

## Assignment -4

Assignment Date	13 November 2022
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Maximum Marks	2 Marks

### 1.Pull an Image from docker hub and run it in docker playground

The first screenshot shows the Docker Playground interface with a terminal window open. The terminal displays the command `docker pull httpd:latest` and its output, which includes the pull progress and the image ID `sha256:5fa96551b61359de5dfb7fd8c9e97e4153232eb520a8e883e2f47fc80dbfc33e`. The second screenshot shows the same interface after the image has been pulled, with the terminal displaying the command `docker images` and its output, which lists the pulled image `httpd latest` with its ID `fe8735c23aec5` and a size of 145MB.

**Screenshot 1: Pulling the image**

```
# The FWD team.
#####
[node1] (local) root@192.168.0.28 ~
$ docker pull httpd:latest
latest: Pulling from library/httpd
e9995326b091: Pull complete
ee55cd348c8f: Pull complete
bc66e8ea7efe: Pull complete
5d0f831d3c0b: Pull complete
e559e5380898: Pull complete
Digest: sha256:5fa96551b61359de5dfb7fd8c9e97e4153232eb520a8e883e2f47fc80dbfc33e
Status: Downloaded newer image for httpd:latest
docker.io/library/httpd:latest
[node1] (local) root@192.168.0.28 ~
$ docker image

Usage: docker image COMMAND

Manage images

Commands:
  build      Build an image from a Dockerfile
```

**Screenshot 2: Listing the images**

```
[node1] (local) root@192.168.0.28 ~
$ docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
httpd         latest   fe8735c23aec5   2 weeks ago    145MB
[node1] (local) root@192.168.0.28 ~
$
```

Docker Playground

labs.play-with-docker.com/p/cdob9gm0qau000ccnsc0#cdob9gm0\_cdob9je0qau000ccnscg

03:52:34

CLOSE SESSION

Instances

+ ADD NEW INSTANCE

192.168.0.28  
node1

cdob9gm0\_cdob9je0qau000ccnscg

IP  
192.168.0.28

OPEN PORT

Memory

CPU

SSH  
ssh ip172-18-0-19-cdob9gm0qau000ccnsc0@direct.labs.play

DELETE EDITOR

```
[node1] (local) root@192.168.0.28 ~
$ docker run -d --name test -p 80:80 httpd
bb26ce69282f0e184274b3dd8afcf8ac3d53a567f91c8e441e51effc57644573
[node1] (local) root@192.168.0.28 ~
$ docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS                   NAMES
bb26ce69282f   httpd     "httpd-foreground"      10 seconds ago Up 8 seconds   0.0.0.0:80->80/tcp      test
[node1] (local) root@192.168.0.28 ~
$
```

Type here to search

Docker Playground

ip172-18-0-19-cdob9gm0qau000ccnsc0

Not secure | ip172-18-0-19-cdob9gm0qau000ccnsc0-80.direct.labs.play-with-docker.com

