# Prerequisites to Install Docker Toolbox on Windows machine

1) To run Docker, your machine must have a 64-bit operating system running Windows 7 or higher.

   a) You can check by right clicking the windows icon in the bottom left of the screen and choose **System**.

2) Make sure your Windows system supports Hardware Virtualization Technology and that Virtualization is enabled.

   a) Choose **Start > Task Manager** and navigate to the **Performance** tab.
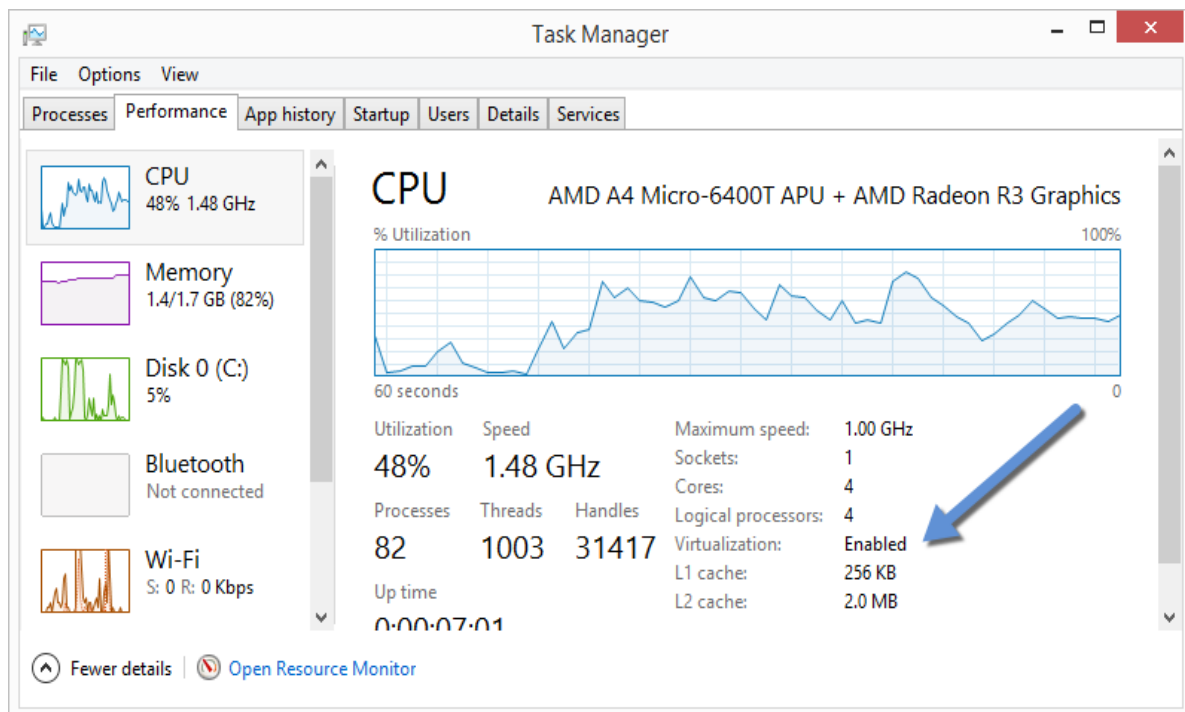
Note: If your PC meets all the above requirements, then proceed to the installation steps

Installation Steps for Windows:

