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Red Hat Enterprise Linux Release 9.2 Manual Pages on 'sem_close.3p' command

\$ man sem_close.3p

SEM_CLOSE(3P) POSIX Programmer's Manual SEM_CLOSE(3P)

PROLOG

This manual page is part of the POSIX Programmer's Manual. The Linux implementation of this interface may differ (consult the corresponding Linux manual page for details of Linux behavior), or the interface may not be implemented on Linux.

NAME

sem_close ? close a named semaphore

SYNOPSIS

```
#include <semaphore.h>

int sem_close(sem_t *sem);
```

DESCRIPTION

The `sem_close()` function shall indicate that the calling process is finished using the named semaphore indicated by `sem`. The effects of calling `sem_close()` for an unnamed semaphore (one created by `sem_init()`) are undefined. The `sem_close()` function shall deallocate (that is, make available for reuse by a subsequent `sem_open()` by this process) any system resources allocated by the system for use by this process for this semaphore. The effect of subsequent use of the semaphore indicated by `sem` by this process is undefined. If any threads in the calling process are currently blocked on the semaphore, the behavior is undefined. If the semaphore has not been removed with a successful call to `sem_unlink()`, then `sem_close()` has no effect on the

state of the semaphore. If the `sem_unlink()` function has been successfully invoked for `name` after the most recent call to `sem_open()` with `O_CREAT` for this semaphore, then when all processes that have opened the semaphore close it, the semaphore is no longer accessible.

RETURN VALUE

Upon successful completion, a value of zero shall be returned. Otherwise, a value of -1 shall be returned and `errno` set to indicate the error.

ERRORS

The `sem_close()` function may fail if:

- `EINVAL` The `sem` argument is not a valid semaphore descriptor.

The following sections are informative.

EXAMPLES

None.

APPLICATION USAGE

None.

RATIONALE

None.

FUTURE DIRECTIONS

None.

SEE ALSO

`semctl()`, `semget()`, `semop()`, `sem_init()`, `sem_open()`, `sem_unlink()`
The Base Definitions volume of POSIX.1-2017, `<semaphore.h>`

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