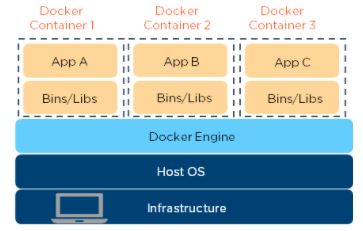
Docker Installation on Windows in detail. But before we learn about the installation process, let us first understand what Docker is.

[Docker is an OS-level](https://www.simplilearn.com/tutorials/docker-tutorial/what-is-docker) virtualization software platform that helps users in building and managing applications in the Docker environment with all its library dependencies.



Note: [Docker Container](https://www.simplilearn.com/tutorials/docker-tutorial/what-is-docker-container" \o "Docker Container" \t "_blank) is a lightweight software package that includes all the dependencies (frameworks, libraries, etc.) required to execute an application

Some of the top benefits of working with Docker on Windows are as below:

* Enables integrated user interface to view and monitor Docker containers
* Quickly starts Docker within ten seconds
* Easy to use Linux Workspaces
* Allots required resource and memory space
* Consists of CA synchronization
* Supports HTTP proxy settings

Here is a list of elements you should have in order to create and run Docker containers:

* Docker Engine: It runs on the host machine to build and run containers
* Docker Daemon: It manages Docker containers
* Docker Client: It runs commands. The command is translated using REST API and delivered to the Docker Daemon
* [Docker Compose](https://www.simplilearn.com/tutorials/docker-tutorial/docker-compose): It runs two containers in a single service

Now, moving forward, we’ll be explaining the installation process of Docker on Windows 10.

Requirements

1. Windows 10 with 64 bit
2. Windows 11 with 64 bit operating system
3. 2004 or higher version of Pro
4. 1909 version or higher for Enterprise or Education Version

Specifications

1. While choosing for windows 10 or 11 with 64 bit, it must be having higher level of translation
2. 4GB RAM or Higher version but not less
3. BIOS settings should have hardware virtualization support enabled.
4. Hyper V feature, WSL 2 feature and Container feature should be enabled in windows.
5. Windows supported by Microsoft need to be updated, if computers have older versions of windows.

Step-By-Step Docker Installation on Windows

1. Go to the website <https://docs.docker.com/docker-for-windows/install/> and download the [docker file.](https://www.simplilearn.com/tutorials/docker-tutorial/what-is-dockerfile" \o "docker file." \t "_blank)

Note: A 64-bit processor and 4GB system RAM are the hardware prerequisites required to successfully run Docker on Windows 10.

2. Then, double-click on the Docker Desktop Installer.exe to run the installer.

Note: Suppose the installer (Docker Desktop Installer.exe) is not downloaded; you can get it from Docker Hub and run it whenever required.

3. Once you start the installation process, always enable Hyper-V Windows Feature on the Configuration page.

4. Then, follow the installation process to allow the installer and wait till the process is done.

5. After completion of the installation process, click Close and restart.

Start Docker Desktop Tool

After the installation process is complete, the tool does not start automatically. To start the Docker tool, search for the tool, and select Docker Desktop in your desktop search results.

Before starting the application, Docker offers an onboarding tutorial. The tutorial explains how to build a Docker image and run a [container.](https://www.simplilearn.com/consumer-as-a-service-caas-complete-guide-article)

You are now successfully running Docker Desktop on Windows.

Next, follow the instruction below to install the Docker engine on your system.

Go to Docker CLI and run the Docker version to verify the version of Docker installation on the system.

Congratulations, Docker Installation on Windows is now done, and now, you are ready

How To Install Docker on Windows 10?

1. To start docker desktop, first you need to download the docker file on windows.
2. Docker Downloaded file can be found in the download folder.
3. Once the setup starts to run, the configuration page will appear where you need to choose options: Hyper V feature and WSL 2 feature to add particular components on windows.
4. Then click OK and simply follow the instructions on wizard and continue for the authorized installation process.
5. Click on the close button once the installation process is finished.
6. Ensure that your docker user account and administrator account should be the same, otherwise you need to add your user account to the docker user group.
7. Initially run the admin as computer management.
8. Then go to local users and groups. From there you can choose groups where you can find docker user groups. Then you can add new users into the docker group.
9. After following all these steps, restart your computer to update and start docker desktop on windows 10.
10. Once you click on docker desktop at the start, it will ask you for a subscription service agreement for docker desktop. As soon as you accept it and agree to the terms and conditions, the docker desktop windows will appear and you're ready to work on it. Don't forget to use a quick start guide by docker desktop to get the better experience.

How to Install Docker on Windows 11?

To install docker desktop on windows 11, your computer must have windows 11, 64 bit processor supported by Microsoft and rest of the steps will be followed the same as installing docker on Windows 10.

How to Install from the command line

Following command lines can be used to install docker desktop on windows 10, 11 or higher versions

1. To run in terminal,  
   "Docker Desktop Installer.exe" install
2. For Powershell,  
   Start-Process '.\win\build\Docker Desktop Installer.exe' -Wait install
3. For windows command prompt,  
   start /w "" "Docker Desktop Installer.exe" install
4. To add user accounts into docker user groups especially when your admin account and user account are not the same.  
   net localgroup docker-users <users>/add

Verification

To verify the docker installation and versions, you can use following command lines

1. With windows terminal via command prompt,  
   docker-run
2. From Powershell, verify the docker version and installation
3. You can check the latest version of docker desktop from the docker option, once the installation process is complete.
4. You need to enter a token number from the Beta invitation email, when you start docker for the first time.
5. On the other hand, you can check for a web server by docker desktop.
6. You can also verify the setup from docker download with nginx from docker hubs.

Updates Guide

1. Usually a new version of docker desktop is available whenever there is an update for docker desktop.
2. One can click for an update option and updates will be downloaded with newly added features. To know more about updates and features, you can check and read release notes.
3. Similarly, Mac also suggests Updates for docker desktop where you need to go to settings for software updates.
4. If you don't want to download automatic updates, you can use docker desktop 4.2.0 to turn off the automatic download update option. Nevertheless, this option is available for all docker desktop subscribed users.
5. Once you download the updates successfully, click on update and restart option on docker start menu.
6. This will allow changes to your previous docker desktop version.
7. When all updates are done, it will again ask you to accept terms and subscription for the latest docker version. Once you accept those terms, you are ready to use the new version of docker desktop.

Uninstall Docker Desktop Tool

Suppose you want to uninstall Docker Desktop from your Windows Home machine, follow the steps mentioned below:

1. Go to the Windows Start menu, choose Settings > Apps > Apps & features.
2. Now, choose Docker Desktop from the Apps & features list and click on Uninstall.