***Strategy***

168 oc create deployment strategy --image quay.io/mayank123modi/strategy:v1

169 oc get all

170 oc expose deployment strategy --port 80

171 oc get svc

172 oc expose svc strategy

173 oc get route

174 oc get all

175 oc describe deployment strategy

176 oc scale deployment strategy --replicas=20

177 oc get pods

178 oc edit deployment strategy

179 oc get deployment strategy -o wide

180 oc set image deployment strategy strategy=quay.io/mayank123modi/strategy:v2 ; watch oc get pods

181 oc get pods

182 oc rollout history deployment strategy

183 oc rollout undo deployment strategy ; oc get pods

184 oc describe pod strategy-6cbc4f4b4c-mclpq

185 oc rollout undo deployment strategy ; oc get pods

186 oc get pods

187 oc get pods -w

188 oc get pods

189 oc describe deployment strategy

190 oc edit deployment strategy

191 oc create deployment strategy --image quay.io/mayank123modi/strategy:v1 --dry-run -o yaml > code/6-dep-st.yml

192 vim code/6-dep-st.yml

193 oc delete all --all --force

194 oc create -f code/6-dep-st.yml

195 oc describe deployment strategy

196 oc expose deployment strategy --port 80

197 oc expose svc strategy

198 oc get route

199 oc scale deployment strategy --replicas=20

200 oc get pods

201 oc get deployment -o wide

202 oc set image deployment strategy strategy=quay.io/mayank123modi/strategy:v2 ; oc get pods

203 oc get pods

204 oc rollout undo deployment strategy ; oc get pods

205 history

[root@openshift ~]# cat code/6-dep-st.yml

apiVersion: apps/v1

kind: Deployment

metadata:

creationTimestamp: null

labels:

app: strategy

name: strategy

spec:

replicas: 1

selector:

matchLabels:

app: strategy

strategy:

type: Recreate

template:

metadata:

creationTimestamp: null

labels:

app: strategy

spec:

containers:

- image: quay.io/mayank123modi/strategy:v1

name: strategy

resources: {}

status: {}

**ConfigMap & Secrets**

**213 oc run mysql --image quay.io/mayank123modi/mysql**

**214 oc get pod -w**

**215 oc delete deployment strategy**

**216 oc get pod -w**

**217 oc get pod**

**218 oc logs mysql**

**219 oc run mysql1 --image quay.io/mayank123modi/mysql --env MYSQL\_ROOT\_PASSWORD=mayank1234**

**220 oc get pods**

**221 oc describe pod mysql1**

**222 oc get pods**

**223 oc exec -it mysql1 -- bash**

**224 history**

**225 cd code/**

**226 s**

**227 ls**

**228 oc run mysql1 --image quay.io/mayank123modi/mysql --env MYSQL\_ROOT\_PASSWORD=mayank1234 --dry-run -o yaml**

**229 oc run mysql1 --image quay.io/mayank123modi/mysql --env MYSQL\_ROOT\_PASSWORD=mayank1234 --dry-run -o yaml > 7-mydb.yml**

