

# Docker Cheat Sheet

## ► Build Commands

```
docker build
```

Builds an image from a Dockerfile located in the current directory

```
docker build https://github.com/  
docker/rootfs.git#container:docker
```

Builds an image from a remote GIT repository

```
docker build -t imagename/tag
```

Builds, and tags an image for easier tracking

```
docker build https://yourserver/file.tar.  
gz
```

Builds an image from a remote tar archive

```
docker build -t image:1.0 -<<EOF  
FROM busybox  
RUN echo "hello world"  
EOF
```

Builds an image via a Dockerfile that is passed through STDIN

## ► Clean Up Commands

```
docker image prune
```

Clears an unused image

```
docker image prune -a
```

Clears all images that are not being used by containers

```
docker system prune
```

Removes all stopped containers, all networks not used by containers, all dangling images, and all build cache

```
docker image rm image
```

Removes an image

```
docker rm container
```

Removes a running container

```
docker kill $ (docker ps -q)
```

Stops all running containers

```
docker kill $(docker ps -q)
```

Stops all running containers

```
docker stack rm stackname
```

Removes a swarm

```
docker volume rm $(docker volume ls  
-f dangling=true -q)
```

Removes all dangling volumes

```
docker rm $(docker ps -a -q)
```

Removes all stopped containers

```
docker kill $(docker ps -q)
```

Stops all running containers

## ► Container Interaction Commands

```
docker start container
```

Starts a new container

```
docker stop container
```

Stops a container

```
docker pause container
```

Pauses a container

```
docker unpause container
```

Unpauses a container

```
docker restart container
```

Restarts a container

```
docker wait container
```

Blocks a container

```
docker export container
```

Exports container contents to a tar archive

```
docker attach container
```

Attaches to a running container

```
docker wait container
```

Waits until the container is terminated and shows the exit code

```
docker commit -m "commit message"  
-a "author" container username/  
image_name: tag
```

Saves a running container as an image

```
docker logs -ft container
```

Follows container logs

```
docker exec -ti container script.sh
```

Runs a command in a container

```
docker commit container image
```

Creates a new image from a container

```
docker create image
```

Creates a new container from an image

## ► Container Inspection Commands

**docker ps**

Lists all running containers

**docker -ps -a**

Lists all containers

**docker diff container**

Inspects changes to directories and files in the container filesystem

**docker top container**

Shows all running processes in an existing container

**docker inspect container**

Displays low-level information about a container

**docker logs container**

Gathers the logs for a container

**docker stats container**

Shows container resource usage statistics

## ► Manage Images Commands

**docker image ls**

Lists images

**docker image rm mysql**

Removes an image

**docker tag image tag**

Tags an image

**docker history image**

Displays the image history

**docker inspect image**

Displays low-level information about an image

## ► Run Commands

Docker uses the run command to create containers from provided images. The default syntax for this command:

```
docker run [options] image [command] [arg...]
```

Then you can use one of the following flags:

**--detach , -d**

Runs a container in the background and prints the container ID

**--env , -e**

Sets environment variables

**--hostname , -h**

Sets a hostname to a container

**--label , -l**

Creates a meta data label for a container

**--name**

Assigns a name to a container

**--network**

Connects a container to a network

**--rm**

Removes container when it stops

**--read-only**

Sets the container filesystem as read-only

**--workdir , -w**

Sets a working directory in a container

## ► Registry Commands

**docker login**

Log ins to a registry

**docker logout**

Logs out from a registry

**docker pull mysql**

Pulls an image from a registry

**docker push repo/ rhel-httpd:latest**

Pushes an image to a registry

**docker search term**

Searches Docker Hub for images with the specified term

## ► Service Commands

```
docker service ls
```

Lists all services running in a swarm

```
docker stack services stackname
```

Lists all running services

```
docker service ps servicename
```

Lists the tasks of a service

```
docker service update servicename
```

Updates a service

```
docker service create image
```

Creates a new service

```
docker service scale servicename=10
```

Scales one or more replicated services

```
docker service logs stackname  
servicename
```

Lists all service logs

## ► Network Commands

```
docker network create networkname
```

Creates a new network

```
docker network rm networkname
```

Removes a specified network

```
docker network ls
```

Lists all networks

```
docker network connect networkname  
container
```

Connects a container to a network

```
docker network disconnect  
networkname container
```

Disconnects a container from a network

```
docker network inspect networkname
```

Displays a detailed information about a network