

SYSTEM

uname -a =>Display linux system information
 uname -r =>Display kernel release information
 uptime =>Show how long the system has been running + load
 hostname =>Show system host name
 hostname -i =>Display the IP address of the host
 last reboot =>Show system reboot history
 date =>Show the current date and time
 cal =>Show this month calendar
 w =>Display who is online
 whoami =>Who you are logged in as
 finger user =>Display information about user

HARDWARE

dmesg =>Detected hardware and boot messages
 cat /proc/cpuinfo =>CPU model
 cat /proc/meminfo =>Hardware memory
 cat /proc/interrupts =>Lists the number of interrupts per CPU per I/O device
 lshw =>Displays information on hardware configuration of the system
 lsblk =>Displays block device related information in Linux
 free -m =>Used and free memory (-m for MB)
 lspci -tv =>Show PCI devices
 lsusb -tv =>Show USB devices
 dmidecode =>Show hardware info from the BIOS
 hdparm -i /dev/sda =>Show info about disk sda
 hdparm -tT /dev/sda =>Do a read speed test on disk sda
 badblocks -s /dev/sda =>Test for unreadable blocks on disk sda

USERS

id =>Show the active user id with login and group
 last =>Show last logins on the system
 who =>Show who is logged on the system
 groupadd admin =>Add group "admin"
 useradd -c "Sam Tomshi" =>g admin -m sam #Create user "sam"
 userdel sam =>Delete user sam
 adduser sam =>Add user "sam"
 usermod =>Modify user information

FILE COMMANDS

ls -al =>Display all information about files/ directories
 pwd =>Show the path of current directory
 mkdir directory-name =>Create a directory
 rm file-name =>Delete file
 rm -r directory-name =>Delete directory recursively
 rm -f file-name =>Forcefully remove file
 rm -rf directory-name =>Forcefully remove directory recursively
 cp file1 file2 =>Copy file1 to file2
 cp -r dir1 dir2 =>Copy dir1 to dir2, create dir2 if it doesn't exist
 mv file1 file2 =>Rename source to dest / move source to directory
 ln -s /path/to/file-name link-name #Create symbolic link to file-name
 touch file =>Create or update file
 cat > file =>Place standard input into file
 more file =>Output contents of file
 head file =>Output first 10 lines of file
 tail file =>Output last 10 lines of file
 tail -f file =>Output contents of file as it grows starting with the last 10 lines
 gpg -c file =>Encrypt file
 gpg file.gpg =>Decrypt file
 wc =>print the number of bytes, words, and lines in files
 xargs =>Execute command lines from standard input

PROCESS RELATED

ps =>Display your currently active processes
 ps aux | grep 'telnet' =>Find all process id related to telnet process
 pmap =>Memory map of process
 top =>Display all running processes
 kill pid =>Kill process with mentioned pid id
 killall proc =>Kill all processes named proc
 pkill process-name =>Send signal to a process with its name
 bg =>Resumes suspended jobs without bringing them to foreground
 fg =>Brings the most recent job to foreground
 fg n =>Brings job n to the foreground

FILE PERMISSION RELATED

chmod octal file-name =>Change the permissions of file to octal
 Example
 chmod 777 /data/test.c =>Set rwx permission for owner,group,world
 chmod 755 /data/test.c =>Set rwx permission for owner,rx for group and world
 chown owner-user file =>Change owner of the file
 chown owner-user:owner-group file-name =>Change owner and group owner of the file
 chown owner-user:owner-group directory =>Change owner and group owner of the directory

NETWORK

ip addr show =>Display all network interfaces and ip address (a iproute2 command,powerful than ifconfig)
 ip address add 192.168.0.1 dev eth0 =>Set ip address
 ethtool eth0 =>Linux tool to show ethernet status
 mii-tool eth0 =>Linux tool to show ethernet status
 ping host =>Send echo request to test connection
 whois domain =>Get who is information for domain
 dig domain =>Get DNS information for domain
 dig -x host =>Reverse lookup host
 host google.com =>Lookup DNS ip address for the name
 hostname -i =>Lookup local ip address
 wget file =>Download file
 netstat -tupl =>Listing all active listening ports

COMPRESSION / ARCHIVES

tar of home.tar home =>Create tar named home.tar containing home/
 tar xf file.tar =>Extract the files from file.tar
 tar czf file.tar.gz files =>Create a tar with gzip compression
 gzip file =>Compress file and renames it to file.gz

INSTALL PACKAGE

rpm -i pkgname.rpm =>Install rpm based package
 rpm -e pkgname =>Remove package

INSTALL FROM SOURCE

./configure
 make
 make install

SEARCH

grep pattern files =>Search for pattern in files
 grep -r pattern dir =>Search recursively for pattern in dir
 locate file =>Find all instances of file
 find /home/tom -name 'index*' =>Find files names that start with "index"
 find /home -size +10000k =>Find files larger than 10000k in /home

LOGIN (SSH AND TELNET)

ssh user@host =>Connect to host as user
 ssh -p port user@host =>Connect to host using specific port
 telnet host =>Connect to the system using telnet port

FILE TRANSFER

scp
 scp file.txt server2:/tmp =>Secure copy file.txt to remote host /tmp folder
 rsync
 rsync -a /home/apps /backup/ =>Synchronize source to destination

DISK USAGE

df -h =>Show free space on mounted filesystems
 df -i =>Show free inodes on mounted filesystems
 fdisk -l =>Show disks partitions sizes and types
 du -ah =>Display disk usage in human readable form
 du -sh =>Display total disk usage on the current directory
 findmnt =>Displays target mount point for all filesystem
 mount device-path mount-point =>Mount a device

DIRECTORY TRAVERSE

cd .. =>To go up one level of the directory tree
 cd =>Go to \$HOME directory
 cd /test =>Change to /test directory

