



## ***Red Hat Enterprise Linux Release 9.2 Manual Pages on 'tkill.2' command***

### ***\$ man tkill.2***

TKILL(2)                      Linux Programmer's Manual                      TKILL(2)

#### NAME

tkill, tkill - send a signal to a thread

#### SYNOPSIS

int tkill(int tid, int sig);

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

Note: There is no glibc wrapper for tkill(); see NOTES.

#### DESCRIPTION

tgid() 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 appropriately.

#### 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.

## VERSIONS

tkill() is supported since Linux 2.4.19 / 2.5.4. tkill() was added in Linux 2.5.75.

Library support for tkill() was added to glibc in version 2.30.

## CONFORMING TO

tkill() and tkill() are Linux-specific and should not be used in programs that are intended to be portable.

## NOTES

See the description of CLONE\_THREAD in clone(2) for an explanation of thread groups.

Glibc does not provide a wrapper for tkill(); call it using syscall(2).

Before glibc 2.30, there was also no wrapper function for tkill().

## SEE ALSO

clone(2), gettid(2), kill(2), rt\_sigqueueinfo(2)

## COLOPHON

This page is part of release 5.10 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/>.