

# DevOps Practice Lab - 1

## 1. Creating new user

```
_1RV24MC019_anusha_s@fedora:~$ whoami
_1RV24MC019_anusha_s
_1RV24MC019_anusha_s@fedora:~$
```

## 2. Install docker

```
_1RV24MC019_anusha_s@fedora:~$ sudo dnf install -y docker-ce docker-ce-cli containerd.io docker-buildx-plugin
docker-compose-plugin
Updating and loading repositories:
Repositories loaded.
Package Arch Version Repository Size
Installing:
containerd.io x86_64 1.7.28-1.fc42 docker-ce-stable 162.2 MiB
docker-buildx-plugin x86_64 0.29.1-1.fc42 docker-ce-stable 74.7 MiB
docker-ce x86_64 3:28.5.1-1.fc42 docker-ce-stable 86.3 MiB
docker-ce-cli x86_64 1:28.5.1-1.fc42 docker-ce-stable 35.3 MiB
docker-compose-plugin x86_64 2.40.0-1.fc42 docker-ce-stable 72.8 MiB
Installing dependencies:
libcgroup x86_64 3.0-8.fc42 fedora 157.7 KiB
libslirp x86_64 4.8.0-3.fc42 fedora 151.3 KiB
slirp4netns x86_64 1.3.1-2.fc42 fedora 89.3 KiB
Installing weak dependencies:
docker-ce-rootless-extras x86_64 28.5.1-1.fc42 docker-ce-stable 11.2 MiB
Transaction Summary:
Installing: 9 packages
Total size of inbound packages is 110 MiB. Need to download 110 MiB.
After this operation, 443 MiB extra will be used (install 443 MiB, remove 0 B).
[1/9] docker-ce-cli-1:28.5.1-1.fc42.x86_64 100% | 636.4 KiB/s | 8.5 MiB | 00m14s
[2/9] docker-ce-3:28.5.1-1.fc42.x86_64 100% | 689.1 KiB/s | 20.4 MiB | 00m30s
[3/9] docker-buildx-plugin-0:0.29.1-1.fc42.x86_64 100% | 577.5 KiB/s | 16.6 MiB | 00m29s
[4/9] libcgroup-0:3.0-8.fc42.x86_64 100% | 19.4 KiB/s | 73.8 KiB | 00m04s
[5/9] docker-compose-plugin-0:2.40.0-1.fc42.x86_64 100% | 717.9 KiB/s | 14.9 MiB | 00m21s
```

## 3. Verifying docker

```
_1RV24MC019_anusha_s@fedora:~$ sudo dnf install -y docker-ce docker-ce-cli containerd.io docker-buildx-plugin
docker-compose-plugin
Updating and loading repositories:
Repositories loaded.
```

Package	Arch	Version	Repository	Size
Installing:				
containerd.io	x86_64	1.7.28-1.fc42	docker-ce-stable	162.2 MiB
docker-buildx-plugin	x86_64	0.29.1-1.fc42	docker-ce-stable	74.7 MiB
docker-ce	x86_64	3:28.5.1-1.fc42	docker-ce-stable	86.3 MiB
docker-ce-cli	x86_64	1:28.5.1-1.fc42	docker-ce-stable	35.3 MiB
docker-compose-plugin	x86_64	2.40.0-1.fc42	docker-ce-stable	72.8 MiB
Installing dependencies:				
libcgroup	x86_64	3.0-8.fc42	fedora	157.7 KiB
libslirp	x86_64	4.8.0-3.fc42	fedora	151.3 KiB
slirp4netns	x86_64	1.3.1-2.fc42	fedora	89.3 KiB
Installing weak dependencies:				
docker-ce-rootless-extras	x86_64	28.5.1-1.fc42	docker-ce-stable	11.2 MiB

```
Transaction Summary:
Installing:          9 packages

Total size of inbound packages is 110 MiB. Need to download 110 MiB.
After this operation, 443 MiB extra will be used (install 443 MiB, remove 0 B).
```

[1/9] docker-ce-cli-1:28.5.1-1.fc42.x86_64	100%	636.4 KiB/s	8.5 MiB	00m14s
[2/9] docker-ce-3:28.5.1-1.fc42.x86_64	100%	689.1 KiB/s	20.4 MiB	00m30s
[3/9] docker-buildx-plugin-0:0.29.1-1.fc42.x86_64	100%	577.5 KiB/s	16.6 MiB	00m29s
[4/9] libcgroup-0:3.0-8.fc42.x86_64	100%	19.4 KiB/s	73.8 KiB	00m04s
[5/9] docker-compose-plugin-0:2.40.0-1.fc42.x86_64	100%	717.9 KiB/s	14.9 MiB	00m21s

#### 4. Verify that the installation is successful by running the hello-world image

```
_1RV24MC019_anusha_s@fedora:~$ sudo systemctl start docker
_1RV24MC019_anusha_s@fedora:~$ sudo systemctl enable docker
Created symlink '/etc/systemd/system/multi-user.target.wants/docker.service' -> '/usr/lib/systemd/system/docker.service'.
_1RV24MC019_anusha_s@fedora:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
17eec7bbc9d7: Pull complete
Digest: sha256:6dc565aa63092705211f823c303948cf83670a3903ffa3849f1488ab517f891
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

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/
```