

NAME

pthread_np - FreeBSD extensions to POSIX thread functions

LIBRARY

POSIX Threads Library (libpthread, -lpthread)

SYNOPSIS

```
#include <pthread_np.h>
```

DESCRIPTION

This manual page documents extensions to the POSIX thread functions. These extensions may or may not be portable to other operating systems.

The POSIX thread functions are summarized in this section in the following groups:

- ⊕ Thread Routines
- ⊕ Attribute Object Routines
- ⊕ Mutex Routines

Thread Routines

*int pthread_getaffinity_np(pthread_t td, size_t cpusetsize, cpuset_t *cpusetp)*

Get the CPU affinity of a specified thread.

*int pthread_get_name_np(pthread_t thread, char *name, size_t len)*

Get the name of a specified thread.

*int pthread_getname_np(pthread_t thread, char *name, size_t len)*

Get the name of a specified thread.

int pthread_getthreadid_np(void)

Get the calling thread's integral ID.

int pthread_main_np(void)

Identify the initial thread.

int pthread_multi_np(void)

Sets the thread's scheduling mode to multi-threaded.

*int pthread_peekjoin_np(pthread_t thread, void **value_ptr)*

Peek into the exit status of a specified thread.

int pthread_resume_all_np(void)

Resume all suspended threads.

*int pthread_setaffinity_np(pthread_t td, size_t cpusetsize, const cpuset_t *cpusetp)*

Set the CPU affinity of a specified thread.

*int pthread_set_name_np(pthread_t thread, char *name)*

Sets the specified thread's name.

*int pthread_setname_np(pthread_t thread, char *name)*

Sets the specified thread's name.

int pthread_single_np(void)

Sets the thread's scheduling mode to single-threaded.

int pthread_suspend_np(pthread_t tid)

Suspend the specified thread.

int pthread_suspend_all_np(void)

Suspend all active threads.

int pthread_switch_add_np(pthread_switch_routine_t routine)

Install a routine that is called every time a thread context switches.

int pthread_switch_delete_np(pthread_switch_routine_t routine)

Remove a routine that is called every time a thread context switches.

*int pthread_timedjoin_np(pthread_t thread, void **value_ptr, const struct timespec *abstime)*

A variant of **pthread_join()** with a timeout.

Attribute Object Routines

*int pthread_attr_get_np(pthread_t pid, pthread_attr_t *dst)*

Get the attributes of an existent thread.

*int pthread_attr_getaffinity_np(const pthread_attr_t *pattr, size_t cpusetsize, cpuset_t *cpusetp)*

Get the CPU affinity mask from the thread attribute object.

*int pthread_attr_setaffinity_np(pthread_attr_t *pattr, size_t cpusetsize, const cpuset_t *cpusetp)*

Set the CPU affinity mask for the thread attribute object.

*int pthread_attr_setcreatesuspend_np(pthread_attr_t *attr)*

Permit creation of suspended threads.

Mutex Routines

int pthread_mutexattr_getkind_np(pthread_mutexattr_t attr)

Deprecated, use pthread_mutexattr_gettype(3) instead.

*int pthread_mutexattr_setkind_np(pthread_mutexattr_t *attr)*

Deprecated, use pthread_mutexattr_settype(3) instead.

SEE ALSO

libthr(3), pthread(3), pthread_affinity_np(3), pthread_attr_affinity_np(3), pthread_attr_get_np(3), pthread_attr_setcreatesuspend_np(3), pthread_getthreadid_np(3), pthread_join(3), pthread_main_np(3), pthread_multi_np(3), pthread_mutexattr_getkind_np(3), pthread_resume_all_np(3), pthread_resume_np(3), pthread_set_name_np(3), pthread_suspend_all_np(3), pthread_suspend_np(3), pthread_switch_add_np(3)

STANDARDS

All of these functions are non-portable extensions to POSIX threads.