

Common Kali Linux Commands Overview

Common use A-Z of Kali Linux commands are here below :

(A)

apropos Search Help manual pages (man -k)

apt-get Search for and install software packages (Debian)

aptitude Search for and install software packages (Debian)

aspell Spell Checker

awk Find and Replace text, database sort/validate/index

(B)

basename Strip directory and suffix from filenames

bash GNU Bourne-Again SHell

bc Arbitrary precision calculator language

bg Send to background

break Exit from a loop

builtin Run a shell builtin

bzip2 Compress or decompress named file(s)

(C)

cal Display a calendar

case Conditionally perform a command

cat Concatenate and print (display) the content of files

cd Change Directory

cfdisk Partition table manipulator for Linux

chgrp Change group ownership

chmod Change access permissions

chown Change file owner and group

chroot Run a command with a different root directory

chkconfig System services (runlevel)

cksum Print CRC checksum and byte counts

clear Clear terminal screen

cmp Compare two files

comm Compare two sorted files line by line

command Run a command - ignoring shell functions

continue Resume the next iteration of a loop

cp Copy one or more files to another location

cron Daemon to execute scheduled commands
crontab Schedule a command to run at a later time
csplit Split a file into context-determined pieces
cut Divide a file into several parts

(D)

date Display or change the date time
dc Desk Calculator
dd Convert and copy a file, write disk headers, boot records
ddrescue Data recovery tool
declare Declare variables and give them attributes
df Display free disk space
diff Display the differences between two files
diff3 Show differences among three files
dig DNS lookup
dir Briefly list directory contents
dircolors Colour setup for `ls`
dirname Convert a full pathname to just a path
dirs Display list of remembered directories
dmesg Print kernel driver messages
du Estimate file space usage

(E)

echo Display message on screen
egrep Search file(s) for lines that match an extended expression
eject Eject removable media
enable Enable and disable builtin shell commands
env Environment variables
ethtool Ethernet card settings
eval Evaluate several commands/arguments
exec Execute a command
exit Exit the shell
expect Automate arbitrary applications accessed over a terminal
expand Convert tabs to spaces
export Set an environment variable
expr Evaluate expressions

(F)

false Do nothing, unsuccessfully
fdformat Low-level format a floppy disk

fdisk Partition table manipulator for Linux
fg Send job to foreground
fgrep Search file(s) for lines that match a fixed string
file Determine file type
find Search for files that meet a desired criteria
fmt Reformat paragraph text
fold Wrap text to fit a specified width.
for Expand words, and execute commands
format Format disks or tapes
free Display memory usage
fsck File system consistency check and repair
ftp File Transfer Protocol
function Define Function Macros
fuser Identify/kill the process that is accessing a file

(G)

gawk Find and Replace text within file(s)
getopts Parse positional parameters
grep Search file(s) for lines that match a given pattern
groupadd Add a user security group
groupdel Delete a group
groupmod Modify a group
groups Print group names a user is in
gzip Compress or decompress named file(s)

(H)

hash Remember the full pathname of a name argument
head Output the first part of file(s)
help Display help for a built-in command
history Command History
hostname Print or set system name

(I)

iconv Convert the character set of a file
id Print user and group id's
if Conditionally perform a command
ifconfig Configure a network interface
ifdown Stop a network interface
ifup Start a network interface up
import Capture an X server screen and save the image to file

install Copy files and set attributes

(J)

jobs List active jobs

join Join lines on a common field

(K)

kill Stop a process from running

killall Kill processes by name

(L)

less Display output one screen at a time

let Perform arithmetic on shell variables

ln Create a symbolic link to a file

local Create variables

locate Find files

logname Print current login name

logout Exit a login shell

look Display lines beginning with a given string

lpc Line printer control program

lpr Off line print

lprint Print a file

lprintd Abort a print job

lprintq List the print queue

lprm Remove jobs from the print queue

ls List information about file(s)

lsuf List open files

(M)

make Recompile a group of programs

man Help manual

mkdir Create new folder(s)

mkfifo Make FIFOs (named pipes)

mkisofs Create an hybrid ISO9660/JOLIET/HFS filesystem

mknod Make block or character special files

more Display output one screen at a time

mount Mount a file system

mttools Manipulate MS-DOS files

mtr Network diagnostics (traceroute/ping)

mv Move or rename files or directories

mmv Mass Move and rename (files)

