

# Docker CLI Cheat Sheet

## docker version

**docker version** [options]

Use: check the version and installation status

Flag: --format or -f to modify the output format

**docker version -f '{{.Server.Os}}/{{.Server.Arch}}'**

It will only show the target OS class and target architecture

## docker build

**docker build** [options] PATH or URL

Use: Build an image from a Dockerfile

Flag: -f to build from file, -t to tag/name the image, --no-cache to avoid using cached layers from previously built images.

**docker build -t my-image**

build an image from Dockerfile and will name it as "my-image"

## docker images

**docker images** [options] [REPO:TAG]

Use: List the images on Docker host

Flag: --all (or -a), --no-trunc to avoid truncated image IDs

**docker images nginx:alpine**

It will only show images with nginx:alpine tag from the host

## docker ps

**docker ps** [options]

Use: Show a list of containers

Flag: -f to filter, -s to show total file sizes

**docker ps --filter 'exited=137'**

It will only show containers whose process ended with exit code 137

## docker image pull

**docker image pull** [options] NAME[:TAG or DIGEST]

Use: Pulls an image or repo from container registry

Flag: -a to pull all tagged images from the repo

**docker image pull nginx:alpine**

It will pull nginx image with alpine tag

## docker image history

**docker image history** [options] IMAGE

Use: shows history (intermediate layers) of an image

**docker image history nginx:alpine**

It will list out all of the intermediate image history of alpine image from the host. Pulled image's intermediate image IDs will be empty.

## docker image save/load

**docker image save/load** [options] IMAGE

Use: saves image to or loads image from tar archive

**docker image save nginx:alpine > nginx.tar**

It will save the content of nginx:alpine image to nginx.tar file

**docker image load < nginx.tar**

It will extract content from nginx.tar and will load an image

## docker image push

**docker image push** IMAGE\_NAME[:TAG]

Use: Pushes local image to Docker hub

**docker image push cerulean-canvas/nginx:alpine**

It will push the nginx:alpine image to cerulen-canvas repo of your docker hub account. (Note: Login to Docker hub is necessary)

## docker container run

**docker container run** [options] IMAGE [CMD] [ARG]

Use: Runs a container from the mentioned image and replaces its CMD/Entrypoint with the command and arguments provided.

Flag: -i to keep STDIN open for interactions, -t to allocate pseudo-TTY (teletype), -d to run it as a background process.

**docker container run -itd ubuntu:16.04 printenv**

It will create and run a container in background from ubuntu16.04 image and will run "printenv" command on it

## docker container exec

**docker container exec** CONTAINER COMMAND [ARG]

Use: Executes the created container with the command as mentioned.

**docker container exec cont-Ubuntu printenv**

It will run cont-ubuntu container with printenv command

## docker container inspect

**docker container inspect** [options] CONTAINER

Use: To view detailed information about container

Flag: -f to for, at the output to your convenience

**docker container inspect -f '{{range .NetworkSettings.Networks}}{{.IPAddress}}{{end}}' cont-nginx**

It will provide IP address of cont-nginx container

## docker container prune

**docker container prune** [OPTIONS]

Use: Remove all terminated containers.