

Create a custom docker image for nginx and deploy it using docker compose, where the volume bind mount should be at /var/opt/nginx location. Push the created custom docker image to your docker-hub.

STEP 1 - Create a custom docker image for nginx

```
root@ip-172-31-10-183:/home/ubuntu/git-to-github# docker pull nginx
Using default tag: latest
latest: Pulling from library/nginx
a2318d6c47ec: Pull complete
095d327c79ae: Pull complete
bbfaa25db775: Pull complete
7bb6fb0cfb2b: Pull complete
0723edc10c17: Pull complete
24b3fdc4dle3: Pull complete
3122471704d5: Pull complete
Digest: sha256:04ba374043ccd2fc5c593885c0eacddebabd5ca375f9323666f28dfd5a9710e3
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest
root@ip-172-31-10-183:/home/ubuntu/git-to-github# vim docker-compose.yml
root@ip-172-31-10-183:/home/ubuntu/git-to-github# docker-compose up
[+] Running 1/1
! nginx Warning
[+] Building 2.1s (9/9) FINISHED
```

- **Docker pull nginx** command for pull the image from hub
- **Vim** command for create a file
- **Docker-compose up** command for execute a container

```
root@ip-172-31-10-183:/home/ubuntu/git-to-github# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
newtask-web         latest             714c9b757776       24 minutes ago     43.2MB
nginx               latest            f5372f0b5426       2 hours ago        1.02GB
<none>              <none>            ba98772562a3       2 hours ago        1.02GB
git-to-github-web   latest            a8cc55ee2040       2 hours ago        1.02GB
<none>              <none>            298aff1aa7c7       2 hours ago        1.02GB
<none>              <none>            1a001f36df9b       2 hours ago        1.04GB
<none>              <none>            f3919eeb04e1       2 hours ago        1.04GB
nginx               latest            39286ab8a5e1       5 weeks ago        188MB
```

- **Docker images** command for list all images

STEP 2 - deploy it using docker compose, where the volume bind mount should be at /var/opt/nginx location.

Docker-compose.yml file

```
services:
  nginx:
    build: .
    image: nginx:latest
    container_name: myteam
    ports:
      - "8080:80"
    volumes:
      - ./nginx-data:/var/opt/nginx
    restart: always
```

Deployment

```
[+] Building 2.1s (9/9) FINISHED
=> [nginx internal] load build definition from dockerfile
=> => transferring dockerfile: 154B
=> [nginx internal] load .dockerignore
=> => transferring context: 2B
=> [nginx internal] load metadata for docker.io/library/python:latest
=> [nginx 1/4] FROM docker.io/library/python@sha256:7859853e7607927aaid1b1a5a2f9e580ac90c2b66feeb1b77da97
=> [nginx internal] load build context
=> => transferring context: 33B
=> CACHED [nginx 2/4] WORKDIR /old
=> CACHED [nginx 3/4] COPY ./api_demo.py /old
=> CACHED [nginx 4/4] RUN pip install requests
=> [nginx] exporting to image
=> => exporting layers
=> => writing image sha256:f5372f0b54261ae84a6cd3f2c40464d609058054f0f100bae60a3defdf49d8d0
=> => naming to docker.io/library/nginx:latest
WARN[0004] Found orphan containers ([git-to-github-web-1]) for this project. If you removed or renamed this
this command with the --remove-orphans flag to clean it up.
[+] Running 1/0
Container myteam Created
```

```

nyteam | Random Cat Fact:
nyteam | {"data":["A form of AIDS exists in cats."]}
nyteam exited with code 0
nyteam | Random Cat Fact:
nyteam | {"data":["A cat has more bones than a human; humans have 206, and the cat - 230."]}
nyteam exited with code 0
nyteam | Random Cat Fact:
nyteam | {"data":["Julius Ceasar, Henri II, Charles XI, and Napoleon were all afraid of cats."]}
nyteam exited with code 0
nyteam | Random Cat Fact:
nyteam | {"data":["Not every cat gets 'high' from catnip. Whether or not a cat responds to it depends upon a recessive
nyteam exited with code 0
nyteam | Random Cat Fact:
nyteam | {"data":["Statistics indicate that animal lovers in recent years have shown a preference for cats over dogs!"
nyteam exited with code 0
nyteam | Random Cat Fact:
nyteam | {"data":["Studies now show that the allergen in cats is related to their scent glands. Cats have scent glands
e of their tails. Entire male cats generate the most scent. If this secretion from the scent glands is the allergen, al
spayed female cats the best."]}
nyteam exited with code 0
nyteam | Random Cat Fact:
nyteam | {"data":["The average cat food meal is the equivalent to about five mice."]}

```


STEP 3 - Push the created custom docker image to your docker-hub.

```



root@ip-172-31-10-183:/home/ubuntu/git-to-github# docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to http
Username: karthick997
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store



Login Succeeded
root@ip-172-31-10-183:/home/ubuntu/git-to-github# docker push karthick997/karthick:latest
The push refers to repository [docker.io/karthick997/karthick]
11de3d47036d: Mounted from library/nginx
16907864a2d0: Mounted from library/nginx
2bdf51597158: Mounted from library/nginx
0fc6bb94eec5: Mounted from library/nginx
edal3eb24d4c: Mounted from library/nginx
67796e30ff04: Mounted from library/nginx
8e2ab394fabf: Mounted from library/nginx
latest: digest: sha256:596c783ac62b9a43c60edb876fe807376cd5022a4e25e89b9a9ae06c374299d4 size: 1778
root@ip-172-31-10-183:/home/ubuntu/git-to-github#

```

karthick997/karthick 

Last pushed 1 minute ago

This repository does not have a description   INCOMPLETE

This repository does not have a category   INCOMPLETE





Docker

To push a

docker

Tags

This repository contains 3 tag(s).

| Tag | OS | Type | Pulled | Pushed |
|--|---|-------|--------|--------------|
|  latest |  | Image | --- | a minute ago |
|  master |  | Image | --- | 9 hours ago |

Auto

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[build](#)

- **Docker login command** for login the dockerhub from vm using username and passwd of dockerhub
- **Docker push <username><reposit. name>:<image tag>** command for push the image to docker hub