

Lab Exercise 7- Install Minikube on Linux (Ubuntu /MacOS/Windows)

Install Minikube on macOS

```
brew install minikube
```

```
brew install kubectl
```

```
devanksilswal@devanks-MacBook-Air ~ % docker --version
Docker version 29.0.1, build eedd969
devanksilswal@devanks-MacBook-Air ~ % brew install minikube

✓ JSON API cask.jws.json                               Downloaded 15.3MB/ 15.3MB
✓ JSON API formula.jws.json                           Downloaded 32.0MB/ 32.0MB
==> Fetching downloads for: minikube
✓ Bottle Manifest minikube (1.38.0)                   Downloaded 8.4KB/ 8.4KB
✓ Bottle Manifest kubernetes-cli (1.35.0)              Downloaded 7.5KB/ 7.5KB
✓ Bottle kubernetes-cli (1.35.0)                      Downloaded 17.9MB/ 17.9MB
✓ Bottle minikube (1.38.0)                             Downloaded 51.8MB/ 51.8MB
==> Installing minikube dependency: kubernetes-cli
==> Pouring kubernetes-cli--1.35.0.arm64_tahoe.bottle.1.tar.gz
📦 /opt/homebrew/Cellar/kubernetes-cli/1.35.0: 261 files, 62.0MB
==> Pouring minikube--1.38.0.arm64_tahoe.bottle.tar.gz
📦 /opt/homebrew/Cellar/minikube/1.38.0: 11 files, 135.5MB
==> Running `brew cleanup minikube`...
Disable this behaviour by setting `HOMEBREW_NO_INSTALL_CLEANUP=1`.
Hide these hints with `HOMEBREW_NO_ENV_HINTS=1` (see `man brew`).
==> Caveats
zsh completions have been installed to:
/opt/homebrew/share/zsh/site-functions
devanksilswal@devanks-MacBook-Air ~ % brew install kubectl

Warning: kubernetes-cli 1.35.0 is already installed and up-to-date.
To reinstall 1.35.0, run:
  brew reinstall kubernetes-cli
```

```
devanksilswal@devanks-MacBook-Air ~ % kubectl version --client
```

```
Client Version: v1.34.1
```

```
Kustomize Version: v5.7.1
```

```
devanksilswal@devanks-MacBook-Air ~ % minikube version
```

```
minikube version: v1.38.0
```

```
commit: de81223c61ab1bd97dcfcfa6d9d5c59e5da4a0cf
```

Start:

```
minikube start
```

```
devanksilswal@devanks-MacBook-Air ~ % minikube start
```

```
🤖 minikube v1.38.0 on Darwin 26.2 (arm64)
🌟 Automatically selected the docker driver
⚠️ Starting v1.39.0, minikube will default to "containerd" container runtime. See #21973 for more info.
🔧 Using Docker Desktop driver with root privileges
👍 Starting "minikube" primary control-plane node in "minikube" cluster
📦 Pulling base image v0.0.49 ...
📦 Downloading Kubernetes v1.35.0 preload ...
> preloaded-images-k8s-v18-v1...: 243.03 MiB / 243.03 MiB 100.00% 2.73 Mi
> gcr.io/k8s-minikube/kicbase...: 478.49 MiB / 478.49 MiB 100.00% 2.51 Mi
🔥 Creating docker container (CPUs=2, Memory=4000MB) ...
🔧 Preparing Kubernetes v1.35.0 on Docker 29.2.0 ...
🔧 Configuring bridge CNI (Container Networking Interface) ...
🔧 Verifying Kubernetes components...
  ■ Using image gcr.io/k8s-minikube/storage-provisioner:v5
🌟 Enabled addons: storage-provisioner, default-storageclass
👉 Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
```

```
devanksilswal@devanks-MacBook-Air ~ % minikube status
```

```
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured
```

Verify Kubernetes Cluster

```
kubectl get nodes
```

Expected output:

NAME	STATUS	ROLES	AGE	VERSION
minikube	Ready	control-plane	xx	v1.xx

```
[devanksilswal@devanks-MacBook-Air ~ % kubectl get nodes
NAME           STATUS    ROLES           AGE     VERSION
minikube       Ready     control-plane   2m      v1.35.0
```

Useful Minikube Commands (Lab Ready)

