Linux

General

Shell

- install and config **zsh**
  - [LINK](#)
- create new file

  ```
  touch <filename>
  ```

- create a range of files
  - example:

    ```
    touch myfiles{1..10}.txt
    ```

- `grep` one of the most practical linux commands for filtering:
  - example:

    ```
    ls | grep <wanted-folder>
    ```

    > you have very very practical flag `-v` that **exclude** files.

- how to see current user in cli

  ```
  whoami
  ```

- recommended to don't install snap on linux!
- just try download the file from the internet.
- how to see the hostname

  ```
  hostname
  ```

- how to see the hostname ip in LAN

```
hostname -I
```

> first ip is your ipv4 in LAN

- how to see the current port usuage:

```
sudo lsof -i -P -n | grep LISTEN
```

- add `alias` permanently in one command

```
echo "alias aliasname='aliascommand'" >> ~/.bashrc && source ~/.bashrc
echo "alias aliasname='aliascommand'" >> ~/.zshrc && source ~/.zshrc
```

- add app to path

```
echo 'export PATH=/your/directory/path:$PATH' >> ~/.bashrc && source ~/.bashrc
```

- see the disk usage of folders and files:

```
df -h <your-path>
```

  - example:

```
df -h /
```

  - or

```
sudo du -h --max-depth=1
```

- see the partitions

```
lsblk
```

- go to your flash removable

```
cd /run/<username>/<medianame>
```

- find in file contents

```
grep -rnw yourpath -e "yourregex"
```

- go to terminal before login to linux shortcut:
  - `ctrl + alt + f2`
  - for back to graphical:
    - `ctrl + alt + f1` (centos worked)
    - `ctrl + alt + f7` (mint worked)
- how to run `.jar` file

```
java -jar yourjarfile.jar
```

- network manager setting from terminal with ui

```
nmtui
```

- see which ports are used!

```
netstat -tunlp
```

- see port status

```
nmap -p 5432 172.19.0.3
```

- remove a file recursively

```
find . -name "FILENAMEWILDCARD" -delete
```

- increase the time login time

```
sudo visudo
```

```
Defaults        timestamp_timeout=240 # in minutes (4 hours)
```

- running and background and also saving logs!

```
yourcommand >output.log 2>&1 &
```

- see your background procceses

```
jobs
```

- The `+` symbol indicates the current job. This is the job that will be affected by commands like fg or bg if you don't specify a job ID.
- The `-` symbol indicates the previous job (the one before the current job).
- Other jobs do not have a symbol.
- Running: The job is actively running in the background.
- Stopped: The job has been paused (e.g., with Ctrl+Z).
- Done: The job has completed execution.
- fg %1: Brings job [1] to the foreground.
- bg %1: Resumes job [1] in the background.
- kill %1: Kills job [1].
- to beautify the `json` format

```
jsonoutputer | jq .
```

- see log online

```
tail -f logfile.log
```

- find and replace all command from out of text file

```
sed 's/pattern/replacement/g' file
```

```
sed -i 's/pattern/replacement/g' file
```

```
sed -i.bak 's/pattern/replacement/g' file
```

systemd

- start the service

```
systemctl start yourservice.service
```

- stop the service

```
systemctl stop yourservice.service
```

- restart the service

```
systemctl restart yourservice.service
```

- enable the service to run after boot

```
systemctl enable yourservice.service
```

- diable the service to run after boot

```
systemctl diable yourservice.service
```

ssh

- get a file from remote

```
scp remoteuser@remotehostip:/path/to/file localdirectory
```

- get a folder complete from remote

```
scp -r remoteuser@remotehostip:/path/to/directory localdirectory
```

- send a file to destination ip

```
scp filepath remoteuser@remotehostip:/remote/to/directory
```

- send a folder to destination ip

```
scp -r folderpath remoteuser@remotehostip:/remote/to/directory
```

- copy files with progress status

```
rsync -ah --progress source destination
```

- sha2 hash of string

```
echo -n "your text" | sha256sum
```

- send DHCP

```
sudo dhclient -r
sudo dhclient
```

- see all process

```
ps aux | grep whatyouwant
```

- kill process

```
sudo kill -9 pid
```

- see app for port usage

```
sudo lsof -i :5432
```

Snap

- installing

```
sudo snap install <your-package>
```

- removing

```
sudo snap remove <your-package>
```

Security

File Encryption

GPG (GNUPG)

- generate keys

  ```
  gpg --gen-key
  ```

- see your keys

  ```
  gpg --list-secret-keys
  ```

- export your keys

  ```
  gpg --export-secret-keys [key-id | email] > private_key.asc
  ```

- import your keys

  ```
  gpg --import private_key.asc
  ```

- delete a key

  ```
  gpg --delete-key [KeyID]
  gpg --delete-secret-key [KeyID]
  ```

- symmetric encryption with just passphrase! (***very practical***)

  ```
  gpg -c --no-symkey-cache <filename>
  ```

- assymetric encryption with pair key

  ```
  gpg -e -r <key-email> <filename>
  ```

- now decrypt symmetric

  ```
  gpg -d <filename>.gpg > <filename>
  ```

GUI's

Cinammon

- file manager: nemo

Xfce

- file manager: thunar
- disk usage analyzer: baobab
- pdf reader: xreader
- text editor: xed

Gnome

- file manager: nautilus
- disk usage analyzer: baobab
- pdf reader: xdg-open
- text editor: gedit

Distros

Debian

- install `.deb` package

  ```
  sudo dpkg -i <packagepath>
  ```

- remove `.deb` package

  ```
  sudo dpkg -r <packagepath>
  ```

Mint

- mint has has no default root password!, you should set for it

  ```
  sudo passwd root
  ```

- install `.deb` package

```
sudo dpkg -i <packagepath>
```

- remove `.deb` package

```
sudo dpkg -r <packagepath>
```

- for becoming root user

```
sudo su
```

Centos

- if the root disk usage become 100% your operating system
  does not boot completely!!!
  - you probably go to your virtual terminal with `ctrl+alt+f2`
    shortcut to remove some of your data for booting completely!

Apps and Packages

ncat

- a package for general-purpose command-line tool for reading, writing, redirecting
  and encrypting data across a network.
- run server

```
nc -lv <port>
```

- sending data to server

```
nc -v localhost <port>
```

Firefox

- open app

```
firefox
```

Google Chrome

- open app

```
google-chrome
```