

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

This page is part of release 4.10 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.