Command	Purpose
minikube dashboard	Open K8s UI
minikube stop	Stop cluster
minikube delete	Delete cluster
minikube ssh	Access node
kubectl get pods -A	View all pods

```
devanssilswal@devans-MacBook-Air ~ % kubectl get pods -A
```

NAMESPACE	NAME	READY	STATUS	RESTARTS	AGE
kube-system	coredns-7d764666f9-tr2n6	1/1	Running	0	2m7s
kube-system	etcd-minikube	1/1	Running	0	2m13s
kube-system	kube-apiserver-minikube	1/1	Running	0	2m13s
kube-system	kube-controller-manager-minikube	1/1	Running	0	2m14s
kube-system	kube-proxy-zx9c6	1/1	Running	0	2m7s
kube-system	kube-scheduler-minikube	1/1	Running	0	2m13s
kube-system	storage-provisioner	1/1	Running	1 (97s ago)	2m12s

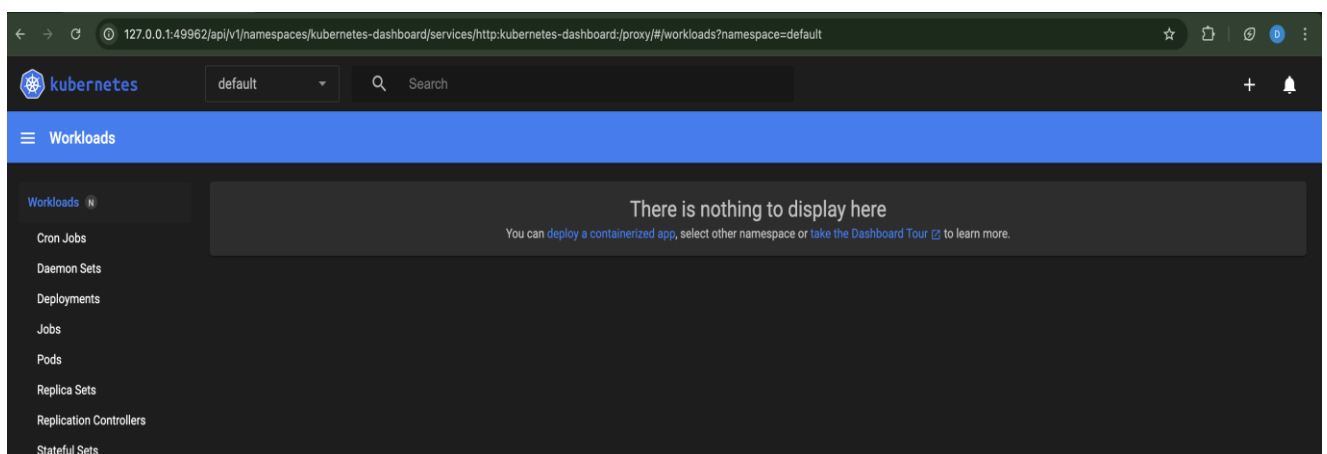
```
devanssilswal@devans-MacBook-Air ~ % minikube dashboard
```

```

🔧 Enabling dashboard ...
  ■ Using image docker.io/kubernetesui/dashboard:v2.7.0
  ■ Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
💡 Some dashboard features require the metrics-server addon. To enable all features please run:

    minikube addons enable metrics-server

👤 Verifying dashboard health ...
🚀 Launching proxy ...
👤 Verifying proxy health ...
🔗 Opening http://127.0.0.1:50437/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/ in
your default browser...
```



```
devanksilswal@devanks-MacBook-Air ~ % minikube ssh
```

```
Linux minikube 6.12.54-linuxkit #1 SMP Tue Nov 4 21:21:47 UTC 2025 aarch64
```

```
The programs included with the Debian GNU/Linux system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.
```

```
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent  
permitted by applicable law.
```

```
docker@minikube:~$
```

```
[docker@minikube:~$ exit  
logout
```

```
devanksilswal@devanks-MacBook-Air ~ % minikube stop
```

```
👋 Stopping node "minikube" ...  
🔴 Powering off "minikube" via SSH ...  
🔴 1 node stopped.
```

```
devanksilswal@devanks-MacBook-Air ~ % minikube delete
```

```
🔥 Deleting "minikube" in docker ...  
🔥 Deleting container "minikube" ...  
🔥 Removing /Users/devanksilswal/.minikube/machines/minikube ...  
💀 Removed all traces of the "minikube" cluster.
```