Fosslovers

100 LINUX COMMANDS – A BRIEF OUTLINE WITH EXAMPLES CHEATSHEET

System Related Commands

1. uname	Displays linux system information.
uname -a	You can view all the information,
uname -r	You can view kernel release information
uname -o	You can view OS information.
2. cat /etc/redhat_release	Shows which version of redhat installed.
3. uptime	Shows how long the system has been running.
4. hostname	Shows system host name.
hostname -i	You can view the ip addr of the machine,
hostname -d	You can view the domain name.
5. last reboot	Shows system reboot history.
6. date	Shows the current date and time.
7. cal	Shows the calendar of the current month.
8. w	Displays who is logged on and what they are doing.
9. whoami	Shows current user id.
10. finger user	Displays information about user.
11. reboot	Reboots the system.
12. shutdown	Shuts down the system.

Hardware Related Commands

13. dmesg	Displays all the messages from Kernel ring buffer.
dmesg -k	You can view kernel messages.
dmesg -u	You can view userspace messages.
14. cat /proc/cpuinfo	Displays information about processes and CPUs of the system.
15. cat /proc/meminfo	Displays details on hardware memory.
16. cat /proc/interrupts	Lists the no. of interrupts per CPU per I/O device.
17. lshw	Displays info on hardware config of the system.
18. lsblk	Displays block device related info of the machine.
lsblk -a	You can view all block devices.
19. free -m	Shows used and free memory (-m for MB).
20. lspci -tv	Shows information on PCI buses devices.
21. lsusb -tv	Shows information on USB devices.
22. dmidecode	Shows hardware info from the BIOS (vendor details).
23. hdparm -i /dev/sda	Shows info about disk sda.
hdparm -i /dev/sda	Performs a read speed test on disk sda.
24. badblocks -s /dev/sda	Tests for unreadable blocks on disk sda.

Statistic Related Commands

25. mpstat 1	Displays processors related statistics.
26. vmstat 2	Displays virtual memory statistics.
27. iostat 2	Displays I/O statistics.
28. tail -n 500 /var/log/messages	Displays the last 500 kernel/syslog messages.
29. tcpdump -i eth1	Captures all packets flow on interface eth1.
	With -w switch you can specify a file where you can direct the output to.
tcpdump -i eth0 'port 80'	Monitors all traffic on port 80 on interface eth0.
30. lsof	Lists all open files belonging to all active processes.
lsof -u testuser	Lists files opened by a specific user.
31. free -m	Shows RAM memory details.
32. watch df -h	Watches changeable disk usage continuously.

User Related Commands

33. id	Shows the active user and group information.
id -g	You can view the IDs of groups.
34. last	Shows a list of last logins on the system.
last -a	You can add the hostname to the last column of the output.
35. who	Shows who is logged on the system.
36. groupadd admin	Adds the group "admin".
37. useradd -c "Kool Arpan" -g admin -m kool	Creates user "kool" and adds to group "admin".
38. userdel kool	Deletes user kool.
39. adduser kool	Adds user "kool".
40. usermod :	Modifies user information.
41. passwd user1	Changes the password of user1.

File Related Commands

42. ls -al	Displays all information about files/directories. This includes displaying all hidden files as well
43. pwd	Shows current directory path
44. mkdir directory-name	Creates a directory
45. rm file-name	Deletes file
rm -r directory-name	Deletes directory recursively
rm -f file-name	Forcefully removes file
rm -rf directory-name	Forcefully removes directory recursively
46. cp file1 file2	Copies linux files, here file1 to file2
cp -r dir1 dir2	Copies dir1 to dir2, creates dir2 if it doesn't exist
47. mv file1 file2	Moves files from one place to another/renames file1 to file2
48. ln -s /path/to/file-name link-name	Creates a symbolic link to file-name
49. touch file	Creates empty file
50. cat file	Prints the file content in terminal
51. more file	Display the contents of file
52. head file	Display the first 10 lines of file
53. tail file	Outputs the last 10 lines of file
tail -f file	Outputs the contents of file as it grows starting with the last 10 lines
54. gpg -c file	Encrypts file
gpg file.gpg	Decrypts file
55. cksum file	View the checksum of the file
56. diff file1 file2	View the differences between contents of file1 and file2
57. ln -s link file	Create a soft link named link to the file
58. sort	Sorts files in alphabetical order
59. uniq	Compares adjacent lines in a file and removes/reports any duplicate lines
60. wc	Counts number of words/lines
61. dir	Lists the content of the directory
62. tee	Command for chaining and redirection
63. tr	Command for translating characters

