DOCKER INSTALLATION AND SETUP:



In this lesson on Docker installation steps, you'll cover setting up Docker on both macOS and Windows. For macOS, you'll start by downloading Docker Desktop from the official website, installing it by dragging the Docker icon into the Applications folder, and verifying the setup through the terminal. For Windows, you'll download Docker Desktop for Windows, run the installer, and follow the prompts to complete the installation, ensuring that WSL 2 is enabled for optimal performance. Both sections will guide you through verifying the installation and configuring Docker to suit your needs, providing a solid foundation for working with containerized applications on your chosen platform.

INSTALLATION IN WINDOWS:



Installing docker on windows would be the easy process if you just follow these steps to get it right

As we know docker has its official docs which consists of both the installation methods for windows and mac os

LINK:

Get started

1. Check System Requirements

Before installing, ensure your system meets the following requirements:

- 64-bit version of Windows 10 or 11 (Pro, Enterprise, or Education).
- Windows Subsystem for Linux (WSL) 2 enabled for better performance.

2. Download Docker Desktop for Windows

- 1. Visit the <u>Docker Desktop for Windows download page</u>.
- 2. Click **Download for Windows** and save the installer.

3. Run the Docker Installer

- 1. Locate the downloaded .exe file and double-click it to run the installer.
- 2. Follow the installation wizard:
 - Ensure the option "Use WSL 2 instead of Hyper-V" is selected for better performance.
 - Click Next and then Install.

4. Complete the Installation

- 1. Once the installation is complete, click **Close and restart** to finish setting up Docker.
- 2. After your system restarts, Docker Desktop will automatically start.

5. Initial Setup and Configuration

- 1. When Docker Desktop launches for the first time, it might prompt you to sign in or create a Docker account. You can skip this step if preferred.
- 2. Docker will then check your system and configure the necessary components. This process may take a few minutes.

6. Verify the Installation

- 1. Open a command prompt or PowerShell.
- 2. Run the following command to verify Docker is installed correctly
- 3. docker run hello-world
- 4. If everything is installed properly, Docker will download a test image and run a container that prints a "Hello from Docker!" message.

Make sure that the docker desktop is Running in order to get the proper output requirements

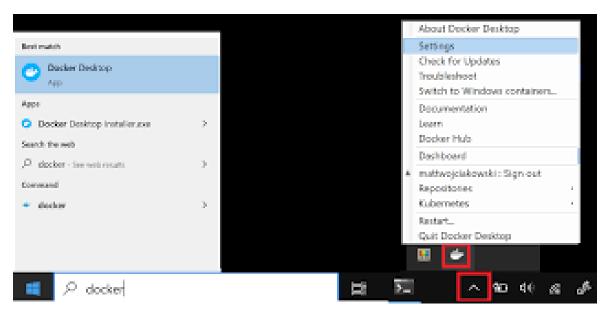
Docker Desktop

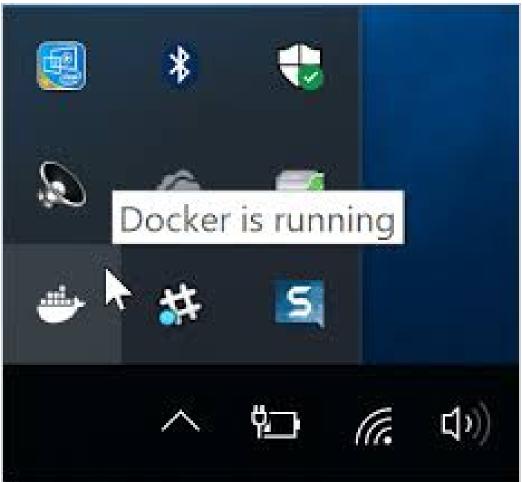
The fastest way to containerize applications on desktop

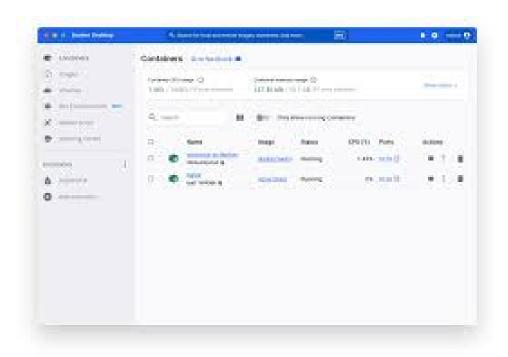
Download for Windows

Also available for Mac and Linux

By downloading this, you agree to the terms of the Docker Software End User License Agreement and the Docker Data Processing Agreement (DPA).







DOCKER INSTALLATION ON MAC OS:



Installing Docker on macOS

1. Check System Requirements

Ensure your system meets these requirements:

• macOS 10.15 or newer.

- At least 4GB of RAM.
- Intel or Apple Silicon (M1/M2) chip.

2. Download Docker Desktop for Mac

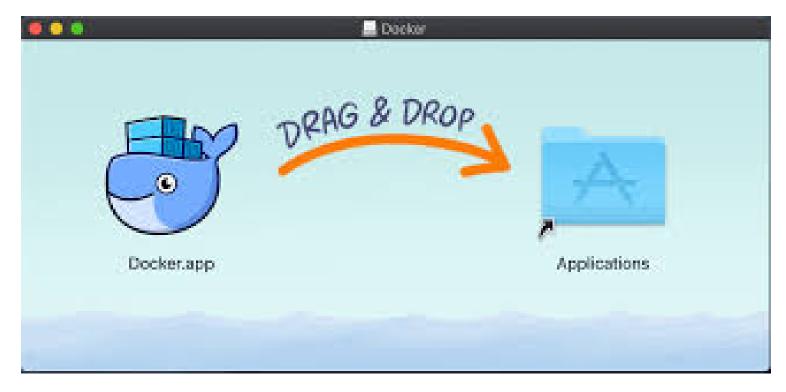
- 1. Visit the <u>Docker Desktop for Mac download page</u>.
- 2. Click **Download for Mac (Intel Chip)** or **Download for Mac (Apple Chip)** depending on your hardware.

3. Install Docker Desktop

- 1. Once the download is complete, double-click the .dmg file.
- 2. Drag the Docker icon to the Applications folder.

4. Launch Docker Desktop

- 1. Open **Docker** from the Applications folder or via Launchpad.
- 2. You might be prompted to enter your macOS password to complete the setup.
- 3. Docker will start, and you'll see a Docker icon in the macOS menu bar



Make sure that you push docker to the applications so that is available on the apps



Verify the Installation

- 1. Open the **Terminal** application.
- 2. docker run hello-world
- 3. If the installation is successful, you'll see a "Hello from Docker!" message.

```
Last login: Fri Aug 23 12:17:29 on ttys006
(base) pavankumar@Pavans-MacBook-Air ~ % docker --version
Docker version 26.1.1, build 4cf5afa
(base) pavankumar@Pavans-MacBook-Air ~ % docker run hello-world
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.
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: \mbox{\$} docker run -it ubuntu bash
Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/
For more examples and ideas, visit:
 https://docs.docker.com/get-started/
(base) pavankumar@Pavans-MacBook-Air ~ % 📗
```

As you could observe that when we run hello-world program we could see a message from docker that it has been perfectly installed and running successfully