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 mes?

    sages. Each messages 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 mes?

        sage 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 dele?

tion.

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 identifier 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 dele?

      tion.

  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), shm?

    ctl(2), shmdt(2), shmget(2), ftok(3), ipc_namespaces(7)

COLOPHON

    This page is part of release 5.10 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/.

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