Cheatography

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**≛** Downloads Linux Command Line Cheat Sheet by DaveC.

A cheat sheet of the commands I use most for Linux, with popup links to man pages.

# Search this cheat sheet:

Bash	ıС	om	ıma	and	S

uname –a	Show system and
	kernel

#### head -n1 /etc/issue Show distribution

Show mounted filesymount

stems

date Show system date

uptime Show uptime

whoami Show your username

man command Show manual for command

## **Bash Shortcuts**

basii siioree	
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
<u>!</u> *	All arguments of previous

command

^abc^123

Run previous command,

replacing abc with 123

Directory	Opera	tions
-----------	-------	-------

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

-a	Snow all (including hidden)
-R	Recursive list

Reverse order -r Sort by last modified -t

Sort by file size -S

-1 Long listing format

-1 One file per line

Comma-separated output -m

-Q Quoted output

## Search Files

Search Files	
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 modifed less than num minutes ago in dir
whereis command	Find binary / source / manual for command
locate file	Find file (quick search of system

index)

## Nano Shortcuts

Files

Ctrl-R Read file Ctrl-O Save file Ctrl-X Close file

Cut and Paste

Start marking text ALT-A CTRL-K Cut marked text or line

CTRL-U Paste text

Navigate File

ALT-/ End of file

CTRL-A Beginning of line

CTRL-E End of line

Show line number CTRL-C

CTRL-\_ Go to line number

Search File

CTRL-W Find

ALT-W Find next

 $CTRL-\$ Search and replace

More nano info at:

http://www.nano-editor.org/docs.php

Bash Variables Show environment env 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 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 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 cmd1 | cmd2 stdout of cmd1 to cmd2 cmd1 |& cmd2 stderr of cmd1 to cmd2 Command Lists 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

File Operations 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

watch -n 5 'ntpq -p'

Issue the 'ntpq -p' command every 5 seconds and display output

Process Management

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

Screen Shortcuts

screen

Start a screen session.

screen -r

Resume a screen session.

screen -list

Show your current screen sessions.

CTRL-A

Activate commands for screen.

CTRL-A c

Create a new instance of terminal.

CTRL-A n

Go to the next instance of terminal.

CTRL-A p

Go to the previous instance of terminal.

CTRL-A "

Show current instances of terminals.

CTRL-A A

Rename the current instance.

More screen info at:

http://www.gnu.org/software/screen/

File Permissions

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

First digit is owner permission, second is group and third is everyone.

Calculate permission digits by adding numbers below.

execute (x)

4 read (r) 2 write (w)

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English

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Comments



gerben, 10:02 28 Nov 11

Thanks for creating this cheat-sheet Dave. The one thing I missed was "grep -o"; Show only the part of a matching line that matches PATTERN



DaveChild, 10:02 28 Nov 11

I've added "grep -o" to the cheat sheet :)



a\_statham, 10:02 28 Nov 11

The I/O redirection section could use "2>" and "&>" examples, I always forget how to redirect stderr



DaveChild, 10:02 28 Nov 11

Good idea - I'll add that (once I remember how they work myself ... :) )



DaveChild, 10:02 28 Nov 11

I've updated that section to include stderr redirection. :)



wattslevi, 19:51 29 Nov 11

How are the indented lines added several of the cells like Screen Shortcuts? RE: http://getsatisfaction.com/cheatography/topics/adding\_a\_two\_line\_entry\_in\_a\_list



DaveChild, 08:35 30 Nov 11

Those indented bits are a "question and answer" format box.



wattslevi, 10:30 30 Nov 11

Ah, Q&A means I would be able to cheat with it and use it for two column with an extra line. Thanks for the info.

(Replying to my original post seems unintuitive for trying to reply under your post, but not to the overall thread... assuming this post as I'm thinking it might.)



jim, 23:12 30 Nov 11

On the redirects, the one I most commonly use is ignoring errors (2>/dev/null, or more succinctly 2>&- ).

