**Linux Commands:**

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| **Command** |  | **Description** |
| Ls |  | link file or directory |
| Cd |  | change directory |
| Users |  | Display current user |
| which |  | Show the path of the command |
| Clear |  | clear screen |
| diff,comm,cmp |  | file compare |
| Cp |  | file copy |
| Ctl-C |  | break (signal) |
| Ctl-D |  | EOF (end-of-file) |
| rm –rf |  | delete directory recursively |
| Rm |  | delete file(s) |
| Exit |  | exit current process |
| Grep |  | find strings in files |
| Mkdir |  | make directory |
| More |  | text file paging filter |
| $PATH |  | path to executables |
| Mv |  | rename (move) |
| Find |  | Find the file in all directories |
| Sort |  | sort file |
| Date |  | display system time |
| Cat |  | output file to stdout |
| scp |  | secure file copy |
| gzip |  | Compress named file(s) |
| gunzip |  | decompress named file(s) |
| man |  | Help manual |
| mv |  | Move or rename files or directories |
| cal |  | Display a calendar |
| cat |  | Concatenate and print (display) the content of files |
| chmod |  | Change access permissions |
| crontab |  | Schedule a command to run at a later time |
| echo |  | Display message on screen • |
| egrep |  | Search file(s) for lines that match an extended expression |
| exit |  | Exit the shell |
| du |  | Show disk space |
| free |  | Display memory usage |
| grep |  | Search file(s) for lines that match a given pattern |
| hostname |  | Print or set system name |
| help |  | Display help for a built-in command |
| Ps -ef |  | for background running jobs |
| jobs |  | List active jobs |
| kill |  | Stop a process from running |
| killall |  | Kill processes by name |
| less |  | Display output one screen at a time |
| logout |  | Exit a login shell |
| nohup |  | Run a command immune to hangups |
| passwd |  | Modify a user password |
| pwd |  | Print Working Directory |
| sed |  | Stream Editor |
| su |  | Substitute user identity |
| sudo su |  | Execute a command as another user |
| tail |  | Output the last part of file |
| tar |  | Tape ARchiver |
| time |  | Measure Program running time |
| vi |  | Text Editor |
| vmstat |  | Report virtual memory statistics |
| wc |  | Print byte, word, and line counts |
| who |  | Print all usernames currently logged in |
| whoami |  | Print the current user id and name (`id -un') |
| Cut |  | Cut data |
| Awk |  | Cut the data column oriented |
| Touch |  | Created a empty file |
| export |  | Set an environment variable |
| . |  | Run a command script in the current shell |
| !! |  | Run the last command again |
| ### |  | Comment / Remark |

How to use:

|  |  |  |
| --- | --- | --- |
| **Command** | **Example** | **Description** |
| **Ls** | Ls | Lists files in current directory |
|  | ls –alF | List in long format |
| **Cd** | cd tempdir | Change directory to tempdir |
|  | cd .. | Move back one directory |
|  | cd ~dhyatt/web-docs | Move into dhyatt's web-docs directory |
| **Mkdir** | mkdir graphics | Make a directory called graphics |
| **Rmdir** | rmdir emptydir | Remove directory (must be empty) |
| **Cp** | cp file1 web-docs | Copy file into directory |
|  | cp file1 file1.bak | Make backup of file1 |
| **Rm** | rm file1.bak | Remove or delete file |
|  | rm \*.tmp | Remove all file |
| **Mv** | mv old.html new.html | Move or rename files |
| **More** | more index.html | Look at file, one page at a time |
| **Man** | man ls | Online manual (help) about command |
| **grep <str><files>** | grep "bad word" \* | Find which files contain a certain word |
| **chmod <opt> <file>** | chmod 644 \*.html | Change file permissions read only |
|  | chmod 755 file.exe | Change file permissions to executable |
| **Passwd** | Passwd | Change passwd |
| **ps <opt>** | ps aux | List all running processes by #ID |
|  | ps aux  **|**   grep dhyatt | List process #ID's running by dhyatt |
| **kill <opt> <ID>** | kill -9 8453 | Kill process with ID #8453 |
| **gcc (g++) <source>** | gcc file.c -o file | Compile a program written in C |
|  | g++ fil2.cpp -o fil2 | Compile a program written in C++ |
| **gzip <file>** | gzip bigfile | Compress file |
|  | gunzip bigfile.gz | Uncompress file |
| **Mail** | mail me@tjhsst.edu **<** file1 | Send file1 by email to someone |
| **(pine)** | Pine | Read mail using pine |
| **telnet <host>** | telnet vortex.tjhsst.edu | Open a connection to vortex |
| **ssh <host>** | ssh -l dhyatt jazz.tjhsst.edu | Open a secure connection to jazz as user dhyatt |
| **ftp <host>** | ftp station1.tjhsst.edu | Upload or Download files to station1 |
| **ncftp <host/directory>** | ncftp metalab.unc.edu | Connect to archives at UNC |
| **Who** | Who | Lists who is logged on your machine |
| **History** | History | Lists commands you've done recently |
| **Date** | Date | Print out current date |
| **cal <mo> <yr>** | cal 9 2000 | Print calendar for September 2000 |
| **Xcalc** | xcalc & | Calculator ("background" process) |
| **ispell <fname>** | ispell file1 | Spell check file1 |
| **latex <fname>** | latex file.tex | Run LaTeX, a scientific document tool |
| **Df** | Df | See how much free disk space |
| **Du** | du -b subdir | Estimate disk usage of directory in Bytes |
| **Alias** | alias lls="ls -alF" | Create new command "lls" for long format of ls |
| **Tar** | tar -cf subdir.tar subdir | Create an archive called subdir.tar of a directory |
|  | tar -xvf subdir.tar | Extract files from an archive file |
| **logout (exit)** | logout or exit | How to quit a UNIX shell. |

ls:

ls -l

In the above example this command would list each of the files in the current directory and the files permissions, the size of the file, date of the last modification, and the file name or directory. Below is additional information about each of the fields this command lists.