1. Download docker toolbox from the link(scroll to the end of page) (https://docs.docker.com/toolbox/overview/).

2. Install Docker Toolbox by double-clicking the installer. The installer launches the "Setup - Docker Toolbox" dialog.

3. If Windows security dialog prompts you to allow the program to make a change, choose **Yes**. The system displays the **Setup - Docker Toolbox for Windows** wizard.
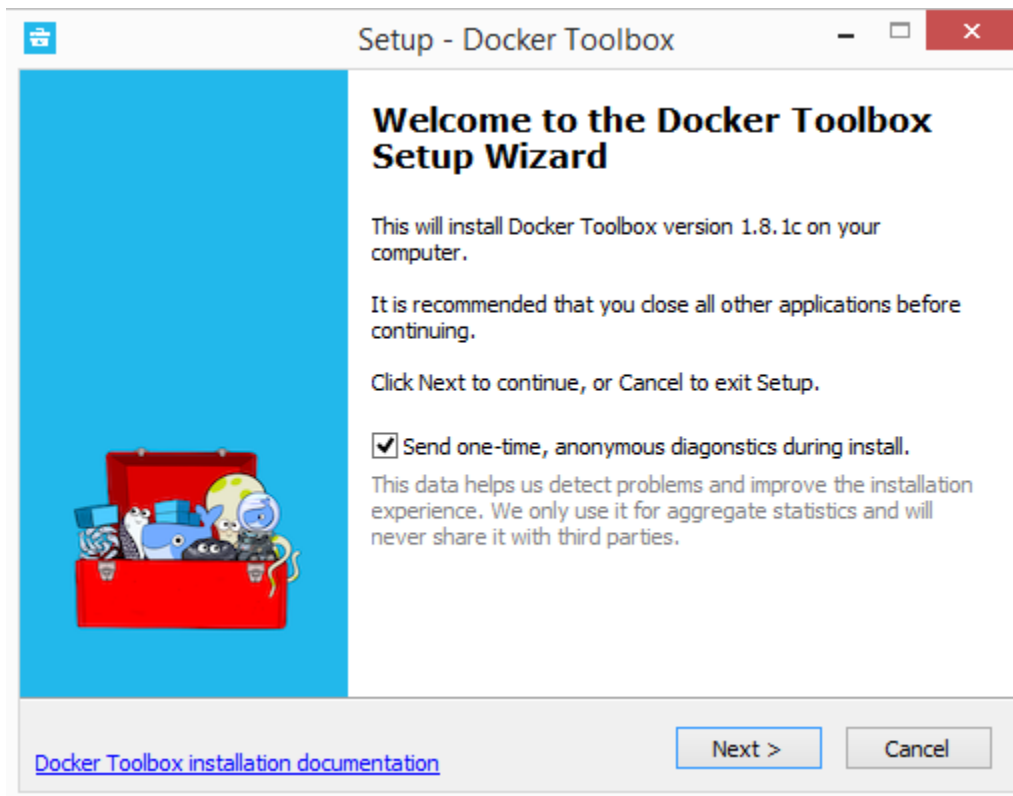
4.Press **Next** to accept all the defaults and then **Install**. Accept all the installer defaults. Depending on your system configuration, this may take some time.

5. **When notified by Windows Security the installer will make changes, make sure you allow the installer to make the necessary changes**

6. When it completes, the installer reports it was successful.

Note: If your windows version is Windows 10 Pro N or newer, then instead of Docker Toolbox, Docker Desktop can also be installed
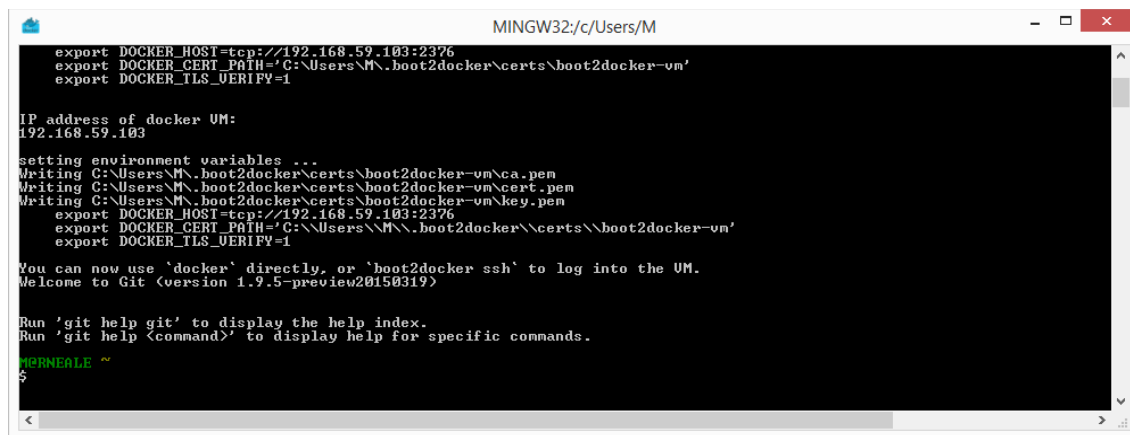
Verify your Installation:

