NAME

gettext, dgettext, dcgettext, textdomain, bindtextdomain – message handling functions

SYNOPSIS

cc [*flag* ...] *file* ... **–lintl** [*library* ...]

#include <libintl.h>
#include <locale.h>   /∗ needed for **dcgettext**( ) only ∗/

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

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

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

char ∗textdomain(const char ∗*domainname***);**

char ∗bindtextdomain(const char ∗*domainname***, const char ∗***dirname***);**

MT-LEVEL

Safe with exceptions

DESCRIPTION

gettext( ), **dgettext( )**, and **dcgettext( )** attempt to retrieve a target string based on the specified *msgid* argument within the context of a specific domain and the current locale. The length of strings returned by **gettext( )**, **dgettext( )**, and **dcgettext( )** is undetermined until the function is called. The *msgid* argument is a null-terminated string.

NLSPATH is searched first for the location of the **LC_MESSAGES** catalogue. The setting of the **LC_MESSAGES** category of the current locale determines the locale used by **gettext( )** and **dgettext( )** for string retrieval. *category* determines the locale used by **dcgettext( ).** If **NLSPATH** is not defined and the current locale is "C", **gettext( )**, **dgettext( )**, and **dcgettext( )** simply return the message string that was passed. In a locale other than "C", if **NLSPATH** is not defined or if a message catalogue is not found in any of the components specified by **NLSPATH**, the routines search for the message catalogue *dirname***/***locale***/***category***/***domainname***.mo**, after querying **bindtextdomain( )** for *dirname*.

For **gettext( )**, the domain used is set by the last valid call to **textdomain( )**. If a valid call to **textdomain( )** has not been made, the default domain (called **messages**) is used.

For **dgettext( )** and **dcgettext( )**, the domain used is specified by the *domainname* argument. The *domainname* argument is equivalent in syntax and meaning to the *domainname* argument to **textdomain( )**, except that the selection of the domain is valid only for the duration of the **dgettext( )** or **dcgettext( )** call.

textdomain( ) sets or queries the name of the current domain of the active **LC_MESSAGES** locale category. The *domainname* argument is a null-terminated string that can contain only the characters allowed in legal filenames.

The *domainname* argument is the unique name of a domain on the system. If there are multiple versions of the same domain on one system, namespace collisions can be avoided by using **bindtextdomain( )**. If **textdomain( )** is not called, a default domain is selected. The setting of domain made by the last valid call to **textdomain( )** remains valid across subsequent calls to **setlocale**(3C), and **gettext( )**.

The *domainname* argument is applied to the currently active **LC_MESSAGES** locale.

The current setting of the domain can be queried without affecting the current state of the domain by calling **textdomain( )** with *domainname* set to the null pointer. Calling **textdomain( )** with a *domainname* argument of a null string sets the domain to the default domain (**messages**).

bindtextdomain( ) binds the path predicate for a message domain *domainname* to the value contained in *dirname*. If *domainname* is a non-empty string and has not been bound previously, **bindtextdomain( )** binds *domainname* with *dirname*.

If *domainname* is a non-empty string and has been bound previously, **bindtextdomain( )** replaces the old binding with *dirname*. *dirname* can be an absolute or relative pathname being resolved when **gettext( )**, **dgettext( )**, or **dcgettext( )** are called. If *domainname* is a null pointer or an empty string, **bindtextdomain( )** returns **NULL**. User defined domain names cannot begin with the string **SYS_**. Domain names beginning with this string are reserved for system use.

RETURN VALUES

The individual bytes of the string returned by **gettext( )**, **dgettext( )**, or **dcgettext( )** can contain any value other than null. If *msgid* is a null pointer, the return value is undefined. The string returned must not be modified by the program, and can be invalidated by a subsequent call to **gettext( )**, **dgettext( )**, **dcgettext( ) ,** or **setlocale**(3C). If the *domainname* argument to **dgettext( )** or **dcgettext( )** is a null pointer, the results are undefined.

If the target string cannot be found in the current locale and selected domain, **gettext( )**, **dgettext( )**, and **dcgettext( )** return *msgid*.

The normal return value from **textdomain( )** is a pointer to a string containing the current setting of the domain. If *domainname* is a null pointer, **textdomain( )** returns a pointer to the string containing the current domain. If **textdomain( )** was not previously called and *domainname* is a null string, the name of the default domain is returned. The name of the default domain is **messages.**

The return value from **bindtextdomain( )** is a null-terminated string containing *dirname* or the directory binding associated with *domainname* if *dirname* is **NULL**. If no binding is found, the default return value is **/usr/lib/locale**. If *domainname* is a null pointer or an empty string, **bindtextdomain( )** takes no action and returns a null pointer. The string returned must not be modified by the caller.

FILES

/usr/lib/locale
: The default path predicate for message domain files.

/usr/lib/locale/*locale***/LC_MESSAGES/***domainname***.mo**
: system default location for file containing messages for language *locale* and *domainname*

/usr/lib/locale/*locale***/LC_XXX/***domainname***.mo**
: system default location for file containing messages for language *locale* and *domainname* for **dcgettext( )** calls where **LC_XXX** is **LC_CTYPE**, **LC_NUMERIC**, **LC_TIME**, **LC_COLLATE**, **LC_MONETARY**, or **LC_MESSAGES.**

dirname/*locale*/**LC_MESSAGES/***domainname***.mo**
: location for file containing messages for domain *domainname* and path predicate *dirname* after a successful call to **bindtextdomain( )**

dirname/*locale*/**LC_XXX/***domainname***.mo**
: location for files containing messages for domain *domainname*, language *locale*, and path predicate *dirname* after a successful call to **bindtextdomain( )** for **dcgettext( )** calls where **LC_XXX** is one of **LC_CTYPE**, **LC_NUMERIC**, **LC_TIME**, **LC_COLLATE**, **LC_MONETARY**, or **LC_MESSAGES.**

SEE ALSO

msgfmt(1), **xgettext**(1), **setlocale**(3C), **environ**(5)

NOTES

These routines impose no limit on message length. However, a text *domainname* is limited to **TEXTDOMAINMAX** (256) bytes.

gettext, **dgettext**, **dcgettext**, **textdomain** and **bindtextdomain** can be used safely in a multi-thread application, as long as **setlocale**(3C) is not being called to change the locale.