

LINUX COMMANDS CHEAT SHEET

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
dmiidecode => 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
who => Show last logins on the system
w => Show who is logged on the system
groupadd admin => Add group "admin"
useradd -c "Sam Tomshi" -s /bin -m -s /bin -c "Create user '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
gzip -c file => Encrypt file
gunzip file.gz => 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
mpstat => Memory map of process
top => Display all running processes
kill pid => Kill process with mentioned pid
killall proc => Kill all processes named proc
kill 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
nslookup google.com => Lookup DNS ip address for the name
hostname -i => Lookup local ip address
wget file => Download file
netstat -tulp => 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 => Secure copy
scp txt.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 -sh => 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

