

Sylhet Engineering College
Department of Computer Science & Engineering

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Remarks:

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10 commands for package management and their operation in Linux/Unix platform.

Commands	Operation
1. apt-get install package-name(s)	Installs the package(s) specified, along with any dependencies.
2. apt-get remove package name(s)	Removes the package(s) specified, but does not remove dependencies.
3. apt-get autoremove	Removes any orphaned dependencies, meaning those that remain installed but are no longer required.
4. apt-get clean	Removes downloaded package files (.deb) for software that is already installed.

5. apt-get upgrade	Upgrades all packages if there are updates available.
6. apt-cache show package name(s)	Shows dependency information, version numbers and a basic description of the package.
7. apt-get apt-cache depends package name(s)	Lists the packages that the specified packages depends upon in a tree.
8. dpkg -i package-filename.deb	install a .deb file.
9. dpkg --get-selections	Lists packages currently installed on the system.
10. dpkg --configure package-name(s)	Runs a configuration interface to set up a package.

#10 commands for networking & their operation in Linux/Unix platform.

<u>Command</u>	<u>Operation</u>
1. ifconfig Syntax: ifconfig	Display and manipulate route and network interfaces. It's used at boot time to set up interfaces as necessary. After that usually only needed debugging.
2. ip Syntax: ip or ip address	It's a replacement of ifconfig command. It's used to bring interfaces up or down, assign and remove addresses and routes, manage ARP cache, and much more.
3. traceroute Syntax: traceroute [OPTION...] Host	Prints the route that a packet takes to reach the host. This is useful when you want to know about the route and about all the hops that a packet takes.

Command

4. tracpath
Syntax: tracpath <destination>

Operation
Similar to traceroute but doesn't require root privileges. It traces the network path of the specified destination and reports each hop along the path.

5. Ping
Syntax: ping <option>
 <destination>

To check connectivity between two nodes. Checks connectivity between two nodes to see if a server is available.

6. netstat
Syntax: netstat

Display connection information. Netstat stands for Network Statistics. Display different interface statistics including open sockets, routing tables.

7. ss
Syntax: ss

It's a replacement of netstat. This command gives more information in comparison to the netstat. It's also faster than netstat.

8. dig

Syntax: dig @server name
type

Query DNS related information. This dig means Domain Information Gopher. It's used for tasks related to DNS lookup to query DNS name servers.

9. nslookup

Syntax: nslookup <domain
name>

Find DNS related query. It's used to query specific DNS resource records (RR) as well. It is also used for testing and troubleshooting DNS servers.

10. route

Syntax: route

Shows and manipulate IP routing table. It also displays all existing routing table entries on our system. It's mainly used to set up static routes to specific hosts or networks via an interface.

Write 10 commands for vi editor and their operation:-

Commands	Operation
1. vi Syntax: vi <filename New>	To launch the VI Editor - open the terminal (CLI)
2. A	Write at the end of line (goes into insert mode)
3. u	Undo last change.
4. C	delete contents of a line after the cursor and insert new text.
5. S	substitute entire line and begin to insert at the beginning of the line.
6. :wq	save the file and quit.
7. R	Overwrite characters from cursor onward.
8. K	Move cursor up.

9. Shift + zz

Save the file and quit.

10. :q

Quit without saving.