Docker Basic Commands

Here are few basic docker commands.

Check the version of Docker:

* docker version

Check the detailed information on the running/stopped containers:

* docker info

Docker images can be downloaded from Docker hub using docker commands.

Lets pull an image from docker hub using pull command.

Download a image from docker hub

* docker pull <<image name>>

e.g. docker pull nginx

Docker Commands - Images

Verify the downloaded docker images:

* docker images ↵

View all the commands that were run with an image via a container.

* docker history <<Image Name>> ↵

e.g. docker history nginx

Remove Docker Images

* docker rmi <<Image Name>> ↵

e.g. docker rmi nginx

Download and run an image in docker container using run command

* docker run <<Image Name>> ↵

e.g. docker run --name nginxservice -d nginx

--name --> to specify a name for the running service. In this example, it is nginxservice

-d --> to run the service in the background

Docker Version Tag

You must have noticed that on pulling the image from the Registry, the tagged version of the image is displayed:

For example, **docker pull busybox:1.24** will download the corresponding version:

Docker Search

We can also search for the images in the Docker Hub registry by using docker search subcommand. Let us search for ubuntu images in the Docker Hub, and limit the search result only to 20 because we have more than 2000 images on Ubuntu: **docker search ubuntu | head -20**

Docker Commands - Container

Now let’s run list of commands on the service/ container

List running containers

* **docker ps**

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Know the IP address of the running container:

* **docker inspect <Container Name>**

**e.g. docker inspect nginxservice**

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Print the stats for a running Container

* **docker stats <<Container Name>> ↵**

**E.g. docker stats nginxservice**

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Pause the processes in a running container

* **docker pause <<Container Name >> ↵**

**E.g. docker pause nginxservice**

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Unpause the processes in a running container

* **docker unpause <<Container Name >> ↵**

**e.g. docker unpause nginxservice**  
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Kill the processes in a running container

* **docker kill <<Container Name >> ↵**

**e.g. docker kill nginxservice**

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Start the same container:

* **docker start <<Container Name>> ↵**

**e.g. docker start nginxservice**

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Stop the running container

* **docker stop <<Container Name >> ↵**

**e.g. docker stop nginxservice**

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List all containers (This includes containers in a all states):

We will be able to see the container we just stopped listed here.

* **docker ps -a**

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Delete a container:

* **docker rm <<Container Name >> ↵**

**e.g. docker rm nginxservice**

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To remove all stopped containers:

* **docker container prune**

Note: Instead of using the Container Name, all the above commands can be executed with the container id as well.

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Export a container

**docker export <<Container Name>> <<file\_Name>>.tar ↵**

**e.g.**

**Lets run a service using docker run command.**

**docker run --name newnginxservice -d nginx**

**docker export newnginxservice > test.tar**

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Import a container

**docker import <<Remote URL/Image Name.tar>> ↵**

**e.g. docker import test.tar**

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Docker daemon Commands

Stop Docker daemon process

* service docker stop

Start Docker daemon process

* service docker start

You may not be able to try these 2 commands since you would not have access to root on Katacoda playground.

Diagnose Run Issues

In case you are having a problem with downloading the images and running them, please follow these steps to check whether the docker service is running on your system or not:

Check the running status of docker:

* service docker status

Restart Docker service in your system:

* service docker restart