**230 vim 7-mydb.yml**

**231 oc delete all --all --force**

**232 oc create -f 7-mydb.yml**

**233 oc getpods**

**234 oc get pods**

**235 oc describe pod mysql1**

**236 oc exec -it mysql1 -- bash**

**237 cat 7-mydb.yml**

**238 vim file1**

**239 cat file1**

**240 oc create configmap mayank --from-env-file file1**

**241 oc get configmap**

**242 oc get configmap mayank**

**243 oc describe configmap mayank**

**244 oc create secret generic mayank --from-env-file file1**

**245 oc get secret**

**246 oc describe secret mayank**

**247 oc get secret mayank -o yaml**

**248 cat file1**

**249 echo dGVzdGluZw== | base64 -d**

**250 oc get secret**

**251 oc get configmap**

**252 cp 7-mydb.yml 8-cmmydb.yaml**

**253 vim 8-cmmydb.yaml**

**254 cp 8-cmmydb.yaml 9-secretdb.yml**

**255 vim 9-secretdb.yml**

**256 vim 8-cmmydb.yaml**

**257 oc create -f 8-cmmydb.yaml**

**258 oc create -f 9-secretdb.yml**

**259 oc get pods**

**260 oc describe pod cmmysql1**

**261 oc describe pod secretmysql1**

**262 oc exec -it cnmysql1 -- bash**

**263 oc exec -it cmmysql1 -- bash**

**264 cat 8-cmmydb.yaml**

**265 cat 9-secretdb.yml**

**266 his**

**267 history**

**268 cat 8-cmmydb.yaml**

**269 cat 9-secretdb.yml**

**[root@openshift code]# cat 7-mydb.yml**

**apiVersion: v1**

**kind: Pod**

**metadata:**

**creationTimestamp: null**

**labels:**

**run: mysql1**

**name: mysql1**

**spec:**

**containers:**

**- env:**

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

**value: mayank1234**

**- name: MYSQL\_DATABASE**

**value: mayank**

**- name: MYSQL\_USER**

**value: abb**

**- name: MYSQL\_PASSWORD**

**value: test@1234**

**image: quay.io/mayank123modi/mysql**

**name: mysql1**

**resources: {}**

**dnsPolicy: ClusterFirst**

**restartPolicy: Always**

**status: {}**

**[root@openshift code]# cat 8-cmmydb.yaml**

**apiVersion: v1**

**kind: Pod**

**metadata:**

**creationTimestamp: null**

**labels:**

**run: mysql1**

**name: cmmysql1**

**spec:**

**containers:**

**- envFrom:**

**- configMapRef:**

**name: mayank**

**image: quay.io/mayank123modi/mysql**

**name: mysql1**

**[root@openshift code]# cat 9-secretdb.yml**

**apiVersion: v1**

**kind: Pod**

**metadata:**

**creationTimestamp: null**

**labels:**

**run: mysql1**

**name: secretmysql1**

**spec:**

**containers:**

**- envFrom:**

**- secretRef:**

**name: mayank**

**image: quay.io/mayank123modi/mysql**

**name: mysql1**

**Env**

**mysql -u root -pqwerty@1234**

**show databases;**

**[root@openshift code]# cat file1**

**MYSQL\_ROOT\_PASSWORD=qwerty@1234**

**MYSQL\_DATABASE=testing**

**MYSQL\_USER=training**

**MYSQL\_PASSWORD=asdfgh**

**MANAGING RESOURCES**

**169 oc get all**

**170 oc adm top pod**

**171 oc adm top node**

**172 oc get node**

**173 oc project user3**

**174 oc adm top pod**

**175 oc project mayank**

**176 oc run mayank --image quay.io/mayank123modi/myapache**

**177 oc adm top pod**

**178 oc get pods**

**179 oc get pods o- wide**

**180 oc get pods -o wide**

**181 oc adm top pod**

**182 oc project**

**183 oc create deployment mayank --image quay.io/mayank123modi/myserver**

**184 oc scale deployment mayank --replicas=2-**

**185 oc scale deployment mayank --replicas=20**

**186 oc ge**

**187 oc get pods**

**188 oc scale deployment mayank --replicas=1**

**189 oc create quota --help**

**190 oc create quota my-quota**

**191 --hard=pods=2,services=1**

**192 #oc create quota my-quota --hard=pods=2,services=1**

**193 oc delete quota my-quota**

**194 oc