Linux Commands

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System information Commands

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1. **date** :- to display the current system date and time
2. **host name**:- to display the system name
3. **uname** :-to display the os name
4. **uname –a** :- to display os name,kernel version,hostname,os bit
5. **Uname –r** :to display the kernel version
6. **uptime**:- to display system uptime ,load avg ,how many users working
7. **Su – username** :- it switches one user to another user
8. **Vim /etc/passwd**:- user information location path
9. **su – username** :- switch one user to another user
10. **Arch** :- to display the os bit version
11. **Cat /proc/version** :- to display the kernel version
12. **cat /etc/redhat-release** :-to know the linux version
13. **Service iptables status**

    Service iptables start

    Service iptables stop
14. **Service servicename status**

    Service servicename start

    Service servicename stop

Networking commands

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15. **ifconfig**:- to display the system Ip and mac address
16. **Ifconfig eth0** :- to display only ip address
17. **netstat –anlp |grep ":80"** :- to see the which service is running 80 port number
18. **ping hostname** :- to display to see the connection remote system available or not
19. **netstat –anlp |grep httpd** :- to see the apache running or not
20. **dig hostname** :- to display the response time on remote server
21. **nslookup hostname** :- to display the hostname is dns registered or not
22. **telnet hostname portno**:- to see the remote server and port is available or not

nc -vz hostname portno:- to see the remote server and port is available or not

here :-nc means net cat

23. **Nmap hostname**:- it is used for port number scanner
24. **Traceroute hostname/websitename**:- to reach the website path in 30 hops to display

File creation commands

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25. **Vim filename** :- to display the file content and add the file content

Esc mode:

:wq ---save and quit

:q!—forcebully quit

Yy – copy the line,P --- paste the line

Shift +gg ----- go to firstline

Shift+g -------go to last line

U –undo last delete or modified line

:set nu---to be set number on file

Dd --- to delete the line

/searchkeyword :-- to be search keyword in particular file existed or not

n – to search next word by top to down

N – to search next word by down to top

:%/oldkeyword/newkeyword/gc it is replace old name to newname

I ---insert the data

26. **cat >filename.txt** :- to be create file and to give the data and save the data in a file
27. **cat filename**:- to be see the content of the file
28. **cat >> filename.txt** :- to be append the data already existing file
29. **touch**:- to be create the empty file
30. **touch filename**:- to be create the empty or change the timestamp for file
31. **View filename**:- to display the content of the file
32. **more filename**:- it displays the content of file
33. **Head filename** :- to display the first 10 lines in a file
34. **Head -100 filename** :- to display the first 100 lines in a file
35. **Head –n 5 filename** :- to display the first 5 lines in a file
36. **tail filename** :- to display the last 10 lines in a file
37. **tail -50 filename** :- to display the last 50 lines in a file
38. **tail –f filename** :- to see the running content process file
39. **Rm file**:- it remove the file with conformation
40. **Rm –rf filename** :– it remove the file without confirmation

Searching Commands

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41. **locate filename**:- to search entire file system for given file name
42. **find / -name filename**:- to search entire / file system for given file name
43. **find . –name filename**:- it searches the file in current directory
44. **find . –iname filename**:- it searches the file in current directory with ignore the case sensitive
45. **find / -type f –name filename**:- it searches the file in the file system of /
46. **find / -type d –name dirname** :- it searches the directory in the file system of /
47. **find / -type f –name filename –exec rm –rf {}\;** **:-**to find the file and remove that file
48. **find / -type f –empty** :- it display the empty file
49. **find / -type d –empty** :- it display the empty directories
50. **find / -mtime 50** :- to be find the last 50 days modified files
51. **find / -mtime +50 –mtime -100** :- to be find the last 50 days to 100days modified files.
52. **find / -mmin -60**:- it displayes the last one hour modified file
53. **find / -cmin -60**:- it displayes the last one hour changed file
54. **find / -atime 50**:- it displayes the last 50 days accessed file
55. **find / -size 50M** :- it displayes the 50 mb files.
56. **find / -size +50M –size -100M** :- it displayes the 50 mb to 100mb files.
57. **Find / -size +100M –exec rm –rf {} \;** :- it finds the 100 mb files and delete the files

How to find the largest file in the current directory and sub directories

find . -type f -exec ls -s {} \; | sort -n -r | head -1

How to find the smallest file in the current directory and sub directories

```
find . -type f -exec ls -s {} \; | sort -n -r | tail -1
```

or

```
find . -type f -exec ls -s {} \; | sort -n  | head -1
```

How to find the files which are created between two files.

```
find . -cnewer f1 -and ! -cnewer f2
```

