

NAME

`set_thread_area` – Set a Thread Local Storage (TLS) area

SYNOPSIS

```
#include <linux/unistd.h>
#include <asm/ldt.h>
```

```
int set_thread_area(struct user_desc *u_info);
```

DESCRIPTION

`set_thread_area()` sets an entry in the current thread's Thread Local Storage (TLS) array. The TLS array entry set by `set_thread_area()` corresponds to the value of `u_info->entry_number` passed in by the user. If this value is in bounds, `set_thread_area()` copies the TLS descriptor pointed to by `u_info` into the thread's TLS array.

When `set_thread_area()` is passed an `entry_number` of `-1`, it uses a free TLS entry. If `set_thread_area()` finds a free TLS entry, the value of `u_info->entry_number` is set upon return to show which entry was changed.

RETURN VALUE

`set_thread_area()` returns 0 on success, and `-1` on failure, with `errno` set appropriately.

ERRORS**EINVAL**

`u_info->entry_number` is out of bounds.

EFAULT

`u_info` is an invalid pointer.

ESRCH

A free TLS entry could not be located.

VERSIONS

A version of `set_thread_area()` first appeared in Linux 2.5.29.

CONFORMING TO

`set_thread_area()` is Linux-specific and should not be used in programs that are intended to be portable.

NOTES

Glibc does not provide a wrapper for this function; call it using `syscall(2)`.

SEE ALSO

`get_thread_area(2)`

COLOPHON

This page is part of release 3.22 of the Linux *man-pages* project. A description of the project, and information about reporting bugs, can be found at <http://www.kernel.org/doc/man-pages/>.