# **Docker**

## Docker Installation

sudo apt update  
sudo apt install docker.io

sudo apt install docker-compose

sudo apt install docke**r**

## Search Images

**docker search ubuntu #image\_name(ubuntu)**

## Pull Images

**docker pull ubuntu #image\_name (ubuntu)**

## Create Container but don’t execute

docker create --name container\_name image\_name /bin/bash

docker create --name lampcont ubuntu /bin/bash

## Create and run container

**docker run -it** --**name container\_name image\_name /bin/bash**

**docker run -it** --**name** test**ubuntu ubuntu /bin/bash**

## Exit and Stop container from inside container

**exit**

## Start container but don’t execute

**docker start** test**ubuntu**

## Execute running container

**docker attach** test**pubuntu**

## Execute running container

**docker exec -it** test**ubuntu bin/**bash

## Exit but not terminate container

**exit**

## Terminate container - running via exec command

**docker stop container\_name**

**docker stop testubuntu**

## List All running containers

**docker ps**

## List All running and stopped containers

**docker ps -a**

## Remove a stopped container

**docker rm container\_name**

**docker rm testubuntu**

## List all pulled images

**docker images**

## Remove pulled image

**docker image rm image\_name  
docker image rm testcentos**

## Create image from container

docker commit container\_name new\_image\_name

## Create Image From file but not Dockerfile

docker build -t Tag\_name -f File\_Name .

## Share volume from Dockerfile container to container

nano Dockerfile

FROM ubuntu:latest

RUN apt-get update \

&& DEBIAN\_FRONTEND=noninteractive apt-get install -y \

apache2 \

mysql-server \

php8.1

VOLUME ["/myshare"]

### Build Image

docker build -t updatedimage .

### Create a container from updated-image

docker run -it --name mycont1 updatedimage /bin/bash

#Create some files or directories inside /myshare directory.

### Create another container from updated-image

docker run -it --name mycont2 --privileged=true --volumes-from mycont1 lampcont1 /bin/bash

#Check files or directories are created inside /myshare directory or not.

## Share volume from command container to container

### Create a container with any of image with -v myvolume

docker run -it --name mycont3 -v /myvolume lampcont1 /bin/bash

#Create some files or directories inside /myvolume directory.

### Create a container and share myvolume

docker run -it --name mycont4 --privileged=true --volumes-from mycont3 ubuntu /bin/bash

## Mount host directory to containers directory

docker run -it --name container\_name -v /host\_machine\_dir:/container\_dir --privileged=true image\_name /bin/bash

docker runmycont5 -it --name mycont5 -v /tmp:/tmp/ --privileged=true ubuntu /bin/bash

## Port Mapping

### Port mapping host to container via command

#Create and Run container but not to go inside

docker run -td --name container\_name -p host\_port:container\_port image\_name   
docker run -td --name lampcont -p 8000:80 lampubuntu

### Check which port is exposed

docker port cont\_name

## Import and Export a tar image of docker container

docker export container\_name > image\_name.tar

docker import image\_name < image\_name.tar

docker run -it --name container\_name image\_name /bin/bash