The installer adds Docker Toolbox, VirtualBox, and Kitematic to your **Applications** folder. Start Docker Toolbox and run a simple Docker command.

1) On your Desktop, find the Docker QuickStart Terminal icon.
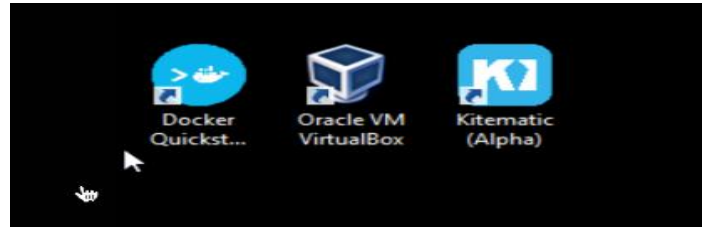
2) Click the Docker QuickStart icon to launch a pre-configured Docker Toolbox terminal. If the system displays a **User Account Control** prompt to allow VirtualBox to make changes to your computer. Choose **Yes**. This step will take a few minutes.

3) The terminal does several things to set up Docker Toolbox for you. When it is done, the terminal displays the $ prompt.

4) Type the docker run hello-world command and press ENTER. The command does some work for you, if everything runs well, the command's output looks like this:

```
$ docker run hello-world
Unable to find image 'hello-world:latest' locally
Pulling repository hello-world
91c95931e552: Download complete
a8219747be10: Download complete
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 Engine CLI client contacted the Docker Engine daemon.
 2. The Docker Engine daemon pulled the "hello-world" image from the Docker Hub.
    (Assuming it was not already locally available.)
 3. The Docker Engine daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker Engine daemon streamed that output to the Docker Engine CLI client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

For more examples and ideas, visit:
 https://docs.docker.com/userguide/
```

Prerequisites for Installing Docker on MacOS

Your Mac must be running macOS 10.8 "Mountain Lion" or newer to run Docker software. To find out what version of the OS you have:

1. Choose **About this Mac** from the Apple menu.
2. The version number appears directly below the words macOS.
3. If you have the correct version, go to the next step.
4. If you aren't using a supported version, you could consider upgrading your operating system.

If your PC satisfies all the above steps, please proceed to the Installation steps.

If you have macOS 10.10.3 Yosemite or newer, consider installing using Docker **Desktop** mode of installation, otherwise choose **Docker Toolbox** as mode of installation.

Docker Toolbox Installation Steps for MacOS

1) Download docker toolbox from the link (scroll to the end of page)
   (https://docs.docker.com/toolbox/overview/).

