

## Lesson 02 Demo 07

### Pulling and Deleting Images from Registry

**Objective:** To pull a Docker image from Docker Hub, tag it, push it to a local registry, pull it from the registry, list all images, and then delete all Docker images

**Tools required:** Docker and Ubuntu

**Prerequisites:** None

Steps to be followed:

1. Pull and delete image in Docker

#### Step 1: Pull an image in Docker

- 1.1 Pull the ubuntu:14.04 image from Docker Hub using the following command and copy the Digest key:

**sudo docker pull ubuntu:14.04**

```
File Edit View Search Terminal Help
bharathgsimplil@ip-172-31-42-255:~$ sudo docker pull ubuntu:14.04
14.04: Pulling from library/ubuntu
2e6e20c8e2e6: Pull complete
0551a797c01d: Pull complete
512123a864da: Pull complete
Digest: sha256:64483f3496c1373bfd55348e88694d1c4d0c9b660dee6bfef5e12f43b9933b30
Status: Downloaded newer image for ubuntu:14.04
docker.io/library/ubuntu:14.04
bharathgsimplil@ip-172-31-42-255:~$
```

1.2 Use the below command to pull an Ubuntu image by pasting the Digest key:

**sudo docker pull ubuntu@DIGEST**

```
bharathgsimplil@ip-172-31-42-255:~$ sudo docker pull ubuntu@sha256:64483f3496c1373bfd55348e88694d1c4d0c9b660dee6bfef5e12f43b9933b30
docker.io/library/ubuntu@sha256:64483f3496c1373bfd55348e88694d1c4d0c9b660dee6bfef5e12f43b9933b30: Pulling from library/ubuntu
Digest: sha256:64483f3496c1373bfd55348e88694d1c4d0c9b660dee6bfef5e12f43b9933b30
Status: Image is up to date for ubuntu@sha256:64483f3496c1373bfd55348e88694d1c4d0c9b660dee6bfef5e12f43b9933b30
docker.io/library/ubuntu@sha256:64483f3496c1373bfd55348e88694d1c4d0c9b660dee6bfef5e12f43b9933b30
bharathgsimplil@ip-172-31-42-255:~$
```

**Note:** Replace DIGEST with the Digest Id of newly pulled ubuntu image in the previous step

1.3 Tag the image so that it points to your registry using the following command:

**sudo docker image tag ubuntu:14.04 localhost:5000/ubuntu\_image**

```
File Edit View Search Terminal Help
bharathgsimplil@ip-172-31-42-255:~$ sudo docker image tag ubuntu:14.04 localhost:5000/ubuntu_image
bharathgsimplil@ip-172-31-42-255:~$
```

1.4 Push the image to your registry using the following command:

**sudo docker push localhost:5000/ubuntu\_image**

```
bharathgsimplil@ip-172-31-42-255:~$ sudo docker push localhost:5000/ubuntu_image
Using default tag: latest
The push refers to repository [localhost:5000/ubuntu_image]
83109fa660b2: Pushed
30d3c4334a23: Pushed
f2fa9f4cf8fd: Pushed
latest: digest: sha256:881afbae521c910f764f7187dbfbc3cc10c26f8bafa458c76dda009a901c29d size: 945
bharathgsimplil@ip-172-31-42-255:~$
```

**Note:** In case of an error, run code `docker run -d -p 5000:5000 --restart=always --name registry registry:2`

1.5 Pull the image from the repository using the following command:

**sudo docker pull localhost:5000/ubuntu\_image**

```
bharathgsimplil@ip-172-31-42-255:~$ sudo docker pull localhost:5000/ubuntu_image
Using default tag: latest
latest: Pulling from ubuntu_image
Digest: sha256:881afbae521c910f764f7187dbfbca3cc10c26f8bafa458c76dda009a901c29d
Status: Image is up to date for localhost:5000/ubuntu_image:latest
localhost:5000/ubuntu_image:latest
bharathgsimplil@ip-172-31-42-255:~$
```

1.6 Find all the images present using the below given command:

**sudo docker images**

```
bharathgsimplil@ip-172-31-42-255:~$ sudo docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
localhost:5000/nginx latest             92b11f67642b       4 weeks ago        187MB
registry             2                  a8781fe3b7a2       6 weeks ago        25.4MB
ubuntu               14.04             13b66b487594       2 years ago        197MB
localhost:5000/ubuntu_image latest             13b66b487594       2 years ago        197MB
bharathgsimplil@ip-172-31-42-255:~$
```

1.7 Delete all Docker images using the following command:

**sudo docker rmi -f \$(docker images -q)**

```
bharathgsimplil@ip-172-31-42-255:~$ sudo docker rmi -f $(docker images -q)
Untagged: localhost:5000/nginx:latest
Untagged: localhost:5000/nginx@sha256:9a09179391eb34b797a024dd4d13c836f067be2dd2351fd6819f888ba5e04fdb
Deleted: sha256:92b11f67642b62bbb98e7e49169c346b30e20cd3c1c034d31087e46924b9312e
Deleted: sha256:d9e826dbb4b3c5770fe92638baa8c6614f210d782a5d021a123fe9fa1f92c23d
Deleted: sha256:2a75285e888884bed4d630896c86ecd71739c6e82669e21ad7a050f33c9ac48d
Deleted: sha256:32bfe3f040358ab8f9872a63d4ddefdc68f35d991ca10a812cbac5912ae9f97b
Deleted: sha256:1330486eb62ea7e96f384961b77b0fc85f5d4422e761114ef3a72e7cb89751a4
Deleted: sha256:a375372209a0f2b2c697a52cce46bc41b495bf86184ae83dd5146e20c22078eb
Deleted: sha256:450787ca55caa59d0288de9cf36fc6b77d1b208a77eb837ec3d25b385f99cafb
Deleted: sha256:a483da8ab3e941547542718cacd3258c6c705a63e94183c837c9bc44eb608999
Untagged: ubuntu:14.04
Untagged: ubuntu@sha256:64483f3496c1373bfd55348e88694d1c4d0c9b660dee6bfe5e12f43b9933b30
Untagged: localhost:5000/ubuntu_image:latest
Untagged: localhost:5000/ubuntu_image@sha256:881afbae521c910f764f7187dbfbca3cc10c26f8bafa458c76dda009a901c29d
Deleted: sha256:13b66b487594a1f2b75396013bc05d29d9f527852d96c5577cc4f187559875d0
Deleted: sha256:e08f4f554d8df6b04f441fcdfe207b6314d3c709daa2b1ef66f79bbfb529b8c4
Deleted: sha256:c28d0c854fd56736ef4456e3c1c4276a28159751dc13fd1b340bd38d69473f7e
Deleted: sha256:f2fa9f4cf8fd0a521d40e34492b522cee3f35004047e617c75fadeb8bfd1e6b7
```

**Note:** In case of errors, stop all Docker containers and then delete using the command mentioned above

By following these steps, you have successfully pulled the ubuntu:14.04 image from Docker Hub, tagged it with your local registry, and pushed it to the registry.