

What is Minikube?

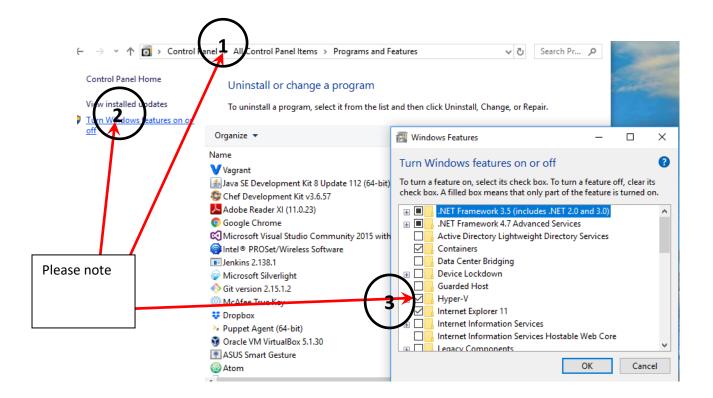
Minikube is a tool that makes it easy to run Kubernetes locally. Minikube runs a single-node Kubernetes cluster inside a VM (on Virtualbox for example) on your laptop for users looking to try out Kubernetes or develop with it day-to-day. Internally, minikube runs a single Go binary (named *localkube*), which runs all the kubernetes' components. The result is a local kubernetes endpoint that you can use with the *kubectl* client.

- Minikube supports kubernetes features such as DNS, Dashboards, CNI, NodePorts, ConfigMaps and Secrets and so on.
- The minikube VM runs Docker, but supports also rkt container engine.
- Multiple version of kubernetes are supported, from kubernetes 1.3.0 to 1.7.5 at the time of this writing.
- Possible to reuse the minikube's built-in Docker daemon; as this means you
 don't have to build a docker registry on your host machine and push the image
 into it you can just build inside the same docker daemon as minikube which
 speeds up local experiments.
- Supports persistent volumes and host folder mounting.
- Kubernetes environment configurable.

Minikube is distributed in binary form for Linux, OSX, and Windows systems

Installing Minikube on Windows

At first we have to enable windows features like, Hyper-V on Windows.





Installing Kubectl first on Windows

```
Install-Script -Name install-kubectl -Scope CurrentUser -Force install-kubectl.ps1 [-DownloadLocation <path>]

<br/>
<br/>
<br/>
<br/>
<br/>
Note: If you do not specify a DownloadLocation, kubectl will be installed in the user's temp Directory.

The installer creates $HOME/.kube and instructs it to create a config file
```

Install using Chocolatey on Windows

- 1. Run the installation command:
- 2. choco install kubernetes-cli
- 3. Test to ensure the version you installed is sufficiently up-to-date:
- 4. kubectl version
- 5. Change to your %HOME% directory:

For example: cd C:\users\yourusername

- 6. Create the .kube directory:
- 7. mkdir .kube
- 8. Change to the .kube directory you just created:

```
cd .kube
```

This will need first to download and install Chocolatey using below command,

```
Set-ExecutionPolicy Bypass -Scope Process -Force; iex ((New-Object
System.Net.WebClient).DownloadString('https://chocolatey.org/insta
ll.ps1'))
```

Minikube on Linux VM:

Below command is to download minikube on linux VM.

```
$ curl -Lo minikube
https://storage.googleapis.com/minikube/releases/v0.30.0/minik
```



ube-linux-amd64 && chmod +x minikube && sudo cp minikube
/usr/local/bin/ && rm minikube

To use minikube on a VM where there's no VM-Driver

```
$ sudo minikube start --vm-driver=none --apiserver-ips
127.0.0.1 --apiserver-name localhost
```

Run below command as recommended.

```
$ sudo chown -R $USER $HOME/.minikube
```