

Docker Commands – Docker Commands

Following are the commands which are being covered:

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So, let's get started:

Docker Commands

1. **docker -version**

This command is used to get the currently installed version of docker

```
edureka@Manager-1: ~  
edureka@Manager-1:~$ docker --version  
Docker version 17.05.0-ce, build 89658be  
edureka@Manager-1:~$
```

2. docker pull

Usage: docker pull <image name>

This command is used to pull images from the **docker repository**(hub.docker.com)

```
edureka@Manager-1: ~  
edureka@Manager-1:~$ docker pull ubuntu  
Using default tag: latest  
latest: Pulling from library/ubuntu  
ae79f2514705: Pull complete  
c59d01a7e4ca: Pull complete  
41ba73a9054d: Pull complete  
f1bbfd495cc1: Pull complete  
0c346f7223e2: Pull complete  
Digest: sha256:6eb24585b1b2e7402600450d289ea0fd195cfb76893032bbbb3943e041ec8a65  
Status: Downloaded newer image for ubuntu:latest  
edureka@Manager-1:~$
```

3. docker run

Usage: docker run -it -d <image name>

This command is used to create a container from an image

```
edureka@Manager-1: ~  
edureka@Manager-1:~$ docker run -it -d ubuntu  
f49b58b66d1ebc7c2d9e42280c1e24019b3202fb3e69050c45e806e6f9b65f71  
edureka@Manager-1:~$
```

4. docker ps

This command is used to list the running containers

```
edureka@Manager-1: ~
edureka@Manager-1:~$ docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED         STATUS
f49b58b66d1e   ubuntu    "/bin/bash"             6 minutes ago   Up 6 minutes
angry_knuth
edureka@Manager-1:~$
```

5. docker ps -a

This command is used to show all the running and exited containers

```
edureka@Manager-1: ~
edureka@Manager-1:~$ docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED         STATUS
fe6e370a1c9c   ubuntu    "/bin/bash"             12 seconds ago   Up 11 seconds
boring_ritchie
2b86a0703d4f   ubuntu    "/bin/bash"             About a minute ago   Exited (0) 21 seconds ago
infallible_galileo
edureka@Manager-1:~$
```

6. docker exec

Usage: `docker exec -it <container id> bash`

This command is used to access the running container

```
root@fe6e370a1c9c: /
edureka@Manager-1:~$ docker exec -it fe6e370a1c9c bash
root@fe6e370a1c9c:/#
```

7. docker stop

Usage: `docker stop <container id>`

This command stops a running container

```
edureka@Manager-1: ~
edureka@Manager-1:~$ docker stop fe6e370a1c9c
fe6e370a1c9c
edureka@Manager-1:~$
```

8. docker kill

Usage: `docker kill <container id>`

This command kills the container by stopping its execution immediately. The difference between 'docker kill' and 'docker stop' is that 'docker stop' gives the container time to shutdown gracefully, in situations when it is taking too much time for getting the container to stop, one can opt to kill it

```
edureka@Manager-1: ~  
edureka@Manager-1:~$ docker kill d611cbc3789c  
d611cbc3789c  
edureka@Manager-1:~$
```

9. docker commit

Usage: `docker commit <container id> <username/imagename>`

This command creates a new image of an edited container on the local system

```
edureka@Manager-1: ~  
edureka@Manager-1:~$ docker commit fe6e370a1c9c hshar/ubuntuew  
sha256:0678ee2e6b1e6a66ae7179c3be31610e5338d3004c52d25fc9f65fd2a63dc164  
edureka@Manager-1:~$
```

10. docker login

This command is used to login to the docker hub repository

```
edureka@Manager-1: ~  
edureka@Manager-1:~$ docker login  
Login with your Docker ID to push and pull images from Docker Hub. If you don't  
have a Docker ID, head over to https://hub.docker.com to create one.  
Username (hshar): hshar  
Password:  
Login Succeeded  
edureka@Manager-1:~$
```

