

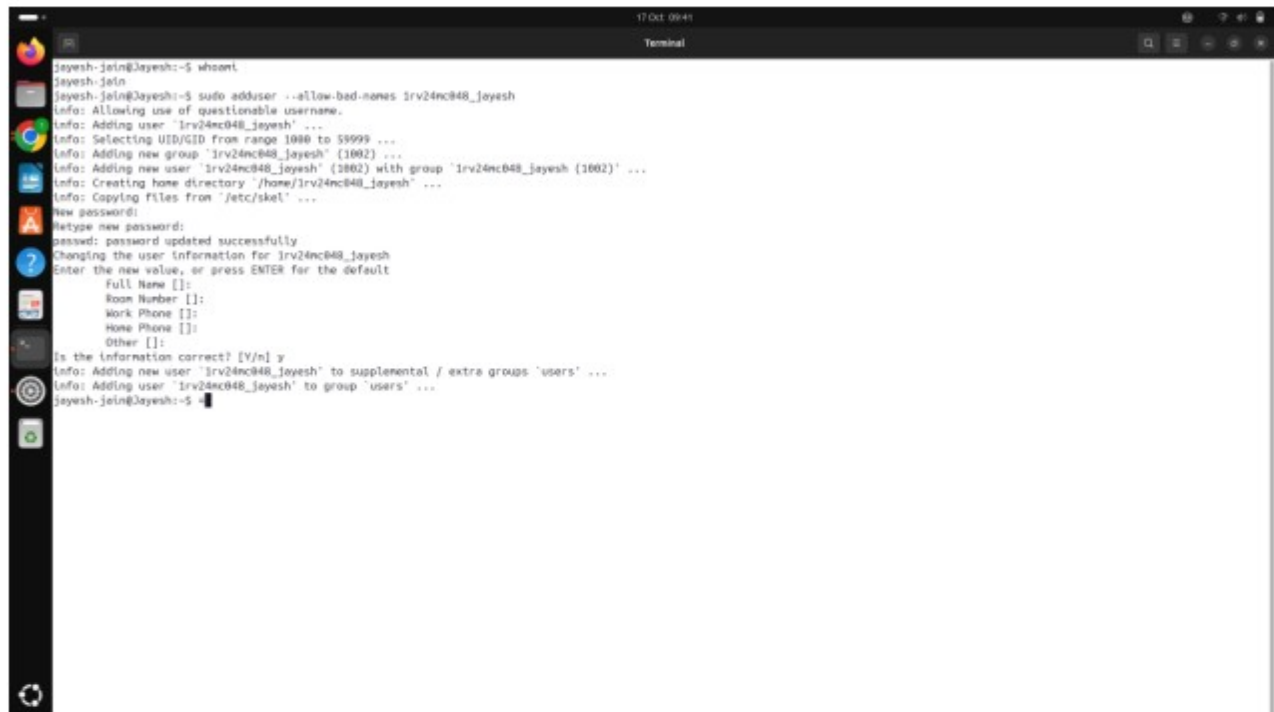
Lab 1 – changing username and docker engine installation

Add a tempuser

```
#sudo adduser tmpusr
```

Add user to sudo group

```
#sudo usermod -aG sudo username
```



```
jeyesh-jain@jeyesh:~$ whoami
jeyesh-jain
jeyesh-jain@jeyesh:~$ sudo adduser --allow-bad-names jrv24nc848_jayesh
Info: Allowing use of questionable username.
Info: Adding user 'jrv24nc848_jayesh' ...
Info: Selecting UID/GID from range 1000 to 59999 ...
Info: Adding new group 'jrv24nc848_jayesh' (1002) ...
Info: Adding new user 'jrv24nc848_jayesh' (1002) with group 'jrv24nc848_jayesh (1002)' ...
Info: Creating home directory '/home/jrv24nc848_jayesh' ...
Info: Copying files from '/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for jrv24nc848_jayesh
Enter the new value, or press ENTER for the default
Full Name []:
Room Number []:
Work Phone []:
Home Phone []:
Other []:
Is the information correct? [Y/n] y
Info: Adding new user 'jrv24nc848_jayesh' to supplemental / extra groups 'users' ...
Info: Adding user 'jrv24nc848_jayesh' to group 'users' ...
jeyesh-jain@jeyesh:~$
```

check whether user added to groups

```
#groups username
```

Logout from the current user then login as a tmpusr

open terminal

```
sudo usermod -l new_username old_username
```

Logout and login as same user

Check whoami command to get username

Docker installation steps

Setup apt repository

Before you install Docker Engine for the first time on a new host machine, you need to set up the Docker apt repository. Afterward, you can install and update Docker from the repository.

