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
```

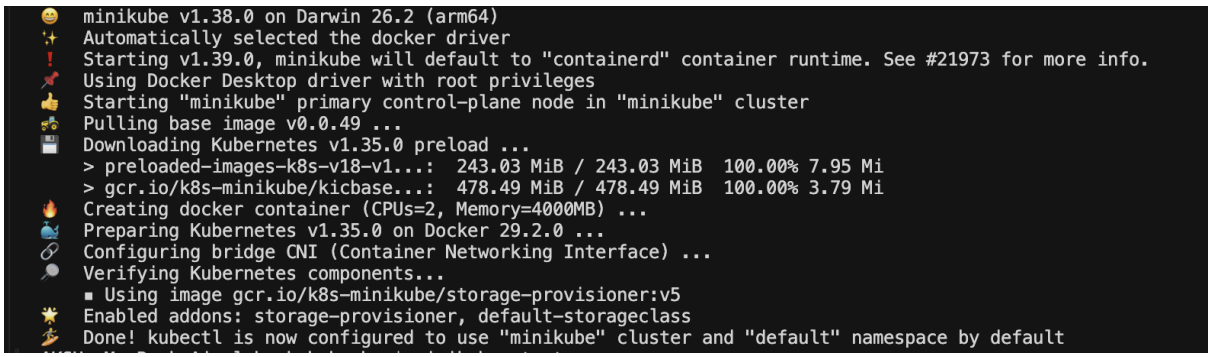
Install Minikube on macOS

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

```
NAME       STATUS   ROLES           AGE   VERSION
minikube   Ready    control-plane   113s  v1.35.0
```

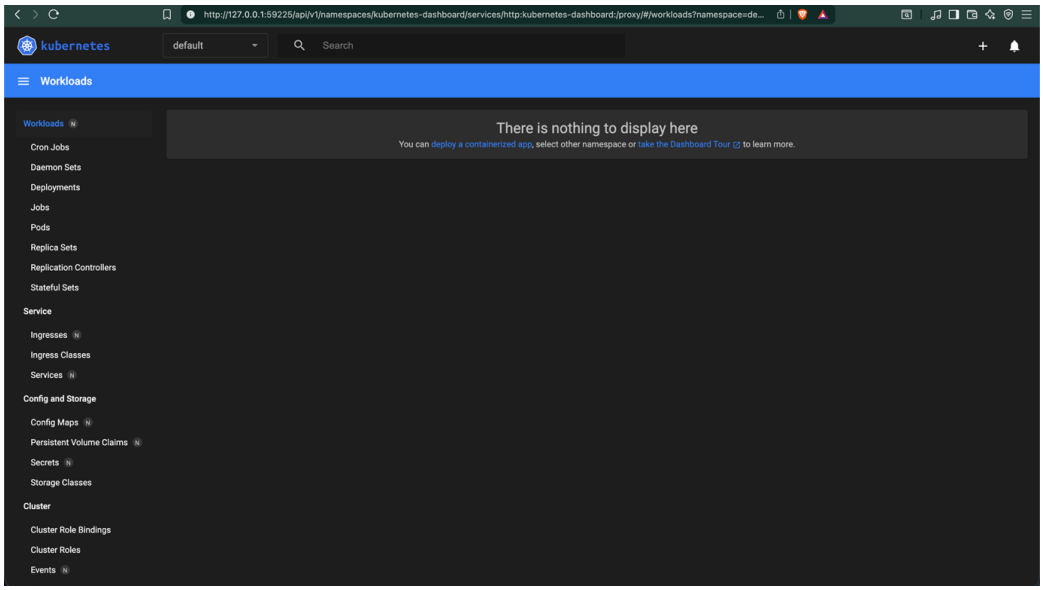
Useful Minikube Commands (Lab Ready)

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

```
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://127.0.0.1:59225/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/ in your default browser...
```



```
Linux minikube 6.12.65-linuxkit #1 SMP Thu Jan 15 14:58:53 UTC 2026 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:~$ ls
docker@minikube:~$ ls -a
.  ..  .bash_history  .bash_logout  .bashrc  .profile  .ssh  .sudo_as_admin_successful
docker@minikube:~$
```

```
NAMESPACE              NAME                                         READY   STATUS    RESTARTS         AGE
kube-system            coredns-7d764666f9-7x6vh                     1/1     Running   1 (3m58s ago)    4m33s
kube-system            etcd-minikube                                1/1     Running   1 (3m56s ago)    4m39s
kube-system            kube-apiserver-minikube                      1/1     Running   1 (3m53s ago)    4m39s
kube-system            kube-controller-manager-minikube             1/1     Running   1 (4m3s ago)     4m39s
kube-system            kube-proxy-4njjn                             1/1     Running   1 (4m3s ago)     4m33s
kube-system            kube-scheduler-minikube                      1/1     Running   1 (4m3s ago)     4m39s
kube-system            storage-provisioner                          1/1     Running   1 (4m3s ago)     4m38s
kubernetes-dashboard   dashboard-metrics-scraper-5565989548-9slf7   1/1     Running   0                2m21s
kubernetes-dashboard   kubernetes-dashboard-b84665fb8-w8tnh         1/1     Running   0                2m21s
```

```
✋  Stopping node "minikube"  ...
🛑  Powering off "minikube" via SSH ...
🛑  1 node stopped.
```

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