

NAME

`pstree` - display a tree of processes

SYNOPSIS

`pstree` [-a, --arguments] [-c, --compact] [-h, --highlight-all, -H*pid*, --highlight-pid *pid*] [-g] --show-pgids] [-l, --long] [-n, --numeric-sort] [-N, --ns-sortns] [-p, --show-pids] [-s, --show-parents] [-S, --ns-changes] [-u, --uid-changes] [-Z, --security-context] [-A, --ascii, -G, --vt100, -U, --unicode] [*pid*, *user*]
`pstree` -V, --version

DESCRIPTION

`pstree` shows running processes as a tree. The tree is rooted at either *pid* or **init** if *pid* is omitted. If a user name is specified, all process trees rooted at processes owned by that user are shown.

`pstree` visually merges identical branches by putting them in square brackets and prefixing them with the repetition count, e.g.

```
init+-getty
|-getty
|-getty
+-getty
```

becomes

```
init--4*[getty]
```

Child threads of a process are found under the parent process and are shown with the process name in curly braces, e.g.

```
icecast2---13*[{icecast2}]
```

If `pstree` is called as `pstree.x11` then it will prompt the user at the end of the line to press return and will not return until that has happened. This is useful for when `pstree` is run in a xterminal.

Certain kernel or mount parameters, such as the `hidepid` option for `procfs`, will hide information for some processes. In these situations `pstree` will attempt to build the tree without this information, showing process names as question marks.

OPTIONS

- a** Show command line arguments. If the command line of a process is swapped out, that process is shown in parentheses. **-a** implicitly disables compaction for processes but not threads.
- A** Use ASCII characters to draw the tree.
- c** Disable compaction of identical subtrees. By default, subtrees are compacted whenever possible.
- G** Use VT100 line drawing characters.
- h** Highlight the current process and its ancestors. This is a no-op if the terminal doesn't support highlighting or if neither the current process nor any of its ancestors are in the subtree being shown.
- H** Like **-h**, but highlight the specified process instead. Unlike with **-h**, `pstree` fails when using **-H** if highlighting is not available.
- g** Show PGIDs. Process Group IDs are shown as decimal numbers in parentheses after each process name. **-g** implicitly disables compaction. If both PIDs and PGIDs are displayed then PIDs are shown first.
- l** Display long lines. By default, lines are truncated to either the `COLUMNS` environment variable or the display width. If neither of these methods work, the default of 132 columns is used.
- n** Sort processes with the same ancestor by PID instead of by name. (Numeric sort.)
- N** Show individual trees for each namespace of the type specified. The available types are: `ipc`, `mnt`, `net`, `pid`, `user`, `uts`. Regular users don't have access to other users' processes information, so the

output will be limited.

- p** Show PIDs. PIDs are shown as decimal numbers in parentheses after each process name. **-p** implicitly disables compaction.
- s** Show parent processes of the specified process.
- S** Show namespaces transitions. Like **-N**, the output is limited when running as a regular user.
- u** Show uid transitions. Whenever the uid of a process differs from the uid of its parent, the new uid is shown in parentheses after the process name.
- U** Use UTF-8 (Unicode) line drawing characters. Under Linux 1.1-54 and above, UTF-8 mode is entered on the console with **echo -e ' 33%8'** and left with **echo -e ' 33%@'**
- V** Display version information.
- Z** (SELinux) Show security context for each process. This flag will only work if pstree is compiled with SELinux support.

FILES

/proc location of the proc file system

BUGS

Some character sets may be incompatible with the VT100 characters.

SEE ALSO

[ps\(1\)](#), [top\(1\)](#).