

# Docker Git Integration

## Building a custom Ubuntu Image

JDK 8, VI Editor, MySQL Client, Maven  
Ubuntu  
Docker Engine  
Host OS (Windows/MAC/ Linux)  
Infrastructure/Server

### Time to build a Image from Docker Hub

Step 1: Push your micro service to Git Hub/ BitBucket  
Step 2: Login to Docker Hub Account and Link your Git Hub/ BitBucket account under account settings  
Step 3: Create a Docker repository and in build settings select GitHub/ Bitbucket \* Select Organisation, \* Select Repository  
Step 4: Click on Build Rules and Click on Create  
Step 5: Goto Build tab and click on Trigger button (Build images takes long time for me it took 20 min [Ubuntu, OpenJDK, Maven Build Tool, Generating Jar, Running Spring boot application])  
Step 6: After build is Success (Should not be InProgress) Pull the repository in your local path.  
`docker pull kharvinagaraj1/first-spring-boot-app:latest`  
Step 7: Run it as container  
Step 8: Access for whatever you are looking for.

### Rename a Docker image

`docker images`

REPOSITORY	SIZE	TAG	IMAGE ID
khavrinagaraj1/first-spring-boot-app		latest	
1b6bc195fab1	2 hours ago	862MB	
spring-boot-app1		latest	
965328da5f99	9 hours ago	862MB	

`docker image tag 1b6bc195fab1 first-spring-boot-app:latest`

`docker images`

REPOSITORY	SIZE	TAG	IMAGE ID
khavrinagaraj1/first-spring-boot-app		latest	
1b6bc195fab1	2 hours ago	862MB	
first-spring-boot-app		latest	
1b6bc195fab1	2 hours ago	862MB	
spring-boot-app1		latest	
965328da5f99	10 hours ago	862MB	

`docker rmi kharvinagaraj1/first-spring-boot-app`

Untagged: kharvinagaraj1/first-spring-boot-app:latest  
Untagged: kharvinagaraj1/first-spring-boot-app@sha256:d43f34da22be6d26dbd523b99ef52fe6831bb2354f15ec8e6509f5148d92582d

## **docker images**

REPOSITORY	SIZE	TAG	IMAGE ID
first-spring-boot-app		latest	1b6bc195fab1
2 hours ago	862MB		
spring-boot-app1		latest	965328da5f99
10 hours ago	862MB		
spring-boot-app		latest	e3f1e82feca1
19 hours ago	758MB		
auto-app		latest	36bfcc790a43
2 days ago	767MB		
rest-call-app		latest	cd7132faa316
7 days ago	503MB		
first-java-image		latest	6b9289194c98
7 days ago	495MB		
paketobuildpacks/run		base-cnb	a717358311fc
10 days ago	87.2MB		
kharvinagaraj1/my-nginx-tagged		1.0	59bae95439aa
13 days ago	110MB		
springio/gs-spring-boot-docker		latest	82d56f8f8358
40 years ago	267MB		
paketobuildpacks/builder		base	511452064e06
40 years ago	558MB		

## **Test for automated image build in docker hub**

Step 1: Make required changes in your micro service (As soon after code gets updated in GitHub, Docker will trigger for a new build)

Step 2: Pull the new image in your local path which was built by docker hub.

**docker pull kharvinagaraj1/first-spring-boot-app:latest**

Step 3: Run it as container

Step 4: Access for whatever you are looking for.