Statefulsets

**Kubectl create namespace mysql**

**Vi my-sql-cm.yaml**

**apiVersion: v1**

**kind: ConfigMap**

**metadata:**

**name: mysql-config**

**data:**

**my.cnf: |**

**[mysqld]**

**datadir=/var/lib/mysql**

**socket=/var/run/mysqld/mysqld.sock**

**Kubectl apply -f .yml -n mysql**

**kubectl get configmaps -n mysql**

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**Vi my-sql-sc.yaml**

**apiVersion: storage.k8s.io/v1**

**kind: StorageClass**

**metadata:**

**name: gcp-storage-class**

**provisioner: kubernetes.io/gce-pd**

**parameters:**

**type: pd-standard**

**reclaimPolicy: Delete**

**Kubectl apply -f .yml -n mysql**

**kubectl get storageclass**

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vi **my-sql-secret.yaml**

**apiVersion: v1**

**kind: Secret**

**metadata:**

**name: mysql-secret**

**type: Opaque**

**data:**

**mysql-root-password: U2VjdXJlKjEyMw==**

To create mysql generic password:

kubectl create secret generic mysql-root-password

--from-literal=password=YOUR\_ROOT\_PASSWORD

--namespace mysql

**kubectl get secret mysql-root-password --namespace mysql -o yaml**

This will give random password keepit in secret.yml

data:

password: WU9VUl9ST09UX1BBU1NXT1JE\

kind: Secret

**Kubectl apply -f .yml -n mysql**

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vi **my-sql-service.yaml**

**apiVersion: v1**

**kind: Service**

**metadata:**

**name: mysql**

**spec:**

**selector:**

**app: mysql**

**ports:**

**- protocol: TCP**

**port: 3306**

**targetPort: 3306**

**clusterIP: None  #Headless**

**Kubectl apply -f .yml -n mysql**

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vi **my-sql-sts.yaml**

**apiVersion: apps/v1**

**kind: StatefulSet**

**metadata:**

**name: mysql**

**spec:**

**selector:**

**matchLabels:**

**app: mysql**

**serviceName: mysql**

**replicas: 3**

**template:**

**metadata:**

**labels:**

**app: mysql**

**spec:**

**containers:**

**- name: mysql**

**image: mysql:latest**

**env:**

**- name: MYSQL\_ROOT\_PASSWORD**

**valueFrom:**

**secretKeyRef:**

**name: mysql-secret**

**key: mysql-root-password**

**ports:**

**- containerPort: 3306**

**name: mysql**

**volumeMounts:**

**- name: data-volume**

**mountPath: /var/lib/mysql**

**- name: mysql-config**

**mountPath: /etc/mysql/conf.d**

**readOnly: true**

**volumes:**

**- name: mysql-config**

**configMap:**

**name: mysql-config**

**volumeClaimTemplates:**

**- metadata:**

**name: data-volume**

**spec:**

**storageClassName: gcp-storage-class**

**accessModes:**

**- ReadWriteOnce**

**resources:**

**requests:**

**storage: 10Gi**

**Kubectl apply -f .yml -n mysql**

**kubectl get statefulsets -n mysql**

By default if we create stateful sets it will have Persistent volumes for every pod.

**kubectl get pvc -n mysql**