

Configuration(Docker, Kubernetes)

Younggyu kim (younggyu.kim@oracle.com, credemol@gmail.com)

Cloud Platform, Oracle Korea

Install Docker

Install Tools



VirtualBox

<https://www.virtualbox.org/>



<https://brew.sh/>



<https://chocolatey.org/>



Install Docker

<https://docs.docker.com/engine/installation/>

Capabilities	Community Edition	Enterprise Edition Basic	Enterprise Edition Standard	Enterprise Edition Advanced
Container engine and built in orchestration, networking, security	✓	✓	✓	✓
Certified infrastructure, plugins and ISV containers		✓	✓	✓
Image management			✓	✓
Container app management			✓	✓
Image security scanning				✓

Supported Platform

Desktop

Platform	Docker CE x86_64	Docker CE ARM	Docker EE
Docker for Mac (macOS)			
Docker for Windows (Microsoft Windows 10)			

Install Docker

Mac OS

<https://docs.docker.com/docker-for-mac/install/#download-docker-for-mac>

The screenshot shows the Docker documentation website. The top navigation bar includes the Docker logo, a search bar, and links to Guides, Product manuals, Glossary, Reference, and Samples. The right side of the header shows the current version, Docker v17.09 (current). The left sidebar lists various operating systems and platforms, with 'Mac' selected. The main content area is titled 'Mac' and provides information about the Stable and Edge channels. The Stable channel is described as a fully baked and tested installer, while the Edge channel provides the latest release with new features in development. Both channels offer download links for Mac. The right sidebar contains links to edit the page, request changes, get support, and a section titled 'On this page:' which lists 'Download Docker for Mac' and its sub-sections: 'What to know before you install', 'Install and run Docker for Mac', and 'Where to go next'.

Mac

Windows

Ubuntu

Debian

CentOS

Fedora

Binaries

Platforms supporting Docker EE and Docker CE

Optional Linux post-installation steps

Docker Edge

Docker for AWS

Docker for Azure

Docker Toolbox (legacy)

Compatibility between Docker

On both channels, we welcome your [feedback](#) to help us as the apps evolve.

For more about Stable and Edge channels, see the [FAQs](#).

Stable channel	Edge channel
This installer is fully baked and tested. This is the best channel to use if you want a reliable platform to work with. These releases follow the Docker Engine stable releases.	This installer provides the latest Edge release of Docker for Mac and Engine, and typically offers new features in development. Use this channel if you want to get experimental features faster, and can weather some instability and bugs. We collect all usage data on Edge releases across the board.
On this channel, you can select whether to send usage statistics and other data.	
Stable builds are released once per quarter.	Edge builds are released once per month.
Get Docker for Mac (Stable)	Get Docker for Mac (Edge)
Checksum: Docker.dmg SHA256	Checksum: Docker.dmg SHA256

- Docker for Mac requires OS X El Capitan 10.11 or newer macOS release running on a 2010 or newer Mac, with Intel's hardware support for MMU virtualization. The app will run on 10.10.3 Yosemite, but with limited support. Please see [What to know before you install](#) for a

[Edit this page](#)

[Request docs changes](#)