2) Install Docker Toolbox by double-clicking the package or by right-clicking and choosing "Open" from the pop-up menu. The installer launches an introductory dialog, followed by an overview of what's installed.
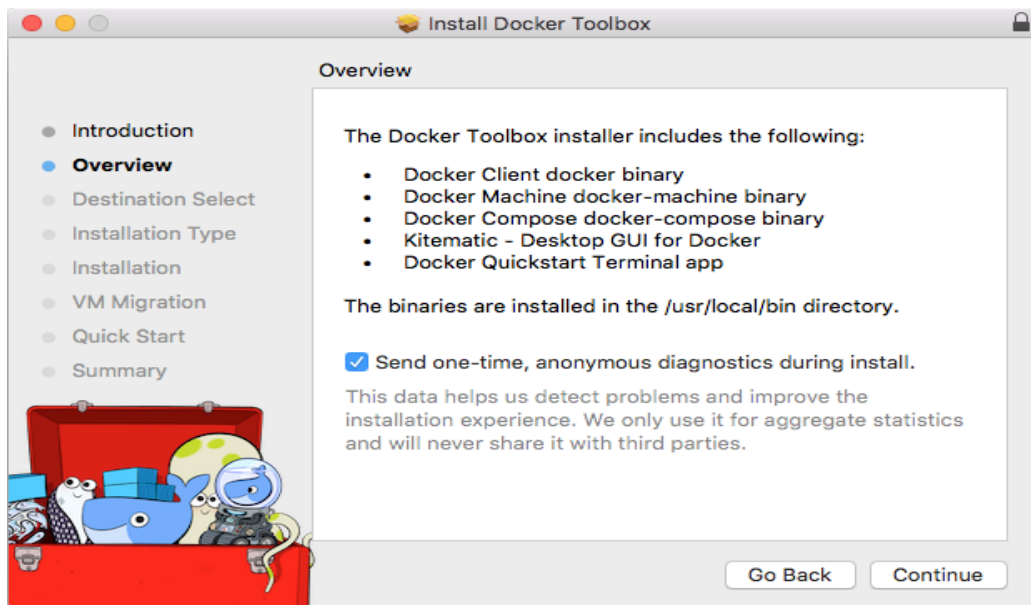
3) Press Continue to install the toolbox. The installer presents you with options to customize the standard installation
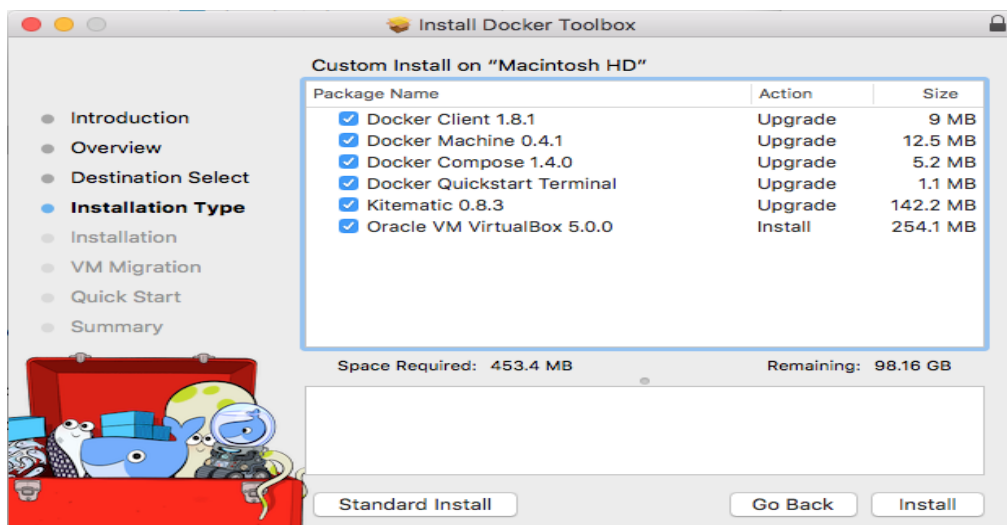
4) For now, don't change any of the defaults.

5) Click Install to perform the standard installation. The system prompts you for your password

6) Provide your password to continue with the installation. When it completes, the installer provides you with some shortcuts. You can ignore this for now and click **Continue**.

7) Then click **Close** to finish the installer.