create quota my-quota --hard=pods=2,services=1**

**195 oc get quota**

**196 oc get all**

**197 oc describe pod mayank-868bccfcdb-ts669**

**198 oc edit deployment mayank**

**199 oc get pods**

**200 oc delete pod mayank-868bccfcdb-ts669**

**201 oc get all**

**202 oc expose deployment mayank --port 80**

**203 oc delete pod mayank-868bccfcdb-ts669free -m**

**204 free -m free -m**

**205 free -m**

**206 echo 1 > /proc/sys/vm/drop\_caches**

**207 free -m**

**208 echo 1 > /proc/sys/vm/drop\_caches**

**209 oc get all**

**210 oc edit deployment mayank**

**211 oc delete deployment mayank**

**212 oc create deployment mayank --image quay.io/mayank123modi/myserver**

**213 oc get quota**

**214 oc expose deployment mayank --port 80 --name modi**

**215 oc scale deploymentconfig mayank --replicas 5**

**216 oc scale deployment mayank --replicas 5**

**217 oc get pods**

**218 oc get all**

**219 oc describe rs mayank-d9d8fb5d8**

**220 oc delete quota my-quota**

**221 cd code/**

**222 ls**

**223 vim limitrange.yml**

**224 oc create -f limitrange.yml**

**225 oc get limitranges**

**226 oc describe limitranges resource-limits**

**227 oc delete all --all --force**

**228 cat 3-dep.yml**

**229 oc create -f 3-dep.yml**

**230 oc get all**

**231 oc create -f 3-dep.yml**

**232 oc get all**

**233 cat 3-dep.yml**

**234 oc get limitranges**

**235 oc describe pod mayank-969c56798-bznfn**

**236 oc version**

**237 vim 3-dep.yml**

**238 oc delete deployment mayank**

**239 oc create -f 3-dep.yml**

**240 oc get all**

**241 oc describe limitranges resource-limits**

**242 oc describe deployment mayank**

**243 oc get rs**

**244 oc describe rs mayank-547dbdc49**

**245 oc delete all --all --force**

**246 oc delete -f limitrange.yml**

**247 cat 3-dep.yml**

**248 history**

[root@openshift code]# cat limitrange.yml

apiVersion: "v1"

kind: "LimitRange"

metadata:

name: "resource-limits"

spec:

limits:

- type: "Container"

max:

cpu: "2"

memory: "1Gi"

min:

cpu: "100m"

memory: "4Mi"

- type: "Pod"

max:

cpu: "3"

memory: "2Gi"

min:

cpu: "110m"

memory: "6Mi"

apiVersion: apps/v1

kind: Deployment

metadata:

creationTimestamp: null

labels:

app: mayank

name: mayank

spec:

replicas: 1

selector:

matchLabels:

app: mayank

strategy: {}

template:

metadata:

creationTimestamp: null

labels:

app: mayank

spec:

containers:

- image: quay.io/mayank123modi/myapache

name: myapache

resources:

requests:

cpu: 100m

memory: 100Mi

limits:

cpu: 800m

memory: 900Mi

status: {}

**HPA**

252 vim hpa-dep.yml

253 oc create -f hpa-dep.yml

254 oc get all

255 #oc autoscale deployment php-apache --max=20 --min=1 --cpu-percent 50

256 oc adm top opd

257 oc adm top node

259 oc autoscale deployment php-apache --max=20 --min=1 --cpu-percent 50

260 oc get hpa

261 oc get all

262 oc adm toppod

263 oc adm top pod

264 oc run -i --tty load-generator --rm --image=quay.io/mayank123modi/busybox:1.28 --restart=Never -- /bin/sh -c "while sleep 0.01; do wget -q -O- http://php-apache; done"

265 history

apiVersion: apps/v1

kind: Deployment

metadata:

name: php-apache

spec:

selector:

matchLabels:

run: php-apache

template:

metadata:

labels:

run: php-apache

spec:

containers:

- name: php-apache

image: registry.k8s.io/hpa-example

ports:

- containerPort: 80

resources:

limits:

cpu: 500m

requests:

cpu: 200m

---

apiVersion: v1

kind: Service

metadata:

name: php-apache

labels:

run: php-apache

spec:

ports:

- port: 80

selector:

run: php-apache