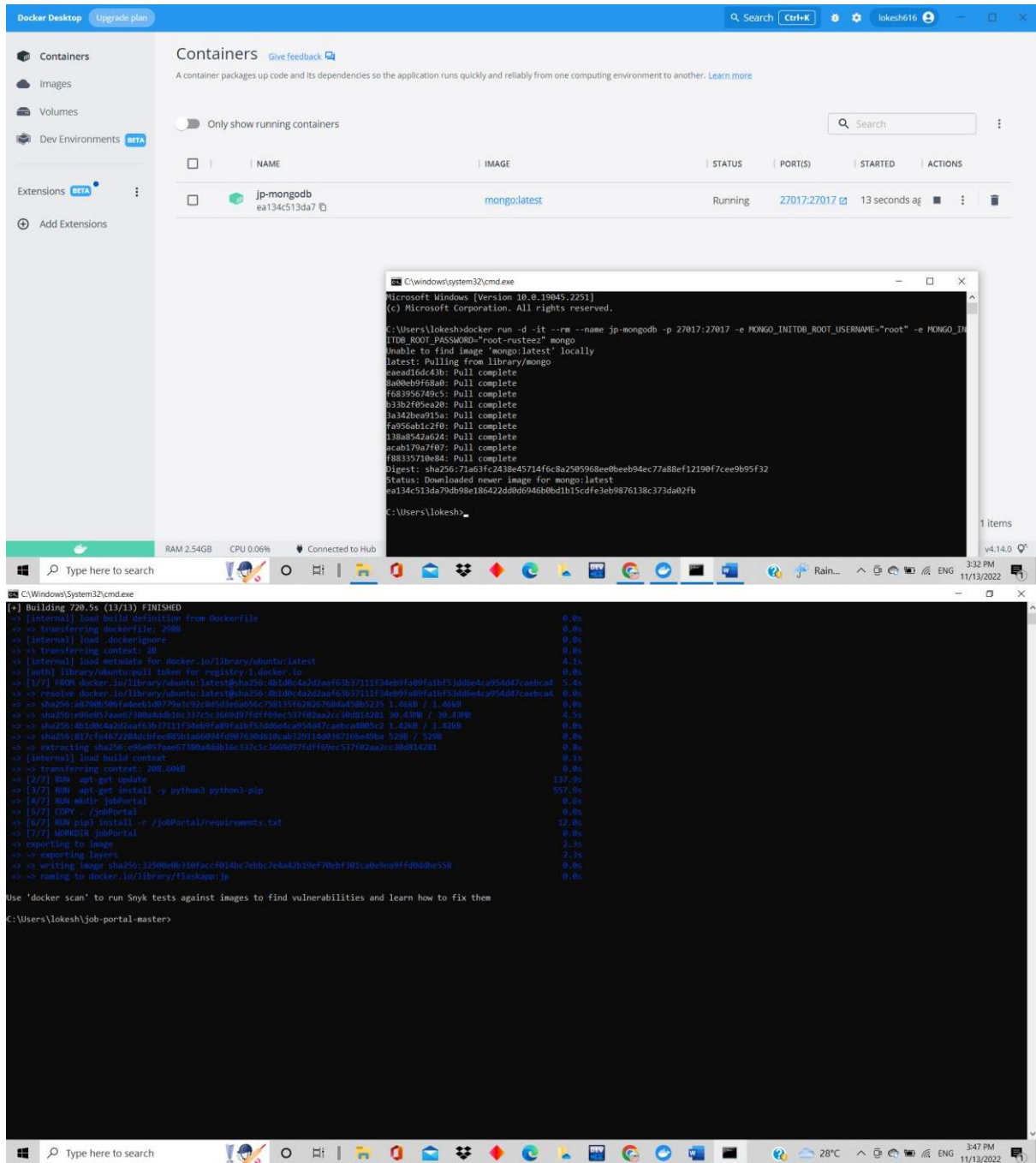
It works!

