

Processes

Go through the basic concepts about the system processes and the command to get their status.

A **process** is a running instance created when a program or a software system is initiated. They can be perceived as programs in action. Processes are often referred as *tasks*.

PID:

Every process has a unique identifier assigned to it at the time of its creation, known as **PID** (*process identifier*).

PPID:

Every process id spawned by its parent process. The **PID** of its parent is called as **PPID**.

ps

Definition:

Short for “**process status**”, the command `ps` gives the status and information about the currently running processes along with their **PID**’s (process identification numbers).

Syntax:

```
ps [options]
```

Options:

Option	Description
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Option	Description
<code>-A</code>	Select all processes. Identical to <code>-e</code> .
<code>-d</code>	Select all processes except session leaders.
<code>r</code>	Restrict the selection to only running processes.
<code>p pidlist</code> OR <code>-p pidlist</code> OR <code>--pid pidlist</code>	Select by process ID.
<code>--ppid pidlist</code>	Select by parent process ID.
<code>-s sesslist</code> OR <code>--sid sesslist</code>	Select by session ID.

Example:

- To see every process running on the system, using the standard syntax:

```
ps -e
```

- To display a process tree:

```
ps -ejh
```

- Print only the name of process ID 21:

```
ps -p 21 -o comm=
```