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 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 you system

documentation.   `uid`
```
gid
cuid
cgid
mode
segsz
lpid
cpid
nattach
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*

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