How to find the permissions of the files which contain the name "java"?

```
find -name "*java*"|xargs ls -l
```

Alternate method is

```
find -name "*java*" -exec ls -l {} \;
```

Find the files which have the name "java" in it and then display only the files which have "class" word in them?

```
find -name "*java*" -exec grep -H class {} \;
```

How to remove files which contain the name "java".

```
find -name "*java*" -exec rm -r {} \;
```

find and copy

```
find . -type f -name "*.mp3" -exec cp {} /tmp/MusicFiles \;
```

 # cp *.mp3 files to /tmp/MusicFiles

copy one file to many dirs

```
find dir1 dir2 dir3 dir4 -type d -exec cp header.shtml {} \;
```

 # copy the file header.shtml to those dirs

How to Find and Delete Files in the Linux Command Line

```
find . -name "*.bak" -delete
```

Find files with different file extensions

```
find . -type f \( -name "*.c" -o -name "*.sh" \)
```

```
find . -iname foo
```

If you're just interested in directories, search like this:

```
find . -iname foo -type d
```

And if you're just looking for files, search like this:

```
find . -iname foo -type f
```

Sed Command

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58. **Sed 's/oldname/newname/' filename** :- to change first occurrence of the each line old name to new name
59. **Sed 's/oldname/newname/2' filename** :- to change second occurrence of the each line old name to new name
60. **Sed 's/oldname/newname/g' filename** :- to change all occurrence of the each line old name to new name.
61. **Sed –n '/name/p' filename** :- to print pattern match the line
62. **Sed '/^#\|^$| -*#/d' httpd.conf : to empty line file and start the # beginning remove that lines**

Awk Command

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63. Awk {print;} filename:-
64. Awk '/searchword/' filename
65. Awk '{print $2,$3;}' filename
66. Awk '{print $2,$5;}' filename
67. Awk '{print $2,$NF;}' filename
68. Awk 'BEGIN {print col1 \t col2 \t…}
Awk "BEGIN {print $2 ,"\t" $3,;}
69. Awk '$1>200 ' filename :-
70. Awk 'BEGIN {count=0:}
$4 ~ /searchkeyword/{count ++;}
END {print "no .ofmatching records:=,count;}' filename

Linux Common Commands

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71. pwd :-present working directory
72. w:- to display system uptime ,load avg ,how many users working full information of users
73. who:-to display the current active users
74. whoami:- current user name
75. who am i:-it gives first login user in the system command prompt
76. which command :- to know the execution command location path
77. cd:- to go the home directory
78. cd ~ :- to go the home directory
79. cd ..:- to go the previous directory
80. cd /somepath:- to go the given path
81. man :- to given the commands information
82. ls :- to display the list of files and directories
83. ls –a :- to display the list of files and directories and hidden directories and files
84. ls –l :-
85. ls –lt:-it display the files with time based
86. ls –ltr:- it display the files with time reverse order
87. ls –ltrh:- it display the files with human readable format (like gb,mb)

Rpm Commands

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88. **Rpm –ivh rpmpkgname** :- to install rpm package independently(with in dependence)
89. **Rpm –qa** :- to display the all rpm packages installed details
90. **Rpm –q kernel** :- it display the kernel version
91. **Rpm –e packagename** :- to uninstall the rpm package
92. **Rpm –l package** :- to search the rpm location path

Compressed Commands

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93. **Tar –cvf filename.tar directory/filepath**:- to create tar file
94. **Tar –xvf filename.tar**:- to extract the tar file
95. **Tar –cvf filename.tar directory1 directory2 directory3**:- to create tar file multiple directory
96. **Tar –xvf filename.tar –d directorypath**:- to extract the tar file in specific location
97. **Tar –tvf filename.tar**:- to see the contents tar file without extract
98. **Tar –czvf filename.tar.gz directory1 directory2 directory3**:- to create tar file multiple directory
99. **Tar –xzvf filename.tar.gz**:- to extract the tar file
100. **Tar –tzvf filename.tar.gz**:- to see the contents tar file without extract
101. **Zip –r filename.zip directory1** :- to creates zip files
102. **Unzip filename.zip** :- to unzip the files
103. **Unzip –l filename.zip** (**or) less filename.zip**:- to see the content without extract to see the content
104. **Gzip filename**:- to create only the files not directories