For example, if I'm looking for files and I don't care that I haven't access to parts of the filesystem, we might do something like:

find / -name "\*.html" 2>&-



Tanner, 10:30 7 Mar 12

Is -h is handy - changes sizes to human readable formats. Goes along good with -S. If I'm using it it is generally a Is -alhS



Wane, 07:28 21 Mar 12

I think the "Bash Shortcuts" part is a little misleading. The "ctrl-a", "ctrl-e", "ctrl-k" is in emacs mode. But there should be many people preferring vim-mode or some thing like that.



Davis Peng, 13:57 22 Mar 12

Thanks a lot for your sheet, I just need such a linux command summary such as this sheet.



gamiclea, 00:05 2 Jun 12

Awesome job! This will definitely come in handy



wolvverine, 11:29 6 Jun 12

download PDF is broken



Arpit, 10:51 29 Jun 12

Good work. Thanks, its helpful.



Chetan Morajkar, 14:35 6 Aug 12

Hi.

Fantastic good job..

Thanks



Donald J. Tambeau, 15:23 6 Aug 12

Love your work....it is so ....so helpful! I would like to format a MicroDisk using Linux Centros. When I look at the Partition on the MicroDisk, I see the following comment....(non-Linux). This makes sense, since I formatted with a computer running Win 7! I want to use it on my Linux system but do not know how to do it. I tried format /dev/scd1 but no joy! Thank you

Don



Eric, 08:59 7 Aug 12

I'd just like to point out a trick I use with the head and tail commands:

First, you can designate the number of lines to return, like so: head -100 filename I often use both head and tail together to get a section of a file by piping the output of one into the other. The following command gets 100 lines, starting 1000 lines before the end of

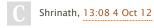
tail -1000 filename | head -100

You could, of course, reverse the commands to get a section near the top of the file. To get lines 91–100:

head -100 filename | tail -10



I just wanted to take a moment to thank you for putting this together. This is a big help to me I am new to OpenFiler witch I believe uses bash at the core so I am of course new to Linux. I didn't really think it would be quite so difficult to find resources that one can use to navigate the command line but I guess most folks use the GUI. But, I'm not most folks when I bought my first IBM 8088 I started with DOS.Anyway, thanks for the time and effort you put into this, sorry about digressing there.



Excellent Stuff man.. I think these are the most commonly used commands.. Good Effort.



you need to figure out how to split your command sheet as a pdf

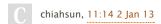


hi!.these are useful cheat sheet.



CTRL-Z sleeps (stops) the running process. fg [#] brings it back to foreground.

top CTRL-Z ps aux | grep top fg



Show human readable format (kb, mb...) Is -Ih



PierreBdR, 11:35 9 Feb 13

This cheat-sheet is very good! Thanks for that.

However, I don't like the "chmod" commands you are using. I don't think anybody should use the numeric version of chmod anymore. Your example "chmod –R 600 folder", is the best way to lock yourself out of your own folder and loose any executable bits on the scripts. I would rather use the symbolic version:

 $chmod -R \ u + rw \ folder \# \ Add \ read-write \ for \ user \ on \ all \ files \ in \ folder \\ chmod -R \ og-rwx \# \ Remove \ read \ write \ and \ execute \ bits \ for "other" \ and "group" \ on \ all \ files \ in \ folder$ 

And my all-time favorite:

chmod -R og=u-w folder # Give other and group the same rights as user, but removing writing rights.

Of course, this also handles t and s bits:

chmod u+s file chmod o+t folder



Stylius, 09:17 15 Feb 13

I would also add the tar command. No sysadmin would survive without it.

To extract tar.gz archive tar xvzf archive.tar.gz

To extract tar.bz2 archive tar xvjf archive.tar.bz2

To extract tar archive tar xvf archive.tar

To create archive tar cvzf archive.tar.gz /file\_or\_folder/to/archive



Sandeep, 08:43 16 Feb 13

Nice one...really helpful



John, 08:43 16 Feb 13

Great resource - thanks for taking the time and trouble to put this out there.

