

# DOCKER & AWS

*Install Docker On EC2 And Explore  
The Docker Commands.....*

# Docker Install Commands

`sudo apt update -y`

`sudo apt-get update`

`sudo apt-get install docker.io -y`

`sudo systemctl start docker`

`sudo systemctl status`

`sudo systemctl enable docker`

`docker --version`

```
Last login: Tue Jan 16 03:23:09 2024 from 13.48.4.203
ubuntu@ip-172-31-45-204:~$
ubuntu@ip-172-31-45-204:~$
ubuntu@ip-172-31-45-204:~$ ls
ubuntu@ip-172-31-45-204:~$ pwd
/home/ubuntu
ubuntu@ip-172-31-45-204:~$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2024-01-16 03:36:18 UTC; 18min ago
 TriggeredBy: ● docker.socket
    Docs: https://docs.docker.com
   Main PID: 2947 (dockerd)
     Tasks: 10
    Memory: 39.0M
       CPU: 703ms
    CGroup: /system.slice/docker.service
            └─2947 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Jan 16 03:36:17 ip-172-31-45-204 systemd[1]: Starting Docker Application Container Engine...
Jan 16 03:36:17 ip-172-31-45-204 dockerd[2947]: time="2024-01-16T03:36:17.706808874Z" level=
Jan 16 03:36:17 ip-172-31-45-204 dockerd[2947]: time="2024-01-16T03:36:17.707667013Z" level=
Jan 16 03:36:17 ip-172-31-45-204 dockerd[2947]: time="2024-01-16T03:36:17.876073697Z" level=
```

i-0ef6184117abf3e71 (docker-test)

PublicIPs: 13.49.241.106 PrivateIPs: 172.31.45.204

```
ubuntu@ip-172-31-45-204:/#$ docker --version
Docker version 24.0.5, build 24.0.5-0ubuntu1~22.04.1
ubuntu@ip-172-31-45-204:/#$
```

i-0ef6184117abf3e71 (docker-test)

PublicIPs: 13.49.241.106 PrivateIPs: 172.31.45.204

# Docker Image vs Container

docker pull name

docker images

docker ps -a

docker run -d -p 8081:80 --name test1 sss:s1

docker stop container-id

docker rm container-id

docker rmi image-name

docker restart container-id

```
ubuntu@ip-172-31-45-204:~$ docker images
REPOSITORY    TAG       IMAGE ID   CREATED   SIZE
ubuntu@ip-172-31-45-204:~$ docker pull nginx
Using default tag: latest
latest: Pulling from library/nginx
2f44b7a888fa: Pull complete
8b7dd3ed1dc3: Pull complete
35497dd96569: Pull complete
36664b6ce66b: Pull complete
2d455521f76c: Pull complete
dc9c4fdb83d6: Pull complete
8056d2bcf3b6: Pull complete
Digest: sha256:4c0fdaa8b6341bfdeca5f18f7837462c80cff90527ee35ef185571e1c327beac
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest
ubuntu@ip-172-31-45-204:~$ docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS     NAMES
ubuntu@ip-172-31-45-204:~$ docker images
REPOSITORY    TAG       IMAGE ID   CREATED   SIZE
nginx         latest   a8758716bb6a   2 months ago   187MB
ubuntu@ip-172-31-45-204:~$ docker run -t -p 80:8080 --name test ngi:ngi1
```

i-0ef6184117abf3e71 (docker-test)

PublicIPs: 13.49.241.106 PrivateIPs: 172.31.45.204

# More Info

```
ubuntu@ip-172-31-45-204:~$ sudo docker run -d -p 8081:80 --name test nginx
ffa7b119058326eda9eda87b06f54067b034963676a9a5511335024ee6bb3642
```

```
ubuntu@ip-172-31-45-204:~$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
nginx	latest	a8758716bb6a	2 months ago	187MB

```
ubuntu@ip-172-31-45-204:~$ docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
ffa7b1190583	nginx	"/docker-entrypoint...."	53 seconds ago	Up 52 seconds	0.0.0.0:8081->80/tcp, :::8081->80/tcp	test
38d85b9fe67d	d2c94e258dcb	"/hello"	About an hour ago	Exited (0) About an hour ago		silly_shannon

i-0ef6184117abf3e71 (docker-test)

PublicIPs: 13.49.241.106 PrivateIPs: 172.31.45.204

```
nginx latest a8758716bb6a 2 months ago 187MB
```

```
ubuntu@ip-172-31-45-204:~$ docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
ffa7b1190583	nginx	"/docker-entrypoint...."	53 seconds ago	Up 52 seconds	0.0.0.0:8081->80/tcp, :::8081->80/tcp	test
38d85b9fe67d	d2c94e258dcb	"/hello"	About an hour ago	Exited (0) About an hour ago		silly_shannon

```
ubuntu@ip-172-31-45-204:~$ docker rm -f ffa7b1190583
ffa7b1190583
```

```
ubuntu@ip-172-31-45-204:~$ docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
38d85b9fe67d	d2c94e258dcb	"/hello"	2 hours ago	Exited (0) 2 hours ago		silly_shannon

```
ubuntu@ip-172-31-45-204:~$ docker rm -f 38d85b9fe67d
38d85b9fe67d
```

```
ubuntu@ip-172-31-45-204:~$ docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
--------------	-------	---------	---------	--------	-------	-------

```
ubuntu@ip-172-31-45-204:~$ docker images
```

i-0ef6184117abf3e71 (docker-test)

PublicIPs: 13.49.241.106 PrivateIPs: 172.31.45.204

## Docker overview

*Docker is an open platform for developing, shipping, and running applications. Docker enables you to separate your applications from your infrastructure so you can deliver software quickly. With Docker, you can manage your infrastructure in the same ways you manage your applications. By taking advantage of Docker's methodologies for shipping, testing, and deploying code, you can significantly reduce the delay between writing code and running it in production.*

## AWS overview

*Build, Deploy, and Manage Websites, Apps or Processes On AWS Secure, Reliable Network.*

*Sign Up for a Free Account & Experience AWS Secure, Reliable, Scalable Services. In-Memory Caching.*

*Secure Solutions. Global Infrastructure.*

# Thank You

{ GokulSM }