

Configuration(Docker, Kubernetes)

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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				✓

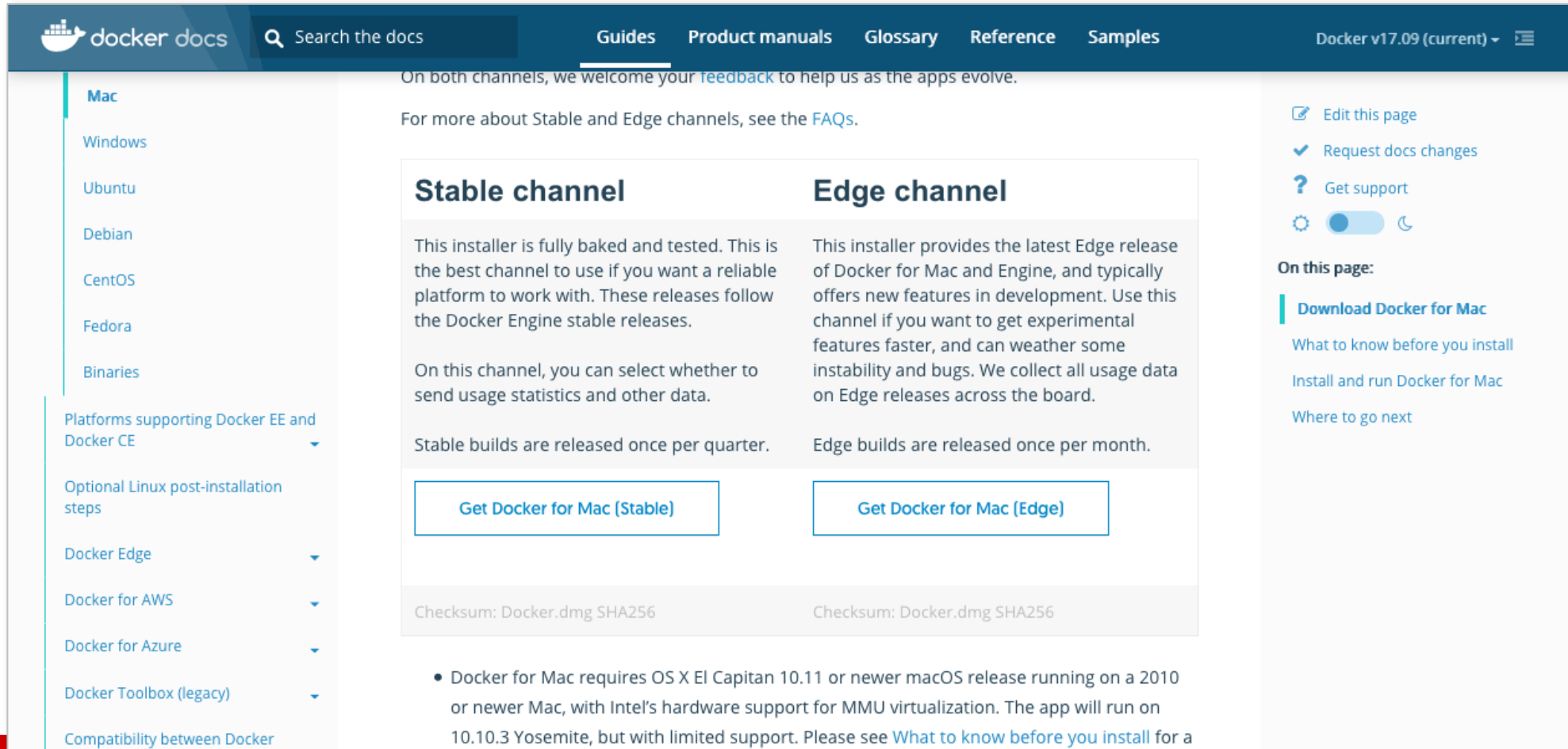
Supported Platform

Desktop

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

Mac OS

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



The screenshot shows the Docker documentation website for Mac OS. 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 titled "Mac" and is part of the "Docker v17.09 (current)" version. The left sidebar lists various operating systems and platforms, with "Mac" selected. The main content area is divided into two columns: "Stable channel" and "Edge channel". The "Stable channel" section describes the installer as fully baked and tested, suitable for reliable work, and provides a link to "Get Docker for Mac (Stable)". The "Edge channel" section describes the installer as providing the latest Edge release with new features in development, and provides a link to "Get Docker for Mac (Edge)". Below these sections, a note states that 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 right sidebar contains links to "Edit this page", "Request docs changes", "Get support", and "On this page: Download Docker for Mac", "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](#)