(N)

netstat Networking information

nice Set the priority of a command or job

nl Number lines and write files

nohup Run a command immune to hangups

notify-send Send desktop notifications

nslookup Query Internet name servers interactively

(O)

open Open a file in its default application

op Operator access

(P)

passwd Modify a user password

paste Merge lines of files

pathchk Check file name portability

ping Test a network connection

kill Stop processes from running

popd Restore the previous value of the current directory

pr Prepare files for printing

printcap Printer capability database

printenv Print environment variables

printf Format and print data

ps Process status

pushd Save and then change the current directory

pwd Print Working Directory

(Q)

quota Display disk usage and limits

quotacheck Scan a file system for disk usage

quotactl Set disk quotas

(R)

ram ram disk device

rcp Copy files between two machines

read Read a line from standard input

readarray Read from stdin into an array variable

readonly Mark variables/functions as readonly

reboot Reboot the system
rename Rename files
renice Alter priority of running processes
remsync Synchronize remote files via email
return Exit a shell function
rev Reverse lines of a file
rm Remove files
rmdir Remove folder(s)
rsync Remote file copy (Synchronize file trees)

(S)

screen Multiplex terminal, run remote shells via ssh
scp Secure copy (remote file copy)
sdiff Merge two files interactively
sed Stream Editor
select Accept keyboard input
seq Print numeric sequences
set Manipulate shell variables and functions
sftp Secure File Transfer Program
shift Shift positional parameters
shopt Shell Options
shutdown Shutdown or restart linux
sleep Delay for a specified time
slocate Find files
sort Sort text files
source Run commands from a file `.'
split Split a file into fixed-size pieces
ssh Secure Shell client (remote login program)
strace Trace system calls and signals
su Substitute user identity
sudo Execute a command as another user
sum Print a checksum for a file
suspend Suspend execution of this shell
symlink Make a new name for a file
sync Synchronize data on disk with memory

(T)

tail Output the last part of file
tar Tape ARchiver
tee Redirect output to multiple files

test Evaluate a conditional expression
time Measure Program running time
times User and system times
touch Change file timestamps
top List processes running on the system
traceroute Trace Route to Host
trap Run a command when a signal is set(bourne)
tr Translate, squeeze, and/or delete characters
true Do nothing, successfully
tsort Topological sort
tty Print filename of terminal on stdin
type Describe a command

(U)

ulimit Limit user resources
umask Users file creation mask
umount Unmount a device
unalias Remove an alias
uname Print system information
unexpand Convert spaces to tabs
uniq Uniquify files
units Convert units from one scale to another
unset Remove variable or function names
unshar Unpack shell archive scripts
until Execute commands (until error)
uptime Show uptime
useradd Create new user account
userdel Delete a user account
usermod Modify user account
users List users currently logged in
uuencode Encode a binary file
uudecode Decode a file created by uuencode

(v)

v Verbosely list directory contents (`ls -l -b')
vdir Verbosely list directory contents (`ls -l -b')
vi Text Editor
vmstat Report virtual memory statistics

(w)

wait Wait for a process to complete

watch Execute/display a program periodically

wc Print byte, word, and line counts

whereis Search the user's \$path, man pages and source files for a program

which Search the user's \$path for a program file

while Execute commands

who Print all usernames currently logged in

whoami Print the current user id and name (`id -un`)

wget Retrieve web pages or files via HTTP, HTTPS or FTP

write Send a message to another user

(x)

xargs Execute utility, passing constructed argument list(s)

xdg-open Open a file or URL in the user's preferred application.

yes Print a string until interrupted

Some Examples:

Command: ls

The command “ls” stands for (List Directory Contents), List the contents of the folder, be it file or folder, from which it runs. The most common options are -a (all files) and -l (long or details) Tab completion is supported and may be configured with .inputrc

When output to file the files are listed one per line. By default, colour is not used to distinguish types of files. That is equivalent to using --color=none. Using the --color option without the optional WHEN argument is equivalent to using --color=always. With --color=auto, color codes are output only if standard output is connected to a terminal (tty).

