## Rebooting and Shutting Down

| | |
|---|---|
| shutdown at 10:00 | $ sudo shutdown -h 10:00 |
| shutdown now | $ sudo shutdown -h now |
| restart at 10:00 | $ sudo shutdown -r 10:00 |
| restart now | $ sudo shutdown -r now |
| with message "Shutting down for scheduled maintenance. | $ sudo shutdown -h 10:00 "Shutting down for scheduled maintenance." |

## Locate application

| | |
|---|---|
| locate application only | which "application name" |
| locates application , source and man | whereis "application name" |

## Locate / Find

The locate utility program performs a search through a previously constructed database of files and directories on your system, matching all entries that contain a specified character string
updatedb to update the database
can use grep program as a filter; grep will print only the lines that contain one or more specified strings
$ locate zip | grep bin

## Finding Files

| | |
|---|---|
| Searching for files and directories named "gcc" | find /usr -name gcc |
| Searching only for directories named "gcc": | find /usr -type d -name gcc |
| Searching only for regular files named "gcc" | $ find /usr -type f -name gcc |
| *To find files based on time created "+_ n" days | find / -ctime n |
| To find files based on size +- n | $ find / -size n |

Another good use of find is being able to run commands on the files that match your search criteria. The -exec option is used for this purpose.
To find and remove all files that end with .swp:

$ find -name "*.swp" -exec rm {} ';'
*mtime for modified/written time
atime for access time/read time

## Accessing Directories

| | |
|---|---|
| Displays the present working directory | pwd |
| Change to your home directory | cd ~ or cd |
| Change to parent directory | cd .. |
| Change to previous directory | cd - |

## Exploring the FileSystem

| | |
|---|---|
| Changes your current directory to the root (/) directory (or path you supply) | cd / |
| List the contents of the present working directory | ls |
| List all files including hidden files and directories (those whose name start with . ) | ls – a |
| Displays a tree view of the filesystem | tree |

## Directories

| | |
|---|---|
| to create a directory. | mkdir |
| create a sample directory named sampdir under the current directory, | mkdir sampdir |
| create a sample directory called sampdir under /usr | mkdir /usr/sampdir. |
| Removing a directory * | rmdir |
| To remove a directory and all of its contents | rm -rf |

* for rmdir The directory must be empty or it will fail
* usage sample for rmdir and rm -rf is same as mkdir

## Renaming / removing directory

| | |
|---|---|
| Rename a directory | mv |
| Remove an empty directory | rmdir |
| Forcefully remove a directory recursively | rm -rf |

## Basic Packagaing Commands

| | |
|---|---|
| Install package | dpkg --install foo.deb |
| Install package, dependencies | apt-get install foo |
| Remove package | dpkg --remove foo.deb |
| Remove package, dependencies | apt-get autoremove foo |
| Update package | dpkg --install foo.deb |
| Update package, dependencies | apt-get install foo |
| Update entire system | apt-get dist-upgrade |
| Show all installed packages | dpkg --list |
| Get information on package | dpkg --listfiles foo |
| Show packages named foo | apt-cache search foo |
| Show all available packages | apt-cache dumpavail foo |
| What package is file part of? | dpkg --search file |

## Viewing Files

| | |
|---|---|
| for viewing files that are not very long; it does not provide any scroll-back. | cat |
| o look at a file backwards, starting with the last line | tac |
| Used to view larger files | less (/ for forwad and ? for backward) |
| Used to print the last 10 lines | tail |
| Used to print the first 10 lines | head |
| Used to print the last X lines | tail -n X or tail -X |
| Used to print the first X lines | head -n X or head -X |

## File Linking

| | |
|---|---|
| Hardlink file1 and file2 | $ ln file1 file2 |
| Softlink file1 and file2 | $ ln -s file1 file2 |

## New file / change time of file

| | |
|---|---|
| Create newfile | $ touch "filename" |
| sets the "myfile" file's time stamp to 4 p.m., March 20th (03 20 1600). | $ touch -t 03201600 myfile |

## Removing/Renaming file

| | |
|---|---|
| Rename a file | mv |
| Remove a file | rm |
| Forcefully remove a file | rm –f |
| Interactively remove a file | rm –i |