Linux Cli Cheatsheet

Linux Command Line Cheat Sheet

Bash Commands

Command	Description
uname -a	Show system and kernel
head -n1 /etc/issue	Show distribution
mount	Show mounted filesystems
date	Show system date
uptime	Show uptime
whoami	Show your username
man *command*	Show manual for *command*

Bash Shortcuts

Shortcut	Description
CTRL-c	Stop current command
CTRL-z	Sleep program
CTRL-a	Go to start of line
CTRL-e	Go to end of line
CTRL-u	Cut from start of line
CTRL-k	Cut to end of line
CTRL-r	Search history
!!	Repeat last command
!*abc*	Run last command starting with *abc*
!*abc*:p	Print last command starting with *abc*
!$	Last argument of previous command
ALT-.	Last argument of previous command
!*	All arguments of previous command
^abc^123	Run previous command, replacing *abc* with *123*

Bash Variables

Variable	Description
env	Show environment variables
echo $NAME	Output value of $NAME variable
export NAME=value	Set $NAME to *value*
$PATH	Executable search path
$HOME	Home directory
$SHELL	Current shell

IO Redirection

Command	Description
cmd < file	Input of cmd from file
cmd1 <(cmd2)	Output of cmd2 as file input to cmd1
cmd > file	Standard output (stdout) of cmd to file
cmd > /dev/null	Discard stdout of cmd

Command	Description
cmd >> file	Append stdout to file
cmd 2> file	Error output (stderr) of cmd to file
cmd 1>&2	stdout to same place as stderr
cmd 2>&1	stderr to same place as stdout
cmd &> file	Every output of cmd to file
cmd refers to a command.	

Pipes

Command	Description
cmd1 | cmd2	stdout of cmd1 to cmd2
cmd1 |& cmd2	stderr of cmd1 to cmd2

Command Lists

Command	Description
cmd1 ; cmd2	Run cmd1 then cmd2
cmd1 \&\& cmd2	Run cmd2 if cmd1 is successful
cmd1 || cmd2	Run cmd2 if cmd1 is not successful
cmd &	Run cmd in a subshell

Directory Operations

Command	Description
pwd	Show current directory
mkdir dir	Make directory dir
cd dir	Change directory to dir
cd ..	Go up a directory
ls	List files

ls Options

Option	Description
-a	Show all (including hidden)
-R	Recursive list
-r	Reverse order
-t	Sort by last modified
-S	Sort by file size
-l	Long listing format
-1	One file per line
-m	Comma-separated output
-Q	Quoted output

Search Files

Command	Description
grep pattern files	Search for *pattern* in *files*
grep -i	Case insensitive search
grep -r	Recursive search
grep -v	Inverted search
grep -o	Show matched part of file only
find /dir/ -name name*	Find files starting with *name* in *dir*
find /dir/ -user name	Find files owned by *name* in *dir*
find /dir/ -mmin num	Find files modified less than *num* minutes ago in *dir*

Command	Description
`whereis command`	Find binary / source / manual for *command*
`locate file`	Find *file* (quick search of system index)

File Operations

Command	Description
`touch file1`	Create `file1`
`cat file1 file2`	Concatenate files and output
`less file1`	View and paginate `file1`
`file file1`	Get type of `file1`
`cp file1 file2`	Copy `file1` to `file2`
`mv file1 file2`	Move `file1` to `file2`
`rm file1`	Delete `file1`
`head file1`	Show first 10 lines of `file1`
`tail file1`	Show last 10 lines of `file1`
`tail -F file1`	Output last lines of `file1` as it changes

Watch a Command

Command	Description
`watch -n 5 'ntpq -p'`	Issue the 'ntpq -p' command every 5 seconds and display output

Process Management

Command	Description
`ps`	Show snapshot of processes
`top`	Show real time processes
`kill pid`	Kill process with id *pid*
`pkill name`	Kill process with name *name*
`killall name`	Kill all processes with names beginning *name*

Nano Shortcuts

Shortcut	Description	Shortcut	Description
`Ctrl-R`	Read file	`ALT-A`	Start marking text
`Ctrl-O`	Save file	`CTRL-K`	Cut marked text or line
`Ctrl-X`	Close file	`CTRL-U`	Paste text
	Navigate File		**Search File**
`ALT-/`	End of file	`CTRL-W`	Find
`CTRL-A`	Beginning of line	`ALT-W`	Find next
`CTRL-E`	End of line	`CTRL-\`	Search and replace
`CTRL-C`	Show line number		
`CTRL-_`	Go to line number		
	Cut and Paste		

More nano info at:
http://www.nano-editor.org/docs.php

Screen Shortcuts

Shortcut	Description	Shortcut	Description
`screen`	Start a screen session.	`CTRL-A n`	Go to the next instance of terminal.

Shortcut	Description	Shortcut	Description
`screen -r`	Resume a screen session.	`CTRL-A p`	Go to the previous instance of terminal.
`screen -list`	Show your current screen sessions.	`CTRL-A "`	Show current instances of terminals.
`CTRL-A`	Activate commands for screen.	`CTRL-A A`	Rename the current instance.
`CTRL-A c`	Create a new instance of terminal.	More screen info at: http://www.gnu.org/software/screen/	

File Permissions

Command	Description
`chmod 775 file`	Change mode of *file* to 775
`chmod -R 600 folder`	Recursively chmod *folder* to 600
`chown user:group file`	Change *file* owner to *user* and group to *group*

File Permission Numbers

Number	Permission
4	read (r)
2	write (w)
1	execute (x)

First digit is owner permission, second is group and third is everyone. Calculate permission digits by adding numbers above.