

NAME

sem_post – unlock a semaphore

LIBRARY

POSIX threads library (*libpthread*, *-lpthread*)

SYNOPSIS

```
#include <semaphore.h>

int sem_post(sem_t *sem);
```

DESCRIPTION

sem_post() increments (unlocks) the semaphore pointed to by *sem*. If the semaphore's value consequently becomes greater than zero, then another process or thread blocked in a **sem_wait(3)** call will be woken up and proceed to lock the semaphore.

RETURN VALUE

sem_post() returns 0 on success; on error, the value of the semaphore is left unchanged, -1 is returned, and *errno* is set to indicate the error.

ERRORS**EINVAL**

sem is not a valid semaphore.

EOverflow

The maximum allowable value for a semaphore would be exceeded.

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes(7)**.

Interface	Attribute	Value
sem_post()	Thread safety	MT-Safe

STANDARDS

POSIX.1-2001.

NOTES

sem_post() is async-signal-safe: it may be safely called within a signal handler.

EXAMPLES

See **sem_wait(3)** and **shm_open(3)**.

SEE ALSO

sem_getvalue(3), **sem_wait(3)**, **sem_overview(7)**, **signal-safety(7)**