

DOCKER

Docker is an open source platform for building, deploying, and managing containerized applications.

DOCKER IMAGES

Download an image
 docker pull nginx

Upload an image to a repository
 docker push myimage:1.0

Delete an image
 docker rmi nginx

Show a list of all Images
 docker images

Delete dangling images
 docker image prune

Build an image from a Dockerfile
 docker build .

Tag an image
 docker tag ubuntu ubuntu:18.04

Save an image
 docker save nginx > nginx.tar

Load an image from a .tar file
 docker load -i nginx.tar

RUN CONTAINERS

Start a new Container from an Image
 docker run nginx

Assign it a name
 docker run --name web nginx

Map a port
 docker run -p 8080:80 nginx

Map all ports
 docker run -P nginx

RUN CONTAINERS (cont)

Start container in background
 docker run -d nginx

Assign it a hostname
 docker run --hostname srv nginx

MANAGE CONTAINERS

Show a list of running containers
 docker ps

Show a list of all containers
 docker ps -a

Delete a container
 docker rm web

Delete a running container
 docker rm -f web

Delete stopped containers
 docker container prune

Stop a running container
 docker stop web

Start a stopped container
 docker start web

Create an image out of container
 docker commit web

NETWORK

List networks
 docker network ls

Create a local network
 docker network create mynet

Show Information on one or more networks
 docker network inspect (network)

Connect a container to a network

NETWORK (cont)

docker network connect (network) (container)

Disconnect a container from a network
 docker network disconnect (network) (container)

DOCKER COMPOSE

Start your docker-compose defined resources in detached mode
 docker-compose up -d -f <docker-compose.yml>

Stop all docker-compose resources
 docker-compose stop

Destroy all docker-compose resources
 docker-compose down

ORCHESTRATE

Initialize swarm
 Docker swarm init --advertise-addr IP

Join an existing swarm as manager/worker node
 Docker swarm join --token<manager-token> IP

Create a service
 Docker service create --replicas 3 -p 80:80 --name web nginx

DOCKER MACHINE

Create a machine
 docker-machine create --driver VirtualBox NAME

List all the machines
 docker-machine ls

Connect to a machine
 docker-machine ssh NAME

VOLUMES

List volumes
 docker volume ls

Create a volume
 docker volume create <volume>

Delete a volume
 docker volume rm <volume>

Mount a local directory to your container
 docker run -v <local_dir>:/<container_dir> <image>

TROUBLESHOOTING

Show the logs of a container
 docker logs <container>

Show a 'top' view of processes running on a container
 docker top <container>

Show any files that have changed since startup
 docker diff <container>

Connect to an already running container
 docker attach <container>

Execute a command on a container
 docker exec -it <container_id> /bin/bash

Show docker disk space used
 docker system df