NAME

setfsuid − set user identity used for file system checks

SYNOPSIS

#include <unistd.h> /* glibc uses <sys/fsuid.h> */

int setfsuid(uid_t *fsuid***);**

DESCRIPTION

The system call **setfsuid**() sets the user ID that the Linux kernel uses to check for all accesses to the file system. Normally, the value of *fsuid* will shadow the value of the effective user ID. In fact, whenever the effective user ID is changed, *fsuid* will also be changed to the new value of the effective user ID.

Explicit calls to **setfsuid**() and **setfsgid**(2) are usually only used by programs such as the Linux NFS server that need to change what user and group ID is used for file access without a corresponding change in the real and effective user and group IDs. A change in the normal user IDs for a program such as the NFS server is a security hole that can expose it to unwanted signals. (But see below.)

setfsuid() will only succeed if the caller is the superuser or if *fsuid* matches either the real user ID, effective user ID, saved set-user-ID, or the current value of *fsuid*.

RETURN VALUE

On success, the previous value of *fsuid* is returned. On error, the current value of *fsuid* is returned.

VERSIONS

This system call is present in Linux since version 1.2.

CONFORMING TO

setfsuid() is Linux-specific and should not be used in programs intended to be portable.

NOTES

When glibc determines that the argument is not a valid user ID, it will return −1 and set *errno* to **EINVAL** without attempting the system call.

Note that at the time this system call was introduced, a process could send a signal to a process with the same effective user ID. Today signal permission handling is slightly different.

BUGS

No error messages of any kind are returned to the caller. At the very least, **EPERM** should be returned when the call fails (because the caller lacks the **CAP_SETUID** capability).

SEE ALSO

kill(2), **setfsgid**(2), **capabilities**(7), **credentials**(7)

COLOPHON

This page is part of release 3.22 of the Linux *man-pages* project. A description of the project, and information about reporting bugs, can be found at http://www.kernel.org/doc/man-pages/.