Verify your Installation:

1. Open the **Launchpad** and locate the Docker Quickstart Terminal icon.

2. Click the icon to launch a Docker Quickstart Terminal window. The terminal does a number of things to set up Docker Quickstart and finally it displaces following in your Terminal.

```
Last login: Sat Jul 11 20:09:45 on ttys002
bash '/Applications/Docker Quickstart Terminal.app/Contents/Resources/Scripts/start.sh'
Get http:///var/run/docker.sock/v1.19/images/json?all=1&filters=%7B%22dangling%22%3A%5B%22true%22%5D%7
Get http:///var/run/docker.sock/v1.19/images/json?all=1: dial unix /var/run/docker.sock: no such file
-bash: lolcat: command not found

mary at meepers in ~
$ bash '/Applications/Docker Quickstart Terminal.app/Contents/Resources/Scripts/start.sh'
Creating Machine dev...
Creating VirtualBox VM...
Creating SSH key...
Starting VirtualBox VM...
Starting VM...
To see how to connect Docker to this machine, run: docker-machine env dev
Starting machine dev...
Setting environment variables for machine dev...


                        ##         .
                  ## ## ##        ==
               ## ## ## ## ##    ===
           /"""""""""""""""""\___/ ===
      ~~~ {~~ ~~~~ ~~~ ~~~~ ~~~ ~ /  ===- ~~~
           _____ o           __/
             \    \         __/
              _____/


The Docker Quick Start Terminal is configured to use Docker with the "default" VM.
```
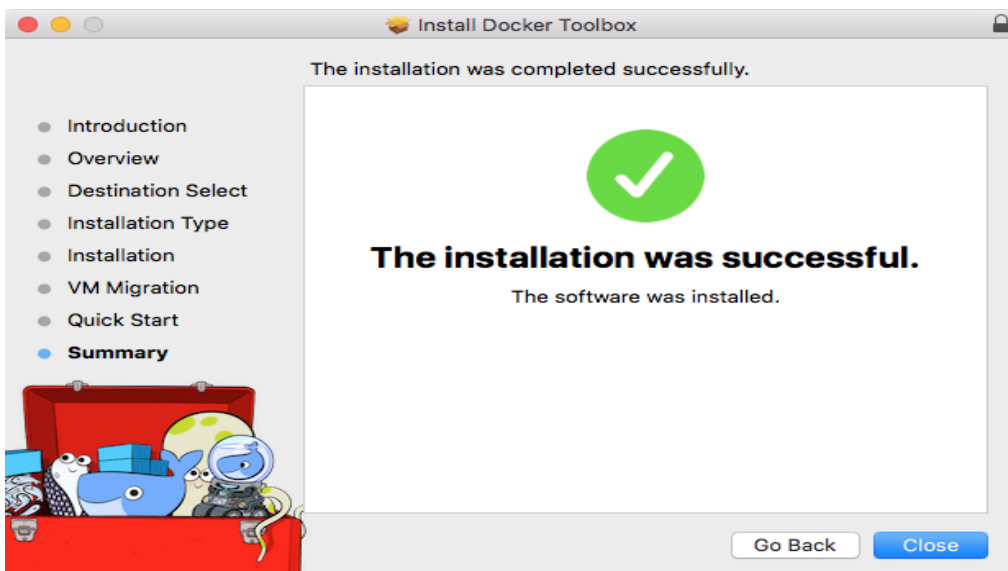
3. Click your mouse in the terminal window to make it active.

4. Type the docker run hello-world command and press RETURN. The command does some work for you, if everything runs well, the command's output looks like this:

```
$ docker run hello-world
Unable to find image 'hello-world:latest' locally
Pulling repository hello-world
91c95931e552: Download complete
a8219747be10: Download complete
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 Engine CLI client contacted the Docker Engine daemon.
 2. The Docker Engine daemon pulled the "hello-world" image from the Docker Hub.
    (Assuming it was not already locally available.)
 3. The Docker Engine daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker Engine daemon streamed that output to the Docker Engine CLI client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

For more examples and ideas, visit:
 https://docs.docker.com/userguide/
```

