Rocky Enterprise Linux 9.2 Manual Pages on command 'pthread_attr_setschedparam.3'

$ man pthread_attr_setschedparam.3

PTHREAD_ATTR_SETSCHEDPARAM(Linux Programmer's ManPTHREAD_ATTR_SETSCHEDPARAM(3)

NAME

   pthread_attr_setschedparam, pthread_attr_getschedparam - set/get sched?

   uling parameter attributes in thread attributes object

SYNOPSIS

   #include <pthread.h>

   int pthread_attr_setschedparam(pthread_attr_t *attr,

                      const struct sched_param *param);

   int pthread_attr_getschedparam(const pthread_attr_t *attr,

                      struct sched_param *param);

   Compile and link with -pthread.

DESCRIPTION

   The pthread_attr_setschedparam() function sets the scheduling parameter

   attributes of the thread attributes object referred to by attr to the

   values specified in the buffer pointed to by param.   These attributes

   determine the scheduling parameters of a thread created using the

   thread attributes object attr.

   The pthread_attr_getschedparam() returns the scheduling parameter at?

tributes of the thread attributes object attr in the buffer pointed to
by param.

Scheduling parameters are maintained in the following structure:

```
struct sched_param {
    int sched_priority;     /* Scheduling priority */
};
```

As can be seen, only one scheduling parameter is supported. For de?
tails of the permitted ranges for scheduling priorities in each sched?
uling policy, see sched(7).

In order for the parameter setting made by pthread_attr_setschedparam()
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_setschedparam() can fail with the following error:

EINVAL The priority specified in param does not make sense for the cur?
    rent scheduling policy of attr.

POSIX.1 also documents an ENOTSUP error for pthread_attr_setsched?
param(). This value is never returned on Linux (but portable and fu?
ture-proof applications should nevertheless handle this error return
value).

ATTRIBUTES

For an explanation of the terms used in this section, see at?
tributes(7).

```
?????????????????????????????????????????????????????????????????
?Interface               ? Attribute    ? Value   ?
?????????????????????????????????????????????????????????????????
?pthread_attr_setschedparam(), ? Thread safety ? MT-Safe ?
?pthread_attr_getschedparam()  ?           ?       ?
?????????????????????????????????????????????????????????????????
```

CONFORMING TO

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

NOTES

See pthread_attr_setschedpolicy(3) for a list of the thread scheduling

policies supported on Linux.

EXAMPLES

See pthread_setschedparam(3).

SEE ALSO

sched_get_priority_min(2), pthread_attr_init(3),

pthread_attr_setinheritsched(3), pthread_attr_setschedpolicy(3),

pthread_create(3), pthread_setschedparam(3), pthread_setschedprio(3),

pthreads(7), sched(7)

COLOPHON

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