



Rocky Enterprise Linux 9.2 Manual Pages on command 'gettext.3'

C:\>man gettext.3

GETTEXT(3)

Library Functions Manual

GETTEXT(3)

NAME

gettext, dgettext, dcgettext - translate message

SYNOPSIS

```
#include <libintl.h>
```

```
char * gettext (const char * msgid);
```

```
char * dgettext (const char * domainname, const char * msgid);
```

```
char * dcgettext (const char * domainname, const char * msgid,  
                 int category);
```

DESCRIPTION

The `gettext`, `dgettext` and `dcgettext` functions attempt to translate a text string into the user's native language, by looking up the translation in a message catalog. The `gettext` function uses the system default message catalog, while `dgettext` and `dcgettext` use the catalog specified by the `domainname` argument. The `dcgettext` function also takes a `category` argument, which is used to select the appropriate message catalog for the given category.

The `msgid` argument identifies the message to be translated. By convention, it is the English version of the message, with non-ASCII characters replaced by ASCII approximations. This choice allows the translators to work with message catalogs, called PO files, that contain both the English and the translated versions of each

message, and can be installed using the msgfmt utility.

A message domain is a set of translatable msgid messages. Usually, every software package has its own message domain. The domain name is used to determine the message catalog where the translation is looked up; it must be a non-empty string. For the gettext function, it is specified through a preceding textdomain call. For the dgettext and dcgettext functions, it is passed as the domainname argument; if this argument is NULL, the domain name specified through a preceding textdomain call is used instead.

Translation lookup operates in the context of the current locale. For the gettext and dgettext functions, the LC_MESSAGES locale facet is used. It is determined by a preceding call to the setlocale function. setlocale(LC_ALL, "") initializes the LC_MESSAGES locale based on the first nonempty value of the three environment variables LC_ALL, LC_MESSAGES, LANG; see setlocale(3). For the dcgettext function, the locale facet is determined by the category argument, which should be one of the LC_XXX constants defined in the <locale.h> header, excluding LC_ALL. In both cases, the functions also use the LC_CTYPE locale facet in order to convert the translated message from the translator's codeset to the current locale's codeset, unless overridden by a prior call to the bind_textdomain_codeset function.

The message catalog used by the functions is at the pathname dirname/locale/category/domainname.mo. Here dirname is the directory specified through bindtextdomain. Its default is system and configuration dependent; typically it is prefix/share/locale, where prefix is the installation prefix of the package. locale is the name of the current locale facet; the GNU implementation also tries generalizations, such as the language name without the territory name. category is LC_MESSAGES for the gettext and dgettext functions, or the argument passed to the dcgettext function.

If the LANGUAGE environment variable is set to a nonempty value, and the locale is not the "C" locale, the value of LANGUAGE is assumed to contain a colon separated list of locale names. The functions will attempt to look up a translation of msgid in each of the locales in turn. This is a GNU extension.

In the "C" locale, or if none of the used catalogs contain a translation for msgid, the gettext, dgettext and dcgettext functions return msgid.

RETURN VALUE

If a translation was found in one of the specified catalogs, it is converted to the locale's codeset and returned. The resulting string is statically allocated and must not be modified or freed. Otherwise msgid is returned.

ERRORS

errno is not modified.

BUGS

The return type ought to be const char *, but is char * to avoid warnings in C code predating ANSI C.

When an empty string is used for msgid, the functions may return a nonempty string.

SEE ALSO

ngettext(3), dngettext(3), dcgettext(3), setlocale(3), textdomain(3), bindtextdo?
main(3), bind_textdomain_codeset(3), msgfmt(1)