Rocky Enterprise Linux 9.2 Manual Pages on command 'seteuid.2'

$ man seteuid.2

SETEUID(2) Linux Programmer's Manual SETEUID(2)

NAME

seteuid, setegid - set effective user or group ID

SYNOPSIS

#include <sys/types.h>

#include <unistd.h>

int seteuid(uid_t euid);

int setegid(gid_t egid);

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

seteuid(), setegid():

_POSIX_C_SOURCE >= 200112L

|| /* Glibc versions <= 2.19: */ _BSD_SOURCE

DESCRIPTION

seteuid() sets the effective user ID of the calling process. Unprivi?

leged processes may only set the effective user ID to the real user ID,

the effective user ID or the saved set-user-ID.

Precisely the same holds for setegid() with "group" instead of "user".

RETURN VALUE

On success, zero is returned. On error, -1 is returned, and errno is set appropriately.

Note: there are cases where seteuid() can fail even when the caller is UID 0; it is a grave security error to omit checking for a failure re? turn from seteuid().

ERRORS

EINVAL The target user or group ID is not valid in this user namespace.

EPERM In the case of seteuid(): the calling process is not privileged (does not have the CAP_SETUID capability in its user namespace) and euid does not match the current real user ID, current effec? tive user ID, or current saved set-user-ID.

In the case of setegid(): the calling process is not privileged (does not have the CAP_SETGID capability in its user namespace) and egid does not match the current real group ID, current ef? fective group ID, or current saved set-group-ID.

CONFORMING TO

POSIX.1-2001, POSIX.1-2008, 4.3BSD.

NOTES

Setting the effective user (group) ID to the saved set-user-ID (saved set-group-ID) is possible since Linux 1.1.37 (1.1.38). On an arbitrary system one should check _POSIX_SAVED_IDS.

Under glibc 2.0, seteuid(euid) is equivalent to setreuid(-1, euid) and hence may change the saved set-user-ID. Under glibc 2.1 and later, it is equivalent to setresuid(-1, euid, -1) and hence does not change the saved set-user-ID. Analogous remarks hold for setegid(), with the dif? ference that the change in implementation from setregid(-1, egid) to setresgid(-1, egid, -1) occurred in glibc 2.2 or 2.3 (depending on the hardware architecture).

According to POSIX.1, seteuid() (setegid()) need not permit euid (egid) to be the same value as the current effective user (group) ID, and some implementations do not permit this.

C library/kernel differences

On Linux, seteuid() and setegid() are implemented as library functions

that call, respectively, setreuid(2) and setregid(2).

SEE ALSO

geteuid(2), setresuid(2), setreuid(2), setuid(2), capabilities(7), cre?dentials(7), user_namespaces(7)

COLOPHON

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Linux 2017-09-15 SETEUID(2)