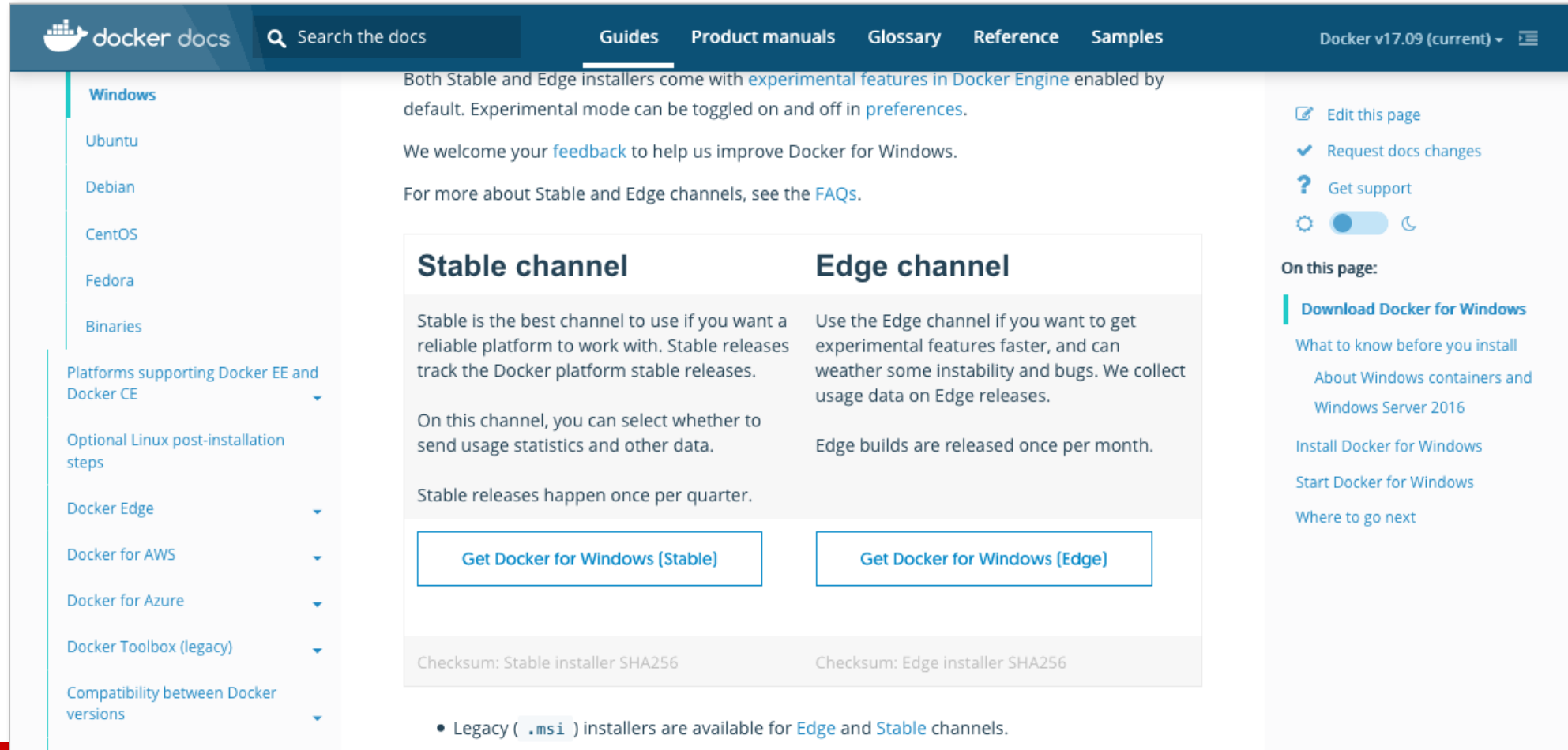
[Get support](#)

[On this page:](#)

- [Download Docker for Mac](#)
- [What to know before you install](#)
- [Install and run Docker for Mac](#)
- [Where to go next](#)

Windows 10

<https://docs.docker.com/docker-for-windows/install/#download-docker-for-windows>



The screenshot shows the Docker documentation website for Windows installation. The page has a dark blue header with the Docker logo, a search bar, and navigation links: Guides, Product manuals, Glossary, Reference, and Samples. The current version is Docker v17.09 (current). The left sidebar lists various operating systems and topics, with 'Windows' selected. The main content area is divided into two columns: 'Stable channel' and 'Edge channel'. The 'Stable channel' section describes it as the best for reliable work, with releases tracked by Docker platform stable releases, and mentions that usage statistics can be sent. The 'Edge channel' section describes it as the best for experimental features, with faster releases and usage data collection. Both sections have buttons to 'Get Docker for Windows'. Below these, there are checksums for the installers and a note about legacy .msi installers. The right sidebar contains links to edit the page, request changes, get support, and a list of links for downloading Docker for Windows.