Command: sudo he “sudo” (super user do) command allows a permitted user to execute a command as the superuser or another user, as specified by the security policy in the sudoers list.

exp: root@Kali:~# sudo add-apt-repository ppa:tualatrix/ppa

Note: sudo allows user to borrow superuser privileged, while a similar command „su,, allows user to actually log in as superuser. Sudo is safer than su. It is not advised to use sudo or su for day-to-day normal use, as it can result in serious error if accidentally you did something wrong, that’s why a very popular saying in

Linux community is: “To err is human, but to really foul up everything, you need root password.”

Command: mkdir The “mkdir” (Make directory) command create a new directory with name path. However is the directory already exists, it will return an error message “cannot create folder, folder already exists”.

exp: root@Kalitut:~# mkdir Kalitut

Note: Directory can only be created inside the folder, in which the user has write permission. mkdir: cannot create directory `Kalitut,,: File exists (Don’t confuse with file in the above output, you might remember what i said at the beginning – In Linux every file, folder, drive, command, scripts are treated as file).

Command: chmod

The Linux “chmod” command stands for (change file mode bits). chmod changes the file mode (permission) of each given file, folder, script, etc.. according to mode asked for.

There exist 3 types of permission on a file (folder or anything but to keep things simple we will be using file).

Read (r)=4

Write(w)=2

Execute(x)=1

So if you want to give only read permission on a file it will be assigned a value of „4,, for write permission only, a value of „2,, and for execute permission only, a value of „1,, is to be given. For read and write permission $4+2 = „6,,$ is to be given, and so on.

Now permission need to be set for 3 kinds of user and usergroup. The first is owner, then usergroup and finally world.

`rwxr-x--x abc.sh`

Here the root’s permission is rwx (read, write and execute).

usergroup to which it belongs, is r-x (read and execute only, no write permission) and

for world is -x (only execute).

To change its permission and provide read, write and execute permission to owner, group and world.

root@Kali:~# `chmod 777 abc.sh`

only read and write permission to all three.

root@Kalitut:~# `chmod 666 abc.sh`

read, write and execute to owner and only execute to group and world.

root@Kalitut:~# `chmod 711 abc.sh`

Note: one of the most important command useful for sysadmin and user both. On a multi-user environment or on a server, this command comes to rescue, setting wrong permission will either makes a file inaccessible or provide unauthorized access to someone.

Command: tar

The “tar” command is a Tape Archive is useful in creation of archive, in a number of file format and their extraction.

```
root@Kali:~# tar -zxvf abc.tar.gz (Remember 'z' for .tar.gz)
```

```
root@Kali:~# tar -jxvf abc.tar.bz2 (Remember 'j' for .tar.bz2)
```

```
root@Kali:~# tar -cvf archive.tar.gz(.bz2) /path/to/folder/abc
```

Note: A „tar.gz,, means gzipped. „tar.bz2,, is compressed with bzip which uses a better but slower compression method.

Command: cp

The “copy” stands for (Copy), it copies a file from one location to another location.

```
root@Kali:~# cp /home/user/Downloads abc.tar.gz /home/user/Desktop (Return 0 when success)
```

Note: cp is one of the most commonly used command in shell scripting and it can be used with wildcard characters (Describe in the above block), for customised and desired file copying.

Command: mv

The “mv” command moves a file from one location to another location.

```
root@Kali:~# mv /home/user/Downloads abc.tar.gz /home/user/Desktop (Return 0 when success)
```

Note: mv command can be used with wildcard characters. mv should be used with caution, as moving of system/unauthorised file may lead to security as well as breakdown of system.

Command: pwd

The command “pwd” (print working directory), prints the current working directory with full path name from terminal.

```
root@Kali:~# pwd
/home/user/Desktop
```

Note: This command won’t be much frequently used in scripting but it is an absolute life saver for newbie who gets lost in terminal in their early connection with nux. (Linux is most commonly referred as nux or nix).

Command: cd

Finally, the frequently used “cd” command stands for (change directory), it change the working directory to execute, copy, move write, read, etc. from terminal itself.

```
root@Kali:~# cd /home/user/Desktop
```

```
server@localhost:~$ pwd
```

```
/home/user/Desktop
```

Note: cd comes to rescue when switching between directories from terminal. “Cd ~” will change the working directory to user’s home directory, and is very useful if a user finds himself lost in terminal. “Cd ..” will change the working directory to parent directory (of current working directory).