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# 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 auto?

matically 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 at?

tributes(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 joinable again.

A new thread can be created in a detached state using pthread\_attr\_set?

detachstate(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 terminates; it does not prevent the thread from being terminated if the process terminates using exit(3) (or equivalently, if the main thread returns).

Either pthread\_join(3) or pthread\_detach() should be called for each thread that an application 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

 $pthread\_attr\_setdetachstate(3), \ pthread\_cancel(3), \ pthread\_create(3), \ pthread\_create($ 

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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