

**NAME**

**pthread\_mutex\_unlock** - unlock a mutex

**LIBRARY**

POSIX Threads Library (libpthread, -lpthread)

**SYNOPSIS**

```
#include <pthread.h>
```

*int*

```
pthread_mutex_unlock(pthread_mutex_t *mutex);
```

**DESCRIPTION**

If the current thread holds the lock on *mutex*, then the **pthread\_mutex\_unlock()** function unlocks *mutex*.

If the argument pointed by the *mutex* is a robust mutex in the inconsistent state, and the call to **pthread\_mutex\_consistent()** function was not done prior to unlocking, further locking attempts on the mutex *mutex* are denied and locking functions return ENOTRECOVERABLE error.

**RETURN VALUES**

If successful, **pthread\_mutex\_unlock()** will return zero, otherwise an error number will be returned to indicate the error.

**ERRORS**

The **pthread\_mutex\_unlock()** function will fail if:

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

[EPERM]            The current thread does not hold a lock on *mutex*.

**SEE ALSO**

pthread\_mutex\_destroy(3), pthread\_mutex\_init(3), pthread\_mutex\_lock(3), pthread\_mutex\_trylock(3)

**STANDARDS**

The **pthread\_mutex\_unlock()** function conforms to ISO/IEC 9945-1:1996 ("POSIX.1").