Process Related Commands

64. ps	Displays your currently active processes
ps aux	grep 'telnet'	Displays all process ids related to telnet process
65. pmap	Display Memory map of process
66. top	Display all running processes and cpu/memory usage
67. kill pid	Kills process with mentioned pid
68. killall proc	Kills all processes named proc
69. pkill processname	Sends kill signal to a process with its name
70. bg	Resumes suspended jobs without bringing them to foreground
71. fg	Brings the most recent job to foreground
fg n	Brings job n to the foreground

File Permission Related Commands

72. chmod octal file-name	Changes the permissions of file to octal
chmod 777 /data/test.c	Sets rwx permission for owner , group and others
chmod 755 /data/test.c	Sets rwx permission for owner and rx for group and others
73. chown owner-user file	Changes owner of the file
chown owner-user:owner-group file-name	Changes owner and group owner of the file
chown owner-user:owner-group directory	Changes owner and group owner of the directory
74. chgrp group1 file	Changes the group ownership of the file to group1 test ipv4 connection

Compression / Archive Related Commands

89. tar cf home.tar home	Creates a tar named home.tar containing home
tar xf file.tar	Extracts the files from file.tar
tar czf file.tar.gz files	Creates a tar with gzip compression
90. gzip file	Compresses file and renames it to file.gz
91. bzip2 -z file	Compresses file and renames it to file.bz2
bzip2 -d file.bz2	Decompress the file

Network Related Commands

75. ifconfig -a	Displays all network interface and set ip address
76. ifconfig eth0	Displays eth0 ethernet port ip address and details
77. ip addr show	Display all network interfaces and ip addresses
78. ip address add 192.168.88.1 dev eth0	Sets ip address of eth0 device
79. ethtool eth0	Linux tool to show ethernet status
80. mii-tool eth0	Linux tool to show eth0 status
81. ping host	Sends echo requests to the host to test ipv4 connetion
82. whois domain	Gets who is information for domain
83. dig domain	Gets DNS nameserver information for domain
dig -x host	Reverse lookup host
84. host google.com	Lookup DNS ip address for the name
85. hostname -i	Lookup local ip address
86. wget file	Downloads file
87. netstat -tupl	Lists all active listening ports
88. nslookup	Resolves domain names to IP addresses

Package Installation Related Commands

92. rpm -i pkgname.rpm	Installs rpm based package
rpm -e pkgname	Removes package
93. make	Install from source file

Search Related Commands

94. grep pattern files	Searches for pattern in files
grep -r pattern dir	Searches recursively for pattern in dir
95. locate file	Finds all instances of file
96. find /home/kool -name 'index'	Finds file names that start with "index" inside /home/kool directory
find /home -size +10000k	Finds files larger than 10000k in /home

File Transfer Related Commands

99. scp file.txt server2:/tmp	Secure copy file.txt to remote host /tmp folder
scp foss@server2:/www/*.html /www/tmp	Copies *.html files from remote host to current host / www/tmp folder
scp -r foss@server2:/www /www/tmp	Copies all files and folders recursively from remote server to the current system /www/tmp folder
100. rsync -a /home/apps /backup/	Synchronizes source to destination
rsync -avz /home/apps $ foss@192.168.88.1	Synchronize files/directories between the local and remote system with compression enabled

Login Related Commands

97. ssh user@host	Securely connect to a host as user
ssh -p port $ user@host	Connects to host using specific port
98. telnet host	Connects to the system using telnet port

mail@fosslovers.com
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