**11. The magic of helm**

--- in this session, we will install a package to the kubernetes cluster using the helm install command.

**Mysql db installation with helm**

**# Install mysql with helm**

--- helm install <dbname> bitnami/mysql

--- helm install mydb bitnami/mysql

NAME: mydb

LAST DEPLOYED: Sun Sep 11 14:29:48 2022

NAMESPACE: default

STATUS: deployed

REVISION: 1

TEST SUITE: None

NOTES:

CHART NAME: mysql

CHART VERSION: 9.3.2

APP VERSION: 8.0.30

\*\* Please be patient while the chart is being deployed \*\*

Tip:

  Watch the deployment status using the command: kubectl get pods -w --namespace default

Services:

  echo Primary: mydb-mysql.default.svc.cluster.local:3306

Execute the following to get the administrator credentials:

  echo Username: root

  MYSQL\_ROOT\_PASSWORD=$(kubectl get secret --namespace default mydb-mysql -o jsonpath="{.data.mysql-root-password}" | base64 -d)

To connect to your database:

  1. Run a pod that you can use as a client:

      kubectl run mydb-mysql-client --rm --tty -i --restart='Never' --image  docker.io/bitnami/mysql:8.0.30-debian-11-r15 --namespace default --env MYSQL\_ROOT\_PASSWORD=$MYSQL\_ROOT\_PASSWORD --command -- bash

  2. To connect to primary service (read/write):

      mysql -h mydb-mysql.default.svc.cluster.local -uroot -p"$MYSQL\_ROOT\_PASSWORD"

--- this is the output of above command.

**# To see the above output**

--- helm status mydb

**Jenkins installation using helm**

**# Jenkins installation using helm**

--- helm install jenkins bitnami/jenkins

NAME: jenkins

LAST DEPLOYED: Sun Sep 11 14:38:23 2022

NAMESPACE: default

STATUS: deployed

REVISION: 1

TEST SUITE: None

NOTES:

CHART NAME: jenkins

CHART VERSION: 11.0.1

APP VERSION: 2.361.1

\*\* Please be patient while the chart is being deployed \*\*

1. Get the Jenkins URL by running:

\*\* Please ensure an external IP is associated to the jenkins service before proceeding \*\*

\*\* Watch the status using: kubectl get svc --namespace default -w jenkins \*\*

  export SERVICE\_IP=$(kubectl get svc --namespace default jenkins --template "{{ range (index .status.loadBalancer.ingress 0) }}{{ . }}{{ end }}")

  echo "Jenkins URL: http://$SERVICE\_IP/"

2. Login with the following credentials

  echo Username: user

  echo Password: $(kubectl get secret --namespace default jenkins -o jsonpath="{.data.jenkins-password}" | base64 -d)

**# To see the above output**

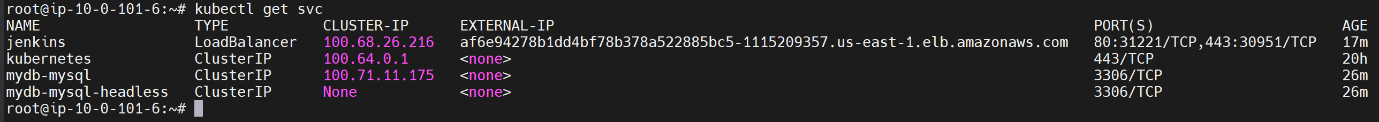
--- helm status jenkins

**# List the pod**

--- kubectl get pod

**# List the service**

--- kubectl get svc



--- **note** – it deployed a classic load balancer.