



Linux Ubuntu 26.04 Manual Pages on command 'tkill.2'

\$ man tkill.2

tkill(2) System Calls Manual tkill(2)

NAME

tkill, tkill - send a signal to a thread

LIBRARY

Standard C library (libc, -lc)

SYNOPSIS

```
#include <signal.h>           /* Definition of SIG* constants */
#include <sys/syscall.h>       /* Definition of SYS_* constants */
#include <unistd.h>

[[deprecated]] int syscall(SYS_tkill, pid_t tid, int sig);

#include <signal.h>

int tkill(pid_t tgid, pid_t tid, int sig);
```

Note: glibc provides no wrapper for tkill(), necessitating the use of syscall(2).

DESCRIPTION

tkill() sends the signal sig to the thread with the thread ID tid in the thread group tgid.

(By contrast, kill(2) can be used to send a signal only to a process (i.e., thread group) as a whole, and the signal will be delivered to an arbitrary thread within that process.)

tkill() is an obsolete predecessor to tkill(). It allows only the target thread ID to be specified, which may result in the wrong thread being signaled if a thread terminates and its thread ID is recycled. Avoid using this system call.

These are the raw system call interfaces, meant for internal thread library use.

RETURN VALUE

On success, zero is returned. On error, -1 is returned, and errno is set to indicate the

error.

ERRORS

EAGAIN The RLIMIT_SIGPENDING resource limit was reached and sig is a real-time signal.

EAGAIN Insufficient kernel memory was available and sig is a real-time signal.

EINVAL An invalid thread ID, thread group ID, or signal was specified.

EPERM Permission denied. For the required permissions, see kill(2).

ESRCH No process with the specified thread ID (and thread group ID) exists.

STANDARDS

Linux.

HISTORY

tkill()

Linux 2.4.19 / 2.5.4.

tgkill()

Linux 2.5.75, glibc 2.30.

NOTES

See the description of CLONE_THREAD in clone(2) for an explanation of thread groups.

SEE ALSO

clone(2), gettid(2), kill(2), rt_sigqueueinfo(2)

Linux man-pages 6.17

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tkill(2)