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https://github.com/hofmannedv/cheatsheets.







1 System information and administration

| blkid | List the block devices, and its ids |
|---------------------------|---|
| cfdisk, fdisk, gdisk | Alter the partition table |
| cpu-info, cpuid, lscpu | List detailed cpu information |
| df, dfc, duf | Show available disk space |
| du, duf | Show disk space usage |
| free | List both available and used memory, and SWAP space |
| halt, poweroff, shutdown | Stop the system |
| journalctl | Query the systemd journal |
| lsblk | Display information about the system's block devices |
| lsdev, lshw | Display information about installed hardware |
| lsof | List open files |
| lspci | List all pci devices |
| lsusb | List all usb devices |
| mailq | Listing of the contents of the mail queue on the stan- dard output |
| reboot | Reboot the system |
| systemctl | Reboot the system |
| systemd-cat | Connect a pipeline or program's output with the jour- nal |
| uname | Display the Linux kernel that is in use |
| uptime | Display the time the system is already up and running |
| | |

2 Find files and directories

| find | Find files, and directories by various criteria |
|----------|--|
| locate | Find files, and directories by name based on the locate database |
| updatedb | Initialize, and update the locate database |

3 File and directory operations

| cd | Change to a directory |
|---------|---|
| ср | Copy a file |
| | Identify the file type |
| ln | Create a link |
| ls | List the contents of a directory |
| mkdir | Create a directory |
| mmv | Rename, or move multiple files, or directories |
| mv | Rename, or move a single file, or directory |
| pwd | Print the current working directory |
| rm | Remove one or more files, or directories |
| rmdir | Remove an empty directory |
| stat | Display details of a file, directory, or link |
| | Create an empty file, or update the timestamp of an existing file |
| umask . | Set file mode creation mask |

4 Package management (selection)

| apt, apt-get, aptitude, synaptic | Install, update, and remove software packages 1 |
|----------------------------------|---|
| apt-cache | Manage, and query the package cache 1 |
| dpkg | Install, update, and remove software packages 1 |
| dpkg-reconfigur | Reconfigure package configuration 1 |
| rpm, yum | Install, update, and remove software packages 2 |
| Notes: | |

- 1: Debian GNU/Linux, Ubuntu, and Linux Mint
- 2: RedHat Linux, Fedora, and OpenSuse

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5 Network commands

| dhclient | Request a dynamic IP address |
|-------------|---|
| dig, host | DNS lookup utility |
| hostname | Display the system's hostname |
| hostnamectl | Manage the system's hostname |
| ifconfig, | Configure network interfaces, and display interface |
| iwconfig | configuration (deprecated) |
| ifdown | Disable a network interface |
| ifup | Enable a network interface |
| ip | Configure network interfaces, and display interface |
| | configuration |
| iwlist | List available wireless networks |
| nc, netcat | TCP/IP swiss army knife |
| netstat, ss | Display network statistics |
| nmap | Scan network ports |
| nslookup | Lookup name service entries |
| ping, ping6 | Send ICMP package to a host |
| route | Display routing table |
| tcpdump | Dump traffic on a network |
| traceroute, | Print the route packets trace to network host |
| traceroute6 | • |
| wget | Non-interactive data transfer |

6 Secure data transfer

| rsync, scp | Synchronize data locally, or remotely using a secure, encrypted channel |
|-------------|--|
| ssh | Connect to a remote system using a secure, encrypted channel |
| ssh-copy-id | Transfer an SSH public key to a remote system for password-less authentification |
| ssh-keygen | Generate an SSH key pair for password-less authen- tification |

7 Users, groups, and access control

| addgroup | Add a new group 1 |
|--------------------|--|
| adduser | Add a new user 1 |
| chage | Modify the duration a user account is valid |
| chgrp | Modify the group of a file, or directory |
| chmod | Modify the access rights of a file, or directory |
| chown | Modify the owner of a file, or directory |
| chsh | Modify the login shell of an existing user |
| delgroup | Remove an existing group 1 |
| deluser | Remove an existing user 1 |
| getfacl | Display ACL permissions of a file, or directory |
| getent | Lookup user information in local databases |
| groupadd | Add a new group 2 |
| groupdel | Remove an existing group 2 |
| groupmod | Modify an existing group 2 |
| groups | Display the groups a user belongs to |
| id | Display user information |
| last, lastb | Show last (unsuccessful) login time for a user |
| passwd, usermod | Modify password for a user account |
| pwgen | Generate a random password |
| setfacl | Set ACL permissions of a file, or directory |
| su | Switch to a different user account |
| sudo | Run command as administrative user |
| useradd | Add a new user 2 |
| userdel | Remove an existing user 2 |
| usermod | Modify an existing user 2 |
| users, w, who | List logged-in users |
| wall | Write a message to all users currently logged in |
| whoami | Display current user name |

Notes:

1 High-level tool 2 Low-level tool

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8 Getting help

| apropos | Display a short help text explaining the given com- mand |
|---------|---|
| info | Get help using the GNU Info system |
| man | Display an extended help text explaining the given command |
| manpath | Manage the path for manual pages |
| whatis | Looks up the index database for short help texts explaining the given command |

9 Using pagers

| less, more | Display data page by page |
|------------|--|
| most | Display data page by page, and in multiple windows |