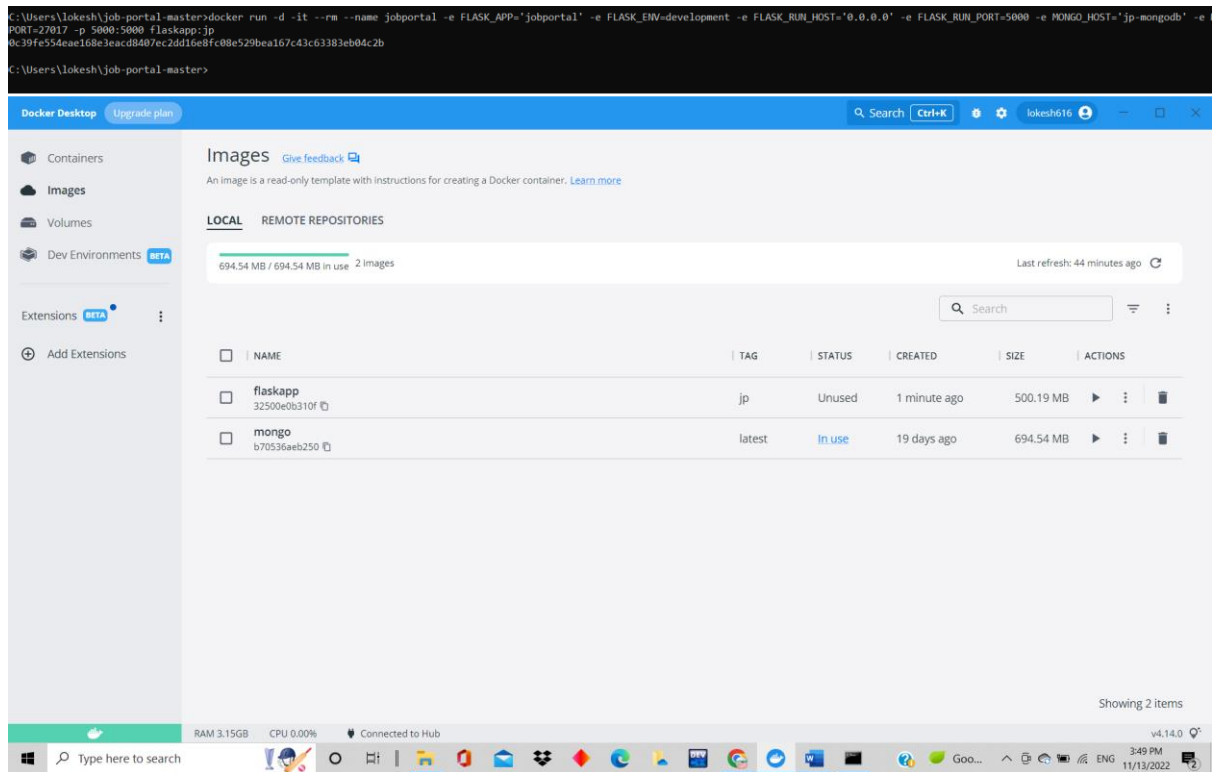
Type here to search

Rain...