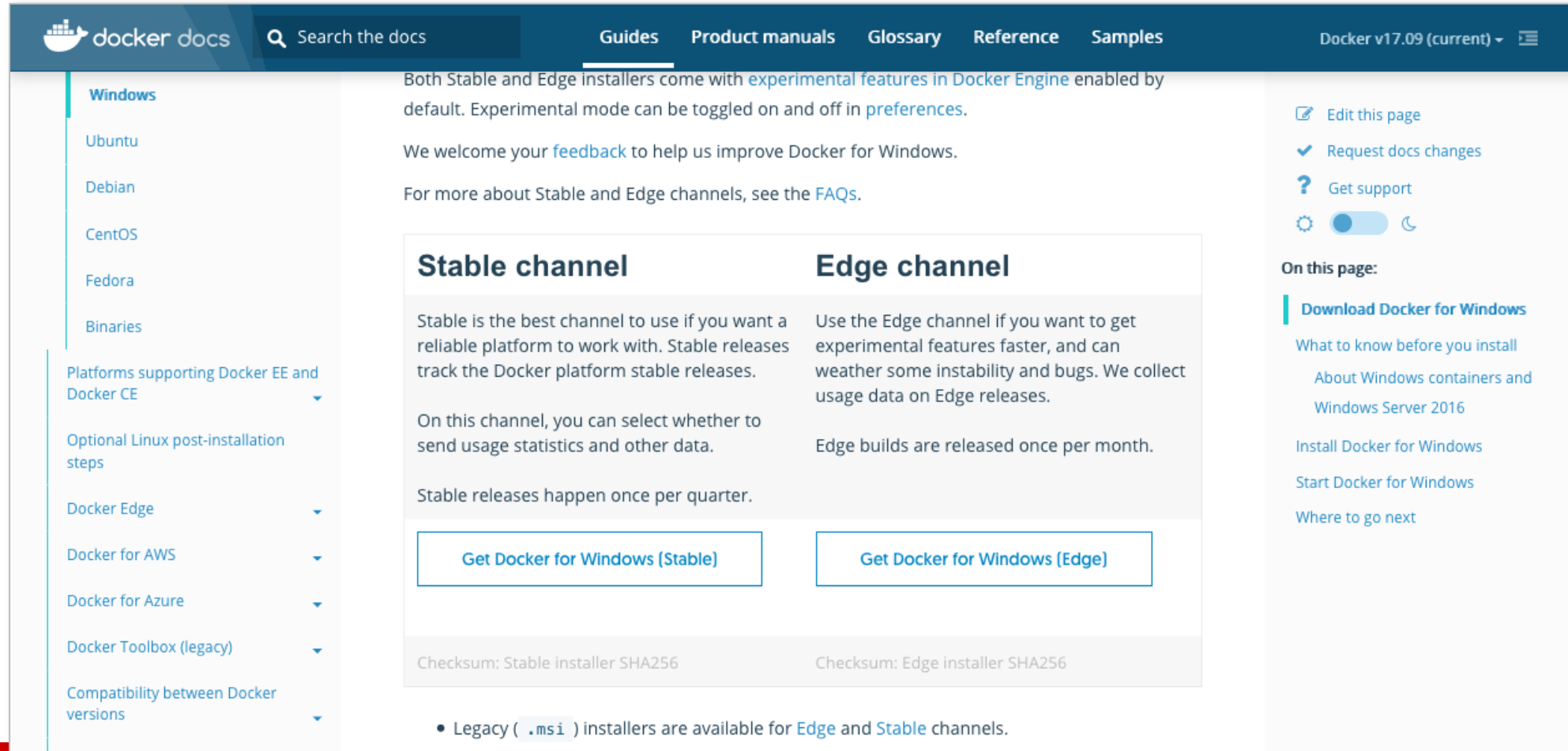
[Get support](#)

[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. 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 Docker version as v17.09 (current). The left sidebar lists various operating systems and topics, with 'Windows' selected. The main content area is titled 'Windows' and contains introductory text about Stable and Edge installers, a welcome message for feedback, and links to FAQs. Below this, there are two columns: 'Stable channel' and 'Edge channel'. The 'Stable channel' section describes it as the best for a reliable platform, with releases tracked by Docker, and provides a button to 'Get Docker for Windows (Stable)'. The 'Edge channel' section describes it as faster for experimental features, with monthly builds, and provides a button to 'Get Docker for Windows (Edge)'. At the bottom of these columns, checksums for the installers are provided. A note at the very bottom states that legacy .msi installers are available for both channels. The right sidebar contains links to edit the page, request changes, get support, and a list of links for the current page, including 'Download 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

Stable is the best channel to use if you want a reliable platform to work with. Stable releases track the Docker platform stable releases.

