

NAME

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

LIBRARY

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

SYNOPSIS

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

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

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
pthread_attr_setschedpolicy() , pthread_attr_getschedpolicy()	Thread safety	MT-Safe

STANDARDS

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

EXAMPLES

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)**