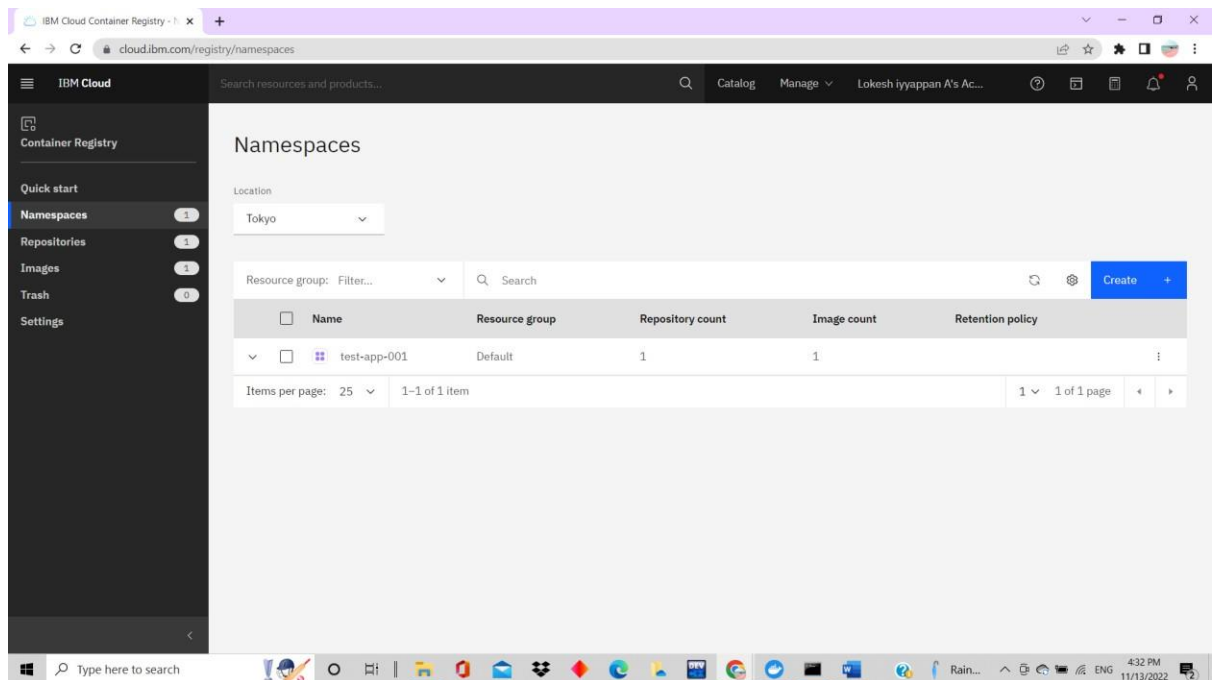
2:49 PM  
11/13/2022

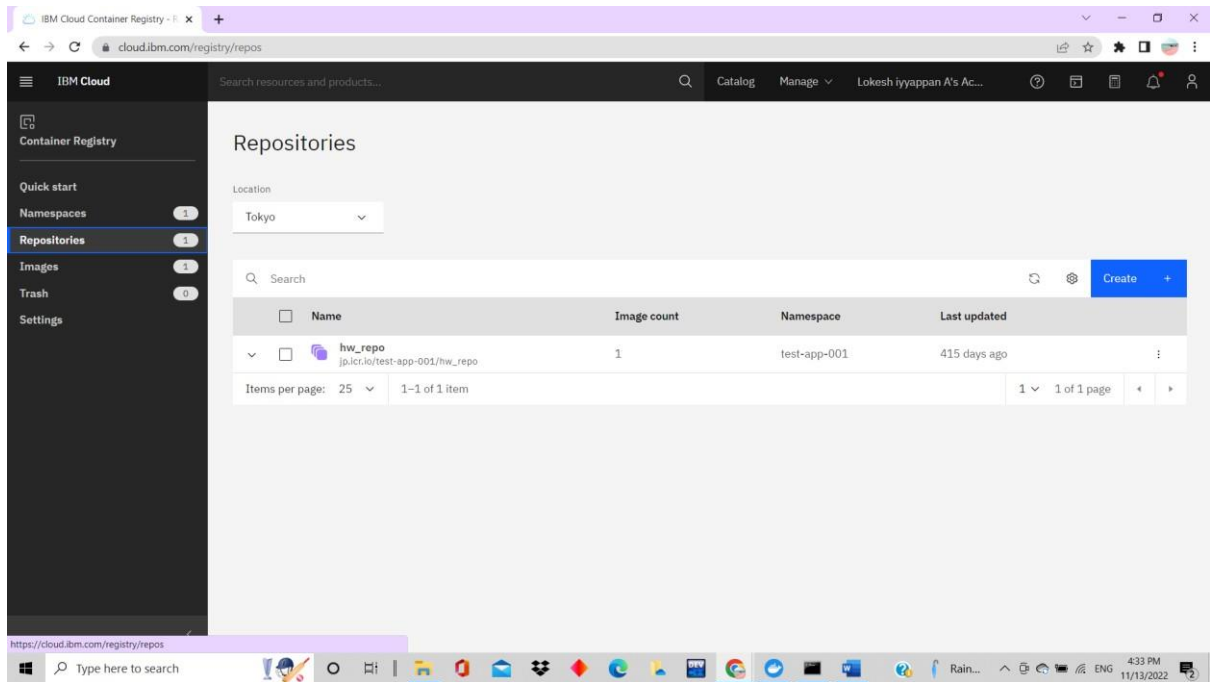
2. Create a docker file for the jobportal application and deploy it in Docker desktop application.