Windows

- Ubuntu
- Debian
- CentOS
- Fedora
- Binaries
- Platforms supporting Docker EE and Docker CE
- Optional Linux post-installation steps
- Docker Edge
- Docker for AWS
- Docker for Azure
- Docker Toolbox (legacy)
- Compatibility between Docker versions

Both Stable and Edge installers come with [experimental features in Docker Engine](#) enabled by default. Experimental mode can be toggled on and off in [preferences](#).

We welcome your [feedback](#) to help us improve Docker for Windows.

For more about Stable and Edge channels, see the [FAQs](#).

Stable channel	Edge channel
Stable is the best channel to use if you want a reliable platform to work with. Stable releases track the Docker platform stable releases.	Use the Edge channel if you want to get experimental features faster, and can weather some instability and bugs. We collect usage data on Edge releases.
On this channel, you can select whether to send usage statistics and other data.	Edge builds are released once per month.
Stable releases happen once per quarter.	
Get Docker for Windows (Stable)	Get Docker for Windows (Edge)
Checksum: Stable installer SHA256	Checksum: Edge installer SHA256

- Legacy (`.msi`) installers are available for [Edge](#) and [Stable](#) channels.

[Edit this page](#)

[Request docs changes](#)

[Get support](#)

[On this page:](#)

- [Download Docker for Windows](#)
- [What to know before you install](#)
- [About Windows containers and Windows Server 2016](#)
- [Install Docker for Windows](#)
- [Start Docker for Windows](#)
- [Where to go next](#)

Install Docker Toolbox

Windows 7, 8, 8.1

https://docs.docker.com/toolbox/toolbox_install_windows/



The screenshot shows the Docker documentation website. The top navigation bar includes the Docker logo, a search bar, and links to Guides, Product manuals, Glossary, Reference, and Samples. The current page is 'Install Docker Toolbox on Windows'. The left sidebar contains a table of contents with links to 'Install Toolbox on Mac', 'Install Toolbox on Windows' (highlighted), 'Kitematic', 'Troubleshooting', 'Compatibility between Docker versions', 'Release notes', 'Get started', 'Develop with Docker', 'Configure networking', 'Manage application data', 'Run your app in production', 'Standards and compliance', and 'Open source at Docker'. The main content area has the title 'Install Docker Toolbox on Windows' and a sub-header 'Legacy desktop solution'. The text explains that Docker Toolbox is for older Mac and Windows systems that do not meet the requirements of Docker for Mac and Docker for Windows. It recommends updating to the newer applications, if possible. Below this, it states that Docker Toolbox provides a way to use Docker on older Windows systems that do not meet minimal system requirements for the Docker for Windows app. It then says 'If you have not done so already, download the installer here:' and provides a button labeled 'Get Docker Toolbox for Windows'. The 'What you get and how it works' section lists the following Docker tools: Docker CLI client for running Docker Engine to create images and containers, Docker Machine so you can run Docker Engine commands from Windows terminals, and Docker Compose for running the `docker-compose` command. The right sidebar contains links to 'Edit this page', 'Request docs changes', 'Get support', and a toggle switch. Below these links, it says 'On this page:' and lists the following sections: 'What you get and how it works', 'Step 1: Check your version', 'Step 2: Install Docker Toolbox', 'Step 3: Verify your installation', 'Looking for troubleshooting help?', 'Optional: Add shared directories', 'How to uninstall Toolbox', and 'Next steps'.

Install Docker Toolbox on Windows

Legacy desktop solution. Docker Toolbox is for older Mac and Windows systems that do not meet the requirements of [Docker for Mac](#) and [Docker for Windows](#). We recommend updating to the newer applications, if possible.

Estimated reading time: 9 minutes

Docker Toolbox provides a way to use Docker on older Windows systems that do not meet minimal system requirements for the [Docker for Windows](#) app.

