

NAME

`pthread_attr_setschedpolicy`, `pthread_attr_getschedpolicy` – set/get scheduling policy attribute in thread attributes object

SYNOPSIS

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

```
int pthread_attr_setschedpolicy(pthread_attr_t *attr, int policy);
int pthread_attr_getschedpolicy(const pthread_attr_t *attr, int *policy);
```

Compile and link with `-pthread`.

DESCRIPTION

The `pthread_attr_setschedpolicy()` function sets the scheduling policy attribute of the thread attributes object referred to by *attr* to the value specified in *policy*. This attribute determines the scheduling policy of a thread created using the thread attributes object *attr*.

The supported values for *policy* are **SCHED_FIFO**, **SCHED_RR**, and **SCHED_OTHER**, with the semantics described in `sched(7)`.

The `pthread_attr_getschedpolicy()` returns the scheduling policy attribute of the thread attributes object *attr* in the buffer pointed to by *policy*.

In order for the policy setting made by `pthread_attr_setschedpolicy()` to have effect when calling `pthread_create(3)`, the caller must use `pthread_attr_setinheritsched(3)` to set the inherit-scheduler attribute of the attributes object *attr* to **PTHREAD_EXPLICIT_SCHED**.

RETURN VALUE

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

ERRORS

`pthread_attr_setschedpolicy()` can fail with the following error:

EINVAL

Invalid value in *policy*.

POSIX.1 also documents an optional **ENOTSUP** error ("attempt was made to set the attribute to an unsupported value") for `pthread_attr_setschedpolicy()`.

ATTRIBUTES

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

Interface	Attribute	Value
<code>pthread_attr_setschedpolicy()</code> , <code>pthread_attr_getschedpolicy()</code>	Thread safety	MT-Safe

CONFORMING TO

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

EXAMPLE

See `pthread_setschedparam(3)`.

SEE ALSO

`pthread_attr_init(3)`, `pthread_attr_setinheritsched(3)`, `pthread_attr_setschedparam(3)`, `pthread_create(3)`, `pthread_setschedparam(3)`, `pthread_setschedprio(3)`, `pthread(7)`, `sched(7)`

COLOPHON

This page is part of release 5.02 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.