



Linux Ubuntu 26.04 Manual Pages on command 'sem_post.3'

\$ man sem_post.3

sem_post(3) Library Functions Manual sem_post(3)

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 value would exceed SEM VALUE MAX.

ATTRIBUTES

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

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? Interface

? Attribute ? Value ?

[illegible]

? sem_post()	? Thread safety ? MT-Safe ?
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[illegible]

STANDARDS

POSIX.1-2008.

HISTORY

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)

Linux man-pages 6.17

2026-02-08

```
sem_post(3)
```