

NAME

duplocale - duplicate a locale object

SYNOPSIS

```
#include <locale.h>
```

```
locale_t duplocale(locale_t locobj);
```

Feature Test Macro Requirements for glibc (see [feature_test_macros\(7\)](#)):

duplocale():

Since glibc 2.10:

```
_XOPEN_SOURCE >= 700
```

Before glibc 2.10:

```
_GNU_SOURCE
```

DESCRIPTION

The **duplocale()** function creates a duplicate of the locale object referred to by *locobj*.

If *locobj* is **LC_GLOBAL_LOCALE**, **duplocale()** creates a locale object containing a copy of the global locale determined by [setlocale\(3\)](#).

RETURN VALUE

On success, **duplocale()** returns a handle for the new locale object. On error, it returns (*locale_t*) 0, and sets *errno* to indicate the cause of the error.

ERRORS

ENOMEM

Insufficient memory to create the duplicate locale object.

VERSIONS

The **duplocale()** function first appeared in version 2.3 of the GNU C library.

CONFORMING TO

POSIX.1-2008.

NOTES

Duplicating a locale can serve the following purposes:

- * To create a copy of a locale object in which one of more categories are to be modified (using [newlocale\(3\)](#)).
- * To obtain a handle for the current locale which can be used in other functions that employ a locale handle, such as [toupper_l\(3\)](#). This is done by applying **duplocale()** to the value returned by the following call:

```
loc = uselocale((locale_t) 0);
```

This technique is necessary, because the above [uselocale\(3\)](#) call may return the value **LC_GLOBAL_LOCALE**, which results in undefined behavior if passed to functions such as [toupper_l\(3\)](#). Calling **duplocale()** can be used to ensure that the **LC_GLOBAL_LOCALE** value is converted into a usable locale object. See **EXAMPLE**, below.

Each locale object created by **duplocale()** should be deallocated using [freelocale\(3\)](#).

EXAMPLE

The program below uses [uselocale\(3\)](#) and **duplocale()** to obtain a handle for the current locale which is then passed to [toupper_l\(3\)](#). The program takes one command-line argument, a string of characters that is converted to uppercase and displayed on standard output. An example of its use is the following:

```
$ ./a.out abc
ABC
```

Program source

```
#define _XOPEN_SOURCE 700
#include <ctype.h>
#include <stdio.h>
#include <stdlib.h>
#include <locale.h>

#define errExit(msg) do { perror(msg); exit(EXIT_FAILURE);
} while (0)

int
main(int argc, char *argv[])
{
    locale_t loc, nloc;
    char *p;

    if (argc != 2) {
        fprintf(stderr, Usage: %s stringn, argv[0]);
        exit(EXIT_FAILURE);
    }

    /* This sequence is necessary, because uselocale() might return
    the value LC_GLOBAL_LOCALE, which cant be passed as an
    argument to toupper_l() */

    loc = uselocale((locale_t) 0);
    if (loc == (locale_t) 0)
        errExit(uselocale);

    nloc = duplocale(loc);
    if (nloc == (locale_t) 0)
        errExit(duplocale);

    for (p = argv[1]; *p; p++)
        putchar(toupper_l(*p, nloc));

    printf(n);

    freelocale(nloc);

    exit(EXIT_SUCCESS);
}
```

SEE ALSO

[freelocale\(3\)](#), [newlocale\(3\)](#), [setlocale\(3\)](#), [uselocale\(3\)](#), [locale\(5\)](#), [locale\(7\)](#)

COLOPHON

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