If you have not done so already, download the installer here:

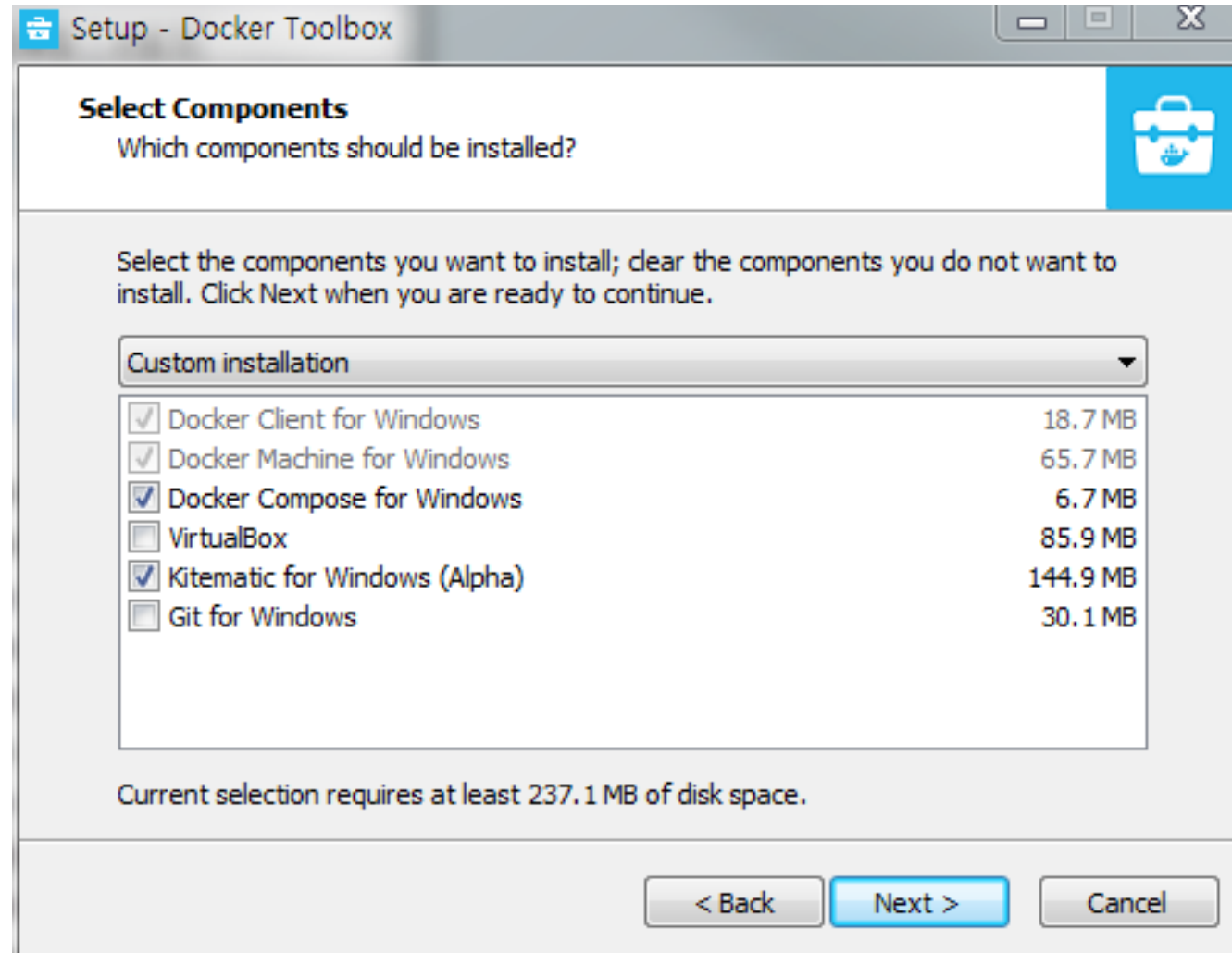
[Get Docker Toolbox for Windows](#)

