Rocky Enterprise Linux 9.2 Manual Pages on command 'sysvipc.7'

$ man sysvipc.7

SVIPC(7) Linux Programmer's Manual SVIPC(7)

NAME

sysvipc - System V interprocess communication mechanisms

DESCRIPTION

System V IPC is the name given to three interprocess communication mechanisms that are widely available on UNIX systems: message queues, semaphore, and shared memory.

Message queues

System V message queues allow data to be exchanged in units called messages. Each mes?sages can have an associated priority, POSIX message queues provide an alternative API for achieving the same result; see mq_overview(7).

The System V message queue API consists of the following system calls:

msgget(2)

Create a new message queue or obtain the ID of an existing message queue. This call returns an identifier that is used in the remaining APIs.

msgsnd(2)

Add a message to a queue.

msgrcv(2)

Remove a message from a queue.

msgctl(2)

Perform various control operations on a queue, including deletion.

Semaphore sets

System V semaphores allow processes to synchronize their actions System V semaphores are allocated in groups called sets; each semaphore in a set is a counting semaphore. POSIX semaphores provide an alternative API for achieving the same result; see sem_overview(7).

The System V semaphore API consists of the following system calls:

semget(2)

Create a new set or obtain the ID of an existing set. This call returns an identi?fier that is used in the remaining APIs.

semop(2)

Perform operations on the semaphores in a set.

semctl(2)

Perform various control operations on a set, including deletion.

Shared memory segments

System V shared memory allows processes to share a region a memory (a "segment"). POSIX shared memory is an alternative API for achieving the same result; see shm_overview(7).

The System V shared memory API consists of the following system calls:

shmget(2)

Create a new segment or obtain the ID of an existing segment. This call returns an identifier that is used in the remaining APIs.

shmat(2)

Attach an existing shared memory object into the calling process's address space.

shmdt(2)

Detach a segment from the calling process's address space.

shmctl(2)

Perform various control operations on a segment, including deletion.

IPC namespaces

For a discussion of the interaction of System V IPC objects and IPC namespaces, see ipc_namespaces(7).

SEE ALSO

ipcmk(1), ipcrm(1), ipcs(1), lsipc(1), ipc(2), msgctl(2), msgget(2), msgrcv(2), msgsnd(2), semctl(2), semget(2), semop(2), shmat(2), shmctl(2), shmdt(2), shmget(2), ftok(3), ipc_namespaces(7)

COLOPHON

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