



Advanced Linux Commands

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t.me/FUMLUG

\$ find

Description :

find - search for files in a directory hierarchy

sample usage:

you need to find every file that contains «fumlug» system wide.

Example:

```
$ man find
$ find dir -name name
$ find dir -iname name
$ find dir -type [d f l]
$ find dir -perm 777
$ find dir ! -perm 777
$ find dir -type f -name "*.txt" -exec rm -f {} \; 2>/dev/null
$ find dir -mtime 50 #50 days age
$ find dir -mtime +50 -mtime -100
$ find dir -size +50M -size -500M
$ find dir [-amin 10 -cmin 10 -mmin 10]
```

\$ tar

Description :

tar - an archiving utility

sample usage:

you want to send a lot of files using mail so you prefer to send one archive instead

of sending all files it would be more easy to use.

switch meaning

-cf create file

-xf extract file

-z compress the archive with gzip after creating it

-b compress the archive with bzip2 after creating it

-v verbose! print a lot of data about what you are doing

Example:

```
$ tar czfv myArchiveName.tar.gz *
```

```
$ tar xf myArchiveName.tar.gz
```

\$ gzip; bzip2

Description :

gzip, gunzip - compress or expand files

bzip2, bunzip2 - a block-sorting file compressor

sample usage:

on Windows archiving and compressing is pretty much the same thing
but on Linux

these are two different things.

you made an archive and you need reduce the size of archive.

Example:

```
$ gzip file #.gz is the common extension.
```

```
$ gunzip file
```

```
$ bzip2 file #.bz2 is the common extension.
```

```
$ bunzip2 file
```

```
$ man bzip2
```

\$ mount; umount

Description :

mount - mount a filesystem

umount - unmount file systems

sample usage:

when you need to use a disk storage files you have to mount the disk
this operation
can be done automatically or manually.

Example:

```
# mount FILE_SYSTEM MOUNT_POINT  
# umount /dev/sdX  
# umount MOUNT_POINT
```

\$ useradd

Description :

useradd - create a new user or update default new user information

sample usage:

you want to make a user and do not allow this user to run the commands need root privilege.

Switch	Meaning
-d	home directory (-d /home/user)
-m	create home directory
-s	specify shell
-G	add to additional groups
-c	comment. most of the time, users actual name. Use quotes if comments has spaces or special characters in them.

Example:

```
# useradd john -m -G sudo -c «John Watson»
```

\$ passwd

Description :

passwd - change user password

sample usage:

you want to change you password or maybe you are the root user and you want to change some user password.

Example:

```
$ passwd  
# passwd USER
```

\$ usermod; userdel

Description :

usermod - modify a user account

userdel - delete a user account and related files

sample usage:

you need to add user to some other groups or you need to delete a user!

Example:

```
# usermod USER -aG  
# userdel  
# userdel -r USER
```


\$ df; du

Description :

df (Disk Free) - report file system disk space usage

du (Disk Usage) - estimate file space usage

sample usage:

you want to get a brief information about your file systems and how much space do you have.

Example:

```
$ df -h
$ df -i
$ du -h
$ du -s
```

\$ ln

Description :

ln - make links between files

ln -s soft link

ln hard link

sample usage:

you want the same content in different places!

Example:

```
$ ln file hardlink
```

```
#same iNode , do not crash if one file deleted, not cross-device
```

```
$ ln -s file softlink
```

```
#different iNode, crash if file deleted, cross-device.
```

```
Note: we have to use soft link for directories!
```

\$ sed

Description :

Stream Editor, Text Processing editor.
Complicated using **regex**.

Example:

```
$ sed 's/a/A/g' file.txt
```

\$ ps; jobs; bg; fg; kill; killall; xkill

Description :

ln - make links between files

ln -s soft link

ln hard link

sample usage:

you want the same content in different places!

Example:

```
$ sleep 4000
$ xeyes &
$ jobs
$ jobs -l # to see process id
$ bg %2
$ fg
$ ps -ef
$ ps -ef | grep xeyes
```

```
$ kill %1
$ kill -9 %2
$ killall sleep
$ kill 16032 # pid (process id)
$ xkill
```

\$ command

Title :

A long description about command or anything you trying to say, this slide is a template if you want to use this template for your presentation, do it freely :)

Example :

```
$ a line of shell command or bash script
```