

**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)`, `pthreads(7)`, `sched(7)`

**COLOPHON**

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