

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

## **Install Minikube on Linux (Ubuntu)**

```
sudo apt install -y docker.io # Ubuntu  
  
sudo systemctl start docker  
  
sudo systemctl enable docker  
  
sudo usermod -aG docker $USER  
  
newgrp docker
```

### **Step 2: Install kubectl**

```
curl -LO https://storage.googleapis.com/kubernetes-release/release/\$\(curl -s https://storage.googleapis.com/kubernetes-release/release/stable.txt\)/bin/linux/amd64/kubectl  
  
chmod +x kubectl  
  
sudo mv kubectl /usr/local/bin/
```

### **Verify:**

```
kubectl version --client
```

### **Step 3: Install Minikube**

```
curl -LO https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64  
  
chmod +x minikube-linux-amd64  
  
sudo mv minikube-linux-amd64 /usr/local/bin/minikube
```

### **Verify:**

```
minikube version
```

### **Step 4: Start Minikube**

```
minikube start --driver=docker
```

**Check Status:**

```
minikube status
```

**Install Minikube on Windows****Prerequisites**

- Docker Desktop installed
- Enable WSL2

**Install Minikube**

```
choco install minikube -y
```

**OR download exe:**

```
https://github.com/kubernetes/minikube/releases/latest
```

**Start:**

```
minikube start
```

**Install Minikube on macOS**

```
brew install minikube
```

```
brew install kubectl
```

**Start:**

```
minikube start
```

**Verify Kubernetes Cluster**

```
kubectl get nodes
```

Expected output:

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

```
PS C:\Users\HP> docker --version
Docker version 28.3.2, build 578ccf6
PS C:\Users\HP> |
```

```
PS C:\Users\HP> wsl -l -v
NAME                STATE              VERSION
* docker-desktop    Running            2
  Ubuntu-22.04       Running            2
PS C:\Users\HP> wsl -d Ubuntu-22.04
root@Shivang:/mnt/c/Users/HP# |
```

```
PS C:\Users\HP> wsl -d Ubuntu-22.04
root@Shivang:/mnt/c/Users/HP# docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
root@Shivang:/mnt/c/Users/HP# curl -LO https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/linux/amd64/kubectl
% Total    % Received % Xferd Average Speed   Time    Time     Time  Current
           Dload  Upload   Total   Spent    Left  Speed
100 138    100 138    0    0   219      0 --:--:-- --:--:-- --:--:-- 219
100 55.8M 100 55.8M    0    0 6010k      0 0:00:09 0:00:09 --:--:-- 7565k
root@Shivang:/mnt/c/Users/HP# sudo install kubectl /usr/local/bin/kubectl
root@Shivang:/mnt/c/Users/HP# kubectl version --client
Client Version: v1.35.0
Kustomize Version: v5.7.1
root@Shivang:/mnt/c/Users/HP# curl -LO https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64
% Total    % Received % Xferd Average Speed   Time    Time     Time  Current
           Dload  Upload   Total   Spent    Left  Speed
100 128M 100 128M    0    0 1474k      0 0:01:29 0:01:29 --:--:-- 5051k
root@Shivang:/mnt/c/Users/HP# sudo install minikube-linux-amd64 /usr/local/bin/minikube
root@Shivang:/mnt/c/Users/HP# |
```

```
root@Shivang:/mnt/c/Users/HP# minikube version
minikube version: v1.38.0
commit: de81223c61ab1bd97dcfcfa6d9d5c59e5da4a0cf
root@Shivang:/mnt/c/Users/HP# |
```

```
PS C:\Users\HP> wsl -d Ubuntu-22.04 -u shivang
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.6.87.2-microsoft-standard-WSL2 x86_64)
```

```
* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:        https://ubuntu.com/pro
```

System information as of Mon Feb 9 20:03:26 IST 2026

System load:	0.01	Processes:	41
Usage of /:	0.3% of 1006.85GB	Users logged in:	1
Memory usage:	10%	IPv4 address for eth0:	172.22.242.177
Swap usage:	0%		

This message is shown once a day. To disable it please create the  
/home/shivang/.hushlogin file.

```
shivang@Shivang:/mnt/c/Users/HP$ minikube start --driver=docker
🐳 minikube v1.38.0 on Ubuntu 22.04 (kvm/amd64)
💡 Using the docker driver based on user configuration
⚠️ Starting v1.39.0, minikube will default to "containerd" container runtime. See #21973 for more info.
🔧 Using Docker 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 ...
> gcr.io/k8s-minikube/kicbase...: 514.16 MiB / 514.16 MiB 100.00% 6.52 Mi
> preloaded-images-k8s-v18-v1...: 271.45 MiB / 271.45 MiB 100.00% 2.18 Mi
🔥 Creating docker container (CPUs=2, Memory=3072MB) ...
🔧 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
shivang@Shivang:/mnt/c/Users/HP$
```

```
shivang@Shivang:/mnt/c/Users/HP$ kubectl get nodes
NAME          STATUS    ROLES          AGE    VERSION
minikube      Ready     control-plane  23s    v1.35.0
shivang@Shivang:/mnt/c/Users/HP$
```

### 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