

containers create multiple replication.

★ (Using single image we can deploy multiple containers)

★ How to Host container Runtime  
 container → immutable  
 virtual machines → mutable.

1) Launch EC2 (name Docker-Host)

Redhat AMI

(use link in exam)

t2.micro

Zone / Public / existing sg  
 launch.

(For Linux CentOS)

2) connect

sudo su -

hostnamectl set-hostname docker.example.com

bash

rpmquery docker

--- docker-ce

--- podman

yum update -y

yum install docker\* (N)

google search  
docker install

RHEL install (copy command)  
& Paste in cli

yum repolist } To check  
Red hat repo.

copy install or  
(yum install) ~~my~~

↳ docker info.

↳ systemctl status docker

↳ -- start --

↳ -- enable --


↳ -- status -- (active)

↳ docker info. ~~info~~

/var/lib/docker } is root directory

↳ docker image

pull image from docker hub

Registry → collection multiple Repositories  
Repository → ... —  LTIMindtree <sup>modules</sup>

Search `httpd`  
tags of multiple version of images.

↳ `docker pull httpd`

↳ `docker images`

↳ `docker pull ubuntu.`

↳ `docker ps`

↳ `docker run -it --name web-app`  
↳ `ubuntu:latest /bin/bash` (interactive)

↳ `id`

↳ `docker inspect web-app | less`

↳ `apt update -y`

↳ `apt install apache2`

↳ `cd /var/www/html`

↳ `cat > index.html`

Hello This is my web app running  
in container.

`Ctrl + d`

↳ `cd`

↳ `service apache2 start`



↳ exit

↳ docker ps

↳ docker ps -a

↳ docker start web-app } To start container.

↳ docker ps -a

↳ docker attach web-app } To access container

↳ cd /tmp/

↳ touch vick.txt <1..10>

↳ cd

↳ ctrl+c ctrl+c } simit

↳ docker ps -a

↳ (curl http://172.17.0.2)

★ → Before this add port 8080 in sg of instance (HTTP) 8080 anywhere

↳ docker attach web-app  
 ↳ service apache2 start

↳ ctrl + c  
 ↳ docker inspect web-app | less

↳ curl http://172.17.0.2 (copy ip)

container name given by docker

↳ docker run -it ubuntu:latest /bin/bash

↳ apt update -y

↳ apt install apache2 -y

↳ cd /var/www/html

↳ echo "This is my container app" > index.html

↳ ll -

↳ service apache2 start

↳ ctrl + c

↳ docker ps -a (name = ecstatic-rubin)  
 (copy container id)

↳ docker inspect -i | less

(copy ip: add)

↳ ping (IP of New container)

↳ curl http://(---)

rename  
container  
name

↳ docker rename stationbin web-app2

↳ docker ps -a

↳ docker attach web-app2

Docker has 2 Type Network  
Overlay Network  
Underlay Network

containers  
should be Reachable To everyone:

Concept: Port Forwarding

↳ docker run -it --name top-noch -p

8080:80

ubuntu:latest /bin/bash



```

└ apt update -y
└ apt install apache2 -y
└ cd /var/www/html
└ echo "This is public App" > index.html
└ service apache2 start.
  chr p chr 0

```

```

└ docker ps
└ curl http://172.17.0.4
  copy (...) open in chrome
  NO output.

```

go to AWS instance → Instance Id  
 ↳ copy instance public id  
 ↓  
 In google ( 8080 )

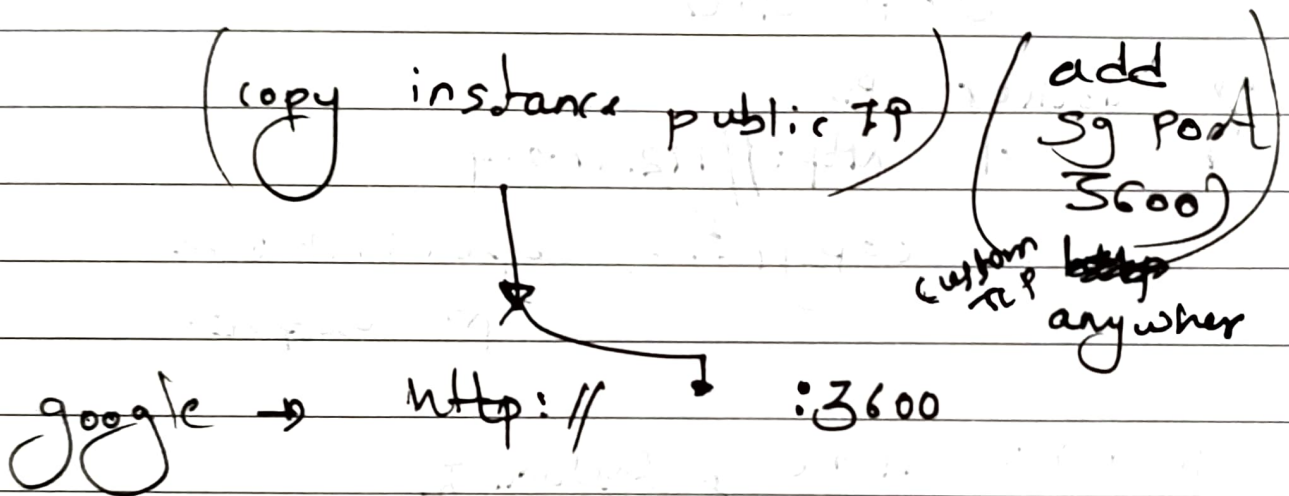
Using  
 same IP  
 of instance  
 But Different  
 port no. for  
 Docker  
 container.

```

└ docker run -it --name my-app -p 3600:80
  ubuntu:latest /bin/bash
└ apt update -y
└ apt install apache2 -y

```

- ↳ cd /var/www/html
- ↳ echo "This is 4th app which is running on different port" > index.html
- ↳ "
- ↳ service apache2 start



- ↳ docker kill my app } To delete container.

We need to allocate persistence storage (docker volume) to store docker container in case if docker container crashes we can revive data.



↳ docker volume ls

↳ docker volume --help

↳ docker volume create my-vol

↳ docker volume ls

↳ cd /var/lib/docker/volumes/

↳ ll

↳ cd my-vol/

↳ ll

↳ cd

↳ docker run -it --name data-app -p 2222:80 -v my-vol:/var/www/html ubuntu:latest /bin/bash

↳ apt update -y

↳ apt install apache2 -y

↳ cd /var/www/html

↳ echo "This is data app" > index.html  
all kind of data's

Join to storage in my-vol

↳ service apache2 start  
(ctrl, c) (ctrl, c)

(in sg add 2222 anywhere)

google: (public ip of instance: 2222)

cd /var/lib/docker/volumes/

||

cd my-vol

cd -data/

||

cd

✖

to  
see  
file

now  
to modify  
that files

↳ docker attach data-app

↳ cat >> index.html

(add new line  
ctrl + d)

ctrl + p + q



↳ docker kill data-app  
container gone

Now To Fetch data file.

↳ cd /var/lib/docker/volumes/my-vol/\_data/

↳ //

↳ (we can see index.html)  
still