Add Docker's official GPG key:

```
sudo apt-get update
```

```
sudo apt-get install ca-certificates curl
```

```
sudo install -m 0755 -d /etc/apt/keyrings
```

```
sudo curl -fsSL https://download.docker.com/linux/ubuntu/gpg -o /etc/apt/keyrings/docker.asc
```

```
sudo chmod a+r /etc/apt/keyrings/docker.asc
```

Add the repository to Apt sources:

```
echo \
```

```
"deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.asc]
```

```
https://download.docker.com/linux/ubuntu \
```

```
$(. /etc/os-release && echo "${UBUNTU_CODENAME:-$VERSION_CODENAME}") stable" |
```

```
\
```

```
sudo apt-get update
```

Only necessary for a new system which did not have docker previously

A terminal window titled "Terminal" with a dark background. The prompt is "irv24nc048_jayesh@jayesh:~\$". The command entered is "sudo apt-get install docker-ce\$(VERSION_STRING) docker-ce-cli\$(VERSION_STRING) containerd.io docker-buildx-plugin docker-compose-plugin". The output shows the start of the installation process, including selecting previously unselected packages and preparing to unpack files.

```
irv24nc048_jayesh@jayesh:~$ sudo apt-get install docker-ce$(VERSION_STRING) docker-ce-cli$(VERSION_STRING) containerd.io docker-buildx-plugin docker-compose-plugin
```

Install the Docker packages.

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

A terminal window titled "Terminal" showing the completion of the Docker installation. The output continues from the previous terminal, showing the unpacking of various Docker components like docker-buildx-plugin, docker-ce-rootless-extras, and docker-compose-plugin. It also shows the creation of symlinks and the processing of triggers for the installed packages.

```
irv24nc048_jayesh@jayesh:~$ sudo apt-get install docker-ce$(VERSION_STRING) docker-ce-cli$(VERSION_STRING) containerd.io docker-buildx-plugin docker-compose-plugin
Get:9 https://download.docker.com/linux/ubuntu noble/stable amd64 docker-compose-plugin amd64 2.40.0-1-ubuntu.24.04-noble [14.2 MB]
Fetched 195 MB in 1min 23s (1,268 kB/s)
Selecting previously unselected package containerd.io.
(Reading database ... 263564 files and directories currently installed.)
Preparing to unpack .../0-containerd.io_1.7.28-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking containerd.io (1.7.28-1-ubuntu.24.04-noble) ...
Selecting previously unselected package docker-ce-cli.
Preparing to unpack .../1-docker-ce-cli_5:28.5.1-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-ce-cli (5:28.5.1-1-ubuntu.24.04-noble) ...
Selecting previously unselected package docker-ce.
Preparing to unpack .../2-docker-ce_5:28.5.1-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-ce (5:28.5.1-1-ubuntu.24.04-noble) ...
Selecting previously unselected package pigz.
Preparing to unpack .../3-pigz_2.8-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking pigz (2.8-1) ...
Selecting previously unselected package docker-buildx-plugin.
Preparing to unpack .../4-docker-buildx-plugin_0.29.1-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-buildx-plugin (0.29.1-1-ubuntu.24.04-noble) ...
Selecting previously unselected package docker-ce-rootless-extras.
Preparing to unpack .../5-docker-ce-rootless-extras_5:28.5.1-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-ce-rootless-extras (5:28.5.1-1-ubuntu.24.04-noble) ...
Selecting previously unselected package docker-compose-plugin.
Preparing to unpack .../6-docker-compose-plugin_2.40.0-1-ubuntu.24.04-noble_amd64.deb ...
Unpacking docker-compose-plugin (2.40.0-1-ubuntu.24.04-noble) ...
Selecting previously unselected package libslirp0:amd64.
Preparing to unpack .../7-libslirp0_4.7.0-1ubuntu3_amd64.deb ...
Unpacking libslirp0:amd64 (4.7.0-1ubuntu3) ...
Selecting previously unselected package slirp4netns.
Preparing to unpack .../8-slirp4netns_1.2.1-1build2_amd64.deb ...
Unpacking slirp4netns (1.2.1-1build2) ...
Setting up docker-buildx-plugin (0.29.1-1-ubuntu.24.04-noble) ...
Setting up containerd.io (1.7.28-1-ubuntu.24.04-noble) ...
Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service → /usr/lib/systemd/system/containerd.service.
Setting up docker-compose-plugin (2.40.0-1-ubuntu.24.04-noble) ...
Setting up docker-ce-cli (5:28.5.1-1-ubuntu.24.04-noble) ...
Setting up libslirp0:amd64 (4.7.0-1ubuntu3) ...
Setting up pigz (2.8-1) ...
Setting up docker-ce-rootless-extras (5:28.5.1-1-ubuntu.24.04-noble) ...
Setting up slirp4netns (1.2.1-1build2) ...
Setting up docker-ce (5:28.5.1-1-ubuntu.24.04-noble) ...
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /usr/lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /usr/lib/systemd/system/docker.socket.
Processing triggers for nan-db (2.32.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.6) ...
irv24nc048_jayesh@jayesh:~$
```

