

NAME

pthread_attr_setdetachstate, pthread_attr_getdetachstate – set/get detach state attribute in thread attributes object

LIBRARY

POSIX threads library (*libpthread*, *-lpthread*)

SYNOPSIS

```
#include <pthread.h>
```

```
int pthread_attr_setdetachstate(pthread_attr_t *attr, int detachstate);
int pthread_attr_getdetachstate(const pthread_attr_t *attr,
                               int *detachstate);
```

DESCRIPTION

The **pthread_attr_setdetachstate()** function sets the detach state attribute of the thread attributes object referred to by *attr* to the value specified in *detachstate*. The detach state attribute determines whether a thread created using the thread attributes object *attr* will be created in a joinable or a detached state.

The following values may be specified in *detachstate*:

PTHREAD_CREATE_DETACHED

Threads that are created using *attr* will be created in a detached state.

PTHREAD_CREATE_JOINABLE

Threads that are created using *attr* will be created in a joinable state.

The default setting of the detach state attribute in a newly initialized thread attributes object is **PTHREAD_CREATE_JOINABLE**.

The **pthread_attr_getdetachstate()** returns the detach state attribute of the thread attributes object *attr* in the buffer pointed to by *detachstate*.

RETURN VALUE

On success, these functions return 0; on error, they return a nonzero error number.

ERRORS

pthread_attr_setdetachstate() can fail with the following error:

EINVAL

An invalid value was specified in *detachstate*.

ATTRIBUTES

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

| Interface | Attribute | Value |
|---|---------------|---------|
| pthread_attr_setdetachstate() , pthread_attr_getdetachstate() | Thread safety | MT-Safe |

STANDARDS

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

NOTES

See **pthread_create(3)** for more details on detached and joinable threads.

A thread that is created in a joinable state should eventually either be joined using **pthread_join(3)** or detached using **pthread_detach(3)**; see **pthread_create(3)**.

It is an error to specify the thread ID of a thread that was created in a detached state in a later call to **pthread_detach(3)** or **pthread_join(3)**.

EXAMPLES

See **pthread_attr_init(3)**.

SEE ALSO**pthread_attr_init(3), pthread_create(3), pthread_detach(3), pthread_join(3), pthreads(7)**