

## Ubuntu Commands

### 1. Uname:

The uname (UNIX name) command in Linux is a simple yet powerful tool that offers information about a Linux machine's operating system and hardware platform.

```
odoo@ICAPC0041:~$ uname  
Linux  
odoo@ICAPC0041:~$
```

### 2. whoami:

The whoami command in Linux displays the username of the user who is currently logged in.

```
odoo@ICAPC0041:~$ whoami  
odoo  
odoo@ICAPC0041:~$
```

### 3. cd:

The cd command allows you to change directories in Linux, making it easier to navigate through the file system and manage your files efficiently.

```
odoo@ICAPC0041:~$ cd test  
odoo@ICAPC0041:~/test$
```

#### 4.pwd:

The pwd command in Ubuntu prints the current working directory's full path.

```
odoo@ICAPC0041:~$ pwd
/home/odoo
odoo@ICAPC0041:~$
```

#### 5.ls:

The ls command in Linux lists the contents of a directory, including files and directories.

```
odoo@ICAPC0041:~$ ls
Desktop    Downloads  Pictures   snap       test
Documents  Music      Public     Templates  Videos
```

#### 6.clear:

We can clear our terminal by using shortcut `CTRL+L` or clear command.

```
odoo@ICAPC0041:~$ cd test
odoo@ICAPC0041:~/test$ cd ..
odoo@ICAPC0041:~$ clear
```

```
odoo@ICAPC0041:~$
```

#### 7.cp:

'cp' means copy. 'cp' command is used to copy a file or a directory.

```
python developer.
odoo@ICAPC0041:~/test$ cat > f2.txt
^C
odoo@ICAPC0041:~/test$ cp f1.txt f2.t
odoo@ICAPC0041:~/test$ cat f2.txt
jay butani
python developer.
```

## 8.cat:

The cat (concatenate) command in Linux displays file contents. It reads one or multiple files and prints their content to the terminal. cat is used to view file contents, combine files, and create new files.

```
odoo@ICAPC0041:~/test$ cat > f1.txt
jay butani
python developer.
^C
odoo@ICAPC0041:~/test$ cat f1.txt
jay butani
python developer.
```

## 9.head:

The 'head' command displays the starting content of a file. By default, it displays starting 10 lines of any file.

```
odoo@ICAPC0041:~/test$ cat f2.txt
jay butani
python developer.
a
b
c
d
e
f
g
h
i
j
k
l
odoo@ICAPC0041:~/test$ head f2.txt
jay butani
python developer.
a
b
c
d
e
f
g
h
```

### 10.tail:

Linux tail command is used to display the last ten lines of one or more files.

```
odoo@ICAPC0041:~/test$ tail f2.txt
c
d
e
f
g
h
i
j
k
l
odoo@ICAPC0041:~/test$
```

### 11.mv:

Linux mv command is used to move existing file or directory from one location to another. It is also used to rename a file or directory. If you want to rename a single directory or file then 'mv' option will be better to use.

```
odoo@ICAPC0041:~/test$ mv f1.txt file1.txt
odoo@ICAPC0041:~/test$ ls
f2.txt  file1.txt
```

### 12.touch:

The touch command in Linux is used to create empty files or update the timestamps of existing files.

```
odoo@ICAPC0041:~/test$ touch f3.txt
odoo@ICAPC0041:~/test$ cat f3.txt
```

### 13.mkdir:

The mkdir command in Linux creates new directories, or folders, on your computer.

```
odoo@ICAPC0041:~$ mkdir test1
odoo@ICAPC0041:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  snap  Templates  test  test1  Videos
```

### 14.rm:

The rm command in Linux is used to remove files, directories, and symbolic links from the file system.

```
odoo@ICAPC0041:~/test$ rm f3.txt
odoo@ICAPC0041:~/test$ ls
f2.txt  file1.txt
```

### 15.rmdir:

The rmdir command in Linux is used to remove empty directories from a system.

```
odoo@ICAPC0041:~$ rmdir test1
odoo@ICAPC0041:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  snap  Templates  test  Videos
```

### 16.ps:

The ps command is used to view currently running processes on the system. It helps us to determine which process is doing what in our system, how much memory it is using, how much CPU space it occupies, user ID, command name, etc .

```
odoo@ICAPC0041:~/test$ ps
  PID TTY          TIME CMD
  99427 pts/0    00:00:00 bash
 103310 pts/0    00:00:00 ps
```

