Rocky Enterprise Linux 9.2 Manual Pages on command 'pthread_detach.3'

$ man pthread_detach.3

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

NAME

    pthread_detach - detach a thread

SYNOPSIS

    #include <pthread.h>

    int pthread_detach(pthread_t thread);

    Compile and link with -pthread.

DESCRIPTION

    The pthread_detach() function marks the thread identified by thread as detached. When a

    detached thread terminates, its resources are automatically released back to the system

    without the need for another thread to join with the terminated thread.

    Attempting to detach an already detached thread results in unspecified behavior.

RETURN VALUE

    On success, pthread_detach() returns 0; on error, it returns an error number.

ERRORS

    EINVAL thread is not a joinable thread.

    ESRCH No thread with the ID thread could be found.

ATTRIBUTES

    For an explanation of the terms used in this section, see attributes(7).

    ??

    ?Interface   ? Attribute   ? Value   ?

    ??

    ?pthread_detach() ? Thread safety ? MT-Safe ?

???

CONFORMING TO

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

NOTES

Once a thread has been detached, it can't be joined with pthread_join(3) or be made join?
able again.

A new thread can be created in a detached state using pthread_attr_setdetachstate(3) to
set the detached attribute of the attr argument of pthread_create(3).

The detached attribute merely determines the behavior of the system when the thread termi?
nates; it does not prevent the thread from being terminated if the process terminates us?
ing exit(3) (or equivalently, if the main thread returns).

Either pthread_join(3) or pthread_detach() should be called for each thread that an appli?
cation creates, so that system resources for the thread can be released. (But note that
the resources of any threads for which one of these actions has not been done will be
freed when the process terminates.)

EXAMPLES

The following statement detaches the calling thread:

    pthread_detach(pthread_self());

SEE ALSO

pthread_attr_setdetachstate(3), pthread_cancel(3), pthread_create(3), pthread_exit(3),
pthread_join(3), pthreads(7)

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/.

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