**19. helm --dry-run**

--- **note** - you will learn how to run dry runs for your helm installations and upgrades

# Dry run mysql installation using helm

---

#helm install mysql bitnami/mysql --values /root/mysql/values.yml --dry-run

NAME: mysql

LAST DEPLOYED: Mon Sep 12 06:30:10 2022

NAMESPACE: default

STATUS: pending-install

REVISION: 1

TEST SUITE: None

HOOKS:

MANIFEST:

---

# Source: mysql/templates/serviceaccount.yaml

apiVersion: v1

kind: ServiceAccount

metadata:

  name: mysql

  namespace: "default"

  labels:

    app.kubernetes.io/name: mysql

    helm.sh/chart: mysql-9.3.2

    app.kubernetes.io/instance: mysql

    app.kubernetes.io/managed-by: Helm

  annotations:

automountServiceAccountToken: true

secrets:

  - name: mysql

---

# Source: mysql/templates/secrets.yaml

apiVersion: v1

kind: Secret

metadata:

  name: mysql

  namespace: "default"

  labels:

    app.kubernetes.io/name: mysql

    helm.sh/chart: mysql-9.3.2

    app.kubernetes.io/instance: mysql

    app.kubernetes.io/managed-by: Helm

type: Opaque

data:

  mysql-root-password: "YWRtaW4xMjM="

  mysql-password: "TDQxNFE3WHIzTQ=="

---

# Source: mysql/templates/primary/configmap.yaml

apiVersion: v1

kind: ConfigMap

metadata:

  name: mysql

  namespace: "default"

  labels:

    app.kubernetes.io/name: mysql

    helm.sh/chart: mysql-9.3.2

    app.kubernetes.io/instance: mysql

    app.kubernetes.io/managed-by: Helm

    app.kubernetes.io/component: primary

data:

  my.cnf: |-

    [mysqld]

    default\_authentication\_plugin=mysql\_native\_password

    skip-name-resolve

    explicit\_defaults\_for\_timestamp

    basedir=/opt/bitnami/mysql

    plugin\_dir=/opt/bitnami/mysql/lib/plugin

    port=3306

    socket=/opt/bitnami/mysql/tmp/mysql.sock

    datadir=/bitnami/mysql/data

    tmpdir=/opt/bitnami/mysql/tmp

    max\_allowed\_packet=16M

    bind-address=0.0.0.0

    pid-file=/opt/bitnami/mysql/tmp/mysqld.pid

    log-error=/opt/bitnami/mysql/logs/mysqld.log

    character-set-server=UTF8

    collation-server=utf8\_general\_ci

    slow\_query\_log=0

    slow\_query\_log\_file=/opt/bitnami/mysql/logs/mysqld.log

    long\_query\_time=10.0

    [client]

    port=3306

    socket=/opt/bitnami/mysql/tmp/mysql.sock

    default-character-set=UTF8

    plugin\_dir=/opt/bitnami/mysql/lib/plugin

    [manager]

    port=3306

    socket=/opt/bitnami/mysql/tmp/mysql.sock

    pid-file=/opt/bitnami/mysql/tmp/mysqld.pid

---

# Source: mysql/templates/primary/svc-headless.yaml

apiVersion: v1

kind: Service

metadata:

  name: mysql-headless

  namespace: "default"

  labels:

    app.kubernetes.io/name: mysql

    helm.sh/chart: mysql-9.3.2

    app.kubernetes.io/instance: mysql

    app.kubernetes.io/managed-by: Helm

    app.kubernetes.io/component: primary

  annotations:

spec:

  type: ClusterIP

  clusterIP: None

  publishNotReadyAddresses: true

  ports:

    - name: mysql

      port: 3306

      targetPort: mysql

  selector:

    app.kubernetes.io/name: mysql

    app.kubernetes.io/instance: mysql

    app.kubernetes.io/component: primary

---

# Source: mysql/templates/primary/svc.yaml

apiVersion: v1

kind: Service

metadata:

  name: mysql

  namespace: "default"

  labels:

    app.kubernetes.io/name: mysql

    helm.sh/chart: mysql-9.3.2

    app.kubernetes.io/instance: mysql

    app.kubernetes.io/managed-by: Helm

    app.kubernetes.io/component: primary

  annotations:

spec:

  type: ClusterIP

  sessionAffinity: None

  ports:

