Linux Essentials

Command Line Cheat Sheet

&& - and **||** - or apropos - returns all documentation containing the defined command bzip/bunzip - bzip; compresses files cat - outputs the contents of a file **cd** - change directory chmod - change file mode **chown** - change ownership **clear** - clears the screen cp - copy**-f** Force; will overwrite any existing files with the same name -i Interactive; will ask to overwrite -p Preserves file ownership -r Recursive; will copy files under directories -a Archive; preserve symlinks -u Copy only if original file is newer cut - manipulate data by columns **-c** Range to cut [-c2-4] **-d** Define a deliminator to use with fields -f Return the numbered field dig - look up IP addresses and DNS names env - show environmental variables for current user exit - terminates all current processes, including shell **find** - locate file in system Search in current directory finger - used to find out information regarding a user **free** - reports on system memory

grep - search for string
-i Case insensitive

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-n Include line number in output
groupadd - add group
   -g Group ID
   -p Password
   -r Create system group
groupmod - modify group
   -g GID
   -p Password
gzip/gunzip - gzip; compresses files
head - output the first ten lines of a file
halt - shuts down operating system
id - outputs user and group IDs for a user
   -u
      Show only UID
      Show only GID
   -G Show all groups to which a user belongs
  -Gn Group name
if - conditional statements in bash scripting
   -d See if directory exists
      See if file exists
   -f See if file exists and it is a regular file
   -G See if file exists and it is owned by a defined group
   -h See if file exists and it is symlinked
   -L
      See if file exists and it is symlinked (same as -h)
   -O See if file exists and it is owned by defined UID
   -r See if file exists and has read permissions
   -w See if file exists and had write permissions
   -x See if file can be executed
ifconfig - shows NIC for network card; configures network settings
info - improved manual pages
init 0 - shuts down operating system
init 6 - reboots the operating system
ip addr - replaces ifconfig on newer systems
last - shows last command used by defined user
less - opens file in a vim-like environment for viewing
ln - link files
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-s Create symbolic link

ls - list contents of directory

- -a List all files, including hidden files
- -List files, including details such as owner and permissions
- -p Adds a / to the end of directories
- -R Enable recursion, including all sub-directories

man — manual pages

- 1 Executable programs and shell commands
- **2** System calls for the kernel
- **3** Library calls
- 4 Device files
- **5** File formats
- **6** Games
- **7** Misc.
- **8** Programs only run by the root user
- **9** Kernel routines
- -k Returns all documentation containing search keyword (apropos)

mv - move; used to move or rename files

- -m Set permissions mode
- -p Force recursion

netstat - shows network status

- -a All listening and non-listening sockets
- -i Network interface statistics
- -Listening sockets
- -s Summary of each protocol

passwd - change/set password

- **-S** View password settings
- -L Locks account
- -u Unlocks account
- -d Remove password
- -n Set days before password change
- -x Set maximum days before password change
- -w Days to warn prior to password reset
- -i Days to wait after expired password to disable account

ping - test connectivity of remote network device

ps - process status

-u Define user

pwck - verifies the integrity of the password files

pwconv - syncs /etc/passwd and /etc/shadow

pwd - print working directory

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reboot - shuts down, then restarts the system
route - view routing tables
set - similar to env; works with environment variables
sort - sorts text in file
   -r Sort in reverse order
   -n Sort numerically
su - substitute user
sudo - run command as root
tail – outputs the last ten lines of a file
rm - remove
 -r Enable recursion
rmdir - remove directory
shutdown - shuts down the system
   -H Halts the machine
   -P Power off
  -r Reboot
   -h Equivalent to powering off, overridden by --halt
   -k Send warning, but perform no actions
   -c Cancel a shutdown
su - substitute user
tar - archives files
  -cf Create file
  -xf Extract file
  -v Verbose
  -zcf Archive with gzip
  -jcf Archive with bzip2
top - shows list of current applications/processes, and system usage
   h
     Help
      Input process ID to kill
      Change process priorety
   p Sort by CPU usage
   m Sort by memory usage
touch - created empty file
   -c Will not create file if one exists; will update timestamp
   -d Manually set timestamp; can be used with directories
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traceroute - traces the route a packet takes

uname - returns information related to the system

- -s Displays kernel name
- -n Displays hostname
- **-r** Kernel release number
- -v Kernel version number
- -m Hardware architecture
- -p Processor architecture
- -i Hardware platform
- -o Operating system
- -a All information

useradd - adds new user

- **-D** Outputs defaults
- -c Comment
- -e When to expire account
- -f Number of days after password expiration to disable account
- -g Default group
- **-G** Additional groups
- -M Do not create home directory
- -m Set home directory
- -p Define password
- **-r** Create system user
- -s Set default shell
- -u Define UID

userdel - delete user

-r Delete home folder

usermod - modify user account

- **-c** Comment
- **-e** Expire date
- **-f** Days after password expiration to disable account
- **-G** Add groups
- -L Change username
- -L Lock account
- -m Move home directory
- -p Change password
- -u Set user ID
- -U Unlock account

w - displays user system information

wc - word count

- -w Count words
- -c Count characters

whatis - returns available man pages for command

which - shows location of application

who - displays who is logged in

- -b Last boot time of machine
- -m Hostname and associated user
- -r Run level for current user
- **-q** Number of logged—in users
- -a All

whoami - outputs username of current user

zip/unzip - zip; compresses files