1. Install docker on ubuntu

2. Verificare servicii/ procese docker

3. Start / stop docker process

4. Check docker repository (check wrights of the user to access the local repository)

5. Download image docker

6. Start image ⇒ create container

7. Check status conatiner

8. Stop container

9. Delete container

10. Delete Image

11. Connect to a container that is started and UP

12. Connect to a container that is DOWN

13. Create and run a docker file

14. Configurare DNS (docker)

15. Configure proxy

1. Install Docker :

a)Update the apt package index:

sudo apt-get update

b)Install packages to allow apt to use a repository over HTTPS

sudo apt install apt-transport-https ca-certificates curl gnupg-agent software-properties-common

c)Import the repository’s GPG key using the following [curl](https://linuxize.com/post/curl-command-examples/) command:

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -

d)Add the Docker [APT repository](https://linuxize.com/post/how-to-add-apt-repository-in-ubuntu/) to your system:

sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu $(lsb\_release -cs) stable"

sudo apt-get update

e) Install the latest version of Docker CE

1. **sudo apt install docker-ce**

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f) go to : etc⇒ apt⇒source.list.d CREATE file : docker.list

Write in file : deb https://apt.dockerproject.org/repo ubuntu-xenial main

g) sudo apt-get install apt-get install linux-image-extra-$(uname -r)

h) sudo apt-get install wget

i) To install a specific version, first list the available versions in the Docker repository:

apt list -a docker-ce

j) install specific version

sudo apt install docker-ce=5:18.09.6~3-0~ubuntu-bionic

2. Verificare servicii/ procese docker

systemctl status docker

3. Start / stop docker process

systemctl stop docker

systemctl start docker

4. Check docker repository (check wrights of the user to access the local repository)

Daca userul nu este adaugat in grupul de acces pentru docker repository :

Sudo docker images

Adaugare user : sudo usermod -a -G docker $USER

* Restart the machine

Check images stage : docker images

In local repository vedem ce imagini sunt downloaded

5. Download image docker

In caz ca nu stiam exact imaginea care treuie downloadaa putem rula :

docker search “name”

docker pull image name

Se va download in docker repository imaginea aferenta

Docker images ⇒ va afisa din repository ce imagini sunt downloadate

Repository = numele imagini

TAG =

Image ID =

Created =

SIZE =

6. Start image ⇒ create container

O imagine de docker startanta → un container UP

docker run -i -t --name name\_personal image\_name

docker run -i -t --name my\_ubuntu ubuntu

------------------Docker start CONTAINER\_ID : docker start 474fc54fc9de

----------------Comanda : docker ps afiseaza (running) containers

----------------Verificare ca am dat start la imagine :

---------------------Docker run ps - a

Va afisa instantierea unei imagini in docker container

7. Check status container :

Docker run ps = show running containters

Docker run ps -a = show all conainters

8. Stop container

docker stop CONTAINTER\_ID

9. Delete container

docker container rm CONTAINER\_ID ⇒ delete

docker rm $(docker ps -a -q)

Se vor sterge toate instantele din docker container

Efectul este ca la rularea comenzii :

Docker ps -a vom avea un container GOL.

Nici o imagine nu este starttata

10. Delete image (base)

Pentru a sterge o imagine de docker in primul rand trebe sai stergem toate instatinierile aceastei imagini din docker container.

Dupa ce aceste instantieri au fost sterse vom putea sterge imaginea propriuzisa.

docker rmi REPOSITORY = image name

11. Connect to a container that is started and UP

Primul pass este sa ne asiguram ca avem container start :

Docker ps

Daca intoarce ⇒ empty ==> ca nu este startata imaginea(containerul)

docker exec -it 45f5dea2c02f bash

Unde **45f5dea2c02f** reprezinta containerul corespunzător imaginii startate pe care vrem sa ne conectam ⇒ m-am conectat cu user <> root

Conectare ca root la container UP

docker exec -it --workdir /root --user root **45f5dea2c02f** bash

12. Connect to a container that is DOWN

docker container start **45f5dea2c02f ⇒** container is UP

Acum puten sa ne conectatm la acest conatiner ..punctul 11

13 Create folder xxx

Create one file : Dockerfile

Run command : docker build -t xxx:latest . ( cu SPACE si .)

14 . **Configurare DNS (docker)**

apt-get install bridge-utils

pkill docker

iptables -t nat -F

ifconfig docker0 down

brctl delbr docker0

service docker restart

15. Configure proxy

etc⇒ systemmd⇒ system⇒ docker.service.d⇒ file : proxy.conf

[Service]

Environment="HTTP\_PROXY=http://proxy.metro.ro:3128"

Environment="HTTPS\_PROXY=https://proxy.metro.ro:3128/"

Environment="NO\_PROXY="localhost,127.0.0.1,::1"