

NAME

pthread_attr_setstacksize, pthread_attr_getstacksize - set/get stack size attribute in thread attributes object

SYNOPSIS

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

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

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

Compile and link with *-pthread*.

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 by glibc since version 2.1.

ATTRIBUTES

For an explanation of the terms used in this section, see [attributes\(7\)](#).

| Interface | Attribute | Value |
|--|---------------|---------|
| pthread_attr_setstacksize() , pthread_attr_getstacksize() | Thread safety | MT-Safe |

CONFORMING TO

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.

EXAMPLE

See [pthread_create\(3\)](#).

SEE ALSO

[getrlimit\(2\)](#), [pthread_attr_init\(3\)](#), [pthread_attr_setguardsize\(3\)](#), [pthread_attr_setstack\(3\)](#), [pthread_create\(3\)](#), [pthreads\(7\)](#)

COLOPHON

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