# Setup minikube at your local and explore creating namespace

How to install Kubernet

Follow the below link for installing minikub:

https://minikube.sigs.k8s.io/docs/start/?arch=%2Fmacos%2Farm64%2Fstable%2Fbinary+download

Am using chocolatey to install minikube on windows

Click on the buttons that describe your target platform. For other architectures, see the release page for a complete list of minikube binaries.

Operating system: Linux | macOS | **Windows**

Architecture: **x86-64**

Release type: **Stable**

Installer type: .exe download | Windows Package Manager | **Chocolatey**

To install the latest minikube **stable** release on **x86-64 Windows** using **Chocolatey**:

If the Chocolatey Package Manager is installed, use the following command:

```
choco install minikube
```

Copied!

```
PROBLEMS 1  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS                    choco

PS C:\K8-D>
PS C:\K8-D>
PS C:\K8-D>
PS C:\K8-D> choco install minikube
Chocolatey v2.4.3
Chocolatey detected you are not running from an elevated command shell
 (cmd/powershell).

 You may experience errors - many functions/packages
 require admin rights. Only advanced users should run choco w/out an
 elevated shell. When you open the command shell, you should ensure
 that you do so with "Run as Administrator" selected. If you are
 attempting to use Chocolatey in a non-administrator setting, you
 must select a different location other than the default install
 location. See
 https://docs.chocolatey.org/en-us/choco/setup#non-administrative-install
Ln 1, Col 1  Spaces: 2  UTF-8  CRLF  {} YAML  kubernetes://schema/v1@pod
```

```
 Do you want to continue?([Y]es/[N]o): yes

Installing the following packages:
minikube
By installing, you accept licenses for the packages.
Minikube v1.36.0 already installed.
 Use --force to reinstall, specify a version to install, or try upgrade.

Chocolatey installed 0/1 packages.
 See the log for details (C:\ProgramData\chocolatey\logs\chocolatey.log).

Warnings:
 - Minikube - Minikube v1.36.0 already installed.
 Use --force to reinstall, specify a version to install, or try upgrade.
PS C:\K8-D>
```

## Installing  kubect

https://kubernetes.io/docs/tasks/tools/install-kubectl-windows/

Kubectl is installed

```
 Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
PS C:\K8-D> curl.exe -LO "https://dl.k8s.io/release/v1.33.0/bin/windows/amd64/kubectl.exe"
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   138  100   138    0     0    118      0  0:00:01  0:00:01 --:--:--   118
100 58.8M  100 58.8M    0     0  1916k      0  0:00:31  0:00:31 --:--:-- 2135k
PS C:\K8-D> kubectl version --client
Client Version: v1.33.2
Kustomize Version: v5.6.0
PS C:\K8-D>
```

