# **Apps Developer Blog**

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### **Docker Commands Cheat Sheet**

When learning Docker I created this page for myself for a quick reference on how to run a specific Docker command. I hope this Docker commands reference page will be of some value to you.

#### Install Docker on EC2 Linux Instance

To install Docker on EC2 Linux machine run these commands one by one.

```
01. sudo yum install docker
02. sudo service docker start
03. sudo usermod -a -G docker ec2-user
```

**Note:** After running the *sudo usermod -a -G docker ec2-user* you can re-login to EC2 instance and it will no longer require you to use *sudo* when running Docker command.

### Start Docker as Service

```
01. sudo service docker start
```

## **Make Docker Not Require sudo Anymore**

```
01. sudo usermod -a -G docker ec2-user
```

**Note:** After running the above command, you need to re-login to EC2 instance and it will no longer require you to use *sudo* when running Docker command.

### **List Currently Running Docker Containers**

```
01. docker ps -all
```

#### **Start Docker Container**

01.	docker start <container here="" id=""></container>

### **Stop Running Docker Container**

01. docker stop <CONTAINER ID HERE>

#### **Delete Docker Container**

01. docker rm <CONTAINER ID HERE>

**Note:** To delete a running Docker container, you will need to first stop it. Execute the docker stop <CONTAINER ID> command to first stop running docker container.

### **List Docker Images on Computer**

01. docker images -a

## **Remove Docker Image**

01. docker rmi <IMAGE ID HERE>

or

01. docker rmi -f <IMAGE ID HERE>

## **Remove All Docker Images on Computer**

01. docker rmi \$(docker images -f dangling=true)

## **Build Docker Image**

01. docker build --tag=<IMAGE TAG NAME> --force-rm=true .

#### For example:

01. docker build --tag=albums-microservice --force-rm=true .

## **Run Docker Image in Docker Container**

01. docker run -d <IMAGE NAME>

Where **-d** is used to detach the process so you can continue working with a terminal window and execute other commands.

## **Check Docker Container Logs**

01. docker logs <CONTAINER ID HERE>

#### For example:

01. docker logs ceaf9e1ebef5

## **Inspect Docker Container**

01. docker inspect <CONTAINER ID HERE>

#### **Execute Commands in Docker Container**

01. docker exec -it <CONTAINER ID HERE> <COMMAND TO RUN>

#### For example:

01. docker exec -it 67e36143717b ls

01. docker exec -it 67e36143717b bash

#### **Pass Environment Variables**

01. docker run <CONTAINER ID> -e "<ENVIRONMENT VARIABLE NAME>=<VALUE>"

#### For example:

01. docker run ceaf9e1ebef5 -e "SPRING\_PROFILES\_ACTIVE=dev" -e "server.port=8080"

### **List Docker Networks on Computer**

01. docker network ls

### **Create Custom Docker Bridge Network**

01. docker network create --driver bridge <NEW NETWORK NAME>

then you can run Docker container in a newly created custom bridge network

01. docker run <CONTAINER ID > --network <NAME OF CREATED NETWORK>

### **Publish Docker Image to Docker Hub**

To publish an existing Docker image to a Docker Hub Repository, follow these steps:

- 1. Open Browser window and login to docker hub,
- 2. Create a new Repository in your Docker Hub account,
- 3. Open a Terminal window on your computer and Login to Docker Hub account:
  - 01. docker login --username=<DOCKER HUB USER NAME>
- 4. List existing Docker images on your computer and look up Docker image ID of the Image you want to publish on Docker Hub.
  - 01. docker images ls
- 5. Tag Docker image on your computer with a Docker Hub repository name the following way:
  - 01. docker tag <CONTAINER ID> <DOCKER HUB USERNAME>/<REPOSITORY NAME>

For example:

- 01. docker tag ceaf9e1ebef5 kargopolov/albums-microservice
- 5. Push Docker image on your computer to a Docker Hub Repository name:
  - 01. docker push <Docker Hub User name>/<Repository name>

For example:

01. docker push kargopolov/albums-microservice

### Bind a Directory in Docker Container to a Directory on Host Machine

docker run -d -v esdata1:/usr/share/elasticsearch/data --name elasticsearch -network host docker.elastic.co/elasticsearch/elasticsearch:7.2.0

#### where:

-v <directory on HOST machine>:<directory in Docker container>

### Make Docker Container use Host Network and Avoid Port Binding

01. docker run <IMAGE ID> --network host

To learn more about Docker, check the below list of online video courses that teach Docker.

