

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
<code>pthread_attr_setstacksize()</code> , <code>pthread_attr_getstacksize()</code>	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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