### 3. Create a IBM container registry and deploy helloworld app or jobportalapp.





```

Select C:\windows\system32\cmd.exe
Microsoft Windows [Version 10.0.19045.2251]
(c) Microsoft Corporation. All rights reserved.

C:\Users\lokesh>ibmcloud login
API endpoint: https://cloud.ibm.com

Email> 953619104026@ritrjpm.ac.in

Password>
Authenticating...
OK

Targeted account Lokesh iyyappan A's Account (6cfc0d4f330147559716e90f5718cfc2)

Select a region (or press enter to skip):
1. au-syd
2. in-che
3. jp-osa
4. jp-tok
5. kr-seo
6. eu-de
7. eu-gb
8. ca-tor
9. us-south
10. us-east
11. br-sao
Enter a number> 4
Targeted region jp-tok

API endpoint: https://cloud.ibm.com
Region: jp-tok
User: 953619104026@ritrjpm.ac.in
Account: Lokesh iyyappan A's Account (6cfc0d4f330147559716e90f5718cfc2)
Resource group: No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:
Org:
Space:

C:\Users\lokesh>cd C:\Users\lokesh\job-portal-master
C:\Users\lokesh\job-portal-master>docker tag mongo icr.io/test-app-001/repo001

```

```

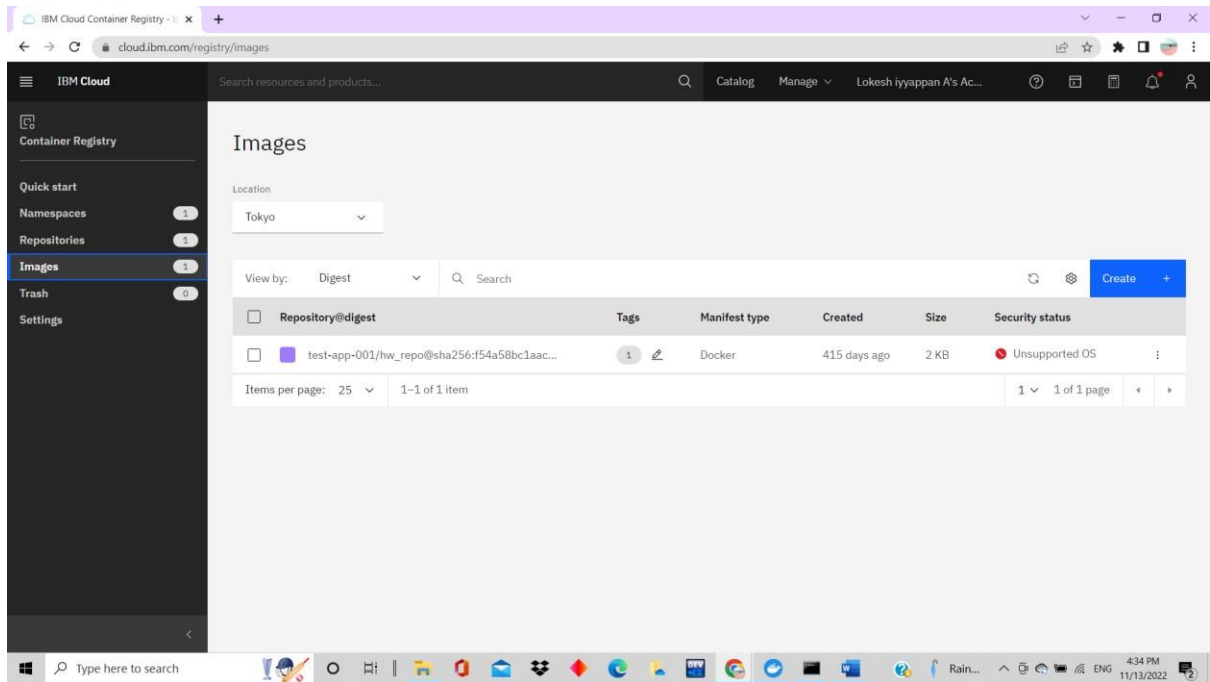
C:\Users\lokesh\job-portal-master>ibmcloud cr login --client docker
Logging 'docker' in to 'jp.icr.io'...
