Red Hat Enterprise Linux Release 9.2 Manual Pages on 'pthread_kill.3' command

$ man pthread_kill.3

PTHREAD_KILL(3)   Linux Programmer's Manual   PTHREAD_KILL(3)

NAME

    pthread_kill - send a signal to a thread

SYNOPSIS

    #include <signal.h>

    int pthread_kill(pthread_t thread, int sig);

    Compile and link with -pthread.

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

    pthread_kill():

        _POSIX_C_SOURCE >= 199506L || _XOPEN_SOURCE >= 500

DESCRIPTION

    The pthread_kill() function sends the signal sig to thread, a thread in

    the same process as the caller. The signal is asynchronously directed

    to thread.

    If sig is 0, then no signal is sent, but error checking is still per?

    formed.

RETURN VALUE

    On success, pthread_kill() returns 0; on error, it returns an error

    number, and no signal is sent.

ERRORS

    EINVAL An invalid signal was specified.

ATTRIBUTES

    For an explanation of the terms used in this section, see at?

tributes(7).

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???????????????????????????????????????????
?Interface     ? Attribute    ? Value   ?
???????????????????????????????????????????
?pthread_kill() ? Thread safety ? MT-Safe ?
???????????????????????????????????????????
```

CONFORMING TO

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

NOTES

Signal dispositions are process-wide: if a signal handler is installed,
the handler will be invoked in the thread thread, but if the disposi?
tion of the signal is "stop", "continue", or "terminate", this action
will affect the whole process.

The glibc implementation of pthread_kill() gives an error (EINVAL) on
attempts to send either of the real-time signals used internally by the
NPTL threading implementation. See nptl(7) for details.

POSIX.1-2008 recommends that if an implementation detects the use of a
thread ID after the end of its lifetime, pthread_kill() should return
the error ESRCH.   The glibc implementation returns this error in the
cases where an invalid thread ID can be detected. But note also that
POSIX says that an attempt to use a thread ID whose lifetime has ended
produces undefined behavior, and an attempt to use an invalid thread ID
in a call to pthread_kill() can, for example, cause a segmentation
fault.

SEE ALSO

kill(2), sigaction(2), sigpending(2), pthread_self(3), pthread_sig?
mask(3), raise(3), pthreads(7), signal(7)

COLOPHON

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