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

$ man pthread_setconcurrency.3

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

NAME

   pthread_setconcurrency, pthread_getconcurrency - set/get the concur?

   rency level

SYNOPSIS

   #include <pthread.h>

   int pthread_setconcurrency(int new_level);

   int pthread_getconcurrency(void);

   Compile and link with -pthread.

DESCRIPTION

   The pthread_setconcurrency() function informs the implementation of the

   application's desired concurrency level, specified in new_level. The

   implementation takes this only as a hint: POSIX.1 does not specify the

   level of concurrency that should be provided as a result of calling

   pthread_setconcurrency().

   Specifying new_level as 0 instructs the implementation to manage the

   concurrency level as it deems appropriate.

   pthread_getconcurrency() returns the current value of the concurrency

level for this process.

RETURN VALUE

On success, pthread_setconcurrency() returns 0; on error, it returns a

nonzero error number.

pthread_getconcurrency() always succeeds, returning the concurrency

level set by a previous call to pthread_setconcurrency(), or 0, if

pthread_setconcurrency() has not previously been called.

ERRORS

pthread_setconcurrency() can fail with the following error:

EINVAL new_level is negative.

POSIX.1 also documents an EAGAIN error ("the value specified by

new_level would cause a system resource to be exceeded").

VERSIONS

These functions are available in glibc since version 2.1.

ATTRIBUTES

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

tributes(7).

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???????????????????????????????????????????????????????????
?Interface              ? Attribute    ? Value   ?
???????????????????????????????????????????????????????????
?pthread_setconcurrency(), ? Thread safety ? MT-Safe ?
?pthread_getconcurrency()  ?            ?       ?
???????????????????????????????????????????????????????????
```

CONFORMING TO

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

NOTES

The default concurrency level is 0.

Concurrency levels are meaningful only for M:N threading implementa?

tions, where at any moment a subset of a process's set of user-level

threads may be bound to a smaller number of kernel-scheduling entities.

Setting the concurrency level allows the application to give the system

a hint as to the number of kernel-scheduling entities that should be

provided for efficient execution of the application.

Both LinuxThreads and NPTL are 1:1 threading implementations, so set‐

ting the concurrency level has no meaning. In other words, on Linux

these functions merely exist for compatibility with other systems, and

they have no effect on the execution of a program.

SEE ALSO

pthread_attr_setscope(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/.