



## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'pthread\_spin\_unlock.3' command**

### **\$ man pthread\_spin\_unlock.3**

PTHREAD\_SPIN\_LOCK(3)      Linux Programmer's Manual      PTHREAD\_SPIN\_LOCK(3)

#### **NAME**

pthread\_spin\_lock, pthread\_spin\_trylock, pthread\_spin\_unlock - lock and  
unlock a spin lock

#### **SYNOPSIS**

```
#include <pthread.h>

int pthread_spin_lock(pthread_spinlock_t *lock);

int pthread_spin_trylock(pthread_spinlock_t *lock);

int pthread_spin_unlock(pthread_spinlock_t *lock);
```

Compile and link with -pthread.

Feature Test Macro Requirements for glibc (see feature\_test\_macros(7)):

```
pthread_spin_lock(), pthread_spin_trylock():

    _POSIX_C_SOURCE >= 200112L
```

#### **DESCRIPTION**

The pthread\_spin\_lock() function locks the spin lock referred to by lock. If the spin lock is currently unlocked, the calling thread acquires the lock immediately. If the spin lock is currently locked by another thread, the calling thread spins, testing the lock until it becomes available, at which point the calling thread acquires the lock. Calling pthread\_spin\_lock() on a lock that is already held by the caller or a lock that has not been initialized with pthread\_spin\_init(3) results in undefined behavior.

The pthread\_spin\_trylock() function is like pthread\_spin\_lock(), except

that if the spin lock referred to by lock is currently locked, then, instead of spinning, the call returns immediately with the error EBUSY. The pthread\_spin\_unlock() function unlocks the spin lock referred to lock. If any threads are spinning on the lock, one of those threads will then acquire the lock.

Calling pthread\_spin\_unlock() on a lock that is not held by the caller results in undefined behavior.

## RETURN VALUE

On success, these functions return zero. On failure, they return an error number.

## ERRORS

pthread\_spin\_lock() may fail with the following errors:

### EDEADLOCK

The system detected a deadlock condition.

pthread\_spin\_trylock() fails with the following errors:

EBUSY The spin lock is currently locked by another thread.

## VERSIONS

These functions first appeared in glibc in version 2.2.

## CONFORMING TO

POSIX.1-2001.

## NOTES

Applying any of the functions described on this page to an uninitialized spin lock results in undefined behavior.

Carefully read NOTES in pthread\_spin\_init(3).

## SEE ALSO

pthread\_spin\_destroy(3), pthread\_spin\_init(3), pthreads(7)

## COLOPHON

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