

1. Actualizarea sistemului

```
sudo apt update
```

```
sudo apt upgrade -y
```

```
robert@robert-VirtualBox:~$ sudo apt upgrade -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
Get more security updates through Ubuntu Pro with 'esm-apps' enabled:
```

2. Instalarea dependintelor necesare

```
sudo apt install apt-transport-https ca-certificates curl software-properties-common -y
```

```
robert@robert-VirtualBox:~$ sudo apt install apt-transport-https ca-certificates
s curl software-properties-common -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20240203).
ca-certificates set to manually installed.
software-properties-common is already the newest version (0.99.49.2).
```

4. Adaugarea cheii GPG pentru Docker

```
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-
archive-keyring.gpg
```

```
robert@robert-VirtualBox:~$ curl -fsSL https://download.docker.com/linux/ubuntu
/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg
```

5. Adaugarea repository-ului Docker

```
sudo nano /etc/apt/sources.list.d/docker.list
```

```
robert@robert-VirtualBox:~$ sudo nano /etc/apt/sources.list.d/docker.list
```

Continut corect:

```
deb [arch=amd64 signed-by=/usr/share/keyrings/docker-archive-keyring.gpg]
https://download.docker.com/linux/ubuntu noble stable
```

```
robert@robert-VirtualBox:~$ sudo cat /etc/apt/sources.list.d/docker.list
deb [arch=amd64 signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] https
://download.docker.com/linux/ubuntu noble stable
```

6. Actualizarea surselor si instalarea Docker

sudo apt update

sudo apt install docker-ce docker-ce-cli containerd.io -y

```
robert@robert-VirtualBox:~$ sudo apt update
Hit:1 http://security.ubuntu.com/ubuntu noble-security InRelease
Get:2 https://download.docker.com/linux/ubuntu noble InRelease [48.8 kB]
Hit:3 http://ro.archive.ubuntu.com/ubuntu noble InRelease
Get:4 https://download.docker.com/linux/ubuntu noble/stable amd64 Packages [24.
0 kB]
Hit:5 http://ro.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:6 http://ro.archive.ubuntu.com/ubuntu noble-backports InRelease
Fetched 72.8 kB in 1s (93.0 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
8 packages can be upgraded. Run 'apt list --upgradable' to see them.
robert@robert-VirtualBox:~$ sudo apt install docker-ce docker-ce-cli containerd
.io -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  docker-buildx-plugin docker-ce-rootless-extras docker-compose-plugin git
  git-man liberror-perl libslirp0 pigz slirp4netns
```

7. Testarea instalarii

docker --version

docker run hello-world

```
robert@robert-VirtualBox:~$ docker --version
Docker version 28.1.1, build 4eba377
robert@robert-VirtualBox:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
e6590344b1a5: Pull complete

Digest: sha256:dd01f97f252193ae3210da231b1dca0cffab4aadb3566692d6730bf93f123a48
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash
```

8. Permisuni pentru rulare fara sudo

sudo usermod -aG docker \$USER

newgrp docker

```
robert@robert-VirtualBox:~$ sudo usermod -aG docker $USER
robert@robert-VirtualBox:~$ newgrp docker
```

9. Rulare container nginx

docker run -d -p 8080:80 nginx

```
robert@robert-VirtualBox:~$ docker run -d -p 8080:80 nginx
Unable to find image 'nginx:latest' locally
latest: Pulling from library/nginx
254e724d7786: Pull complete
913115292750: Pull complete
3e544d53ce49: Pull complete
4f21ed9ac0c0: Pull complete
d38f2ef2d6f2: Pull complete
40a6e9f4e456: Pull complete
d3dc5ec71e9d: Pull complete
Digest: sha256:c15da6c91de8d2f436196f3a768483ad32c258ed4e1beb3d367a27ed67253e66
Status: Downloaded newer image for nginx:latest
bd32a2831b70a9022213ba0dcaaf65fde7f26246069b089f889d8e85e388aecd
robert@robert-VirtualBox:~$ groups
docker adm cdrom sudo dip plugdev users lpadmin robert
```

10. Accesarea serverului web din browser

ip a

```
robert@robert-VirtualBox:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group defau
lt qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP g
roup default qlen 1000
    link/ether 08:00:27:b2:b6:33 brd ff:ff:ff:ff:ff:ff
    inet 192.168.0.10/24 brd 192.168.0.255 scope global noprefixroute enp0s3
        valid_lft forever preferred_lft forever
    inet 192.168.0.164/24 brd 192.168.0.255 scope global secondary dynamic nopr
efixroute enp0s3
        valid_lft 2510sec preferred_lft 2510sec
    inet6 fe80::a00:27ff:feb2:b633/64 scope link
```

<http://192.168.0.10:8080>