    - name: mysql

      port: 3306

      protocol: TCP

      targetPort: mysql

      nodePort: null

  selector:

    app.kubernetes.io/name: mysql

    app.kubernetes.io/instance: mysql

    app.kubernetes.io/component: primary

---

# Source: mysql/templates/primary/statefulset.yaml

apiVersion: apps/v1

kind: StatefulSet

metadata:

  name: mysql

  namespace: "default"

  labels:

    app.kubernetes.io/name: mysql

    helm.sh/chart: mysql-9.3.2

    app.kubernetes.io/instance: mysql

    app.kubernetes.io/managed-by: Helm

    app.kubernetes.io/component: primary

spec:

  replicas: 1

  podManagementPolicy: ""

  selector:

    matchLabels:

      app.kubernetes.io/name: mysql

      app.kubernetes.io/instance: mysql

      app.kubernetes.io/component: primary

  serviceName: mysql

  updateStrategy:

    type: RollingUpdate

  template:

    metadata:

      annotations:

        checksum/configuration: 5c52e411b3a9519246a44d9021f3fe600758cd9fa87562f356592bafbdff7c31

      labels:

        app.kubernetes.io/name: mysql

        helm.sh/chart: mysql-9.3.2

        app.kubernetes.io/instance: mysql

        app.kubernetes.io/managed-by: Helm

        app.kubernetes.io/component: primary

    spec:

      serviceAccountName: mysql

      affinity:

        podAffinity:

        podAntiAffinity:

          preferredDuringSchedulingIgnoredDuringExecution:

            - podAffinityTerm:

                labelSelector:

                  matchLabels:

                    app.kubernetes.io/name: mysql

                    app.kubernetes.io/instance: mysql

                namespaces:

                  - "default"

                topologyKey: kubernetes.io/hostname

              weight: 1

        nodeAffinity:

      securityContext:

        fsGroup: 1001

      initContainers:

      containers:

        - name: mysql

          image: docker.io/bitnami/mysql:8.0.30-debian-11-r15

          imagePullPolicy: "IfNotPresent"

          securityContext:

            runAsNonRoot: true

            runAsUser: 1001

          env:

            - name: BITNAMI\_DEBUG

              value: "false"

            - name: MYSQL\_ROOT\_PASSWORD

              valueFrom:

                secretKeyRef:

                  name: mysql

                  key: mysql-root-password

            - name: MYSQL\_DATABASE

              value: "my\_database"

          envFrom:

          ports:

            - name: mysql

              containerPort: 3306

          livenessProbe:

            failureThreshold: 3

            initialDelaySeconds: 5

            periodSeconds: 10

            successThreshold: 1

            timeoutSeconds: 1

            exec:

              command:

                - /bin/bash

                - -ec

                - |

                  password\_aux="${MYSQL\_ROOT\_PASSWORD:-}"

                  if [[ -f "${MYSQL\_ROOT\_PASSWORD\_FILE:-}" ]]; then

                      password\_aux=$(cat "$MYSQL\_ROOT\_PASSWORD\_FILE")

                  fi

                  mysqladmin status -uroot -p"${password\_aux}"

          readinessProbe:

            failureThreshold: 3

            initialDelaySeconds: 5

            periodSeconds: 10

            successThreshold: 1

            timeoutSeconds: 1

            exec:

              command:

                - /bin/bash

                - -ec

                - |

                  password\_aux="${MYSQL\_ROOT\_PASSWORD:-}"

                  if [[ -f "${MYSQL\_ROOT\_PASSWORD\_FILE:-}" ]]; then

                      password\_aux=$(cat "$MYSQL\_ROOT\_PASSWORD\_FILE")

                  fi

                  mysqladmin status -uroot -p"${password\_aux}"

          startupProbe:

            failureThreshold: 10

            initialDelaySeconds: 15

            periodSeconds: 10

            successThreshold: 1

            timeoutSeconds: 1

            exec:

              command:

                - /bin/bash

                - -ec

                - |

                  password\_aux="${MYSQL\_ROOT\_PASSWORD:-}"

                  if [[ -f "${MYSQL\_ROOT\_PASSWORD\_FILE:-}" ]]; then

                      password\_aux=$(cat "$MYSQL\_ROOT\_PASSWORD\_FILE")

                  fi

                  mysqladmin status -uroot -p"${password\_aux}"

          resources:

            limits: {}

            requests: {}

          volumeMounts:

            - name: data

              mountPath: /bitnami/mysql

            - name: config

              mountPath: /opt/bitnami/mysql/conf/my.cnf

              subPath: my.cnf

      volumes:

        - name: config

          configMap:

            name: mysql

  volumeClaimTemplates:

    - metadata:

        name: data

        labels:

          app.kubernetes.io/name: mysql

          app.kubernetes.io/instance: mysql

          app.kubernetes.io/component: primary

        annotations:

      spec:

        accessModes:

          - "ReadWriteOnce"

        resources:

          requests:

            storage: "8Gi"

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