

**NAME**

tcgetpgrp, tcsetpgrp – get and set terminal foreground process group

**LIBRARY**

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

**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 to indicate the error.

When successful, **tcsetpgrp()** returns 0. Otherwise, it returns *-1*, and *errno* is set to indicate the error.

**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
<b>tcgetpgrp()</b> , <b>tcsetpgrp()</b>	Thread safety	MT-Safe

**STANDARDS**

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

**NOTES**

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

**History**

The `ioctl`s appeared in 4.2BSD. The functions are POSIX inventions.

**SEE ALSO**

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