

# Comptia A+ Linux Cheat Sheet

## Basic Command Syntax

command [options...] [arguments...]

## Navigating the Filesystem

**pwd** `pwd [OPTIONS]`  
Prints the working directory, your current location within the filesystem.

**cd** `cd [options] [path]`  
Navigates the filesystem structure by changing directories.

### Filesystem Path Shortcuts

`.` Current Directory    `/` Root Directory  
`~` Home Directory    `~` Home Directory

**ls** `ls [OPTIONS] [FILE]`  
Lists the contents of a directory.

**ls -l** Use long listing format

## Administrative Access

**su** `su [OPTIONS] USERNAME`  
Allows you to temporarily act as a different user by creating a new shell.

**su -**  
**su -l** Configures the new shell with the settings of the new user.

**su --login**

**sudo** Allows a user to execute a command as another user.

**sudo -u** To specify a different user account use the -u option.

## Filesystem Management

**mv** `mv File(s) Directory`  
Move Files

**mv** `mv File_Name New_File_Name`  
Rename Files

**rm** `rm [OPTIONS] FILE`  
Remove Files

**chown** `chown [OPTIONS] [OWNER] FILE`  
Changes the ownership of a file.

**cp** `cp [OPTIONS] SOURCE DESTINATION`  
Copy Files

**dd** `dd [OPTIONS] OPERAND`  
Copy Files at the bit level

## Permissions

**chmod** Changes the permissions of a file.

	SYMBOL	MEANING		
<b>u</b>	User	<b>+</b> Add	<b>r</b>	Read
<b>g</b>	Group	<b>=</b> Exact	<b>w</b>	Write
<b>o</b>	Others	<b>-</b> Remove	<b>x</b>	Execute
<b>a</b>	All			

## Filtering Input

**grep** `grep [OPTIONS] PATTERN [FILE]`

### Regular Expression Patterns

#### Basic Regex Character(s) || Meaning

<code>.</code>	Any one single character	<code>*</code>	Zero or more of the previous character
<code>[]</code>	Any one specified character	<code>^</code>	If first character in the pattern, then pattern must be at beginning of the line
<code>[^]</code>	Not the one specified character	<code>\$</code>	If last character in the pattern, then pattern must be at the end of the line

## Shutting Down

**shutdown** `shutdown [OPTIONS] TIME [MESSAGE]`

## Display Network Configuration

**ifconfig** `ifconfig [OPTIONS]`  
Displays network configuration information.

**ifwconfig** Displays wireless network configuration information.

## Viewing Processes

**ps** `ps [OPTIONS]`

**ps -e** Display every process    **ps -f** Display additional details

## Package Management

**apt-get** Advanced Package Tool

<code>sudo apt-get update</code>	Refresh package list
<code>apt-cache search [keyword]</code>	Search for packages by keyword
<code>sudo apt-get install [package]</code>	Install a package
<code>sudo apt-get upgrade</code>	Update all package and dependencies
<code>sudo apt-get remove [package]</code>	Remove a package
<code>sudo apt-get purge [package]</code>	Purge a package completely from the system

## Updating User Passwords

**passwd** `passwd [OPTIONS] [USER]`

Change the password of the current user

**passwd -S** Print status information of current users password:

<User Name> <Password Status> <Change Date>  
<Minimum> <Maximum> <Warning> <Inactive>



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Learn more at: [netdevgroup.com/LinuxCheatSheet](http://netdevgroup.com/LinuxCheatSheet)