Linux 101 Command Line Cheat Sheet

Abstract

Fundamental Linux/Unix commands for the Linux/Unix command line learner. If you are experienced with Linux/Unix: you have probably mastered these commands. If not: you are in the right place.

Note: Some of the examples below presume files and paths that might not match your particular system and tool installation.

Where to Acquire

These tools are installed natively in most Unix/Linux distributions, as well as OS X.

Examples/Use Case

- bash basics
- cat
- cd
- echo
- Is
- networking
- passwd
- ping
- pwd
- sudo

bash basics

Tab-completion:

Folks who are new to the Unix/Linux command line often attempt to type everything by hand. This may work well if you type quickly and accurately. Most of us are **much** better off using tab completion.

Note that Windows PowerShell also supports tab completion, but it handles ambiguity differently. See the PowerShell cheat sheet for more information.

Type the following, and then press the <TAB> key:



Then press <TAB>.

Note that it autocompletes to /etc/passwd.

Now try tabbing with ambiguity:

\$ cd ~/Do

Then press <TAB> <TAB>.

Note that it offers two choices: Documents/ Downloads/.

Now add a "w" and press <TAB>:

\$ cd ~/Dow

Press <TAB>. It autocompletes to ~/Downloads/.

cat

Display a file:

\$ cat example.txt

Concatenate (cat) FileA.txt and FileB.txt, create FileC.txt:

\$ cat FileA.txt FileB.txt > FileC.txt

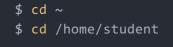
cd

Change Directory (cd) to the /tmp directory:

\$ cd /tmp

Change to the home directory. The following commands are equivalent for the "student" user: "~" means home directory (for example: /home/student):

\$ cd



Change to the parent directory. For example: if you are in /tmp/subdirectory/, this will change your working directory to /tmp/:



echo

Print (echo) the string "Cylon":

\$ echo Cylon

Create or overwrite the file example.txt, containing the string "Cylon":

\$ echo Cylon > example.txt

Append the string "Cylon" to the file example.txt:

\$ echo Cylon >> example.txt

ls

List the files in the current directory (equivalent to the cmd.exe "dir" command):



List the files in the current directory, long output (-l), all files including "hidden" files that begin with a "." (-a):



List the files in the current directory, long output (-I), all files (-a), sort by time (-t):

List the files in the current directory, long output (-l), all files (-a), reverse (-r) sort by time (-t):



networking

Show network interface configuration:

\$ ifconfig

Show network interface configuration using "ip":

\$ ip a

Restart networking:

\$ sudo /etc/init.d/networking restart

passwd

Change your password:

\$ passwd

ping

ping a host forever (until CTRL-C is pressed), see if it is up (and unfiltered):

\$ ping 10.5.11.25

ping a host 3 times, see if it is up (and unfiltered):

\$ ping -c3 10.5.11.25

pwd

Print Working Directory (pwd), show the current directory:

\$ pwd

sudo

Run a command as root:

\$ sudo command

Open a root bash shell:

\$ sudo bash

Additional Info

A printable PDF version of this cheatsheet is available here: LinuxCLI101

Cheat Sheet Version

Version 1.0