

Create a container (without starting it):

```
docker create [IMAGE]
```

Rename an existing container:

```
docker rename [CONTAINER_NAME] [NEW_CONTAINER_NAME]
```

Run a command in a new container:

```
docker run [IMAGE] [COMMAND]
```

`docker run --rm [IMAGE]` – removes a container after it exits.

`docker run -td [IMAGE]` – starts a container and keeps it running.

`docker run -it [IMAGE]` – starts a container, allocates a pseudo-TTY connected to the container's stdin, and creates an interactive bash shell in the container.

`docker run -it-rm [IMAGE]` – creates, starts, and runs a command inside the container. Once it executes the command, the container is removed.

Delete a container (if it is not running):

```
docker rm [CONTAINER]
```

Update the configuration of one or more containers:

```
docker update [CONTAINER]
```

Starting and Stopping Containers

Start a container:

```
docker start [CONTAINER]
```

Stop a running container:

```
docker stop [CONTAINER]
```

Stop a running container and start it up again:

```
docker restart [CONTAINER]
```

Pause processes in a running container:

```
docker pause [CONTAINER]
```

Unpause processes in a running container:

```
docker unpause [CONTAINER]
```

Block a container until others stop (after which it prints their exit codes):

```
docker wait [CONTAINER]
```

Kill a container by sending a SIGKILL to a running container:

```
docker kill [CONTAINER]
```

Attach local standard input, output, and error streams to a running container:

```
docker attach [CONTAINER]
```

Docker Image Commands

Create an image from a Dockerfile:

```
docker build [URL]
```

`docker build -t <tag> .` builds an image from a Dockerfile in the current directory and tags the image

Pull an image from a registry:

```
docker pull [IMAGE]
```

Push an image to a registry:

```
docker push [IMAGE]
```

Create an image from a tarball:

```
docker import [URL/FILE]
```

Create an image from a container:

```
docker commit [CONTAINER] [NEW_IMAGE_NAME]
```

Remove an image:

```
docker rmi [IMAGE]
```

Load an image from a tar archive or stdin:

```
docker load [TAR_FILE/STDIN_FILE]
```

Save an image to a tar archive, streamed to STDOUT with all parent layers, tags, and versions:

```
docker save [IMAGE] > [TAR_FILE]
```

List running containers:

```
docker ps
```

`docker ps -a` – lists both running containers and ones that have stopped

List the logs from a running container:

```
docker logs [CONTAINER]
```

List low-level information on Docker objects:

`docker inspect [OBJECT_NAME/ID]`

List real-time events from a container:

`docker events [CONTAINER]`

Show port (or specific) mapping for a container:

`docker port [CONTAINER]`

Show running processes in a container:

`docker top [CONTAINER]`

Show live resource usage statistics of containers:

`docker stats [CONTAINER]`

Show changes to files (or directories) on a filesystem:

`docker diff [CONTAINER]`

List all images that are locally stored with the docker engine:

`docker image ls`

Show the history of an image:

`docker history [IMAGE]`

Networks Command

One of the most valuable features of Docker software is the ability to connect containers to each other and to other non-Docker workloads. This section covers network-related commands.

List networks:

`docker network ls`

Remove one or more networks:

`docker network rm [NETWORK]`

Show information on one or more networks:

`docker network inspect [NETWORK]`

Connects a container to a network:

`docker network connect [NETWORK] [CONTAINER]`

Disconnect a container from a network:

`docker network disconnect [NETWORK] [CONTAINER]`