Permissions Directories Group Size Date Directory or file

drwx------ 2 users 4096 Nov 2 19:51 mail/

drwxr-s--- 35 www 32768 Jan 20 22:39 public\_html/

-rw------- 1 users 3 Nov 25 02:58 test.txt

Below is a brief description of each of the above categories shown when using the ls -l command.

Permissions - The permissions of the directory or file.

Directories - The amount of links or directories within the directory. The default amount of directories is going to always be 2 because of the . and .. directories.

Group - The group assigned to the file or directory

Size - Size of the file or directory.

Date - Date of last modification.

Directory of file - The name of the file or file.

ls –laxo

Our favorite ls command, which lists files with permissions, shows hidden files, displays in a column format, and doesn't show the group.

ls -1 | wc -l

Count how many files and directories are in the current directory.

Tip: Keep in mind that this is also counting the ./ and ../ directories.

ls ~

List the contents of your home directory by adding a tilde after the ls command.

ls /

List the contents of your root directory.

ls ../

List the contents of the parent directory.

ls \*/

List the contents of all sub directories.

file \*

List about the file information

ls -d \*/

Only list the directories in the current directory.

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For Search:

AND:

* grep -E 'pattern1' filename | grep -E 'pattern1|pattern2'

OR:

* grep -E 'pattern1|pattern2'--- grep 'pattern1\|pattern2' filename

AND OR:

* grep -E '85' filename | grep -E 'D|R'

NOT:

* grep -v 'pattern1' filename

For Search In .gz:

* gunzip \*Trades.pipe.gz
* grep '5PD44338' \*Trades.pipe | grep '931142103'

1)**egrep** stands for extended grep and it is more powerful than grep command in Unix and allows more regular exception like you can use "|" option to search for either Error or Exception by executing just one command.

* egrep 'Error|Exception' logfile.txt

2) If you want to do case insensitive search than use -i option from grep command in UNIX. Grep -i will find occurrence of both Error, error and ERROR and quite useful to display any sort of Error from log file.

* grep -i Error logfile

3**) zgrep** is another great version of grep command in Unix which is used to perform same operation as grep does but with .gz files. Many a times we gzip the old file to reduce size and later wants to look or find something on those file. zgrep is your man for those days. Below command will print all files which have "Error" on them.

* zgrep -i Error \*.gz

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For change the words in all script Files at a time:

If you want to replace text in just a couple of files, replace with the wildcard character with the name of the files.

* >sed -e 's/old-address/new-address/' -i \*.html

For Import and Export:

* exp opf/opf@svmaxit file=/scivan4/home/drone/optionsfirst/dumpfiles/All\_master\_files.dmp log=/scivan4/home/drone/optionsfirst/dumpfiles/All\_master\_files.log tables=(ACCOUNT\_LRM,ACCOUNT\_MASTER,ACCOUNT\_TYPE\_MASTER) grants=y direct=y

* imp opf/opf@svi1pr file=/home/drone/maxit/OPF/Transform/dumpfiles/All\_master\_files.dmp full=y log=/home/drone/maxit/OPF/Transform/All\_master\_files.imp.log ignore=y constraints=n indexes=n

tar:

For .dump Compressed:

* tar –zcvf OPF\_SVI\_RAD.dmp.tar.gz OPF\_SVI\_RAD.dmp

For uncompreessed:

* tar xzvf OPF\_SVI\_RAD.dmp.tar.gz

For Count:

* Zcat file.gz | wc –l
* Wc –l filename

ls:

ls –lntrh:

It will displays permissions and size of file names

mv:

It is used change the file location or file name

mv filename1 filename2

cp:

cp filename1 filename2

scp:

scp –p home/raja/documents/\* home/raja/files/

it copies only files

scp –r home/raja/documents/\* home/raja/files/

it copies files and directories

scp -r /home/drone/maxit/LOY/TP3 scibatch4:/home/drone/maxit/LOY

it will copy the TP3 folder in home/drone/maxit/LOY directory

rm:

rm filename

rm –rf filename

rm –rf directory name

unzip:

unzip Filename.zip

Ex:

Unzip Trade.zip

It will show

Trade.gz

gunzip:

gunzip \*Trades.pipe.gz

grep '5PD44338' \*Trades.pipe | grep '931142103'

sed:

Sed command is mostly used to replace the text in a file. The below simple sed command replaces the word "unix" with "linux" in the file.

sed 's/unix/linux/' file.txt

sed -e 's/old-address/new-address/' -i \*.html

above commamd used for change the word in all .html files

sed -e 's/OPH/LOY/' -i scivantage.properties

above command used for change the word in scivantage.properties file name

wc:

wc filename

X Y Z filename

X – Number of lines

Y – Number of words

Z – Number of bytes

filename – name of the file

EX:

wc demofile.txt

36 104 570 demofile.txt

For Symbol Links:

ln -s /webroot/home/httpd/test.com/index.php /home/vivek/index.php

ls –l

It will show

lrwxrwxrwx 1 vivek vivek 16 2007-09-25 22:53 index.php -> /webroot/home/httpd/test.com/index.php

EX:

ln -f -s /home/drone/maxit/LOY/lib /home/drone/maxit/LOY/TP1/lib

ssh:

it is used for connecting the server

ssh servername

sudo:

it is used for Execute a command as another user

sudo su – superusername

chmod:

it is used for change the permissions

chmod u+a filename

SSH Acess :

sudo apt-get install openssh-server

Links:

sureshkunkutech.blogspot.com