Docker Desktop Installation Steps for MacOS

1. Download Docker Desktop from Docker hub using the link below

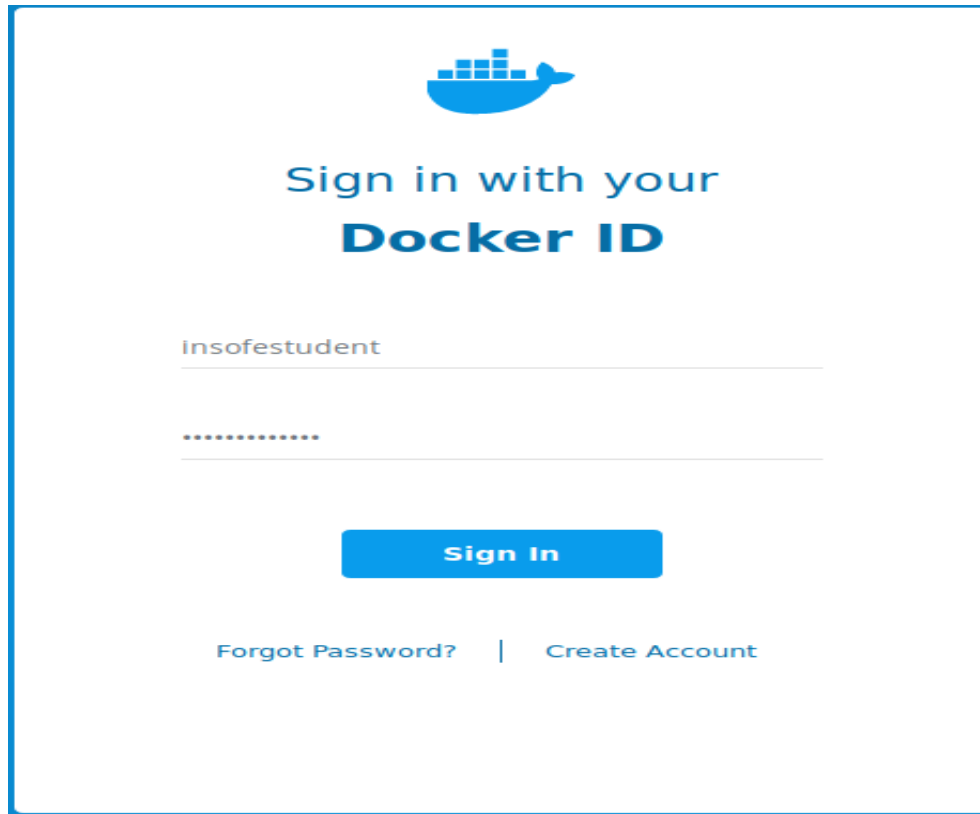   https://hub.docker.com/editions/community/docker-ce-desktop-mac

