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## *Red Hat Enterprise Linux Release 9.2 Manual Pages on 'pthread_mutexattr_getpshared.3p' command*

***$ man pthread_mutexattr_getpshared.3p***

PTHREAD_MUTEXATTR_GETPSHAREPOSIX Programmer's PTHREAD_MUTEXATTR_GETPSHARED(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_mutexattr_getpshared, pthread_mutexattr_setpshared ? get and set the process-shared attribute

SYNOPSIS

```
#include <pthread.h>
int pthread_mutexattr_getpshared(const pthread_mutexattr_t
    *restrict attr, int *restrict pshared);
int pthread_mutexattr_setpshared(pthread_mutexattr_t *attr,
    int pshared);
```

DESCRIPTION

The pthread_mutexattr_getpshared() function shall obtain the value of the process-shared attribute from the attributes object referenced by attr.

The pthread_mutexattr_setpshared() function shall set the process-shared attribute in an initialized attributes object referenced by attr.

The process-shared attribute is set to PTHREAD_PROCESS_SHARED to permit

a mutex to be operated upon by any thread that has access to the memory where the mutex is allocated, even if the mutex is allocated in memory that is shared by multiple processes. See Section 2.9.9, Synchroniza? tion Object Copies and Alternative Mappings for further requirements.

The default value of the attribute shall be PTHREAD_PROCESS_PRIVATE.

The behavior is undefined if the value specified by the attr argument to pthread_mutexattr_getpshared() or pthread_mutexattr_setpshared() does not refer to an initialized mutex attributes object.

RETURN VALUE

Upon successful completion, pthread_mutexattr_setpshared() shall return zero; otherwise, an error number shall be returned to indicate the er? ror.

Upon successful completion, pthread_mutexattr_getpshared() shall return zero and store the value of the process-shared attribute of attr into the object referenced by the pshared parameter. Otherwise, an error number shall be returned to indicate the error.

ERRORS

The pthread_mutexattr_setpshared() function may fail if:

EINVAL The new value specified for the attribute is outside the range of legal values for that attribute.

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 argu? ment to pthread_mutexattr_getpshared() or pthread_mutexattr_setp? shared() does not refer to an initialized mutex attributes object, it is recommended that the function should fail and report an [EINVAL] er? ror.

FUTURE DIRECTIONS

None.

SEE ALSO

pthread_cond_destroy(), pthread_create(), pthread_mutex_destroy(), pthread_mutexattr_destroy()

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