Docker CLI CheatSheet

Run a new Container

-- Start a new Container from an Image

docker run IMAGE

docker run nginx

-- Assign it a name

docker run --name CONTAINER IMAGE

docker run --name web nginx

-- Map a port

docker run -p HOSTPORT:CONTAINERPORT IMAGE

docker run -p 8080:80

-- Map all ports

docker run -P IMAGE

docker run -P nginx

-- Start Container in background

docker run -d IMAGE

docker run -d nginx

-- Assign it a hostname
docker run --hostname HOSTNAME IMAGE
docker run --hostname srv nginx

-- Add a dns entry
docker run --add-host HOSTNAME:IP IMAGE

-- Map a local directory into the container
docker run -v HOSTDIR:TARGETDIR IMAGE
docker run -v ~/:/usr/share/nginx/html nginx

-- Change the entrypoint
docker run -it --entrypoint EXECUTABLE IMAGE
docker run -it --entrypoint bash 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 CONTAINER
docker rm web

-- Delete a running container
docker rm -f CONTAINER
docker rm -f web

-- Delete stoped container
docker container prune

-- Stop a running container
docker stop CONTAINER
docker stop web

-- Copy a file from a container to the host

docker cp CONTAINER:SOURCE TARGET

docker cp web:/index.html index.html

-- Copy a file from host to a container

docker cp TARGET CONTSINER:SOURCE

docker cp index.html web:/index.html

-- Start a shell inside a running container

docker exec -it CONTAINER EXECUTABLE

docker exec -it web bash

-- Rename a container

docker rename OLD_NAME NEW_NAME

docker rename 096 web

-- Create an image out of container

docker commit CONTAINER

docker commit web

Manage Images

-- Download an Image
docker pull IMAGE[:TAG]
docker pull nginx

-- Upload an image to a repository
docker push IMAGE
docker push myimage:1.0

-- Delete an Image
docker rmi IMAGE

-- Show a list of all Images
docker images

-- Delete dangling images
docker image prune

-- Delete all unused images
docker image prune -a

-- Build an image from a Dockerfile
docker build DIRECTORY

docker build .

-- Tag an image
docker tag IMAGE NEWIMAGE

docker tag ubuntu ubuntu:18.04

-- Build and tag image from a Dockerfile
docker build -t IMAGE DIRECTORY

docker build -t myimage .

-- Save an image to .tar file
docker save IMAGE > FILE

docker save nginx > nginx.tar

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

docker load -i nginx.tar

Info & Stats

-- Show the logs of a container
docker logs CONTAINER
docker logs web

-- Show stats of running containers
docker stats

-- Show processes of a container
docker top CONTAINER
docker top web

-- Show installed docker version
docker version

-- Get detailed info about an object
docker inspect NAME
docker inspect nginx

-- Show all modified files in container
docker diff CONTAINER

docker diff web

-- Show mapped ports of a container
docker port CONTAINER

docker port web

Thank You