

**NAME**

IPC::SharedMem - SysV Shared Memory IPC object class

**SYNOPSIS**

```
use IPC::SysV qw(IPC_PRIVATE S_IRUSR S_IWUSR);
use IPC::SharedMem;

$shm = IPC::SharedMem->new(IPC_PRIVATE, 8, S_IRWXU);

$shm->write(pack("S", 4711), 2, 2);

$data = $shm->read(0, 2);

$ds = $shm->stat;

$shm->remove;
```

**DESCRIPTION**

A class providing an object based interface to SysV IPC shared memory.

**METHODS**

`new ( KEY , SIZE , FLAGS )`

Creates a new shared memory segment of `SIZE` bytes size associated with `KEY`. A new segment is created if

- `KEY` is equal to `IPC_PRIVATE`
- `KEY` does not already have a shared memory segment associated with it, and `FLAGS & IPC_CREAT` is true.

On creation of a new shared memory segment `FLAGS` is used to set the permissions. Be careful not to set any flags that the Sys V IPC implementation does not allow: in some systems setting execute bits makes the operations fail.

`id` Returns the shared memory identifier.

`read ( POS, SIZE )`

Read `SIZE` bytes from the shared memory segment at `POS`. Returns the string read, or `undef` if there was an error. The return value becomes tainted. See `shmread`.

`write ( STRING, POS, SIZE )`

Write `SIZE` bytes to the shared memory segment at `POS`. Returns true if successful, or false if there is an error. See `shmwrite`.

`remove`

Remove the shared memory segment from the system or mark it as removed as long as any processes are still attached to it.

`is_removed`

Returns true if the shared memory segment has been removed or marked for removal.

`stat`

Returns an object of type `IPC::SharedMem::stat` which is a sub-class of `Class::Struct` It provides the following fields. For a description of these fields see your system documentation.

uid  
gid  
cuid  
cgid  
mode  
segsz  
lpid  
cpid  
nattch  
atime  
dtime  
ctime

`attach ( [FLAG] )`

Permanently attach to the shared memory segment. When a [IPC::SharedMem](#) object is attached, it will use `memread` and `memwrite` instead of `shmread` and `shmwrite` for accessing the shared memory segment. Returns true if successful, or false on error. See `shmat`.

`detach`

Detach from the shared memory segment that previously has been attached to. Returns true if successful, or false on error. See `shmdt`.

`addr`

Returns the address of the shared memory that has been attached to in a format suitable for use with `pack('P')`. Returns `undef` if the shared memory has not been attached.

## SEE ALSO

[IPC::SysV](#), [Class::Struct](#)

## AUTHORS

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## COPYRIGHT

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