Common Kali Linux Commands Overview

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Common Kali Linux Commands Overview

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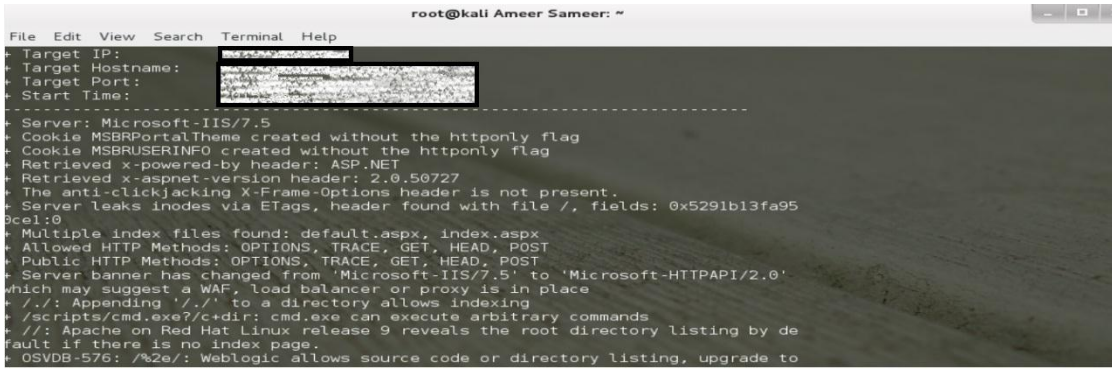
﴿ بِسْمِ اللّهِ الرَّحْمَنِ الرَّحِيمِ ﴾

اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ ﴿١﴾ خَلَقَ الْإِنسَانَ مِنْ عَلَقٍ ﴿٢﴾ اقْرَأْ وَرَبُّكَ الْأَكْرَمُ ﴿٣﴾ الَّذِي عَلَّمَ بِالْقَلَمِ ﴿٤﴾ عَلَّمَ الْإِنسَانَ مَا لَمْ يَعْلَمْ ﴿٥﴾

﴿ In the Name of Allah, the Merciful, the Most Merciful ﴾

Read (Prophet Muhammad) in the Name of your Lord who created,﴿١﴾ created the human from a (blood) clot. ﴿٢﴾Read! Your Lord is the Most Generous, ﴿٣﴾ who taught by the pen, ﴿٤﴾ taught the human what he did not know. ﴿٥﴾



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)

lsof 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

mtools 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

pkill 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.

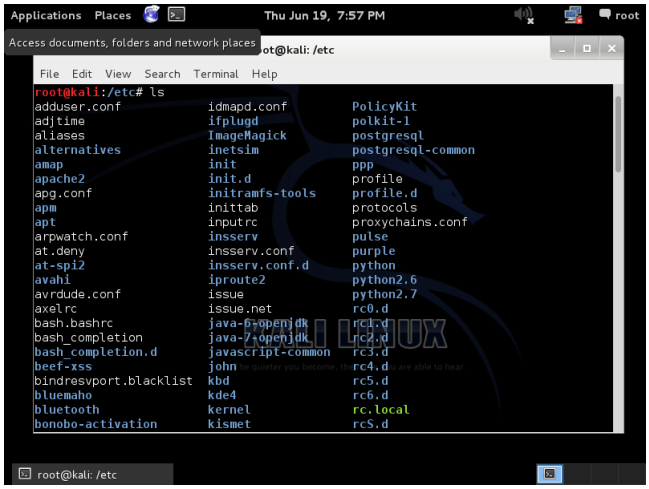
yes Print a string until interrupted

Some Exanples:

Command: ls

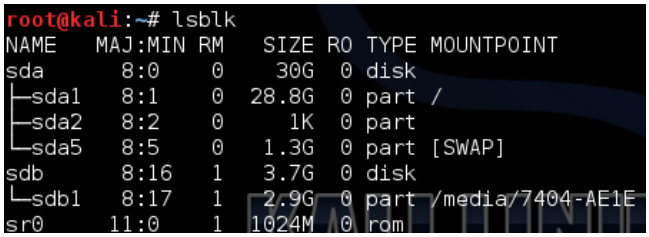
The command “ls” stands for (List Directory Contents), List the contents of the folder, be it file or folder, from which it runs. The most common options are -a (all files) and -l (long or details) Tab completion is supported and may be configured with .inputrc

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: lsblk

The “lsblk” stands for (List Block Devices), print block devices by their assigned name (but not RAM) on the standard output in a tree-like fashion.



he “lsblk -l” command list block devices in ‘list‘ structure (not tree like fashion).

Note: lsblk is very useful and easiest way to know the name of New Usb Device you just plugged in, especially when you have to deal with disk/blocks in terminal.

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, ans 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 archieve.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 sucess)

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 sucess)

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).

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