

**NAME**

**pthread\_exit** - terminate the calling thread

**LIBRARY**

POSIX Threads Library (libpthread, -lpthread)

**SYNOPSIS**

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

*void*

```
pthread_exit(void *value_ptr);
```

**DESCRIPTION**

The **pthread\_exit()** function terminates the calling thread and makes the value *value\_ptr* available to any successful join with the terminating thread. Any cancellation cleanup handlers that have been pushed and are not yet popped are popped in the reverse order that they were pushed and then executed. After all cancellation handlers have been executed, if the thread has any thread-specific data, appropriate destructor functions are called in an unspecified order. Thread termination does not release any application visible process resources, including, but not limited to, mutexes and file descriptors, nor does it perform any process level cleanup actions, including, but not limited to, calling **atexit()** routines that may exist.

An implicit call to **pthread\_exit()** is made when a thread other than the thread in which **main()** was first invoked returns from the start routine that was used to create it. The function's return value serves as the thread's exit status.

The behavior of **pthread\_exit()** is undefined if called from a cancellation handler or destructor function that was invoked as the result of an implicit or explicit call to **pthread\_exit()**.

After a thread has terminated, the result of access to local (auto) variables of the thread is undefined. Thus, references to local variables of the exiting thread should not be used for the **pthread\_exit()** *value\_ptr* parameter value.

The process will exit with an exit status of 0 after the last thread has been terminated. The behavior is as if the implementation called **exit()** with a zero argument at thread termination time.

**RETURN VALUES**

The **pthread\_exit()** function cannot return to its caller.

**ERRORS**

None.

**SEE ALSO**

`_exit(2)`, `exit(3)`, `pthread_cancel(3)`, `pthread_create(3)`, `pthread_join(3)`

**STANDARDS**

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