Minikube is a tool that makes it easy to run Kubernetes locally. Minikube runs a single-node Kubernetes cluster inside a VM on your laptop for users looking to try out Kubernetes or develop with it day-to-day.

Minikube Commands:

minikube version

minikube help

minikube start

minikube status

minikube dashboard

minikube dashboard –url=true

minikube ip

minikube service

minikube stop

minikube delete

Kubectl commands:

kubectl cluster-info

kubectl. The Kubernetes command-line tool, kubectl, **allows you to run commands against Kubernetes clusters**. You can use kubectl to deploy applications, inspect and manage cluster resources, and view logs..Kubectl is installable on a variety of Linux platforms, macOS and Windows.

The cluster can be interacted with using the kubectl CLI. This is the main approach used for managing Kubernetes and the applications running on top of the cluster.

Details of the cluster and its health status can be discovered via the above command

To view the nodes in the cluster using kubectl get nodes

If the node is marked as **NotReady** then it is still starting the components.

This command shows all nodes that can be used to host our applications. Now we have only one node, and we can see that it’s status is ready (it is ready to accept applications for deployment).

kubectl get nodes

kubectl get pods

kubectl get services

kubectl get deployments

kubectl get configmaps

kubectl get secrets

kubectl get ingress

Kubectl get namespaces

Kubectl create namespace test

Kubectl get pods –n test -> get pods with given namespace

Kubectl describe

Kubectl describe pod coredns-78fcd69978-m6lhh –n kube-system

kubectl describe deployments hello-minikube

kubectl create

kubectl expose

kubectl delete

Step 1 - Create a Kubernetes Deployment using an existing image

kubectl create deployment tcs-minikube --image=k8s.gcr.io/echoserver:1.10

Step 2 - Expose the deployment as a service

kubectl expose deployment tcs-minikube --type=NodePort --port=8088

Step 3 - Check the nodes and pods

kubectl get nodes

kubectl get pods

**kubectl describe services/XXXX**

Step 4 - Get URL of the service

minikube service hello-minikube --url

Step 5 - Delete service and deployment

kubectl delete services hello-minikube

kubectl delete deployment hello-minikube

Step 6 - Stop minikube cluster

minikube stop

Step 7 - Delete minikube cluster

minikube delete

Example 2:

kubectl create deployment ngnix-depl --image=nginx

// or

kubectl run ngnix-depl --image=nginx --port=85

kubectl expose deployment ngnix-depl --type=NodePort --port=8088

Step 3 - Check the nodes and pods

kubectl get nodes

kubectl get pods

Step 4 - Get URL of the service

minikube service ngnix-depl --url

Step 5 - Delete service and deployment

kubectl delete services ngnix-depl

kubectl delete deployment ngnix-depl

https://kubernetes.io/docs/reference/generated/kubectl/kubectl-commands