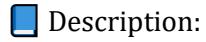


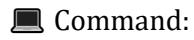
Linux & Docker Commands Documentation

apt update



Description:

Updates the list of available packages and their versions.



Command:

- sudo apt update

```
ubuntu@ip-172-31-18-108:~$ sudo apt update -y
```

Install Docker



Description:

Installs Docker using apt.



Command:

- `sudo apt install docker.io -y`
- `sudo systemctl enable docker`
- `sudo systemctl start docker`

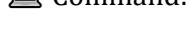
```
ubuntu@ip-172-31-18-108:~$ sudo apt install docker.io -y
Reading package lists... Done
```

Modify Permissions



Description:

Allows running Docker without sudo every time.



Command:

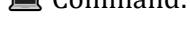
- sudo usermod -aG docker \$USER
- Sudo chmod 666 /var/run/docker.sock
- `ubuntu@ip-172-31-18-108:~$ sudo chmod 666 /var/run/docker.sock`

Interactive Mode



Description:

Runs a container interactively with a terminal.



Command:

- docker run -it ubuntu /bin/bash

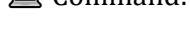
```
ubuntu@ip-172-31-18-108:~$ docker run -it nginx /bin/bash
```

Detached Mode



Description:

Runs a container in the background.



Command:

- docker run -d nginx

```
ubuntu@ip-172-31-18-108:~$ docker run -dt nginx:latest
la53b78b9b7f422dd17fcc3388cdb84a8aa758215580496f94ac8e4ccd1cd3b5
ubuntu@ip-172-31-18-108:~$ docker run -d nginx
9abe5664320e3ecfaf915cb745b6102606d5ccbe3a28c1bd050cded0821c8644
ubuntu@ip-172-31-18-108:~$ docker ps
CONTAINER ID   IMAGE          COMMAND       CREATED      STATUS      PORTS
5 NAMES
9abe5664320e   nginx         "/docker-entrypoint..."   16 seconds ago   Up 15 seconds   80/tcp
cp   awesome_kirch
la53b78b9b7f   nginx:latest  "/docker-entrypoint..."   44 seconds ago   Up 43 seconds   80/tcp
cp   elegant_jennings
ubuntu@ip-172-31-18-108:~$
```

Pull Nginx Image



Description:

Downloads the Nginx image from Docker Hub.



Command:

- docker pull nginx

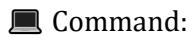
```
ubuntu@ip-172-31-18-108:~$ docker pull nginx
```

```
Using default tag: latest
```

Run Container



Description:
Creates and runs a container from an image.



Command:

- `docker run --name mynginx -d -p 8080:80 nginx`

List Images



Description:
Displays all Docker images on the system.



Command:

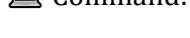
- `docker images`

Start Docker Service



Description:

Starts the Docker service.



Command:

- `sudo systemctl start docker`
- ```
elegant_jennings
ubuntu@ip-172-31-18-108:~$ docker start awesome_kirch
awesome_kirch
ubuntu@ip-172-31-18-108:~$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS
 NAMES
9abe5664320e nginx "/docker-entrypoint..." 6 minutes ago Up 6 seconds 80/tcp
 awesome_kirch
1a53b78b9b7f nginx:latest "/docker-entrypoint..." 7 minutes ago Up 7 minutes 80/tcp
 elegant_jennings
```

## **Enable Docker**



Description:  
Enables Docker to start on boot.



Command:

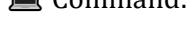
- `sudo systemctl enable docker`

## Inspect Container



Description:

Shows detailed information about a container.



Command:

- docker inspect mynginx

```
ubuntu@ip-172-31-18-108:~$ docker inspect 9abe5664320e
[
 {
 "Id": "9abe5664320e3ecfaf915cb745b6102606d5ccbe3a28c1bd050cded0821c8644",
 "Created": "2025-11-11T10:57:11.803174294Z",
 "Path": "/docker-entrypoint.sh",
 "Args": [
 "nginx",
 "-g",
 "daemon off;"
```

## Stop Container



Description:  
Stops a running container.



Command:

- docker stop mynginx

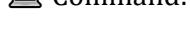
```
ubuntu@ip-172-31-18-108:~$ docker stop awesome_kirch
ubuntu@ip-172-31-18-108:~$ docker ps
CONTAINER ID IMAGE COMMAND
```

## Start Container



Description:

Restarts a previously stopped container.



Command:

- docker start mynginx

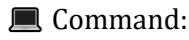
```
elegant_jennings$
ubuntu@ip-172-31-18-108:~$ docker start awesome_kirch
awesome_kirch
ubuntu@ip-172-31-18-108:~$ docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS
 NAMES
9abe5664320e nginx "/docker-entrypoint...." 6 minutes ago Up 6 seconds 80/tcp
awesome_kirch
1a53b78b9b7f nginx:latest "/docker-entrypoint...." 7 minutes ago Up 7 minutes 80/tcp
elegant_jennings
```

## Kill Container



Description:

Forcefully stops a running container.



Command:

- docker kill mynginx

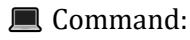
```
ubuntu@ip-172-31-18-108:~$ docker kill elegant_jennings
elegant_jennings
ubuntu@ip-172-31-18-108:~$ docker ps -a
```

## Remove Container



Description:

Removes a stopped container.



Command:

- docker rm mynginx

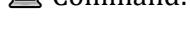
```
ubuntu@ip-172-31-18-108:~$ docker rm -f awesome_kirch
awesome_kirch
```

## Force Remove Container



Description:

Forcefully removes a running container.



Command:

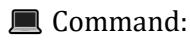
- docker rm -f mynginx

```
ubuntu@ip-172-31-18-108:~$ docker rm -f awesome_kirch
awesome_kirch
```

## Prune Unused Images



Description:  
Deletes unused Docker images.



Command:

- docker image prune -a

```
ubuntu@ip-172-31-18-108:~$ docker image prune -a
WARNING! This will remove all images without at least one container associated to them.
Are you sure you want to continue? [y/N] y
Total reclaimed space: 0B
```

## Summary

| Command                       | Purpose              |
|-------------------------------|----------------------|
| apt update                    | Updates package list |
| apt install docker.io         | Installs Docker      |
| usermod -aG docker \$USER     | Modify permissions   |
| docker run -it                | Interactive mode     |
| docker run -d                 | Detached mode        |
| docker pull nginx             | Pull Nginx image     |
| docker run                    | Run container        |
| docker images                 | List images          |
| systemctl start/enable docker | Start/enable Docker  |
| docker inspect                | Inspect container    |
| docker stop/start/kill/rm     | Manage containers    |
| docker image prune            | Clean unused images  |