NAME

pthread_mutexattr_getpshared, pthread_mutexattr_setpshared − get/set process-shared mutex attribute

SYNOPSIS

#include <pthread.h>

int pthread_mutexattr_getpshared(const pthread_mutexattr_t * *attr* **,**
                      int * *pshared* **);**
int pthread_mutexattr_setpshared(pthread_mutexattr_t * *attr* **,**
                      int *pshared* **);**

Compile and link with − *pthread* .

DESCRIPTION

These functions get and set the process-shared attribute in a mutex attributes object. This attribute must be appropriately set to ensure correct, efficient operation of a mutex created using this attributes object.

The process-shared attribute can have one of the following values:

PTHREAD_PROCESS_PRIVATE
        Mutexes created with this attributes object are to be shared only among threads in the same process that initialized the mutex. This is the default value for the process-shared mutex attribute.

PTHREAD_PROCESS_SHARED
        Mutexes created with this attributes object can be shared between any threads that have access to the memory containing the object, including threads in different processes.

pthread_mutexattr_getpshared() places the value of the process-shared attribute of the mutex attributes object referred to by *attr* in the location pointed to by *pshared* .

pthread_mutexattr_setpshared() sets the value of the process-shared attribute of the mutex attributes object referred to by *attr* to the value specified in **pshared**.

If *attr* does not refer to an initialized mutex attributes object, the behavior is undefined.

RETURN VALUE

On success, these functions return 0. On error, they return a positive error number.

ERRORS

pthread_mutexattr_setpshared() can fail with the following errors:

EINVAL
        The value specified in *pshared* is invalid.

ENOTSUP
        pshared is **PTHREAD_PROCESS_SHARED** but the implementation does not support process-shared mutexes.

CONFORMING TO

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

SEE ALSO

pthread_mutexattr_init(3), **pthreads**(7)

COLOPHON

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