Go to Root Account

$ sudo su -

# curl -fsSL https://get.docker.com -o get-docker.sh ( this will download shell script in the machine)

# sh get-docker.sh ( This will execute the shell script, which will install docker )

How to check the docker is installed or not

# docker --version

To download tomcat image

# docker pull tomee

# docker images

# docker pull ubuntu

If you do not specify the version, by default, we get latest version

I want to download jenkins

# docker pull jenkins

TO create a container from an image

# docker run --name mytomcat -p 7070:8080 tomee

docker run --name c1 -p 7070:8080 tomee

TO check the tomcat is running or not

http://13.250.47.90:7070

( 7070 is port number mapped in docker host)

Lets remove the container ( Open another gitbash terminal)

# docker stop c1

# docker rm -f c1

# docker run --name mytomcat -p 7070:8080 -d tomee

( The above command runs tomcat in detached mode , so we get out # prompt back )

# docker container ls

TO start jenkins

# docker run --name myjenkins -p 9090:8080 -d jenkins

To check for jenkins ( Open browser )

http://13.250.47.90:9090

To create ubuntu container

# docker run --name myubuntu -it ubuntu

Observation: You have automatically entered into ubuntu

# ls ( To see the list of files in ubuntu )

# exit ( To comeout of container back to host )

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Scenario 1:

Start tomcat as a container and name it as "webserver". Perform port mapping and run this container in detached mode

# docker run --name webserver -p 7070:8080 -d tomee

To access homepage of the tomcat container

Launch any browser

public\_ip\_of\_dockerhost:7070

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Scenario 2:

Start jenkins as a container in detached mode , name is as "devserver", perform port mapping

# docker run -d --name devserver -p 9090:8080 jenkins

To access home page of jenkins ( In browser)

public\_ip\_of\_dockerhost:9090

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Scenario 3: Start nginx as a container and name as "appserver", run this in detached mode , perform automatic port mapping

Generally we pull the image and run the image

Instead of pulling, i directly

# docker run --name appserver -P -d nginx

( if image is not available, it perform pull operation automatically )

( Capital P , will perform automatic port mapping )

How to check nginx is running or not? ( we do not know the port number)

To know the port that is reserved for nginx )

# docker port appserver

80/tcp -> 0.0.0.0:32768

80 is nginx port

32768 is dockerhost port

or

# docker container ls ( to see the port of nginz and docker host )

To check nginx on browser

52.221.192.237:32768

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To start centos as container

# docker run --name mycentos -it centos

# exit ( To come back to dockerhost )

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Scenario 3: Start nginx as a container and name as "appserver", run this in detached mode , perform automatic port mapping

Generally we pull the image and run the image

Instead of pulling, i directly

# docker run --name appserver -P -d nginx

( if image is not available, it perform pull operation automatically )

( Capital P , will perform automatic port mapping )

How to check nginx is running or not? ( we do not know the port number)

To know the port that is reserved for nginx )

# docker port appserver

80/tcp -> 0.0.0.0:32768

80 is nginx port

32768 is dockerhost port

or

# docker container ls ( to see the port of nginz and docker host )

To check nginx on browser

52.221.192.237:32768

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To start centos as container

# docker run --name mycentos -it centos

# exit ( To come back to dockerhost )

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To start mysql as container, open interactive terminal in it, create a sample table.

# docker run --name mydb -d -e MYSQL\_ROOT\_PASSWORD=sunil mysql:5

# docker container ls

I want to open bash terminal of mysql

# docker exec -it mydb bash

To connect to mysql database

# mysql -u root -p

enter the password, we get mysql prompt

TO see list of databases

> show databases;

TO switch to a databse

> use db\_name

> use mysql

TO create emp tables and dept tables

https://justinsomnia.org/2009/04/the-emp-and-dept-tables-for-mysql/

> exit

# exit

# exit

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