NAME

tcgetpgrp, tcsetpgrp − get and set terminal foreground process group

SYNOPSIS

#include <unistd.h>

pid_t tcgetpgrp(int *fd***);**

int tcsetpgrp(int *fd***, pid_t** *pgrp***);**

DESCRIPTION

The function **tcgetpgrp**() returns the process group ID of the foreground process group on the terminal associated to *fd*, which must be the controlling terminal of the calling process.

The function **tcsetpgrp**() makes the process group with process group ID *pgrp* the foreground process group on the terminal associated to *fd*, which must be the controlling terminal of the calling process, and still be associated with its session. Moreover, *pgrp* must be a (nonempty) process group belonging to the same session as the calling process.

If **tcsetpgrp**() is called by a member of a background process group in its session, and the calling process is not blocking or ignoring **SIGTTOU**, a **SIGTTOU** signal is sent to all members of this background process group.

RETURN VALUE

When *fd* refers to the controlling terminal of the calling process, the function **tcgetpgrp**() will return the foreground process group ID of that terminal if there is one, and some value larger than 1 that is not presently a process group ID otherwise. When *fd* does not refer to the controlling terminal of the calling process, −1 is returned, and *errno* is set appropriately.

When successful, **tcsetpgrp**() returns 0. Otherwise, it returns −1, and *errno* is set appropriately.

ERRORS

EBADF

fd is not a valid file descriptor.

EINVAL

pgrp has an unsupported value.

ENOTTY

The calling process does not have a controlling terminal, or it has one but it is not described by *fd*, or, for **tcsetpgrp**(), this controlling terminal is no longer associated with the session of the calling process.

EPERM

pgrp has a supported value, but is not the process group ID of a process in the same session as the calling process.

ATTRIBUTES

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

Interface	Attribute	Value
tcgetpgrp(), **tcsetpgrp**()	Thread safety	MT-Safe

CONFORMING TO

POSIX.1-2001, POSIX.1-2008.

NOTES

These functions are implemented via the **TIOCGPGRP** and **TIOCSPGRP** ioctls.

History

The ioctls appeared in 4.2BSD. The functions are POSIX inventions.

SEE ALSO

setpgid(2), setsid(2), credentials(7)

COLOPHON

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