My favorite Is options are '-ltr'. The t sorts files by time, and r reverses that, so newest files show up right above the prompt, no matter how long the listing is.



daveydave400, 08:43 16 Feb 13

What about CTRL+y to paste the stuff you cut back in? How can you leave that out? CTRL+a/e and CTRL+u/y are the pairs I remember.



gymka, 08:44 16 Feb 13

Missing: sed find -exec



Jared, 10:33 26 Feb 13

Nice work, but it would be best as a single page PDF.



Darr247, 16:31 5 Apr 13

Or if the PDF at least split into 2 pages (so it could be a laminated 2-sided sheet) without cutting commands in half.



PastExpiryDotCom, 18:08 11 Jul 13

This is bash-tastic!



thank you very much, it is great



Pradeep, 15:12 13 Feb 14

There is no commands for shutdown or reboot..



RobertAttfieldDotCom, 11:37 14 Feb 14

Good job on the cheatsheet – this will definitely come in handy for my Linux exam next week. Some commands on umask would be a good addition to this cheatsheet :).



Bill, 17:30 17 Feb 14

Hi, handy sheet. Just one thing. Find will do a recursive search by default. In the find /dir - name name\* should be in double quotes if you want it to recursively find all files starting with name:

find /dir/ -name "name\*"

That's because, without the quotes, the shell will expand the wildcard before handing the parameters to find. To unexpected things might happen if you don't have the quotes. Please see the examples below:

```
$ find .
./name1
./name2
./dir1
./dir1/name3
./dir1/name1
./dir1/test3
./test1
$ find . -name name*
find: paths must precede expression: name2
Usage: find [-H] [-L] [-P] [-Olevel] [-D help|tree|search|stat|rates|opt|exec] [path...]
$ find . -name "name*"
./name1
./name2
./dir1/name3
./dir1/name1
$ touch dir1/fred1
$ find .
./name1
./name2
./dir1
./dir1/name3
./dir1/name1
./dir1/test3
./dir1/fred1
./test1
$ find . -name name*
find: paths must precede expression: name2
Usage: find [-H] [-L] [-P] [-Olevel] [-D help|tree|search|stat|rates|opt|exec] [path...]
[expression]
$ find . -name "name*"
./name1
```

```
./name2
./dir1/name3
./dir1/name1
$ find . -name fred*
./dir1/fred1
$ find . -name "fred*"
./dir1/fred1
```



Edser, 17:35 17 Feb 14

grep -B#

This shows what you are searching plus additional lines where number is added. Great for DHCP lease searching.



No4711, 09:56 19 Feb 14

I would suggest to put in screen <tty.device> <baudrate>  $\hat{a} \in$ " just in case anybody needs to connect to some serial console $\hat{a} \in$ |



Henning, 09:57 19 Feb 14

Great reference!

The section on Screen is missing "Ctrl-A d" for detaching.



Mads, 08:55 26 Feb 14

Great resource - thanks a lot Dave!



Kabir, 22:03 10 Mar 14

add task manage comman: gnome-system-monitor



Isabel Ambriz, 13:08 30 Apr 14

Command that might be used to test connectivity of Linux box to the Internet, get logged on user info, and get TCP/IP configuration info. Can anyone help me?



Aaron Tani, 08:27 1 May 14

theres also a good one here: http://www.techietek.com/2014/04/29/linux-cli-cheat-sheet-wallpaper/



Damien, 10:43 23 Jul 14

I've always found `mkdir -p path/to/directory` to be useful.

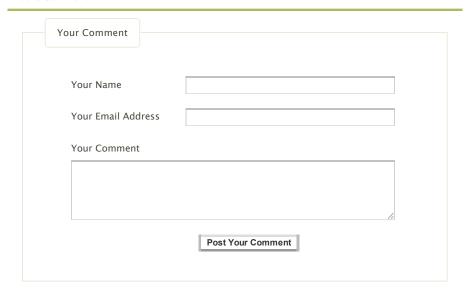


snakeroot, 10:46 14 Jan 15

head -n1 /etc/issue as a means to access distribution name isn't reliable, since the post-login screen could have been customized.

A more reliable version would be sed –nr 's/ $\PRETTY_NAME=(.*)/1/p'$  /etc/os-release . This should be true even for distros using legacy init (i.e., current Debian, Gentoo and even Slackware).

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