Installing Minikube

Windows 10/11

Install Windows Subsystem for linux, WSL

Control Panel > Add/remove Windows Components:

- Hyper-v
- Virtual machine platform
- Windows hypervisor platform
- Windows sub system for linux

or Open PowerShell as Administrator and execute these commands:

```
wsl --install
#Restart the computer
wsl --update
#Restart the computer
wsl --set-default-version 2
```

Download Docker Desktop for Windows

https://desktop.docker.com/win/main/amd64/Docker Desktop Installer.exe

Run the installer

- When prompted, ensure the **Use WSL 2 instead of Hyper-V** option on the Configuration page is selected or not depending on your choice of backend.
- When the installation is successful, click **Close** to complete the installation process.

Install Minikube for Windows

Open PowerShell as Administrator and run this command

`New-Item -Path 'c:\' -Name 'minikube' -ItemType Directory -Force`

`Invoke-WebRequest -OutFile 'c:\minikube\minikube.exe' -Uri 'https://github.com/kubernetes/minikube/releases/latest/download/minikube-windows-amd64.exe' -UseBasicParsing`

Add the minikube.exe binary to your PATH

The following is a single command:

`$oldPath = [Environment]::GetEnvironmentVariable('Path', [EnvironmentVariableTarget]::Machine) if ($oldPath.Split(';') -inotcontains 'C:\minikube'){ [Environment]::SetEnvironmentVariable('Path', $('{0};C:\\minikube' -f $oldPath), [EnvironmentVariableTarget]::Machine) }`

Restart PowerShell

Start minikube cluster

```
minikube start
```

You may see an output like this:

```
PS C:\Windows\system32> minikube start
* minikube v1.30.1 on Microsoft Windows 11 Enterprise 10.0.22621.1555 Build 22621.1555
* Automatically selected the docker driver. Other choices: hyperv, virtualbox, ssh
* Using Docker Desktop driver with root privileges
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
* Downloading Kubernetes v1.26.3 preload ...
    > preloaded-images-k8s-v18-v1...:  397.02 MiB / 397.02 MiB  100.00% 5.36 Mi
    > gcr.io/k8s-minikube/kicbase...:  373.53 MiB / 373.53 MiB  100.00% 3.52 Mi
* Creating docker container (CPUs=2, Memory=3500MB) ...
* Preparing Kubernetes v1.26.3 on Docker 23.0.2 ...
  - Generating certificates and keys ...
  - Booting up control plane ...
  - Configuring RBAC rules ...
* Configuring bridge CNI (Container Networking Interface) ...
  - Using image gcr.io/k8s-minikube/storage-provisioner:v5
* Verifying Kubernetes components...
* Enabled addons: storage-provisioner, default-storageclass
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
```