Logged in to 'jp.icr.io'.

OK

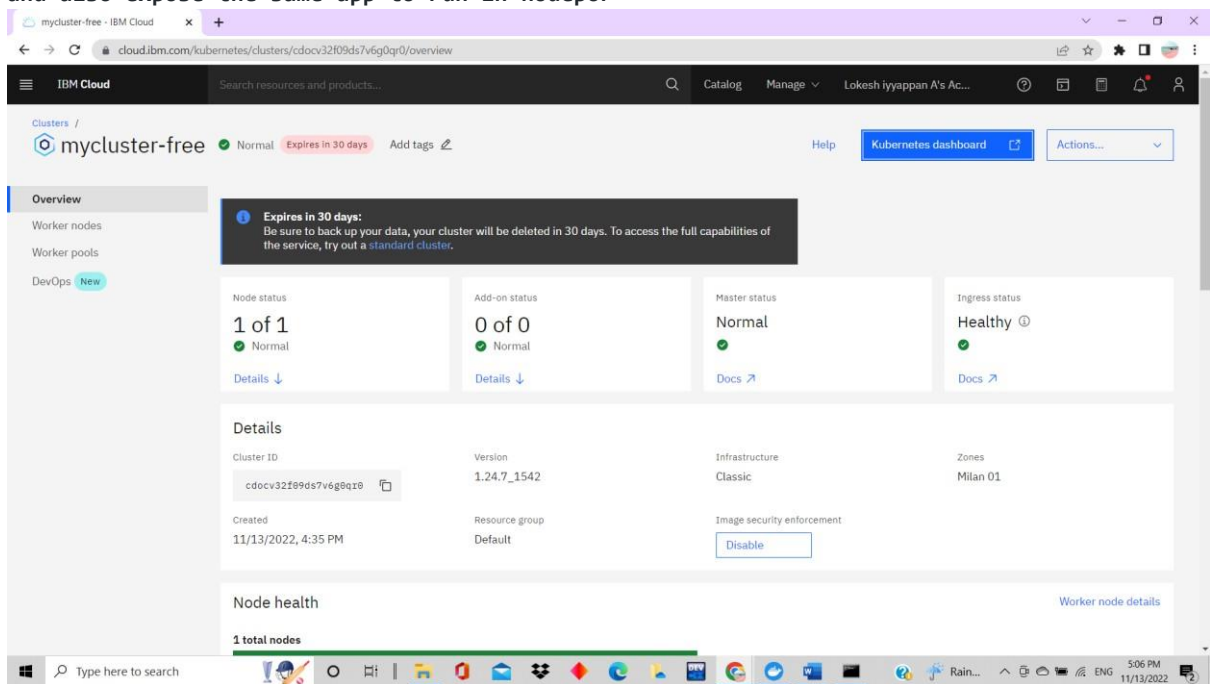
C:\Users\lokesh\job-portal-master>docker push jp.icr.io/test-app-001/hw_repo:1
The push refers to repository [jp.icr.io/test-app-001/hw_repo]
e07ee1baac5f: Pushed
1: digest: sha256:f54a58bc1aac5ea1a25d796ae155dc228b3f0e11d046ae276b39c4bf2f13d8c4 size: 525

C:\Users\lokesh\job-portal-master>

```



4. Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodepor



t.

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

Ingresses

Ingress Classes

Services

Config and Storage

Config Maps

Persistent Volume Claims

Secrets

Annotations

deployment.kubernetes.io/revision: 1

kubectl.kubernetes.io/last-applied-configuration

Resource information

Strategy

RollingUpdate

Min ready seconds

0

Revision history limit

10

Selector

app: sample-app

Rolling update strategy

Max surge

25%

Max unavailable

25%

Deployments

Jobs

Pods

Replica Sets

Replication Controllers

Stateful Sets

Service

Ingresses

Labels

app: sample-app

pod-template-hash: d9bfd84d9

Resource information

Node

docker-desktop

Status

ImagePullBackOff

IP

10.1.0.48

QoS Class

BestEffort

Restarts

0

Service Account

default