10 Processes and job control

| bg | Send process to the background |
|--------------|--|
| _ | Bring a process into the foreground |
| fg | |
| htop, top | A process monitor |
| jobs | List running jobs |
| kill | Send a signal to a process |
| killall | Send a signal to a number of processes |
| nice, renice | Modify the nice level of a process |
| pgrep | Find a process by its name, or by Regular Expression |
| pkill | Look up or signal processes based on name and other attributes |
| ps | List running processes |
| pstree | Display processes as a tree structure |
| pwdx | Display the working directory of a process |
| sleep | Pause the execution of commands |
| watch | Execute a program periodically, showing output fullscreen |

11 Text and data stream processing

| awk | Alter, or extract data from text files preferably by col- umn |
|-----------------------|---|
| cat | Output a file from top to bottom |
| cmp, diff | Compare two files, and show the differences between them |
| colrm | Remove a column from a file |
| column | Display data column-wise |
| cut | Extract data from text files by column |
| egrep, fgrep, grep | Filter text files by pattern line-wise |
| head | Print a specified number of lines beginning at the top of a file |
| hexdump | Output data as hexadecimal characters |
| nl | Output a file, and add line numbers |
| paste | Combine single files into one |
| rev | Output text in reverse order |
| sed | Modify a file line-wise |
| sort | Sort a file |
| split | Split a file based on conditions |
| tac | Output a file from bottom to top |
| tail | Print a specified number of lines beginning at the bottom of a file |
| tee | Read from stdin, and print to both a file, and stdout |
| tr | Replace text in a file |
| uniq | Report, or remove duplicate lines |
| WC | Count lines, words, and characters of a file |

12 Dealing with log files

| logger | A shell command interface to the syslog system log module |
|-----------|---|
| logrotate | Rotates, compresses, and mails system logs |

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13 Handling file systems

| e2fsck, fsck | File system check |
|--------------|---|
| findmnt | List, and search for mounted file systems |
| mkfs | Create a file system |
| mkswap | Prepare a partition for SWAP usage |
| mount | Mount a file system |
| swapoff | Disable a SWAP partition |
| swapon | Ensable a SWAP partition |
| tune2fs | Modify existing file system |
| umount | Unmount a file system |
| xfs_repair | Repair an XFS file system |

14 Working with terminals and shells, adjust the working environment

| alias | List, or alter aliases for commmands | | |
|--------------|--|--|--|
| clear | Clear the screen | | |
| echo | Output text on the screen | | |
| env | Display the environment variables | | |
| exit, logout | Quit the current shell session | | |
| fc | Modify the command history | | |
| history | Display the previously used commands | | |
| screen, tmux | A terminal multiplexer | | |
| set | Enable, or change a run-time parameter | | |
| time | Measure the execution time of a command | | |
| type | Identify command type | | |
| unalias | Remove an alias for a command | | |
| unset | Remove, or disable a runtime parameter | | |
| whatis | Lookup the index database for command descriptions | | |
| whereis | Lookup the binary files, source code files, and manual | | |
| | pages for a command | | |
| which | Identify which command will be run by the shell | | |
| xargs | Build and execute command lines from standard input | | |

15 Handling the Linux kernel

| dmesg | Display, and control the kernel ring buffer |
|----------|--|
| insmod | Insert (activate) a kernel module into the currently running Linux kernel |
| lsmod | List the kernel modules from the currently running Linux kernel |
| modinfo | Display information about a kernel module |
| modprobe | Try to insert (activate) a kernel module into the currently running Linux kernel |
| rmmod | Remove (deactivate) a kernel module from the cur- rently running Linux kernel |
| uname | Display information about the currently running Linux kernel |
| | |

16 Printing

| lp, lpr | Print files, or change an existing printing job |
|---------|---|
| lpc | Manage printers |
| lpq | Display the contents of the printer queue |
| lprm | Remove an existing job from the printer queue |

17 System time, date, calendar, and locales

| cal, ncal | Display a calendar |
|----------------|--|
| date | Display a date in various formats |
| hwclock | Manage both the hardware, and the system clock |
| locale | Display information about the current locale |
| localectl | Manage keyboard settings, and the current locale |
| ntpdate, | Retrieve the time information from an NTP server |
| ntpsec-ntpdate | |
| timedatectl | Control the system time and date |

Cheatsheet

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18 Archives and data compression

| bunzip2 | Unpack a compressed file (bzip2 format) | | |
|--------------------------|---|--|--|
| bzcat | Output file content to stdout from a compressed file (bzip2 format) | | |
| bzegrep, | Search in a bz-compressed file | | |
| bzfgrep, | | | |
| bzgrep | | | |
| bzip2 | Compress a file (bzip2 format) | | |
| gunzip | Unpack a compressed file (gzip format) | | |
| gzip | Compress a file (gzip format) | | |
| tar | Create, and manage a tape archive (tar file) | | |
| unxz | Unpack a compressed file (xz format) | | |
| unzip | Unpack a compressed file (zip format) | | |
| XZ | Compress a file (xz format) | | |
| xzcat | Output file content to stdout from a compressed file (xz format) | | |
| xzegrep, | Search in a xz-compressed file | | |
| xzfgrep, | | | |
| xzgrep | | | |
| zip | Compress a file (zip format) | | |
| zcat | Output file content to stdout from a compressed file (zip format) | | |
| zegrep, zfgrep, zgrep | Search in a zip-compressed file | | |

19 System libraries

| ldd | Print shared library dependencies |
|----------|--|
| ldconfig | Configure dynamic linker run-time bindings |

Notes