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Red Hat Enterprise Linux Release 9.2 Manual Pages on 'pthread_condattr_getclock.3p' command

\$ man pthread_condattr_getclock.3p

PTHREAD_CONDATTR_GETCLOCK(3POSIX Programmer's ManPTHREAD_CONDATTR_GETCLOCK(3P)

PROLOG

This manual page is part of the POSIX Programmer's Manual. The Linux implementation of this interface may differ (consult the corresponding Linux manual page for details of Linux behavior), or the interface may not be implemented on Linux.

NAME

pthread_condattr_getclock, pthread_condattr_setclock ? get and set the clock selection condition variable attribute

SYNOPSIS

```
#include <pthread.h>

int pthread_condattr_getclock(const pthread_condattr_t *restrict attr,
    clockid_t *restrict clock_id);

int pthread_condattr_setclock(pthread_condattr_t *attr,
    clockid_t clock_id);
```

DESCRIPTION

The pthread_condattr_getclock() function shall obtain the value of the clock attribute from the attributes object referenced by attr.

The pthread_condattr_setclock() function shall set the clock attribute in an initialized attributes object referenced by attr. If pthread_condattr_setclock() is called with a clock_id argument that refers to a CPU-time clock, the call shall fail.

The clock attribute is the clock ID of the clock that shall be used to

measure the timeout service of `pthread_cond_timedwait()`. The default value of the clock attribute shall refer to the system clock.

The behavior is undefined if the value specified by the `attr` argument to `pthread_condattr_getclock()` or `pthread_condattr_setclock()` does not refer to an initialized condition variable attributes object.

RETURN VALUE

If successful, the `pthread_condattr_getclock()` function shall return zero and store the value of the clock attribute of `attr` into the object referenced by the `clock_id` argument. Otherwise, an error number shall be returned to indicate the error.

If successful, the `pthread_condattr_setclock()` function shall return zero; otherwise, an error number shall be returned to indicate the error.

ERRORS

The `pthread_condattr_setclock()` function may fail if:

EINVAL The value specified by `clock_id` does not refer to a known clock, or is a CPU-time clock.

These functions shall not return an error code of `[EINTR]`.

The following sections are informative.

EXAMPLES

None.

APPLICATION USAGE

None.

RATIONALE

If an implementation detects that the value specified by the `attr` argument to `pthread_condattr_getclock()` or `pthread_condattr_setclock()` does not refer to an initialized condition variable attributes object, it is recommended that the function should fail and report an `[EINVAL]` error.

FUTURE DIRECTIONS

None.

SEE ALSO

`pthread_cond_destroy()`, `pthread_cond_timedwait()`, `pthread_condattr_destroy()`, `pthread_condattr_getshared()`, `pthread_create()`, `pthread_mu?`

tex_destroy()

The Base Definitions volume of POSIX.1-2017, <pthread.h>

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