

NAME

`sem_getvalue` - get the value of a semaphore

SYNOPSIS

```
#include <semaphore.h>
```

```
int sem_getvalue(sem_t *sem, int *sval);
```

Link with `-pthread`.

DESCRIPTION

`sem_getvalue()` places the current value of the semaphore pointed to `sem` into the integer pointed to by `sval`.

If one or more processes or threads are blocked waiting to lock the semaphore with `sem_wait(3)`, POSIX.1 permits two possibilities for the value returned in `sval`: either 0 is returned; or a negative number whose absolute value is the count of the number of processes and threads currently blocked in `sem_wait(3)`. Linux adopts the former behavior.

RETURN VALUE

`sem_getvalue()` returns 0 on success; on error, -1 is returned and `errno` is set to indicate the error.

ERRORS**EINVAL**

`sem` is not a valid semaphore.

ATTRIBUTES

For an explanation of the terms used in this section, see [attributes\(7\)](#).

Interface	Attribute	Value
<code>sem_getvalue()</code>	Thread safety	MT-Safe

CONFORMING TO

POSIX.1-2001, POSIX.1-2008.

NOTES

The value of the semaphore may already have changed by the time `sem_getvalue()` returns.

SEE ALSO

[sem_post\(3\)](#), [sem_wait\(3\)](#), [sem_overview\(7\)](#)

COLOPHON

This page is part of release 4.10 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.