

**NAME**

pthread\_attr\_setstacksize, pthread\_attr\_getstacksize – set/get stack size attribute in thread attributes object

**LIBRARY**

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

**SYNOPSIS**

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

```
int pthread_attr_setstacksize(pthread_attr_t *attr, size_t stacksize);
int pthread_attr_getstacksize(const pthread_attr_t *restrict attr,
                             size_t *restrict stacksize);
```

**DESCRIPTION**

The **pthread\_attr\_setstacksize()** function sets the stack size attribute of the thread attributes object referred to by *attr* to the value specified in *stacksize*.

The stack size attribute determines the minimum size (in bytes) that will be allocated for threads created using the thread attributes object *attr*.

The **pthread\_attr\_getstacksize()** function returns the stack size attribute of the thread attributes object referred to by *attr* in the buffer pointed to by *stacksize*.

**RETURN VALUE**

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

**ERRORS**

**pthread\_attr\_setstacksize()** can fail with the following error:

**EINVAL**

The stack size is less than **PTHREAD\_STACK\_MIN** (16384) bytes.

On some systems, **pthread\_attr\_setstacksize()** can fail with the error **EINVAL** if *stacksize* is not a multiple of the system page size.

**VERSIONS**

These functions are provided since glibc 2.1.

**ATTRIBUTES**

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

Interface	Attribute	Value
<b>pthread_attr_setstacksize()</b> , <b>pthread_attr_getstacksize()</b>	Thread safety	MT-Safe

**STANDARDS**

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

**NOTES**

For details on the default stack size of new threads, see **pthread\_create(3)**.

A thread's stack size is fixed at the time of thread creation. Only the main thread can dynamically grow its stack.

The **pthread\_attr\_setstack(3)** function allows an application to set both the size and location of a caller-allocated stack that is to be used by a thread.

**BUGS**

As at glibc 2.8, if the specified *stacksize* is not a multiple of **STACK\_ALIGN** (16 bytes on most architectures), it may be rounded *downward*, in violation of POSIX.1, which says that the allocated stack will be at least *stacksize* bytes.

**EXAMPLES**

See **pthread\_create(3)**.

**SEE ALSO**

**getrlimit(2), pthread\_attr\_init(3), pthread\_attr\_setguardsize(3), pthread\_attr\_setstack(3), pthread\_create(3), pthreads(7)**