11. docker push

Usage: `docker push <username/image name>`

This command is used to push an image to the docker hub repository

```
edureka@Manager-1: ~
edureka@Manager-1:~$ docker push hshar/ubuntuew
The push refers to a repository [docker.io/hshar/ubuntuew]
3e69d0f539f1: Pushed
174a611570d4: Mounted from library/ubuntu
f51f76255b02: Mounted from library/ubuntu
51db18d04d72: Mounted from library/ubuntu
f1c896f31e49: Mounted from library/ubuntu
0f5ff0cf6a1c: Mounted from library/ubuntu
latest: digest: sha256:fdecdf8f2195a17e35b41e87fdd96293baf85ec102d045a9deb80d714a1d6950
size: 1564
edureka@Manager-1:~$
```

12. docker images

This command lists all the locally stored docker images

```
edureka@Manager-1: ~
edureka@Manager-1:~$ docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
hshar/ubuntuew      latest             0678ee2e6b1e       6 minutes ago      122MB
ubuntu              latest             dd6f76d9cc90       9 days ago         122MB
edureka@Manager-1:~$
```

13. docker rm

Usage: docker rm <container id>

This command is used to delete a stopped container

```
edureka@Manager-1: ~
edureka@Manager-1:~$ docker rm 2b86a0703d4f
2b86a0703d4f
edureka@Manager-1:~$
```

14. docker rmi

Usage: docker rmi <image-id>

This command is used to delete an image from local storage

```
edureka@Manager-1: ~
edureka@Manager-1:~$ docker rmi 0678ee2e6b1e
Untagged: hshar/ubuntu:latest
Untagged: hshar/ubuntu@sha256:fdecdf8f2195a17e35b41e87fdd96293baf85ec102d045a9deb80d714a1d6950
Deleted: sha256:0678ee2e6b1e6a66ae7179c3be31610e5338d3004c52d25fc9f65fd2a63dc164
Deleted: sha256:f3aea8a0f4950bab665799e13f12d394e06c766df8f2465c7583db95397a5c24
edureka@Manager-1:~$
```

15. docker build

Usage: docker build <path to docker file>

This command is used to build an image from a specified docker file

```
edureka@Manager-1: ~/hello
edureka@Manager-1:~/hello$ docker build .
Sending build context to Docker daemon 3.072kB
Step 1/2 : FROM ubuntu
--> dd6f76d9cc90
Step 2/2 : RUN echo successfully ran the dockerfile
--> Running in 835217ac24f5
successfully ran the dockerfile
--> bf3de26a35f0
Removing intermediate container 835217ac24f5
Successfully built bf3de26a35f0
edureka@Manager-1:~/hello$
```

Docker copy

Usage: COPY <source_file> <destination_directory>

This command copies files or directories from the host machine's file system to the container's file system during Docker image construction.

17. Docker history

Usage: docker history <image_name>

Using this command, you may examine the evolution of a Docker image or its constituent parts.

18. Docker Logout

Usage: docker logout [REGISTRY_URL]

This command is used to log out or remove the credentials used to authenticate with a Docker registry.

19. Docker logs

Usage: docker logout [REGISTRY_URL]

This command is used to log out of a Docker registry or to delete the credentials used to login with it.

20. Docker network

Usage: docker network create <network_name>

This command manages Docker networks. Docker networks enable containers to connect securely and isolatedly with one another and with external network resources.

21. Docker restart

Usage: docker restart [OPTIONS] CONTAINER [CONTAINER...]

This command is used to restart one or more Docker containers that are currently operating. Restarting a container entails gently pausing it and then restarting it with the same configuration and parameters.

22. Docker search

Usage: docker search [OPTIONS] TERM

This command searches for Docker images on Docker Hub, a public registry for Docker images.

23. Docker volume

Usage: docker volume create my_volume

This command creates a new Docker volume named "my_volume" in the Docker container. Volumes in Docker are generated independently of containers.