A summary of useful Linux commands

Help on any Unix command

 \mathbf{man} $\mathbf{command}$ - \mathbf{Type} man is to read the manual for the is $\mathbf{command}$

whatis command - Give short description of command apropos keyword - Search for all Unix commands that match keyword, eg apropos file

File Commands

ls - directory listing

ls -al - formatted listing with hidden files

ls -F path - show type of each file. "/" = directory, "*" = executable

ls -R path - recursive listing, with all subdirs

cd dir - change directory to dir

cd - change to home

pwd - show current directory

mkdir dir - create a directory dir

rm file - delete file

rm -r dir - delete directory dir

rm -f file - force remove file

rm -rf dir - force remove directory dir *

cp file1 file2 - copy file1 to file2

cp -r dir1 dir2 - copy dir1 to dir2; create dir2 if it doesn't exist

 ${\bf mv}$ file1 file2 - rename or move file1 to file2

if file2 is an existing directory, moves file1 into directory file2

touch file - create or update file

cat > file - places standard input into file

more file - output the contents of file

head file - output the first 10 lines of file

less file - like more, with extra features

cat file - view file, but it scrolls

tail file - output the last 10 lines of file

tail -f file - output the contents of file as it grows, starting with the last 10 lines

diff file1 file2 - show the differences between fil1 and file2
wc file - count words in file

File Permissions

chmod u+rw file - Give yourself read and write permission
chmod u+x file - Give yourself execute permission
chmod a+rw file - Give read and write permission to everyone

Searching

grep pattern files - search for pattern in files
grep -r pattern dir - search recursively for pattern in dir
command | grep pattern - search for pattern in the output
of command
locate file - find all instances of file

Wildcards and Shortcuts

* - Match any string of characters, eg page* gets page1, page10, and page.txt

? - Match any single character, eg page? gets page1 and page2, but not page10 $\,$

[...] - Match any characters in a range, eg page[1-3] gets page1, page2, and page3

 \sim - Short for your home directory, eg cd \sim will take you home, and rm -r \sim will destroy it

. - The current directory

.. - One directory up the tree, eg ls ...

Pipes and Redirection

command > **file** - Redirect output to a file

command >> **file** - Append output to an existing file

command < file - Get input from a file, eg sort < file.txt

command < file1 > file2 - Get input from file1, and write to file?

command | command - Pipe one command to another

SSH

ssh user@host - connect to host as user
ssh -p port user@host - connect to host on port port as

Process Management

ps - display your currently active processes

top - display all running processes

kill pid - kill process id pid

killall proc - kill all processes named proc *

 \mathbf{bg} - lists stopped or background jobs; resume a stopped job in the background

fg - brings the most recent job to foreground

 \mathbf{fg} \mathbf{n} - brings job \mathbf{n} to the foreground

Shortcuts

 $\mathbf{Ctrl} + \mathbf{C}$ - halts the current command

 $\mathbf{Ctrl} + \mathbf{Z}$ - stops the current command, resume with fg in the foreground or bg in the background

Ctrl+D - log out of current session, similar to exit

 $\mathbf{Ctrl} + \mathbf{W}$ - erases one word in the current line

 $\mathbf{Ctrl} + \mathbf{U}$ - erases the whole line

Ctrl+R - type to bring up a recent command

!! - repeats the last command

exit - log out of current session