## NAME

pgrep, pkill − look up or signal processes based on name and other attributes

## SYNOPSIS

**pgrep** [options] pattern
**pkill** [options] pattern

## DESCRIPTION

**pgrep** looks through the currently running processes and lists the process IDs which match the selection criteria to stdout. All the criteria have to match. For example,

$ pgrep −u root sshd

will only list the processes called **sshd** AND owned by **root**. On the other hand,

$ pgrep −u root,daemon

will list the processes owned by **root** OR **daemon**.

**pkill** will send the specified signal (by default **SIGTERM**) to each process instead of listing them on stdout.

## OPTIONS

**−***signal*
**−−signal** *signal*
Defines the signal to send to each matched process. Either the numeric or the symbolic signal name can be used. (**pkill** only.)

**−c**, **−−count**
Suppress normal output; instead print a count of matching processes. When count does not match anything, e.g. returns zero, the command will return non-zero value.

**−d**, **−−delimiter** *delimiter*
Sets the string used to delimit each process ID in the output (by default a newline). (**pgrep** only.)

**−f**, **−−full**
The *pattern* is normally only matched against the process name. When **−f** is set, the full command line is used.

**−g**, **−−pgroup** *pgrp,...*
Only match processes in the process group IDs listed. Process group 0 is translated into **pgrep**'s or **pkill**'s own process group.

**−G**, **−−group** *gid,...*
Only match processes whose real group ID is listed. Either the numerical or symbolical value may be used.

**−i**, **−−ignore−case**
Match processes case-insensitively.

**−l**, **−−list−name**
List the process name as well as the process ID. (**pgrep** only.)

**−a**, **−−list−full**
List the full command line as well as the process ID. (**pgrep** only.)

**−n**, **−−newest**
Select only the newest (most recently started) of the matching processes.

**−o**, **−−oldest**
Select only the oldest (least recently started) of the matching processes.

**−P**, **−−parent** *ppid,...*
Only match processes whose parent process ID is listed.

**−s**, **−−session** *sid*,...
Only match processes whose process session ID is listed. Session ID 0 is translated into **pgrep**'s or **pkill**'s own session ID.

**−t**, **−−terminal** *term*,...
Only match processes whose controlling terminal is listed. The terminal name should be specified without the "/dev/" prefix.

**−u**, **−−euid** *euid*,...
Only match processes whose effective user ID is listed. Either the numerical or symbolical value may be used.

**−U**, **−−uid** *uid*,...
Only match processes whose real user ID is listed. Either the numerical or symbolical value may be used.

**−v**, **−−inverse**
Negates the matching. This option is usually used in **pgrep**'s context. In **pkill**'s context the short option is disabled to avoid accidental usage of the option.

**−w**, **−−lightweight**
Shows all thread ids instead of pids in **pgrep**'s context. In **pkill**'s context this option is disabled.

**−x**, **−−exact**
Only match processes whose names (or command line if −f is specified) **exactly** match the *pattern*.

**−F**, **−−pidfile** *file*
Read *PID*'s from file. This option is perhaps more useful for **pkill** than **pgrep**.

**−L**, **−−logpidfile**
Fail if pidfile (see -F) not locked.

**−r**, **−−runstates** *D,R,S,Z,...*
Match only processes which match the process state.

**−−ns** *pid*
Match processes that belong to the same namespaces. Required to run as root to match processes from other users. See −−nslist for how to limit which namespaces to match.

**−−nslist** *name***,...**
Match only the provided namespaces. Available namespaces: ipc, mnt, net, pid, user,uts.

**−V**, **−−version**
Display version information and exit.

**−h**, **−−help**
Display help and exit.

## OPERANDS

*pattern* Specifies an Extended Regular Expression for matching against the process names or command lines.

## EXAMPLES

Example 1: Find the process ID of the **named** daemon:

```
$ pgrep −u root named
```

Example 2: Make **syslog** reread its configuration file:

```
$ pkill −HUP syslogd
```

Example 3: Give detailed information on all **xterm** processes:

```
$ ps −fp $(pgrep −d, −x xterm)
```

Example 4: Make all **chrome** processes run nicer:

$ renice +4 $(pgrep chrome)

## EXIT STATUS

0 One or more processes matched the criteria. For pkill the process must also have been successfully signalled.

1 No processes matched or none of them could be signalled.

2 Syntax error in the command line.

3 Fatal error: out of memory etc.

## NOTES

The process name used for matching is limited to the 15 characters present in the output of /proc/*pid*/stat. Use the −f option to match against the complete command line, /proc/*pid*/cmdline.

The running **pgrep** or **pkill** process will never report itself as a match.

## BUGS

The options **−n** and **−o** and **−v** can not be combined. Let me know if you need to do this.

Defunct processes are reported.

## SEE ALSO

**ps**(1), **regex**(7), **signal**(7), **killall**(1), **skill**(1), **kill**(1), **kill**(2)

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## REPORTING BUGS

Please send bug reports to ⟨procps@freelists.org⟩