POC

Uname –a : – to find version of OS

kubectl get services --all-namespaces

kubectl get pods --all-namespaces

kubectl get nodes

* **Create A Jenkins Deployment**

<https://devopscube.com/setup-jenkins-on-kubernetes-cluster/>

1. Create a Namespace for Jenkins. So that we will have an isolation for the CI/CD environment.

kubectl create ns Jenkins

1. Create a Deployment file named jenkins-deployment.yaml the latest Jenkins Docker Image.

|  |
| --- |
| apiVersion: extensions/v1beta1 # for versions before 1.7.0 use apps/v1beta1  kind: Deployment  metadata:    name: jenkins-deployment  spec:    replicas: 1    selector:      matchLabels:        app: jenkins    template:      metadata:        labels:          app: jenkins      spec:        containers:        - name: jenkins          image: jenkins:2.60.3          ports:          - containerPort: 8080 |



3. Create the jenkins deployment in jenkins namespace using the following command.

kubectl create -f jenkins-deployment.yaml --namespace=Jenkins

4.Now, you can get the deployment details using the following command

kubectl  describe deployments --namespace=Jenkins

### Create A Jenkins Service

We have created a deployment. However is not accessible to the outside world. For accessing the Jenkins container from outside world, we should create a service and map it to the deployment.

1. Create a jenkins-service.yaml file with the following contents.

|  |
| --- |
| apiVersion: v1  kind: Service  metadata:    name: jenkins  spec:    type: NodePort    ports:      - port: 8080        targetPort: 8080        nodePort: 30000    selector:      app: jenkins |

2.Create the jenkins service using the following command.

kubectl create -f jenkins-service.yaml --namespace=Jenkins

Now if you browse to any one of the Node IP on port 30000, you will be able to access the Jenkins dashboard.

http://<node-ip>:3000

make sure the node ip is open

if in google cloud ,go to node details.click network details(view details button).In that change firewall rules

In firewall rule details ,in protocol and ports ,click Allow all

1. kubectl get pods --namespace=Jenkins
2. And with the pod name, you can get the logs as shown below. replace the pod name with your pod name.

kubectl logs jenkins-deployment-2539456353-j00w5 --namespace=jenkins

e password can be found at the end of the log