To check docker installed or not

`sudo systemctl status docker`

or

`docker --version`

```
17 Oct 10:28
Terminal

Unpacking docker-compose-plugin (2.40.0-1-ubuntu.24.04-noble) ...
Selecting previously unselected package libslirp0:amd64.
Preparing to unpack .../7-libslirp0_4.7.0-1ubuntu3_amd64.deb ...
Unpacking libslirp0:amd64 (4.7.0-1ubuntu3) ...
Selecting previously unselected package slirp4netns.
Preparing to unpack .../8-slirp4netns_1.2.1-1build2_amd64.deb ...
Unpacking slirp4netns (1.2.1-1build2) ...
Setting up docker-buildx-plugin (0.29.1-1-ubuntu.24.04-noble) ...
Setting up containerd.io (1.7.28-1-ubuntu.24.04-noble) ...
Created symlink /etc/systemd/system/multi-user.target.wants/containerd.service → /usr/lib/systemd/system/containerd.service.
Setting up docker-compose-plugin (2.40.0-1-ubuntu.24.04-noble) ...
Setting up docker-ce-cli (5:28.5.1-1-ubuntu.24.04-noble) ...
Setting up libslirp0:amd64 (4.7.0-1ubuntu3) ...
Setting up pigz (2.8-1) ...
Setting up docker-ce-rootless-extras (5:28.5.1-1-ubuntu.24.04-noble) ...
Setting up slirp4netns (1.2.1-1build2) ...
Setting up docker-ce (5:28.5.1-1-ubuntu.24.04-noble) ...
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /usr/lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /usr/lib/systemd/system/docker.socket.
Processing triggers for libc-bin (2.39-0ubuntu6) ...
jrv24nc046_Jayesh@Jayesh:~$ sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; preset: enabled)
   Active: active (running) since Fri 2025-10-17 10:27:14 IST; 55s ago
     TriggeredBy: ● docker.socket
   Docs: https://docs.docker.com
  Main PID: 8745 (dockerd)
    Tasks: 10
   Memory: 58.1M (peak: 59.6M)
      CPU: 1.951s
   CGroup: /system.slice/docker.service
           └─8745 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock

Oct 17 10:27:11 Jayesh dockerd[8745]: ttime="2025-10-17T10:27:11.499776645+05:30" level=info msg="detected 127.0.0.53 nameserver, assuming systemd-resolved, so using resolv.conf: /run/
Oct 17 10:27:11 Jayesh dockerd[8745]: ttime="2025-10-17T10:27:11.773463856+05:30" level=info msg="Creating a containerd client" address=/run/containerd/containerd.sock timeout=1m0s
Oct 17 10:27:12 Jayesh dockerd[8745]: ttime="2025-10-17T10:27:12.008578199+05:30" level=info msg="Loading containers: start."
Oct 17 10:27:13 Jayesh dockerd[8745]: ttime="2025-10-17T10:27:13.826638591+05:30" level=info msg="Loading containers: done."
Oct 17 10:27:14 Jayesh dockerd[8745]: ttime="2025-10-17T10:27:14.001503128+05:30" level=info msg="Docker daemon" commit=f8225cc containerd-snapshotter=false storage-driver=overlay2 ve
Oct 17 10:27:14 Jayesh dockerd[8745]: ttime="2025-10-17T10:27:14.001503128+05:30" level=info msg="Initializing buildkit"
Oct 17 10:27:14 Jayesh dockerd[8745]: ttime="2025-10-17T10:27:14.168263315+05:30" level=info msg="Completed buildkit initialization"
Oct 17 10:27:14 Jayesh dockerd[8745]: ttime="2025-10-17T10:27:14.199493586+05:30" level=info msg="Daemon has completed initialization"
Oct 17 10:27:14 Jayesh dockerd[8745]: ttime="2025-10-17T10:27:14.199742500+05:30" level=info msg="API listen on /run/docker.sock"
Oct 17 10:27:14 Jayesh systemd[1]: Started docker.service - Docker Application Container Engine.
```