## **Docker for Node.js Projects From a Docker Captain**

(https://click.linksynergy.com/deeplink?

id=sGnlDIn59ks&mid=39197&murl=http://www.udemy.com/course/docker-mastery-for-nodejs/)



(https://click.linksynergy.com/deeplink?

id=sGnlDln59ks&mid=39197&murl=http://www.udemy.com/course/docker-mastery-for-nodejs/)

## Docker Mastery: with Kubernetes +Swarm from a Docker Captain

(https://click.linksynergy.com/deeplink?

id=sGnlDln59ks&mid=39197&murl=http://www.udemy.com/course/docker-mastery/)



(https://click.linksynergy.com/deeplink?

id=sGnlDIn59ks&mid=39197&murl=http://www.udemy.com/course/docker-mastery/)

## **Docker MasterClass: Docker & Swarm for DevOps**

(https://click.linksynergy.com/deeplink?

id=sGnlDln59ks&mid=39197&murl=http://www.udemy.com/course/docker-for-devops/)



(https://click.linksynergy.com/deeplink?

id=sGnlDln59ks&mid=39197&murl=http://www.udemy.com/course/docker-for-devops/)

## **Docker - Hands On for Java Developers**

(https://click.linksynergy.com/deeplink?

id=sGnlDIn59ks&mid=39197&murl=http://www.udemy.com/course/docker-hands-on/)



(https://click.linksynergy.com/deeplink?

id=sGnlDln59ks&mid=39197&murl=http://www.udemy.com/course/docker-hands-on/)

## **Docker for Java Developers - with Spring Boot Microservices**

(https://click.linksynergy.com/deeplink?

id=sGnlDIn59ks&mid=39197&murl=http://www.udemy.com/course/docker-course-with-java-and-spring-boot-for-beginners/)



(https://click.linksynergy.com/deeplink?

<u>id=sGnlDIn59ks&mid=39197&murl=http://www.udemy.com/course/docker-course-with-java-and-spring-boot-for-beginners/)</u>

#### **Related Posts:**

- Run RabbitMQ Docker Container Command (http://www.appsdeveloperblog.com/runrabbitmq-docker-container-command/)
- <u>Docker Image for Spring Cloud Config Server</u> (http://www.appsdeveloperblog.com/docker-image-for-spring-cloud-config-server/)
- <u>Deploy Web Application Archive(WAR) to Amazon AWS...</u>
   (<a href="http://www.appsdeveloperblog.com/deploy-web-application-archivewar-amazon-aws-ec2-linux-instance/">http://www.appsdeveloperblog.com/deploy-web-application-archivewar-amazon-aws-ec2-linux-instance/</a>)
- <u>Rabbit MQ Download, Install and Change Password</u>
   (http://www.appsdeveloperblog.com/rabbit-mq-download-install-and-change-password/)
- <u>How to Skip Unit Tests in Maven (http://www.appsdeveloperblog.com/how-to-skip-unit-tests-in-maven/)</u>
- <u>Create a Simple Web Service Project with Spring Boot</u>

  (<a href="http://www.appsdeveloperblog.com/create-web-service-project-with-spring-boot/">http://www.appsdeveloperblog.com/create-web-service-project-with-spring-boot/</a>)
- <u>Create .aws/config and .aws/credentials Files Manually</u>
   <a href="mailto:(http://www.appsdeveloperblog.com/create-aws-config-and-aws-credentials-files-manually/">(http://www.appsdeveloperblog.com/create-aws-config-and-aws-credentials-files-manually/)</a>
- Add Jetty Maven Plugin to Your JAX-RS Project
   (http://www.appsdeveloperblog.com/add-jetty-maven-plugin-to-your-jax-rs-project/).
- <u>adb Install APK on Specific Device (http://www.appsdeveloperblog.com/install-apk-on-device-adb/)</u>
- REST API with Java JAX-RS. Create and Deploy to... (http://www.appsdeveloperblog.com/rest-api-java-jax-rs-create-deploy-amazon-cloud/)
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