What you get and how it works

Docker Toolbox includes the following Docker tools:

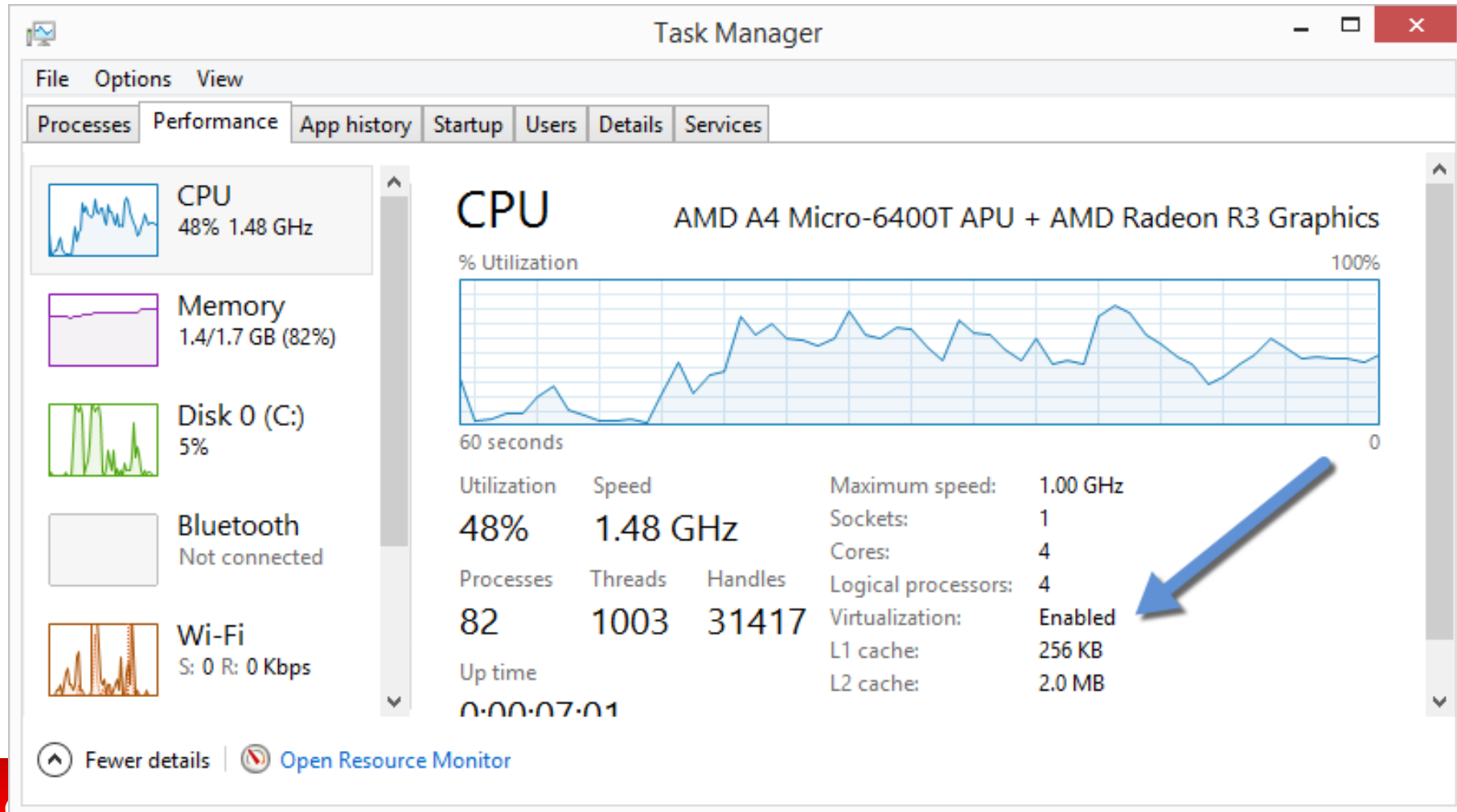
- Docker CLI client for running Docker Engine to create images and containers
- Docker Machine so you can run Docker Engine commands from Windows terminals
- Docker Compose for running the `docker-compose` command

uncheck VirtualBox if you have already installed it



Windows 8, 8.1

set Virtualization Enabled



run Docker Quickstart Terminal

```
$ docker --version
```

```
$ docker-machine --version
```

