**minikube start**

minikube is local Kubernetes, focusing on making it easy to learn and develop for Kubernetes.

All you need is Docker (or similarly compatible) container or a Virtual Machine environment, and Kubernetes is a single command away: minikube start

**1**Installation

Click on the buttons that describe your target platform. For other architectures, see [the release page](https://github.com/kubernetes/minikube/releases/latest) for a complete list of minikube binaries.

Operating system

Linux macOS Windows

Architecture

x86-64

Release type

Stable Beta

Installer type

.exe download Windows Package Manager Chocolatey

To install the latest minikube **stable** release on **x86-64** **Windows** using **.exe download**:

1. Download the [latest release](https://storage.googleapis.com/minikube/releases/latest/minikube-installer.exe).  
     
   Or if using PowerShell, use this command:
2. New-Item -Path 'c:\' -Name 'minikube' -ItemType Directory -Force
3. Invoke-WebRequest -OutFile 'c:\minikube\minikube.exe' -Uri 'https://github.com/kubernetes/minikube/releases/latest/download/minikube-windows-amd64.exe' -UseBasicParsing

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1. Add the binary in to your PATH.  
     
   *Make sure to run PowerShell as Administrator.*
2. $oldPath = [Environment]::GetEnvironmentVariable('Path', [EnvironmentVariableTarget]::Machine)
3. if ($oldPath.Split(';') -inotcontains 'C:\minikube'){ `
4. [Environment]::SetEnvironmentVariable('Path', $('{0};C:\minikube' -f $oldPath), [EnvironmentVariableTarget]::Machine) `
5. }

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*If you used a CLI to perform the installation, you will need to close that CLI and open a new one before proceeding.*

**2**Start your cluster

From a terminal with administrator access (but not logged in as root), run:

minikube start

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If minikube fails to start, see the [drivers page](https://minikube.sigs.k8s.io/docs/drivers/) for help setting up a compatible container or virtual-machine manager.

**3**Interact with your cluster

If you already have kubectl installed, you can now use it to access your shiny new cluster:

kubectl get po -A

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Alternatively, minikube can download the appropriate version of kubectl and you should be able to use it like this:

minikube kubectl -- get po -A

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You can also make your life easier by adding the following to your shell config:

alias kubectl="minikube kubectl --"

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Initially, some services such as the storage-provisioner, may not yet be in a Running state. This is a normal condition during cluster bring-up, and will resolve itself momentarily. For additional insight into your cluster state, minikube bundles the Kubernetes Dashboard, allowing you to get easily acclimated to your new environment:

minikube dashboard

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**4**Deploy applications

Create a sample deployment and expose it on port 8080:

kubectl create deployment hello-minikube --image=k8s.gcr.io/echoserver:1.4

kubectl expose deployment hello-minikube --type=NodePort --port=8080

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It may take a moment, but your deployment will soon show up when you run:

kubectl get services hello-minikube

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The easiest way to access this service is to let minikube launch a web browser for you:

minikube service hello-minikube

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Alternatively, use kubectl to forward the port:

kubectl port-forward service/hello-minikube 7080:8080

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Tada! Your application is now available at <http://localhost:7080/>.

You should be able to see the request metadata from nginx such as the CLIENT VALUES, SERVER VALUES, HEADERS RECEIVED and the BODY in the application output. Try changing the path of the request and observe the changes in the CLIENT VALUES. Similarly, you can do a POST request to the same and observe the body show up in BODY section of the output.

LoadBalancer deployments

To access a LoadBalancer deployment, use the “minikube tunnel” command. Here is an example deployment:

kubectl create deployment balanced --image=k8s.gcr.io/echoserver:1.4

kubectl expose deployment balanced --type=LoadBalancer --port=8080

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In another window, start the tunnel to create a routable IP for the ‘balanced’ deployment:

minikube tunnel

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To find the routable IP, run this command and examine the EXTERNAL-IP column:

kubectl get services balanced

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Your deployment is now available at <EXTERNAL-IP>:8080

**5**Manage your cluster

Pause Kubernetes without impacting deployed applications:

minikube pause

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Unpause a paused instance:

minikube unpause

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Halt the cluster:

minikube stop

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Increase the default memory limit (requires a restart):

minikube config set memory 16384

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Browse the catalog of easily installed Kubernetes services:

minikube addons list

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Create a second cluster running an older Kubernetes release:

minikube start -p aged --kubernetes-version=v1.16.1

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Delete all of the minikube clusters:

minikube delete --all