2. Click on the "Please Login To Download" button to download the docker desktop.

3. Please use the below login credentials

   Docker ID: insofestudent

   Password: insofestudent

4. Click on the "Get Docker" button to start downloading the Docker.dmg file

5. Double-click Docker.dmg to open the installer, then drag Moby the whale to the Applications folder.
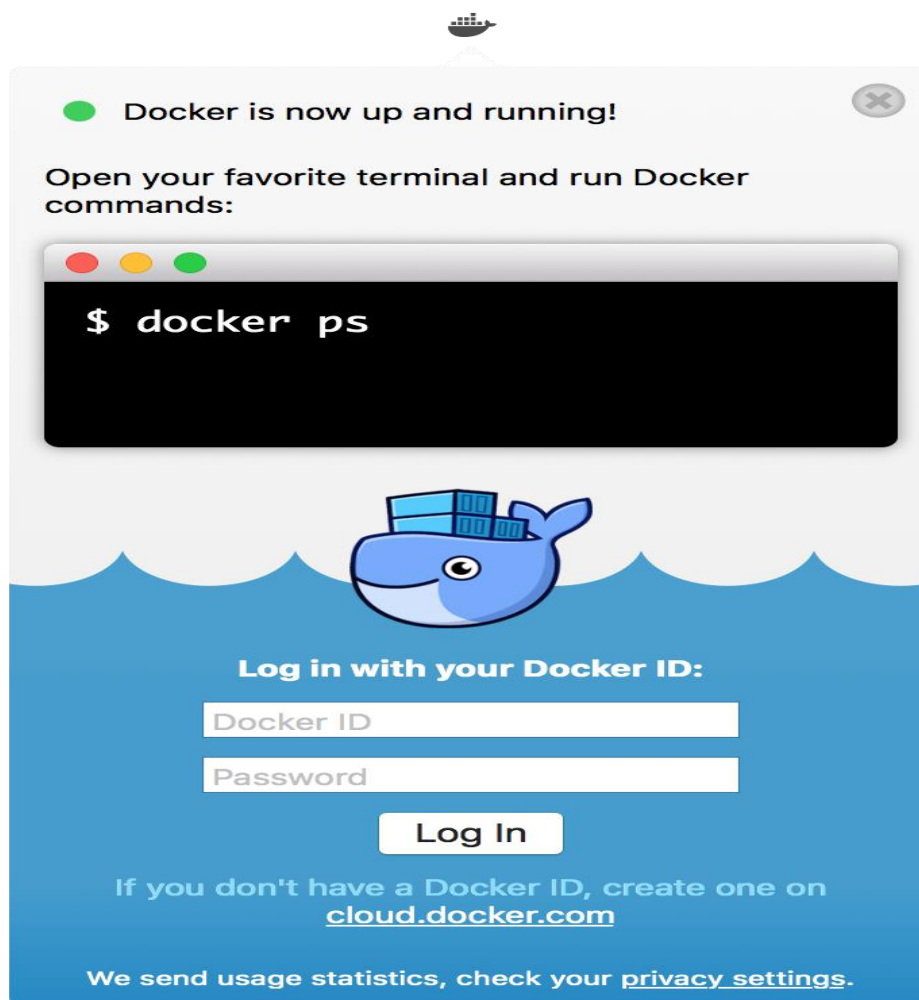

6. Double-click Docker.app in the Applications folder to start Docker.

You are prompted to authorize Docker.app with your system password after you launch it. Privileged access is needed to install networking components and links to the Docker apps.

Verify the Installation:

After the success message is shown, open a terminal and enter the below command

$ docker run hello-world

```
$ docker run hello-world
Unable to find image 'hello-world:latest' locally
Pulling repository hello-world
91c95931e552: Download complete
a8219747be10: Download complete
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 Engine CLI client contacted the Docker Engine daemon.
 2. The Docker Engine daemon pulled the "hello-world" image from the Docker Hub.
    (Assuming it was not already locally available.)
 3. The Docker Engine daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker Engine daemon streamed that output to the Docker Engine CLI client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

For more examples and ideas, visit:
 https://docs.docker.com/userguide/
```

Linux Installation Steps:

1. Update the apt package index:

   $ sudo apt-get update

2. Install packages to allow apt to use a repository over HTTPS:

   $ sudo apt-get install apt-transport-https ca-certificates curl gnupg-agent \

   software-properties-common

3. Add Docker's official GPG key:

   $ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -

4. Verify that you now have the key with the fingerprint 9DC8 5822 9FC7 DD38 854A E2D8 8D81 803C 0EBF CD88, by searching for the last 8 characters of the fingerprint.

   $ sudo apt-key fingerprint 0EBFCD88

5. Use the following command to set up the **stable** repository.

   $ sudo add-apt-repository \

   "deb [arch=amd64] https://download.docker.com/linux/ubuntu \

   $(lsb_release -cs) \

   stable"

6. Update the apt package index.

   $ sudo apt-get update

7. Install the *latest version* of Docker CE and containerd

   $ sudo apt-get install docker-ce docker-ce-cli containerd.io

Verify your Installer

Verify that Docker CE is installed correctly by running the hello-world image.

$ sudo docker run hello-world