### 17.kill:

It is used for manually terminating the processes. The behaviour of the kill command is slightly different among the shells and the */bin/kill* standalone executable.

```
103310 pts/0    00:00:00 ps
odoo@ICAPC0041:~/test$ type -a kill
kill is a shell builtin
kill is /usr/bin/kill
kill is /bin/kill
```

## 18.chmod & chown:

The "chmod" command modifies the read, write, and execute permissions of specified files and the search permissions of specified directories.

```
odoo@ICAPC0041:~/test$ chmod -r f2.txt
odoo@ICAPC0041:~/test$ cat f2.txt
cat: f2.txt: Permission denied
odoo@ICAPC0041:~/test$
```

Linux chown command is used to change a file's ownership, directory, or symbolic link for a user or group. The chown stands for change owner. In Linux, each file is associated with a corresponding owner or group.

## 19.apt:

apt provides a high-level Command Line Interface (CLI) for the APT package management system, offering a user-friendly interface intended for interactive use. It simplifies common tasks like installation, upgrades, and removal, with better defaults than more specialized tools like apt-get and apt-cache.

```

odoo@ICAPC0041:~/test$ sudo apt update
[sudo] password for odoo:
Get:1 https://dl.google.com/linux/chrome/deb stable InRelease [1,825 B]
Hit:2 http://in.archive.ubuntu.com/ubuntu jammy InRelease
Get:3 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:5 https://dl.google.com/linux/chrome/deb stable/main amd64 Packages [1,220 B]
Get:6 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:7 http://security.ubuntu.com/ubuntu jammy-security/main amd64 DEP-11 Metadata [43.1 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 DEP-11 Metadata [103 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 DEP-11 Metadata [208 B]
Get:10 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 DEP-11 Metadata [125 kB]
Get:11 http://in.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 DEP-11 Metadata [212 B]
Get:12 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 DEP-11 Metadata [356 kB]
Get:13 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 DEP-11 Metadata [208 B]
Get:14 http://in.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 DEP-11 Metadata [940 B]
Get:15 http://in.archive.ubuntu.com/ubuntu jammy-backports/main amd64 DEP-11 Metadata [7,028 B]
Get:16 http://in.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 DEP-11 Metadata [212 B]
Get:17 http://in.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 DEP-11 Metadata [17.8 kB]
Get:18 http://in.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 DEP-11 Metadata [212 B]
Fetched 1,041 kB in 4s (292 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
93 packages can be upgraded. Run 'apt list --upgradable' to see them.
odoo@ICAPC0041:~/test$ sudo apt upgrade
Reading package lists... Done

```

## 20.apt-get:

An older tool with a low-level interface that gives users more control over package management. It's a good choice for advanced users or those who need more control, or for scripting purposes. Apt-get has more options than apt, which can be useful for writing low-level scripts and tools.

## 21.history:

The history command in Linux allows users to view and manipulate the history of commands that have been entered. It can be used to quickly access and reuse previously executed commands.

```
odoo@ICAPC0041:~$ history
1  sudo apt update
2  sudo apt install snap\
3  sudo apt install snap
4  sudo snap install skype
5  sudo snap install sublime--text
6  sudo snap install sublime- text
7  sudo apt install sublime --text
8  sudo apt install sublime --classic
9  sudo apt install sublime-text
10 sudo snap install sublime-text
11 sudo snap install sublime-text --classic
12 uname
13 whoami
14 cd test
15 cd Downloads
16 cd..
17 ..
18 cd/
19 cd /
20 cd //
21 cd Downloads
22 cd -
23 cd ..
24 cd test
25 cd ..
26 pwd
27 ls
28 clear
29 cd test
30 cd ..
31 clear
32 cd test
33 cat f1.txt
34 cat > f1.txt
35 cat f1.txt
36 cat > f2.txt
```

## 22.nano:

Nano is a command-line text editor in Linux that can be used for basic text editing tasks.

- **Open a file:** Type nano filename to open the file for editing
- **Save:** Press Ctrl+O to save the current file
- **Exit:** Press Ctrl+X to exit nano



- **Move cursor:** Use the arrow keys to move the cursor
- **Page navigation:** Press Ctrl+V to move down one page or Ctrl+Y to move up one page
- **Search:** Press Ctrl+W to search for a string of text
- **Cut and paste:** Press Ctrl+K to cut the current line and Ctrl+U to paste the cut text
- **Select text:** Move the cursor to the beginning of the text and press Alt+a to set a selection mark
- **Spell check:** Install the spell package to check the spelling of a particular line

```
GNU nano 6.2                                file1.txt
jay butant
python developer.
```

## 23.ifconfig:

The command ifconfig stands for interface configurator. This command enables us to initialize an interface, assign IP address, enable or disable an interface. It display route and network interface.

