



Linux Ubuntu 26.04 Manual Pages on command 'fuser.1'

\$ man fuser.1

FUSER(1) User Commands FUSER(1)

NAME

fuser - identify processes using files or sockets

SYNOPSIS

fuser [-fuv] [-a|-s] [-4|-6] [-c|-m|-n space] [-k [-i] [-M] [-w] [-SIGNAL]] name ...

fuser -l

fuser -V

DESCRIPTION

fuser displays the PIDs of processes using the specified files or file systems. In the de?

fault display mode, each file name is followed by a letter denoting the type of access:

- c current directory.
- e executable being run.
- f open file. f is omitted in default display mode.
- F open file for writing. F is omitted in default display mode.
- r root directory.
- m mmap'ed file or shared library.
- . Placeholder, omitted in default display mode.

fuser returns a non-zero return code if none of the specified files is accessed or in case of a fatal error. If at least one access has been found, fuser returns zero.

In order to look up processes using TCP and UDP sockets, the corresponding name space has to be selected with the -n option. By default fuser will look in both IPv6 and IPv4 sockets.

To change the default behavior, use the -4 and -6 options. The socket(s) can be specified by the local and remote port, and the remote address. All fields are optional, but commas

in front of missing fields must be present:

[lcl_port][, [rmt_host][, [rmt_port]]]

Either symbolic or numeric values can be used for IP addresses and port numbers.

fuser outputs only the PIDs to stdout, everything else is sent to stderr.

OPTIONS

-a, --all

Show all files specified on the command line. By default, only files that are accessed by at least one process are shown.

-c Same as -m option, used for POSIX compatibility.

-f Silently ignored, used for POSIX compatibility.

-k, --kill

Kill processes accessing the file. Unless changed with -SIGNAL, SIGKILL is sent. An fuser process never kills itself, but may kill other fuser processes. The effective user ID of the process executing fuser is set to its real user ID before attempting to kill.

-i, --interactive

Ask the user for confirmation before killing a process. This option is silently ignored if -k is not present too.

-l, --inode

For the name space file let all comparisons be based on the inodes of the specified file(s) and never on the file names even on network based file systems.

-l, --list-signals

List all known signal names.

-m NAME, --mount NAME

NAME specifies a file on a mounted file system or a block device that is mounted. All processes accessing files on that file system are listed. If a directory is specified, it is automatically changed to NAME/ to use any file system that might be mounted on that directory.

-M, --ismountpoint

Request will be fulfilled only if NAME specifies a mountpoint. This is an invaluable seat belt which prevents you from killing the machine if NAME happens to not be a filesystem.

-w Kill only processes which have write access. This option is silently ignored if -k

is not present too.

-n NAMESPACE, --namespace NAMESPACE

Select a different name space. The name spaces file (file names, the default), udp (local UDP ports), and tcp (local TCP ports) are supported. For ports, either the port number or the symbolic name can be specified. If there is no ambiguity, the shortcut notation name/space (e.g., 80/tcp) can be used.

-s, --silent

Silent operation. -u and -v are ignored in this mode. -a must not be used with -s.

-SIGNAL

Use the specified signal instead of SIGKILL when killing processes. Signals can be specified either by name (e.g., -HUP) or by number (e.g., -1). This option is silently ignored if the -k option is not used.

-u, --user

Append the user name of the process owner to each PID.

-v, --verbose

Verbose mode. Processes are shown in a ps-like style. The fields PID, USER and COM? MAND are similar to ps. ACCESS shows how the process accesses the file. Verbose mode will also show when a particular file is being accessed as a mount point, knfs export or swap file. In this case kernel is shown instead of the PID.

-V, --version

Display version information.

-4, --ipv4

Search only for IPv4 sockets. This option must not be used with the -6 option and only has an effect with the tcp and udp namespaces.

-6, --ipv6

Search only for IPv6 sockets. This option must not be used with the -4 option and only has an effect with the tcp and udp namespaces.

FILES

/proc location of the proc file system

EXAMPLES

fuser -km /home

kills all processes accessing the file system /home in any way.

if fuser -s /dev/ttyS1; then ;; else command; fi

invokes command if no other process is using /dev/ttyS1.

fuser telnet/tcp

shows all processes at the (local) TELNET port.

RESTRICTIONS

Processes accessing the same file or file system several times in the same way are only shown once.

If the same object is specified several times on the command line, some of those entries may be ignored.

fuser may only be able to gather partial information unless run with privileges. As a consequence, files opened by processes belonging to other users may not be listed and executables may be classified as mapped only.

fuser cannot report on any processes that it doesn't have permission to look at the file descriptor table for. The most common time this problem occurs is when looking for TCP or UDP sockets when running fuser as a non-root user. In this case fuser will report no access.

Installing fuser SUID root will avoid problems associated with partial information, but may be undesirable for security and privacy reasons.

udp and tcp name spaces, and UNIX domain sockets can't be searched with kernels older than 1.3.78.

Accesses by the kernel are only shown with the -v option.

The -k option only works on processes. If the user is the kernel, fuser will print an advertisement, but take no action beyond that.

fuser will not see block devices mounted by processes in a different mount namespace. This is due to the device ID shown in the process' file descriptor table being from the process namespace, not fuser's; meaning it won't match.

BUGS

fuser -m /dev/sgX will show (or kill with the -k flag) all processes, even if you don't have that device configured. There may be other devices it does this for too.

The mount -m option will match any file within the same device as the specified file, use the -M option as well if you mean to specify only the mount point.

fuser will not match mapped files, such as a process' shared libraries if they are on a btrfs(5) filesystem due to the device IDs being different for stat(2) and /proc/<PID>/maps.

SEE ALSO

kill(1), killall(1), stat(2), btrfs(5), lsof(8), mount_namespaces(7), pkill(1), ps(1),

kill(2).

psmisc

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