# Start your cluster

Minikube start

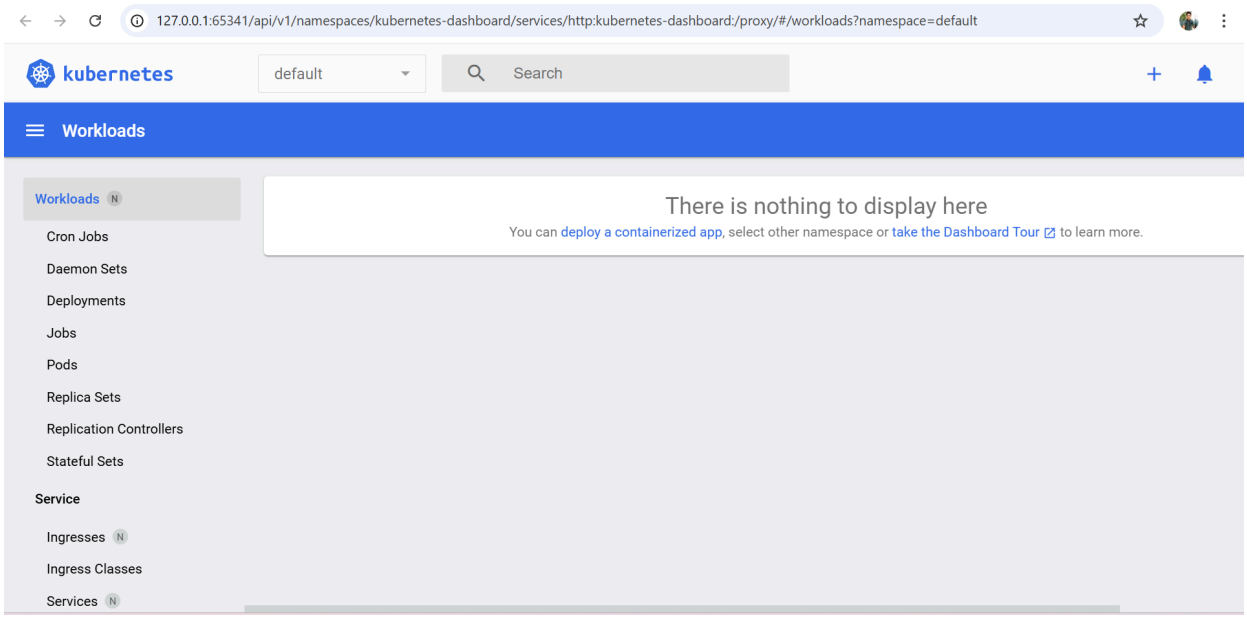
Minikube status

Minikube dashboard

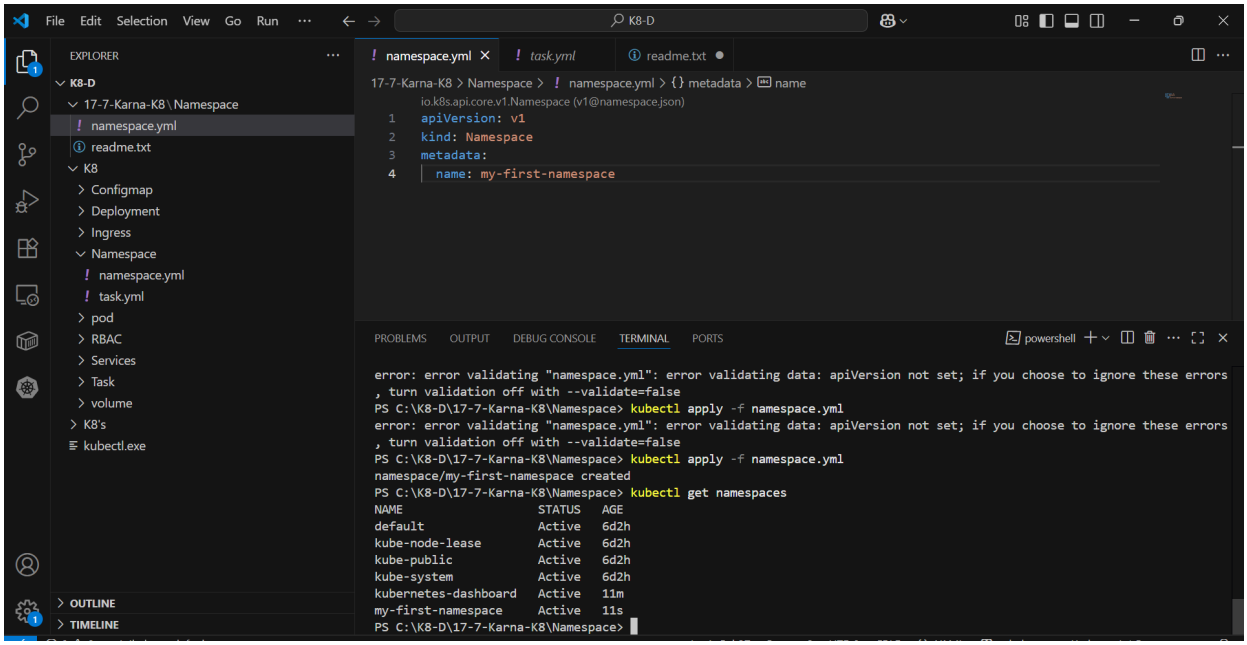
```
PS C:\K8-D> minikube start
😄  minikube v1.36.0 on Microsoft Windows 11 Pro 10.0.26100.4652 Build 26100.4652
✨  Using the docker driver based on existing profile
👍  Starting "minikube" primary control-plane node in "minikube" cluster
🚜  Pulling base image v0.0.47 ...
🔄  Restarting existing docker container for "minikube" ...
❗  Failing to connect to https://registry.k8s.io/ from inside the minikube container
💡  To pull new external images, you may need to configure a proxy: https://minikube.sigs.k8s.io/docs/reference/networking/proxy/
🐳  Preparing Kubernetes v1.33.1 on Docker 28.1.1 ...
🔎  Verifying Kubernetes components...
    ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
🌟  Enabled addons: default-storageclass, storage-provisioner
🏄  Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
```

```
PS C:\K8-D> minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured

PS C:\K8-D> 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:
```




**Exploring creating namespace**


File Edit Selection View Go Run
K8-D
EXPLORER
K8-D
17-7-Karna-K8 \ Namespace
namespace.yml
readme.txt
K8
Configmap
Deployment
Ingress
Namespace
namespace.yml
task.yml
pod
RBAC
Services
Task
volume
K8's
kubectl.exe
OUTLINE
TIMELINE
namespace.yml
task.yml
readme.txt
17-7-Karna-K8 > Namespace > namespace.yml > { } metadata > name
io.k8s.api.core.v1.Namespace (v1@namespace.json)
1 apiVersion: v1
2 kind: Namespace
3 metadata:
4 name: my-first-namespace
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
powershell
error: error validating "namespace.yml": error validating data: apiVersion not set; if you choose to ignore these errors
, turn validation off with --validate=false
PS C:\K8-D\17-7-Karna-K8\Namespace> kubectl apply -f namespace.yml
error: error validating "namespace.yml": error validating data: apiVersion not set; if you choose to ignore these errors
, turn validation off with --validate=false
PS C:\K8-D\17-7-Karna-K8\Namespace> kubectl apply -f namespace.yml
namespace/my-first-namespace created
PS C:\K8-D\17-7-Karna-K8\Namespace> kubectl get namespaces
NAME STATUS AGE
default Active 6d2h
kube-node-lease Active 6d2h
kube-public Active 6d2h
kube-system Active 6d2h
kubernetes-dashboard Active 11m
my-first-namespace Active 11s
PS C:\K8-D\17-7-Karna-K8\Namespace>

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