Install Docker Desktop on Ubuntu

What is Docker:

Docker is a software platform that allows us to build, test, and deploy applications quickly.

How Does Docker Work?

Docker packages an application and all its dependencies in a virtual container that can run on any Linux server. This is why we call them containers.

Docker Containers:

Containers are abstractions of the app layer. They package all the code, libraries, and dependencies together.

Each container runs as an isolated process in the user space and take up less space than regular VMs due to their layered architecture.

Installation in Ubuntu:

- Have a 64-bit version of either Ubuntu Jammy Jellyfish 22.04 (LTS) or Ubuntu Impish Indri 21.10. Docker Desktop is supported on `x86_64` (or `amd64`) architecture.
- For non-Gnome Desktop environments, `gnome-terminal` must be installed:
  Syntax: **sudo apt install gnome-terminal**

- Uninstall the tech preview or beta version of Docker Desktop for Linux. Run:

  Syntex: sudo apt remove docker-desktop

- For a complete cleanup, remove configuration and data files at `$HOME/.docker/desktop`, the symlink at `/usr/local/bin/com.docker.cli`, and purge the remaining systemd service files.

Syntex: **rm -r $HOME/.docker/desktop**
sudo rm /usr/local/bin/com.docker.cli
sudo apt purge docker-desktop

Install Docker Desktop:

1. Set up Docker's package repository.
2. Download latest DEB package.
3. Install the package with apt as follows:

Syntex: **sudo apt-get update**

sudo apt-get install ./docker-desktop-<version>-<arch>.deb

There are a few post-install configuration steps done through the post-install script contained in the deb package.

The post-install script:

- Sets the capability on the Docker Desktop binary to map privileged ports and set resource limits.
- Adds a DNS name for Kubernetes to **`/etc/hosts`.**
- Creates a symlink from **`/usr/local/bin/com.docker.cli`** to **`/usr/bin/docker`**. This is because the classic Docker CLI is installed at **`/usr/bin/docker`**. The Docker Desktop installer also installs a Docker CLI binary that includes cloud-integration capabilities and is essentially a wrapper for the Compose CLI, at**`/usr/local/bin/com.docker.cli`**. The symlink ensures that the wrapper can access the classic Docker CLI.

Launch Docker Desktop:

Open a terminal and run

Syntex : systemctl --user start docker-desktop

After successfully installing Docker Desktop, check the versions of these binaries by running the following commands:

```
$ docker compose version
Docker Compose version v2.17.3
$ docker --version
Docker version 23.0.5, build bc4487a
$ docker version
Client: Docker Engine - Community
 Cloud integration: v1.0.31
 Version:       23.0.5
 API version:           1.42
<...>
```

To enable Docker Desktop to start on login, from the Docker menu, select **Settings** > **General** > **Start Docker Desktop when you log in**.

Alternatively, open a terminal and run:

```
systemctl --user enable docker-desktop
```

To stop Docker Desktop, select the Docker menu icon to open the Docker menu and select **Quit Docker Desktop**.

Alternatively, open a terminal and run:

```
systemctl --user stop docker-desktop
```