



Cheatsheet for Docker CLI

Run a new Container

Start a new Container from an Image
`docker run IMAGE`
`docker run nginx`

...and assign it a name
`docker run --name CONTAINER IMAGE`
`docker run --name web nginx`

...and map a port:
`docker run -p HOSTPORT:CONTAINERPORT IMAGE`
`docker run -p 8000:80 nginx`

...and map all ports
`docker run -P IMAGE`
`docker run -P nginx`

...and start container in background
`docker run -d IMAGE`
`docker run -d nginx`

...and assign it a hostname
`docker run --hostname HOSTNAME IMAGE`
`docker run --hostname srv nginx`

...and add a dns entry
`docker run --add-host HOSTNAME:IP IMAGE`

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

...but 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 stopped containers:
`docker container prune`

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

Start a stopped container
`docker start CONTAINER`
`docker start 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 the host to a container
`docker cp TARGET CONTAINER: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 an 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 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`