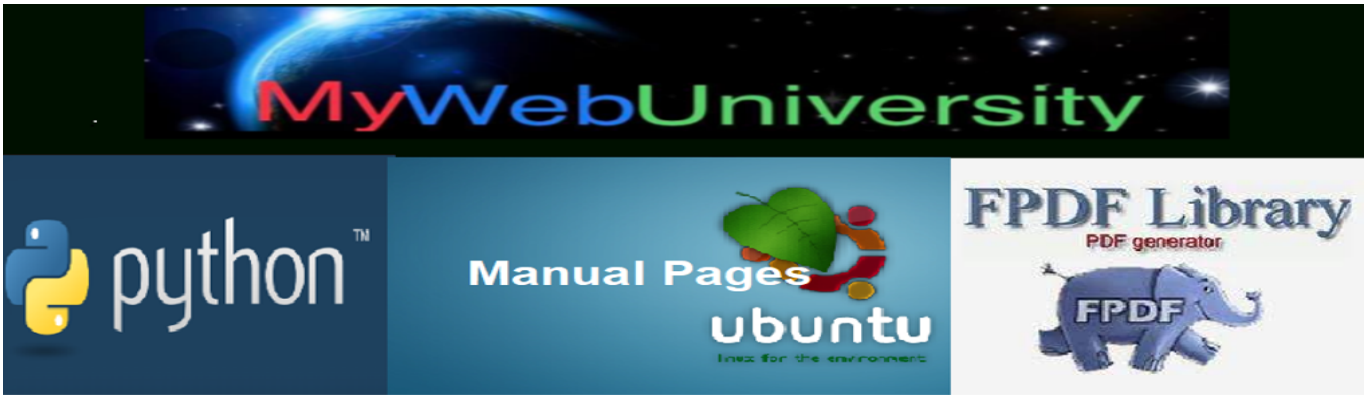

Rocky Enterprise Linux 9.2 Manual Pages on command 'pthread_attr_setinheritsched.3'

$ man pthread_attr_setinheritsched.3

PTHREAD_ATTR_SETINHERITSCHED(3) Linux Programmer's Manual PTHREAD_ATTR_SETINHERITSCHED(3)

NAME

pthread_attr_setinheritsched, pthread_attr_getinheritsched - set/get inherit-scheduler at? tribute in thread attributes object

SYNOPSIS

```
#include <pthread.h>
int pthread_attr_setinheritsched(pthread_attr_t *attr,
                                 int inheritsched);
int pthread_attr_getinheritsched(const pthread_attr_t *attr,
                                 int *inheritsched);
```

Compile and link with -pthread.

DESCRIPTION

The pthread_attr_setinheritsched() function sets the inherit-scheduler attribute of the thread attributes object referred to by attr to the value specified in inheritsched. The inherit-scheduler attribute determines whether a thread created using the thread at? tributes object attr will inherit its scheduling attributes from the calling thread or whether it will take them from attr.

The following scheduling attributes are affected by the inherit-scheduler attribute: scheduling policy (pthread_attr_setschedpolicy(3)), scheduling priority (pthread_attr_setschedparam(3)), and contention scope (pthread_attr_setscope(3)).

The following values may be specified in inheritsched:

PTHREAD_INHERIT_SCHED

Threads that are created using attr inherit scheduling attributes from the creating

thread; the scheduling attributes in attr are ignored.

PTHREAD_EXPLICIT_SCHED

Threads that are created using attr take their scheduling attributes from the val?

ues specified by the attributes object.

The default setting of the inherit-scheduler attribute in a newly initialized thread at?

tributes object is PTHREAD_INHERIT_SCHED.

The pthread_attr_getinheritsched() returns the inherit-scheduler attribute of the thread

attributes object attr in the buffer pointed to by inheritsched.

RETURN VALUE

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

ERRORS

pthread_attr_setinheritsched() can fail with the following error:

EINVAL Invalid value in inheritsched.

POSIX.1 also documents an optional ENOTSUP error ("attempt was made to set the attribute

to an unsupported value") for pthread_attr_setinheritsched().

ATTRIBUTES

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

??

?Interface ? Attribute ? Value ?

??

?pthread_attr_setinheritsched(), ? Thread safety ? MT-Safe ?

?pthread_attr_getinheritsched() ? ? ?

??

CONFORMING TO

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

BUGS

As at glibc 2.8, if a thread attributes object is initialized using pthread_attr_init(3),

then the scheduling policy of the attributes object is set to SCHED_OTHER and the schedul?

ing priority is set to 0. However, if the inherit-scheduler attribute is then set to

PTHREAD_EXPLICIT_SCHED, then a thread created using the attribute object wrongly inherits

its scheduling attributes from the creating thread. This bug does not occur if either the

scheduling policy or scheduling priority attribute is explicitly set in the thread at?

tributes object before calling pthread_create(3).

EXAMPLES

See pthread_setschedparam(3).

SEE ALSO

pthread_attr_init(3), pthread_attr_setschedparam(3), pthread_attr_setschedpolicy(3), pthread_attr_setscope(3), pthread_create(3), pthread_setschedparam(3), pthread_setschedprio(3), pthreads(7), sched(7)

COLOPHON

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