Example: gzip filename

Output:filename.gz

105. **Gzip –r directory:-** to create only zip In files in directories
106. **Gunzip filename.gz** :- to extract the gz file
107. **Tar –cjvf filename.tar.bz filename:-** to create bz file
108. **Jar –cvf filename.jar file1 file2 :-** to create a jar file
109. **Jar –xvf filename.jar** :- extract the jar file
110. **Jar –tvf filename.jar** :- to see the content of jar file without extract
111. **Jar –cvf filename.war directorypath**:- create a war file
112. **Jar –xvf filename.war**:- extract the war file
113. **Jar –xvf filename.war –d directorypath**:- extract the war file in specific location
114. **Jar –tvf filename.war**:- to see the war file content without extract

Moving data one location to another

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115. **Cp** :- copy the files
116. **Cp source destintion**:- to copy the files one location to another.
117. **Cp -r source destintion**:- to copy the directories one location to another.
118. **mv source destintion**:- to cut and paste the files one location to another. Or rename the files /directories

Directory commands

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119. **mkdir directoryname** :- to create the directory.
120. **Mkdir -p directoryname** :- to create the directorys with in directories.
121. **Mkdir – p directory/directory{1..10}** :- to create the directory in directories

122. **Rm –rf directoryname**:- it removes the directory without confirmation

123. **Rmdir directoryname** :- it remove the directory

Permission commands

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124. **Chmod 755 file** :- to be give the change file permissions.

125. **Chmod u+x file** :- to be give the users execution permissions

126. **chmod g+x file** :- to give the groups execution permissions

Chmod o+x file :- to give the others execution permissions

127. **chown username:username filename** :- to change the ower permissions

128. **chgrp username:username filename** :- to change the group permissions

PS Command

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129. **Ps** :- to display the process for running

130. **Ps –ef** :to display the all process for running

131. **Ps –ef|grep httpd** :- to check the httpd process is running or not

132. **ps –ef|grep httpd** :-to see the apache running or not

133. **ps –ef|grep httpd|grep –v grep** :-to see the apache running or not ad not display grep output

134. **kill -9 <pid> (Or) kill –TERM <PID>** :- it kill the running process forcebully

135. **kill -3 <pid>**:- it create the thread dump

136. **jstack -l <pid>** :- Creating tread dump

137. **jmap -dump**:[live],format=b,file=<file-path> <pid>

User Creation commands

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138. Useradd username

139. Id username

140. **Passwd username:-**to create the password

141. Userdel username:-delete the user

142. Useradd –g primarygrp username:-

143. Useradd –G secondarygrp username:-

144. Usermod –a –G groupname username:-

Disk Fragmentation commands

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145. **Df** :- to display disk fragmentation

146. **Df -h** :-to display disk fragmentation in gb

147. **Df –m** :- to display disk fragmentation in mb

148. **Df –h .** :- to display the disk fragmentation in current directory

149. **Du**:- to display the disk usage information

150. **Du –sm *|sort -rn** :- usage of the path reverse order

151. **Du –sm *|sort –rn |head** :- to display top 10in reverse order in top approach

152. **Du –sm *|sort –rn |tail** :- to display top 10in reverse order in down approach

153. **Scp source username@ipaddress/hostname :remoteserverPath** :- to copy data one server to another server

154. **Scp -r usernameA@ipaddress/hostname:remoteserverPath usernameB@ipaddress/hostname:remoteserverPath** :- to copy data second server to third server but your in first server

155. Ssh steps password less login

Step1:-ssh-keygen

Goto .ssh

Id_rsa.pub

Step2:-go to second server

Go to home directory

Create .ssh directory

Copy the first server id_rsa.pub from to second server .ssh directory

Step 3:- after copy the file rename id_rsa.pub to authorized_keys

Change the permissions in server 2

chmod 644 authorized_keys

step 4:- to verify the ssh user@ipaddress

156. **Yum install packagename**:- for install the package(with dependencies.

157. **Yum remove package** :- for uninstall the package

158. **ln –s file1 file2** :- to create the symbolic link file

159. **echo message** :- it displays the message

160. **echo message >file.txt** :- to create a file and store the file echo message information.

161. **Set or env** :- to check the system or user environment variable

162. **Echo $HOME**:- it display the current home directory

163. **>filename.txt**:-

164. **Wc filename**:-

165. **Grep “searchkeyword” filename**:-

166. **Grep –i “searchkeyword” filename**:-

167. **Echo $?** :- if previous command is success print zero
Else :- print non zero

168. **History** :- to display the previous run command information