Install Docker on Linux Server

Install docker & docker-compose

```
$ sudo apt-get install docker.io
```

```
$ sudo docker --version
```

```
Docker version 1.13.1, build 092cba3
```

```
$ sudo apt-get install docker-compose
```

```
docker-compose version 1.8.0, build unknown
```

```
#$ sudo docker run -d -p 8080:8080 --name=hello1 google/nodejs-hello:latest
```

Install Docker CE

SET UP THE REPOSITORY

```
$ sudo apt-get install apt-transport-https ca-certificates curl software-properties-common
```

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

```
$ sudo apt-key fingerprint 0EBFCD88
```

```
$ sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable"
```

```
$ sudo apt-get update
```

```
$ sudo apt-get install docker-ce
```


Add docker group & add user to docker group

```
$ docker image ls (it causes Permission error)
```

```
$ cat /etc/group
```

```
$ sudo groupadd docker (in case 'docker' group does not exists in the above file.)
```

```
$ sudo gpasswd -a $USER docker
```

```
$ sudo service docker restart
```

==> Log out and Log in again

```
$ docker image ls
```

A woman with long brown hair and glasses is sitting at a wooden table in a cafe. She is wearing a brown leather jacket over a blue patterned scarf. She is holding a black smartphone to her ear with her right hand and looking down at an open book or magazine on the table with her left hand. The background is a blurred cafe interior with other people and large windows.

Install Kubernetes

kubect!, minikube

Windows

Installing kubectl on Windows 7 (Admin Role)

- <https://kubernetes.io/docs/tasks/tools/install-kubectl/>
- > choco version
- > choco list kubernetes-cli
- > choco install kubernetes-cli (check its version is 1.8.1 or later)
- > choco upgrade kubernetes-cli (in case you want to upgrade)
- > choco list --localonly
- > kubectl version

Configuring Kubectl to use a remote Kubernetes cluster

- `cd C:\Users\%USERNAME%`
- `mkdir .kube`
- `cd .kube`
- `type nul > config` (this command is equivalent to 'touch config')

Installing on Windows

- <https://github.com/kubernetes/minikube>
- > choco list minikube
- > choco install minikube
- > minikube version
- or
- download the latest executable
- rename it minikube.exe

Mac OS

Installing kubectl on Mac

```
$ brew install kubectl  
$ brew upgrade kubectl
```

OR

```
$ curl -O https://storage.googleapis.com/kubernetes-release/release/v1.5.2  
/bin/darwin/amd64/kubectl  
$ chmod +x kubectl  
$ sudo cp kubectl /usr/local/bin
```


Installing minikube on Mac

```
$ brew cask install minikube (brew cask reinstall minikube)
```

```
$ curl -Lo minikube https://storage.googleapis.com/minikube/releases/v0.12.2/  
minikube-darwin-amd64
```

```
$ chmod +x minikube
```

```
$ sudo mv minikube /usr/local/bin/
```

Linux

Installing kubectl on Linux

```
$ curl -O https://storage.googleapis.com/kubernetes-release/release/v1.5.2  
/bin/linux/amd64/kubectl  
$ chmod +x kubectl  
$ sudo cp kubectl /usr/local/bin/kubectl
```

Installing minikube on Linux

```
$ curl -Lo minikube https://storage.googleapis.com/minikube/releases/latest/  
minikube-linux-amd64 && chmod +x minikube && sudo mv minikube /usr/local/bin/
```

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