

Installation and Deployment of Docker

Procedure:

1) Set up the repository

Step 1: Update the apt package index and install packages to allow apt to use a repository over HTTPS:

```
sudo apt upgrade
```

```
sudo apt-get install \
```

```
apt-transport-https \
```

```
ca-certificates \
```

```
curl \
```

```
gnupg \
```

```
lsb-release
```

Step 2: Add Docker's official GPG key:

```
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add
```

Step 3: Use the following command to set up the stable repository

```
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
```

2)Install Docker Engine

Step 1:Update the apt package index, and install the *latest version* of Docker Engine and container, or go to the next step to install a specific version:

```
sudo apt-get update
```

Step 2: Install docker

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

Step 3: Check that whether it is running

```
sudo systemctl status docker
```

Step 4: To view different docker commands

```
docker
```

Step 5: Docker information

```
sudo docker info
```

Step 6: Verify that Docker Engine is installed correctly by running the hello-world image.

```
sudo docker run hello-world
```

OUTPUT

```
ubuntu@ip-172-31-3-94:~$ docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
2db29710123e: Already exists
Digest: sha256:9ade9cc2e26189a19c2e8854b9c8f1e14829b51c55a630ee675a5a9540ef6ccf
Status: Downloaded newer image for hello-world:latest

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