

NAME

getlogin, getlogin_r, cuserid – get username

LIBRARY

Standard C library (*libc*, *-lc*)

SYNOPSIS

```
#include <unistd.h>

char *getlogin(void);
int getlogin_r(size_t bufsize;
               char buf[bufsize], size_t bufsize);

#include <stdio.h>

char *cuserid(char *string);
```

Feature Test Macro Requirements for glibc (see **feature_test_macros(7)**):

```
getlogin_r():
    _POSIX_C_SOURCE >= 199506L

cuserid():
    Since glibc 2.24:
        (_XOPEN_SOURCE && ! (_POSIX_C_SOURCE >= 200112L)
         || _GNU_SOURCE
    Up to and including glibc 2.23:
        _XOPEN_SOURCE
```

DESCRIPTION

getlogin() returns a pointer to a string containing the name of the user logged in on the controlling terminal of the process, or a null pointer if this information cannot be determined. The string is statically allocated and might be overwritten on subsequent calls to this function or to **cuserid()**.

getlogin_r() returns this same username in the array *buf* of size *bufsize*.

cuserid() returns a pointer to a string containing a username associated with the effective user ID of the process. If *string* is not a null pointer, it should be an array that can hold at least **L_cuserid** characters; the string is returned in this array. Otherwise, a pointer to a string in a static area is returned. This string is statically allocated and might be overwritten on subsequent calls to this function or to **getlogin()**.

The macro **L_cuserid** is an integer constant that indicates how long an array you might need to store a username. **L_cuserid** is declared in *<stdio.h>*.

These functions let your program identify positively the user who is running (**cuserid()**) or the user who logged in this session (**getlogin()**). (These can differ when set-user-ID programs are involved.)

For most purposes, it is more useful to use the environment variable **LOGNAME** to find out who the user is. This is more flexible precisely because the user can set **LOGNAME** arbitrarily.

RETURN VALUE

getlogin() returns a pointer to the username when successful, and NULL on failure, with *errno* set to indicate the error. **getlogin_r()** returns 0 when successful, and nonzero on failure.

ERRORS

POSIX specifies:

EMFILE

The per-process limit on the number of open file descriptors has been reached.

ENFILE

The system-wide limit on the total number of open files has been reached.

ENXIO

The calling process has no controlling terminal.

ERANGE

(getlogin_r) The length of the username, including the terminating null byte ('\0'), is larger than *bufsize*.

Linux/glibc also has:

ENOENT

There was no corresponding entry in the utmp-file.

ENOMEM

Insufficient memory to allocate passwd structure.

ENOTTY

Standard input didn't refer to a terminal. (See BUGS.)

FILES

/etc/passwd

password database file

/var/run/utmp

(traditionally */etc/utmp*; some libc versions used */var/adm/utmp*)

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes(7)**.

Interface	Attribute	Value
getlogin()	Thread safety	MT-Unsafe race:getlogin race:utent sig:ALRM timer locale
getlogin_r()	Thread safety	MT-Unsafe race:utent sig:ALRM timer locale
cuserid()	Thread safety	MT-Unsafe race:cuserid/!string locale

In the above table, *utent* in *race:utent* signifies that if any of the functions **setutent(3)**, **getutent(3)**, or **endutent(3)** are used in parallel in different threads of a program, then data races could occur. **getlogin()** and **getlogin_r()** call those functions, so we use *race:utent* to remind users.

VERSIONS

OpenBSD has **getlogin()** and **setlogin()**, and a username associated with a session, even if it has no controlling terminal.

STANDARDS

getlogin()

getlogin_r()

POSIX.1-2008.

cuserid()

None.

STANDARDS

getlogin()

getlogin_r():

POSIX.1-2001. OpenBSD.

cuserid()

System V, POSIX.1-1988. Removed in POSIX.1-1990. SUSv2. Removed in POSIX.1-2001.

System V has a **cuserid()** function which uses the real user ID rather than the effective user ID.

BUGS

Unfortunately, it is often rather easy to fool **getlogin()**. Sometimes it does not work at all, because some program messed up the utmp file. Often, it gives only the first 8 characters of the login name. The user currently logged in on the controlling terminal of our program need not be the user who started it. Avoid **getlogin()** for security-related purposes.

Note that glibc does not follow the POSIX specification and uses *stdin* instead of */dev/tty*. A bug. (Other recent systems, like SunOS 5.8 and HP-UX 11.11 and FreeBSD 4.8 all return the login name also when

stdin is redirected.)

Nobody knows precisely what **cuserid()** does; avoid it in portable programs. Or avoid it altogether: use *getpwuid(geteuid())* instead, if that is what you meant. **Do not use cuserid()**.

SEE ALSO

logname(1), geteuid(2), getuid(2), utmp(5)