You can view IP address, MAC address and MTU (Maximum Transmission Unit) with ifconfig command.

```
odoo@ICAPC0041:~$ sudo apt install net-tools
[sudo] password for odoo:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  net-tools
0 upgraded, 1 newly installed, 0 to remove and 93 not upgraded.
Need to get 204 kB of archives.
After this operation, 819 kB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 net-tools amd64 1.60+git20181103.0eebece-1ubuntu5 [204 kB]
Fetched 204 kB in 1s (150 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 201958 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20181103.0eebece-1ubuntu5_amd64.deb ...
Unpacking net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Setting up net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Processing triggers for man-db (2.10.2-1) ...
odoo@ICAPC0041:~$ ifconfig
eno1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.1.55 netmask 255.255.255.0 broadcast 192.168.1.255
    inet6 fe80::cd5:65a4:4a3c:bba prefixlen 64 scopeid 0x20<link>
    ether 44:8a:5b:7b:78:e4 txqueuelen 1000 (Ethernet)
    RX packets 1113433 bytes 1172491351 (1.1 GB)
    RX errors 0 dropped 2 overruns 0 frame 0
    TX packets 524298 bytes 138214929 (138.2 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
    device interrupt 20 memory 0xf7c00000-f7c20000

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 20675 bytes 2369608 (2.3 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 20675 bytes 2369608 (2.3 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

## 24.ping:

Ping is short for Packet Internet Groper. This command is mainly used for checking the network connectivity among host/server and host. The ping command takes the URL or IP address as input and transfers the data packet to a specified address along with a "PING" message. Then, it will get a reply from the host/server. This time is known as "latency".

```
odoo@ICAPC0041:~$ ping javatpoint.com
PING javatpoint.com (104.21.32.1) 56(84) bytes of data.
64 bytes from 104.21.32.1 (104.21.32.1): icmp_seq=1 ttl=45 time=34.5 ms
64 bytes from 104.21.32.1 (104.21.32.1): icmp_seq=2 ttl=45 time=34.6 ms
64 bytes from 104.21.32.1 (104.21.32.1): icmp_seq=3 ttl=45 time=34.3 ms
64 bytes from 104.21.32.1 (104.21.32.1): icmp_seq=4 ttl=45 time=34.4 ms
64 bytes from 104.21.32.1 (104.21.32.1): icmp_seq=5 ttl=45 time=34.6 ms
64 bytes from 104.21.32.1 (104.21.32.1): icmp_seq=6 ttl=45 time=34.6 ms
64 bytes from 104.21.32.1 (104.21.32.1): icmp_seq=7 ttl=45 time=34.6 ms
64 bytes from 104.21.32.1 (104.21.32.1): icmp_seq=8 ttl=45 time=34.5 ms
64 bytes from 104.21.32.1 (104.21.32.1): icmp_seq=9 ttl=45 time=34.3 ms
64 bytes from 104.21.32.1 (104.21.32.1): icmp_seq=10 ttl=45 time=34.6 ms
^C
--- javatpoint.com ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9010ms
rtt min/avg/max/mdev = 34.323/34.502/34.601/0.105 ms
```

## Ubuntu Operators

### 1.&:

This command sends a process/script/command to the background.

### 2.&&:

The command following this operator will only execute if the command preceding this operator has been successfully executed.

### 3.|:

The output of the first command acts as input to the second command.

### 4.>,>>:

Redirects the output of a command or a group of commands to a file or stream.

the “>” is the output redirection operator used for overwriting files that already exist in the directory. While, the “>>” is an output operator as well, but, it appends the data of an existing file. Often, both of these operators are used together to modify files in Linux.

### 5.\:

Used to concatenate large commands over several lines in the shell.

### 6.\*:

In the shell, \* acts as a wildcard character, matching zero or more characters in filenames or patterns. For example:

- `ls *.txt` lists all files ending in .txt.

In arithmetic expressions within the shell or scripts, \* represents the multiplication operator. For example:

- `echo $((2 * 3))` outputs 6.

**7.^:**

This operator is used for mathematical operations.