DOCKER

* Launch EC2 instances

**INPUT**

1. Name and tags: Docker Ubuntu Server
2. Application and OS Images: Ubuntu
3. Instance: t2.micro
4. Number of instances: 1

**KEY PAIR**:

Key pair type :RSA

Private key file format : .pem

Create key.

**LAUNCH INSTANCE**

(Go to instance page and click the respective instance and click connect 2 times it will redirect you to another page)

**Run the below command**

1. **update**

sudo apt-get update

(op🡪 reading pacage lists….done)

**2. Install Required Dependencies**

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

(op->Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.)

**3. Add Docker’s Official GPG Key**

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

(The above command doesn’t show any output,if it shows it may lead to error.(or)to check the above command run perfectly use below command

ls -l /usr/share/keyrings/docker-archive-keyring.gpg

(op🡪-rw-r--r-- 1 root root 2760 Mar 10 06:09 /usr/share/keyrings/docker-archive-keyring.gpg)

)

**4. Add Docker APT Repository**

Tells ubuntu where to fetch docker package

echo "deb [arch=amd64 signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] https://download.docker.com/linux/ubuntu $(lsb\_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

(The above command doesn’t show any output,if it shows it may lead to error.(or)to check the above command run perfectly use below command

ls -l /etc/apt/sources.list.d/docker.list

(op🡪-rw-r--r-- 1 root root 128 Mar 10 06:19 /etc/apt/sources.list.d/docker.list)

**5.update again**

Sudo apt-get update

**6. Install Docker Engine**

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

(op🡪 Service restarts being deferred:

/etc/needrestart/restart.d/dbus.service

systemctl restart getty@tty1.service

systemctl restart networkd-dispatcher.service

systemctl restart serial-getty@ttyS0.service

systemctl restart systemd-logind.service

systemctl restart unattended-upgrades.service

No containers need to be restarted.

User sessions running outdated binaries:

ubuntu @ session #10: sshd[1667,2126]

ubuntu @ user manager service: systemd[2014]

No VM guests are running outdated hypervisor (qemu) binaries on this host.)

**7.Verify docker installation**

sudo docker –version

(op🡪Docker version 28.0.1, build XXXXXX)

**8.Test docker by running a container**

sudo docker run hello-world

(op🡪 Hello from Docker!

This message shows that your installation appears to be working correctly.)

9. List All Existing Containers

sudo docker ps -a

(op🡪 CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

a1b2c3d4e5f6 hello-world "/hello" 2 minutes ago Exited (0) 2 minutes ago dreamy\_wilson)

**10.start docker**

sudo docker start 13f2124da789  
in the place of <container id> from the above command

**11.ACCESS THE docker file**

sudo docker exec -it 13f2124da789 /bin/bash