



Linux Ubuntu 26.04 Manual Pages on command 'pthread_attr_getaffinity_np.3'

\$ man pthread_attr_getaffinity_np.3

pthread_attr_setaffinity_np(3) Library Functions Manual pthread_attr_setaffinity_np(3)

NAME

pthread_attr_setaffinity_np, pthread_attr_getaffinity_np - set/get CPU affinity attribute in thread attributes object

LIBRARY

POSIX threads library (libpthread, -lpthread)

SYNOPSIS

```
#define _GNU_SOURCE          /* See feature_test_macros(7) */

#include <pthread.h>

int pthread_attr_setaffinity_np(pthread_attr_t *attr,
                                size_t cpusetsize, const cpu_set_t *cpuset);

int pthread_attr_getaffinity_np(const pthread_attr_t *attr,
                                size_t cpusetsize, cpu_set_t *cpuset);
```

DESCRIPTION

The pthread_attr_setaffinity_np() function sets the CPU affinity mask attribute of the thread attributes object referred to by attr to the value specified in cpuset. This attribute determines the CPU affinity mask of a thread created using the thread attributes object attr.

The pthread_attr_getaffinity_np() function returns the CPU affinity mask attribute of the thread attributes object referred to by attr in the buffer pointed to by cpuset.

The argument cpusetsize is the length (in bytes) of the buffer pointed to by cpuset. Typically, this argument would be specified as sizeof(cpu_set_t).

For more details on CPU affinity masks, see sched_setaffinity(2). For a description of a

RETURN VALUE

ERRORS

`EINVAL` (`pthread_attr_getaffinity_np()`) A CPU in the affinity mask of the `thread` attributes object referred to by `attr` lies outside the range specified by `cpusetsize` (i.e., `cpuset/cpusetsize` is too small).

ATTRIBUTES

[illegible]

STANDARDS

HISTORY

NOTES

In glibc 2.3.3 only, versions of these functions were provided that did not have a `cpuset` size argument. Instead the CPU set size given to the underlying system calls was always `sizeof(cpu_set_t)`.

SEE ALSO

```

sched_setaffinity(2),  pthread_attr_init(3),  pthread_setaffinity_np(3),  cpuset(7),
pthreads(7)

```