

**NAME**

pthread\_attr\_setdetachstate, pthread\_attr\_getdetachstate – set/get detach state attribute in thread attributes object

**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);
```

Compile and link with *-pthread*.

**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
<b>pthread_attr_setdetachstate()</b> , <b>pthread_attr_getdetachstate()</b>	Thread safety	MT-Safe

**CONFORMING TO**

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)**.

**EXAMPLE**

See **pthread\_attr\_init(3)**.

**SEE ALSO**

**pthread\_attr\_init(3)**, **pthread\_create(3)**, **pthread\_detach(3)**, **pthread\_join(3)**,  **pthreads(7)**

**COLOPHON**

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