
Docker Commands

Note: The docker comes with two versions: Enterprise and Community. Here the both the versions are available for CentO's , Amazon linux
But in the Redhat the Enterprise version is only one option to install Docker. So please neglect the docker installation in redhat server

1. `sudo yum install update -y`
2. `sudo yum install docker -y`
3. Check the docker with version `docker --version`
4. To start the docker after instance is up then you need to give the command `sudo service docker start`
5. To check the status of docker then use the command `service docker status`
6. Then After that go to chrome and search for docker hub its like GitHub and create the account in it
7. Then come back to terminal and download hello-world image by using the following command `docker pull hello-world`
8. To check if the hello-world is downloaded or not then use the following command `docker images`
9. To run the hello-world image use the command `docker run -d --name <container:name> <image:tag>`
10. Then check the container is up or not use the following command `docker ps -a`
11. To login into the docker container use the following command `docker exec -it <container:name> /bin/bash`
12. So that the directory is changed from user to container id with `/user/bin/` local it will display by doing step-11

Commands used in Docker

<< Regarding How to Start with Docker. >>

`docker -v`

`docker login` [Enter username and password]

`docker search hello-world` [Search for availability of hello-world]

`docker pull hello-world` [Download the Hello-world from hub]

<< Regarding Images >>

`docker images` — to get the list of images available

`docker rmi < image-name>` — to delete the image

docker rm -f <image-name> — to forcefully delete the image

<< Regarding Container >>

`docker run <container-id> or <image-name>` — to start the container

`docker stop <container-id> or <image-name>` — to stop the container

`docker exec -it <name> or <container-id> /bin/bash` — to enter into container

`Ctrl p + q` — gives the container to run in background

`docker run --name jenkins-master3 -p 9091:8080 -p 50000:50000 -v /Users/durga/Desktop/Dockerjenkins_home:/var/jenkins_home jenkins`

Note:

`jenkins-master3` — Give name to identify the container easily

Here the first port 9091 is for Jenkins

The 8080 is for Docker container port

`-p 50000` is java agent port to connect to Jenkins

`-v` is volume

`Users/durga/Desktop/Dockerjenkins_home` — location of Jenkins workspace folder

`/var/jenkins_home jenkins` — is default location in command

<< How to start Tomcat >>

`docker run -it --rm -p 8090:8080 tomcat` — to start the tomcat with port

number and it is not in detached mode

To start the tomcat in detach mode:

1. `docker run -d --name MyTomcat -p 8090:8080 tomcat`
 2. Then open the browser and open the local host port with 8090
 3. Then we should enter into container with command `docker exec -it MyTomcat /bin/bash` or `docker attach <CID>`
 4. then we need to upgrade the apt update and apt upgrade
 6. Then apt-get install vim to install vi editor
 5. Then open the bin folder and search for conf folder
 6. then search for `find / -name context.xml`
 7. Mark with the Meta/context.xml with comment section `<!-- & -->`
 8. Then open the Tomcat-user.xml and add the roles with following link https://github.com/ValaxyTech/DevOpsDemos/blob/master/Tomcat/tomcat_installation.MD
- Note: please don't re-start the server that happens only in normal in aws servers
9. Then go to the browser and test the scenarios

Note : Here if we close the terminal still the tomcat will run in background

——<< Docker Network >>——

1. Type `docker network ls.` [Display the default 3 networks]
2. `docker network inspect` [To get all the details regarding network with detail]
3. `docker network create --subnet 10.1.0.0/24 --gateway 10.0.1 network name`

