

NAME

killpg – send signal to a process group

SYNOPSIS

```
#include <signal.h>
```

```
int killpg(int pgrp, int sig);
```

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

```
killpg(): _BSD_SOURCE || _XOPEN_SOURCE >= 500
```

DESCRIPTION

killpg() sends the signal *sig* to the process group *pgrp*. See **signal(7)** for a list of signals.

If *pgrp* is 0, **killpg()** sends the signal to the calling process's process group. (POSIX says: If *pgrp* is less than or equal to 1, the behavior is undefined.)

For a process to have permission to send a signal it must either be privileged (under Linux: have the **CAP_KILL** capability), or the real or effective user ID of the sending process must equal the real or saved set-user-ID of the target process. In the case of **SIGCONT** it suffices when the sending and receiving processes belong to the same session.

RETURN VALUE

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

ERRORS**EINVAL**

Sig is not a valid signal number.

EPERM

The process does not have permission to send the signal to any of the target processes.

ESRCH

No process can be found in the process group specified by *pgrp*.

ESRCH

The process group was given as 0 but the sending process does not have a process group.

CONFORMING TO

SVr4, 4.4BSD (the **killpg()** function call first appeared in 4BSD), POSIX.1-2001.

NOTES

There are various differences between the permission checking in BSD-type systems and System V-type systems. See the POSIX rationale for **kill()**. A difference not mentioned by POSIX concerns the return value **EPERM**: BSD documents that no signal is sent and **EPERM** returned when the permission check failed for at least one target process, while POSIX documents **EPERM** only when the permission check failed for all target processes.

On Linux, **killpg()** is implemented as a library function that makes the call *kill(-pgrp, sig)*.

SEE ALSO

getpgrp(2), **kill(2)**, **signal(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/>.