NAME

ipcs – report inter-process communication facilities status

SYNOPSIS

ipcs [**–abcmopqst**] [**–C** *corefile*] [**–N** *namelist*]

AVAILABILITY

SUNWipc

DESCRIPTION

ipcs prints information about active inter-process communication facilities. Without *options*, information is printed in short format for message queues, shared memory, and semaphores that are currently active in the system.

The information that is displayed is controlled by the options supplied.

OPTIONS

–m Print information about active shared memory segments.

–q Print information about active message queues.

–s Print information about active semaphores.

If –**q**, –**m**, or –**s** are specified, information about only those indicated is printed. If none of these three are specified, information about all three is printed subject to these options:

–a Use all print options. (This is a shorthand notation for –**b**, –**c**, –**o**, –**p**, and –**t**.)

–b Print information on biggest allowable size: maximum number of bytes in messages on queue for message queues, size of segments for shared memory, and number of semaphores in each set for semaphores. See below for meaning of columns in a listing.

–c Print creator's login name and group name. See below.

–o Print information on outstanding usage: number of messages on queue and total number of bytes in messages on queue for message queues and number of processes attached to shared memory segments.

–p Print process number information: process ID of last process to send a message, process ID of last process to receive a message on message queues, process ID of creating process, and process ID of last process to attach or detach on shared memory segments. See below.

–t Print time information: time of the last control operation that changed the access permissions for all facilities, time of last **msgsnd** and last **msgrcv** on message queues, time of last **shmat** and last **shmdt** on shared memory, time of last **semop** on semaphores. See below.

–C *corefile* Use the file *corefile* in place of **/dev/mem** and **/dev/kmem**. Use a core dump obtained from **savecore**(1M) in place of **/dev/mem** and **/dev/kmem**. Without the –**C** option (default), the running system image is used.

–N *namelist* Use the file *namelist* in place of **/dev/ksyms**.

The column headings and the meaning of the columns in an **ipcs** listing are given below; the letters in parentheses indicate the options that cause the corresponding heading to appear; "all" means that the heading always appears. Note: These options only determine what information is provided for each facility; they do not determine which facilities are listed.

T (all) Type of the facility:
- **q** message queue
- **m** shared memory segment
- **s** semaphore

ID (all) The identifier for the facility entry.

KEY (all) The key used as an argument to **msgget**, **semget**, or **shmget** to create the facility entry. (Note: The key of a shared memory segment is changed to **IPC_PRIVATE** when the segment has been removed until all processes attached to the segment detach it.)

MODE (all) The facility access modes and flags: The mode consists of 11 characters that are interpreted as follows. The first two characters are:
- **R** A process is waiting on a *msgrcv*.
- **S** A process is waiting on a *msgsnd*.
- **D** The associated shared memory segment has been removed. It will disappear when the last process attached to the segment detaches it.
- **C** The associated shared memory segment is to be cleared when the first attach is executed.
- – The corresponding special flag is not set.

The next nine characters are interpreted as three sets of three bits each. The first set refers to the owner's permissions; the next to permissions of others in the user-group of the facility entry; and the last to all others. Within each set, the first character indicates permission to read, the second character indicates permission to write or alter the facility entry, and the last character is currently unused.

The permissions are indicated as follows:
- **r** Read permission is granted.
- **w** Write permission is granted.
- **a** Alter permission is granted.
- – The indicated permission is not granted.

OWNER (all) The login name of the owner of the facility entry.

GROUP (all) The group name of the group of the owner of the facility entry.

CREATOR (a,c) The login name of the creator of the facility entry.

CGROUP (a,c) The group name of the group of the creator of the facility entry.

CBYTES (a,o) The number of bytes in messages currently outstanding on the associated message queue.

QNUM (a,o) The number of messages currently outstanding on the associated

		message queue.
QBYTES	(a,b)	The maximum number of bytes allowed in messages outstanding on the associated message queue.
LSPID	(a,p)	The process ID of the last process to send a message to the associated queue.
LRPID	(a,p)	The process ID of the last process to receive a message from the associated queue.
STIME	(a,t)	The time the last message was sent to the associated queue.
RTIME	(a,t)	The time the last message was received from the associated queue.
CTIME	(a,t)	The time when the associated entry was created or changed.
NATTCH	(a,o)	The number of processes attached to the associated shared memory segment.
SEGSZ	(a,b)	The size of the associated shared memory segment.
CPID	(a,p)	The process ID of the creator of the shared memory entry.
LPID	(a,p)	The process ID of the last process to attach or detach the shared memory segment.
ATIME	(a,t)	The time the last attach was completed to the associated shared memory segment.
DTIME	(a,t)	The time the last detach was completed on the associated shared memory segment.
NSEMS	(a,b)	The number of semaphores in the set associated with the semaphore entry.
OTIME	(a,t)	The time the last semaphore operation was completed on the set associated with the semaphore entry.

FILES

/etc/group	group names
/etc/passwd	user names
/dev/mem	memory
/dev/ksyms	system namelist

SEE ALSO

msgop(2), **semop**(2), **shmop**(2)

NOTES

If the user specifies either the −**C** or −**N** flag, the real and effective UID/GID is set to the real UID/GID of the user invoking **ipcs**.

Things can change while **ipcs** is running; the information it gives is guaranteed to be accurate only when it was retrieved.