NAME

pthread_once - dynamic package initialization

LIBRARY

POSIX Threads Library (libpthread, -lpthread)

SYNOPSIS

#include <pthread.h>

pthread_once_t once_control = PTHREAD_ONCE_INIT;
int
pthread_once(pthread_once_t *once_control, void (*init_routine)(void));

DESCRIPTION

The first call to **pthread_once**() by any thread in a process, with a given *once_control*, will call the **init_routine**() with no arguments. Subsequent calls to **pthread_once**() with the same *once_control* will not call the **init_routine**(). On return from **pthread_once**(), it is guaranteed that **init_routine**() has completed. The *once_control* parameter is used to determine whether the associated initialization routine has been called.

The function **pthread_once**() is not a cancellation point. However, if **init_routine**() is a cancellation point and is cancelled, the effect on *once_control* is as if **pthread_once**() was never called.

The constant *PTHREAD_ONCE_INIT* is defined by header *<pthread.h>*.

The behavior of **pthread_once**() is undefined if *once_control* has automatic storage duration or is not initialized by *PTHREAD_ONCE_INIT*.

RETURN VALUES

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

ERRORS

None.

STANDARDS

The **pthread_once**() function conforms to ISO/IEC 9945-1:1996 ("POSIX.1").