DEPLOY JENKINS ON KUBERNETES

The Nautilus DevOps team is planning to set up a Jenkins CI server to create/manage some deployment pipelines for some of the projects. They want to set up the Jenkins server on Kubernetes cluster. Below you can find more details about the task:

1) Create namespace jenkins

2) Create a Service for jenkins deployment. Service name should be jenkins-service under jenkins namespace, type should be NodePort, targetport should be 8080 and nodePort should be 30008

3) Create a Jenkins Deployment under jenkins namespace, It should be name as jenkins-deployment , labels app should be jenkins , container name should be jenkins-container , use jenkins image, containerPort should be 8080 and replicas count should be 1.

Make sure to wait for pods to be in running state before clicking on Finish button.

SOLUTION

Kubectl create namespace Jenkins

Vi Jenkins.yml

apiVersion: v1

kind: Service

metadata:

name: jenkins-service

namespace: jenkins

spec:

type: NodePort

selector:

app: jenkins

ports:

- port: 8080

targetPort: 8080

nodePort: 30008

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apiVersion: apps/v1

kind: Deployment

metadata:

name: jenkins-deployment

namespace: jenkins

labels:

app: jenkins

spec:

replicas: 1

selector:

matchLabels:

app: jenkins

template:

metadata:

labels:

app: jenkins

spec:

containers:

- name: jenkins-container

image: jenkins/jenkins

ports:

- containerPort: 8080

Kubectl get deploy -n Jenkins

kubectl exec jenkins-deployment-6b6c78f968-9x2tw -n jenkins -- curl http://localhost:8080