

Linux Run levels

A runlevel is one of the modes that a Unix-based, dedicated server or a VPS server OS will run on. Each runlevel has a certain number of services stopped or started, giving the user control over the behavior of the machine.

Conventionally, seven runlevels exist, numbered from zero to six.

0 – System halt i.e the system can be safely powered off with no activity.

1 – Single user mode.

2 – Multiple user mode with no NFS(network file system).

3 – Multiple user mode under the command line interface and not under the graphical user interface.

4 – User-definable.

5 – Multiple user mode under GUI (graphical user interface) and this is the standard runlevel for most of the LINUX based systems.

6 – Reboot which is used to restart the system.

you can check run level by typing on terminal: **runlevel**



A bit of history (Shell)

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The Bourne Shell (sh) was originally developed by Stephen Bourne while working at Bell Labs.

Released in 1979 in the Version 7 Unix release distributed to colleges and universities.

The Bourne Again Shell (bash) was written as a free and open source replacement for the Bourne Shell.

Given the open nature of Bash, over time it has been adopted as the default shell on most Linux systems.

Accessing the Command Line

You can quickly access the terminal by using the desktop menu option Terminal. This opens `gnome-terminal`, from which you can access the terminal while remaining in a GUI environment. This time, the terminal appears as white text on an aubergine (dark purple) background. This is the most common method for accessing the terminal for most desktop users.

⇒ '\$' indicates a normal user in the terminal.

'#' indicates super user in the terminal.

⇒ To switch to the super user from normal user:

\$ su -

⇒ In the terminal the blinking cursor represents an "Interactive Shell Prompt".

- physical console and 5 virtual consoles.

⇒ To see, which user you are logged in as:

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\$ whoami

⇒ To see how much free memory is available in the system:

free -m

⇒ To logout as a user:

\$ logout

⇒ Three parts of a command:

command **option** **argument/target**

i. command - command to execute

ii. option - to change the behaviour of the command. normally starts with '-' .

iii. argument/target - on which target the command should execute.

e.g. ls -l /etc .

=> Main 3 commands of a linux system:

i. cd (change directory)

ii. ls (list)

iii. pwd (present working directory)

⇒ To go to the root directory:

cd /

⇒ To go to the home directory of the current logged in user:

\$ cd

Or use,

\$ cd ~

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⇒ To switch between current and the most previous working directory:

\$ cd -

⇒ To go to the parent directory of the current working directory:

\$ cd ..

⇒ To go to two step back of current working directory:

\$ cd ../../

⇒ To see all the typed commands:

\$ history

⇒ To see contents in long listing detailed format of a directory:

\$ ls -l

⇒ To see all sub-directories and files under the current working directory:

\$ ls -R

⇒ To see all the files including the hidden ones:

\$ ls -a

⇒ Hidden files start with a '.'.

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