

1.Go to Kubernetes website to download kubectl 4 commands

2.User srikar wattsap for minikube installation

Minikube is a tool that makes it easy to run Kubernetes locally. Here's a step-by-step guide to install and start Minikube:

1. Install Minikube

On Ubuntu (or other Debian-based systems)

Install Dependencies:

Ensure you have curl, apt-transport-https, and virtualbox (or another VM driver) installed:

bash

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sudo apt-get update

sudo apt-get install -y curl apt-transport-https virtualbox

Download Minikube:

Download the Minikube binary:

bash

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curl -LO <https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64>

Install Minikube:

Move the binary to /usr/local/bin:

bash

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sudo install minikube-linux-amd64 /usr/local/bin/minikube

Verify Installation:

Check the version of Minikube to ensure it's installed correctly:

bash

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minikube version

3.Create infinite loop file and push to docker hub

```
omkar@krishna: ~/muni
v1.0: digest: sha256:7ab41732b4425a69e2911fcf794af873d97505eb407f964437f1488fce16e6c1 size: 1783
omkar@krishna:~/muni$ minikube start
minikube v1.33.1 on Ubuntu 22.04 (amd64)
Using the docker driver based on existing profile
Starting "minikube" primary control-plane node in "minikube" cluster
Pulling base image v0.0.44 ...
Restarting existing docker container for "minikube" ...
Preparing Kubernetes v1.30.0 on Docker 26.1.1 ...
Verifying Kubernetes components...
  Using image docker.io/kubernetes/dashboard:v2.7.0
  Using image gcr.io/k8s-minikube/storage-provisioner:v5
  Using image docker.io/kubernetes/metrics-scrafer:v1.0.8
Some dashboard features require the metrics-server addon. To enable all features please run:

minikube addons enable metrics-server

Enabled addons: storage-provisioner, dashboard, default-storageclass
Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
omkar@krishna:~/muni$ nano deployment.yaml
omkar@krishna:~/muni$ kubectl apply -f deployment.yaml
deployment.apps/model-deployment created
omkar@krishna:~/muni$ kubectl create deployment app --image=omkarspc/model
error: failed to create deployment: deployments.apps "app" already exists
omkar@krishna:~/muni$ kubectl create deployment app3 --image=omkarspc/model
deployment.apps/app3 created
omkar@krishna:~/muni$ kubectl get pods
NAME                                READY    STATUS              RESTARTS   AGE
app-665db9c89d-d77tt                0/1      ImagePullBackOff    0           34m
app3-5b878f4457-bdngc               0/1      ContainerCreating   0           10s
main-f88b7b84d-2b27n                1/1      Running             1 (2m47s ago) 15m
model-deployment-bf7954468-4grd7     1/1      Running             0           59s
my-app-deployment-69f8c5d848-b2tdc   1/1      Running             1 (2m47s ago) 14m
my-app-deployment-69f8c5d848-bwrc8   1/1      Running             1 (2m47s ago) 14m
my-app-deployment-69f8c5d848-h4qkt   1/1      Running             1 (2m47s ago) 14m
omkar@krishna:~/muni$ nano deployment.yaml
omkar@krishna:~/muni$ kubectl get pods
NAME                                READY    STATUS              RESTARTS   AGE
app-665db9c89d-d77tt                0/1      ImagePullBackOff    0           40m
app3-5b878f4457-bdngc               0/1      ErrImagePull        0           6m32s
main-f88b7b84d-2b27n                1/1      Running             1 (9m9s ago) 21m
model-deployment-bf7954468-4grd7     1/1      Running             0           7m21s
my-app-deployment-69f8c5d848-b2tdc   1/1      Running             1 (9m9s ago) 20m
my-app-deployment-69f8c5d848-bwrc8   1/1      Running             1 (9m9s ago) 20m
```