On this channel, you can select whether to send usage statistics and other data.

Stable releases happen once per quarter.

[Get Docker for Windows \(Stable\)](#)

Checksum: Stable installer SHA256

Edge channel

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.

Edge builds are released once per month.

[Get Docker for Windows \(Edge\)](#)

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

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 'Get Docker Toolbox for Windows'. The section 'What you get and how it works' follows, stating that 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, 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 for 'On this page:'. Below this, it lists the contents of the page: '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](#)

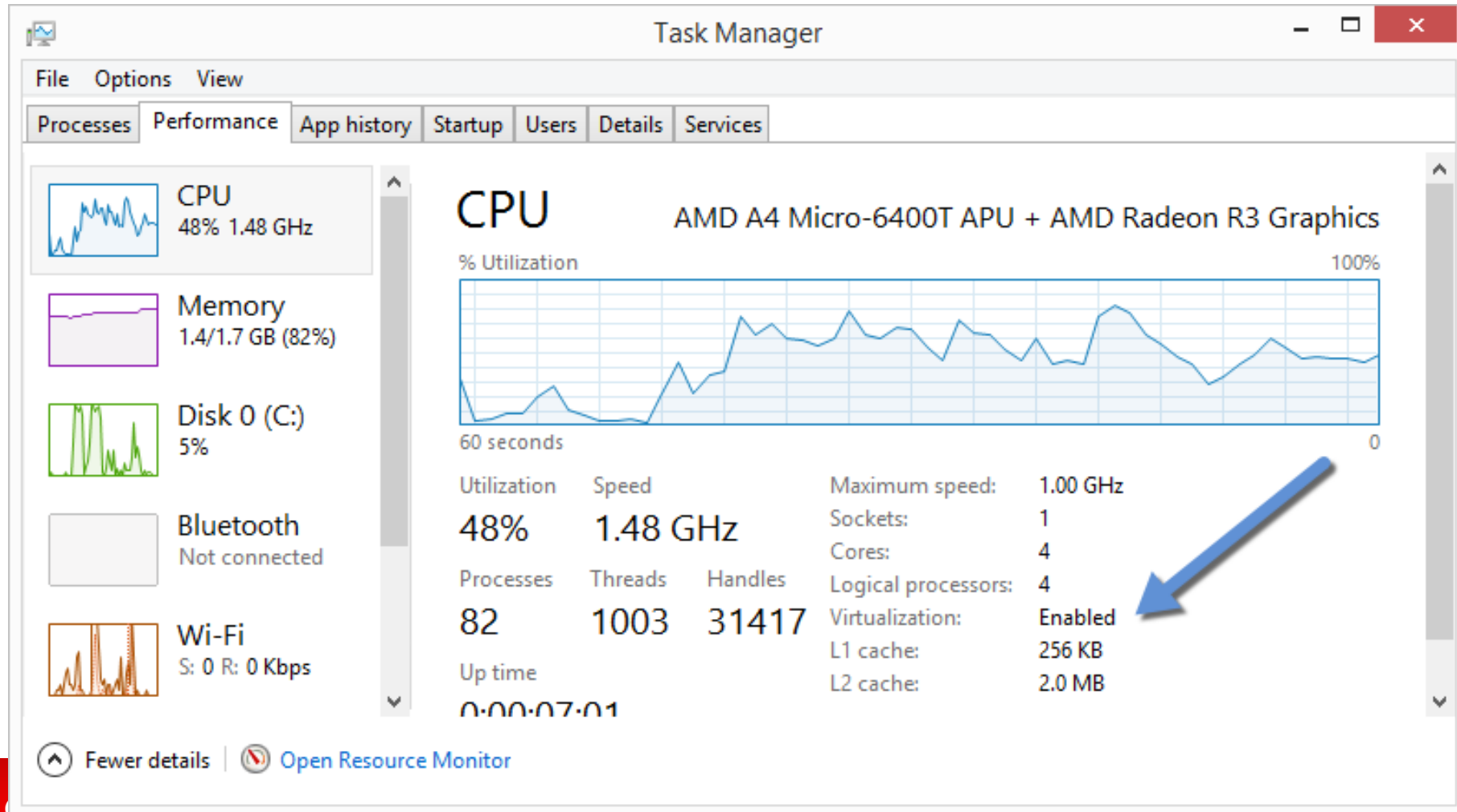
What you get and how it works

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

Windows 8, 8.1

set Virtualization Enabled



run Docker Quickstart Terminal

```
$ docker --version
```

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

Linux. 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
```

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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