

NAME

mtx_init - initialize a mutex

SYNOPSIS

library "threads"

#include <threads.h>

int

mtx_init(*mtx_t* **mtx*, *int* *type*);

DESCRIPTION

The function **mtx_init**() initializes a mutex *mtx* of the given *type*.

The *type* argument can be either of

mtx_plain

a simple mutex, can be shared across child processes.

mtx_timed

a simple mutex, can be shared across child processes, allows timed locking.

mtx_plain | *mtx_recursive*

a simple mutex, can be shared across child processes, the same thread can acquire the lock multiple times recursively. It must be unlocked by an equal amount of times by the thread.

mtx_timed | *mtx_recursive*

a simple mutex, can be shared across child processes, allows timed locking, the same thread can acquire the lock multiple times recursively. It must be unlocked by an equal amount of times by the thread.

RETURN VALUES

Upon success **mtx_init**() returns *thrd_success*, if there is insufficient memory it will return *thrd_nomem* in case of any other error *thrd_error* will be returned.

SEE ALSO

mtx_destroy(3) mtx_lock(3) mtx_timedlock(3) mtx_trylock(3) mtx_unlock(3)

HISTORY

The **mtx_init**() function first appeared in the C11 standard ISO/IEC 9899:2011.

AUTHORS

Jan Adelsbach <jan@jadelsbach.de>