NAME

pthread_rwlock_init - initialize a read/write lock

LIBRARY

POSIX Threads Library (libpthread, -lpthread)

SYNOPSIS

#include <pthread.h>

int
pthread_rwlock_init(*pthread_rwlock_t *restrict lock*, *const pthread_rwlockattr_t *restrict attr*);

DESCRIPTION

The **pthread_rwlock_init**() function is used to initialize a read/write lock, with attributes specified by *attr*. If *attr* is NULL, the default read/write lock attributes are used.

The results of calling **pthread_rwlock_init**() with an already initialized lock are undefined.

RETURN VALUES

If successful, the **pthread_rwlock_init**() function will return zero. Otherwise an error number will be returned to indicate the error.

ERRORS

The **pthread_rwlock_init**() function will fail if:

[EAGAIN]   The system lacked the necessary resources (other than memory) to initialize the lock.

[ENOMEM]   Insufficient memory exists to initialize the lock.

[EPERM]   The caller does not have sufficient privilege to perform the operation.

The **pthread_rwlock_init**() function may fail if:

[EBUSY]   The system has detected an attempt to re-initialize the object referenced by *lock*, a previously initialized but not yet destroyed read/write lock.

[EINVAL]   The value specified by *attr* is invalid.

SEE ALSO

pthread_rwlock_destroy(3), pthread_rwlockattr_init(3), pthread_rwlockattr_setpshared(3)

STANDARDS

The **pthread_rwlock_init**() function is expected to conform to Version 2 of the Single UNIX Specification ("SUSv2").

HISTORY

The **pthread_rwlock_init**() function first appeared in FreeBSD 3.0.