Create The Docker Private Registry in Ubuntu 18:04  
Master Machine Side:

* You can do it by editing /etc/hosts file.

Open /etc/hosts file on both server with the following command:

Vim /etc/hosts

|  |
| --- |
| 192.168.0.102 “your hostname” 192.168.0.103 “your hostname” |

* Install the docker in master and worker VM

|  |
| --- |
| 1: curl -fsSL https://get.docker.com -o get-docker.sh  2: sudo sh get-docker.sh |

* Install the registry server in Master Server

|  |
| --- |
| docker pull registry |

Next, start the registry container with the following command:

|  |
| --- |
| docker run -d -p 5000:5000 --restart=always --name registry registry |

You can see the running registry container with the following command:

|  |
| --- |
| docker ps |

Create a Docker Container Image on the Client System Side:

* First, log in to the Client system and create a dockerfile to build Nginx web server image:

|  |
| --- |
| mkdir Image  cd Image  nano dockerfile |

* Add the following lines:

|  |
| --- |
| FROM ubuntu:18.04 LABEL project="Apache Web Server Image" LABEL maintainer "hitjethva@gmail.com" RUN apt-get update RUN apt-get install -y apache2 VOLUME /var/www/html ENV APACHE\_RUN\_USER www-data ENV APACHE\_RUN\_GROUP www-data ENV APACHE\_LOG\_DIR /var/log/apache2 ENV APACHE\_PID\_FILE=/var/run/apache2/apache2$SUFFIX.pid ENV APACHE\_LOCK\_DIR=/var/lock/apache2   RUN mkdir -p $APACHE\_RUN\_DIR $APACHE\_LOCK\_DIR $APACHE\_LOG\_DIR   EXPOSE 80   CMD ["apache2","-DFOREGROUND"] |

* Now, run the following command to build an Apache docker image using dockerfile:

|  |
| --- |
| docker build -t ubuntu:apache . |

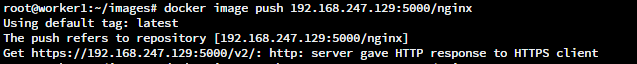
* Now the assign the tag of the create image.

|  |
| --- |
| docker tag ubuntu:apache docker-server:5000/ubuntu:apache  Example:  docker tag ubuntu:apache 192.168.247.129:5000/ubuntu:apache |

* Upload the Apache image on Private Registry Server:

|  |
| --- |
| docker push server:5000/ubuntu:apache  Example: docker image push 192.168.247.129:5000/ubuntu:apache |

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* When You face this type of error you can follow this steps:

You can add the one file in client machine(worker node)  
Location: cd /etc/docker

Create the new file:  
vim **daemon.json**

|  |
| --- |
| {        "insecure-registries" : ["192.168.247.142:6060"] } |

Then restart the docker service

|  |
| --- |
| Service docker restart |

Hit the URL in browser:

<http://192.168.247.129:5000/v2/_catalog>

Using Docker-composs   
Master Machine side:

* Install the docker-compos in the master machine:

|  |
| --- |
| sudo curl -L https://github.com/docker/compose/releases/download/1.21.2/docker-compose-`uname -s`-`uname -m` -o /usr/local/bin/docker-compose |

|  |
| --- |
| sudo chmod +x /usr/local/bin/docker-compose docker-compose --version |

* Create the docker-compos directory:

|  |
| --- |
| Mkdir docker-compos |

* Create the docker-compos.yml file in this folder. Yml file link

Vim docker-compos.yml

|  |
| --- |
| https://www.youtube.com/watch?v=8gEs\_zefNYA&t=765s |
| docker-compose -f docker-compos.yml up -d |

* Hit this commands :
* Hit the url

<http://192.168.247.129:8080/home>

### Creating the authentification file:

First, we start by installing the htpasswd package by running the following command:

|  |
| --- |
| sudo apt install apache2-utils |

Next, we will create a folder that will hold our password files.

|  |
| --- |
| mkdir auth |

After that, we will continue by creating a user using the following command:

|  |
| --- |
| htpasswd -Bc registry.password testuser |

You can now restart your Docker set up to make the changes accessible.

|  |
| --- |
| docker-compose up --force-recreate |

### Log in to the registry:

|  |
| --- |
| docker login localhost:5000 |

* Docker-composs.yml file

|  |
| --- |
| * --- * version: '3' * services: * docker-registry: * container\_name: docker-registry * image: registry:2 * ports: * - 5000:5000 * restart: always * environment: * REGISTRY\_AUTH: htpasswd * REGISTRY\_AUTH\_HTPASSWD\_REALM: Registry Realm * REGISTRY\_AUTH\_HTPASSWD\_PATH: /auth/registry.password * volumes: * - ./volume:/var/lib/registry * - ./auth:/auth * docker-registry-ui: * container\_name: docker-registry-ui * image: konradkleine/docker-registry-frontend:v2 * ports: * - 8080:80 * environment: * ENV\_DOCKER\_REGISTRY\_HOST: docker-registry * ENV\_DOCKER\_REGISTRY\_PORT: 5000 |

**Create the dashboard of Kubernetes**

* Link:- <https://computingforgeeks.com/how-to-install-kubernetes-dashboard-with-nodeport/>
* For user create:  
  <https://upcloud.com/community/tutorials/deploy-kubernetes-dashboard/>  
    
    
  - delete the namespace reference link:  
  <https://stackoverflow.com/questions/52369247/namespace-stuck-as-terminating-how-do-i-remove-it>
* Private repo  
  <https://github.com/docker-archive/docker-registry>
* Create secret for the kubernetes:  
  <https://github.com/javahometech/kubernetes/tree/master/secrets>