Deployments

» Updating a Simple Application

Let's Update our Example Application from version 1.0.0 to version 2.0.0

Verify the deployment exists

```
oc get deployment
```

View the current pods

```
oc get pods
```

Verify `1.0.0` of our simple app is up by navigating to the OpenShift Route URL.

```
oc get route simple-service-route
```

> Note: Open another terminal window and run the following to continually curl the OpenShift Route URL and highlight once our app has been updated to `2.0.0`: `while true; do curl -s $ROUTE_HOST_URL | egrep --color "v2.0.0|$"; sleep 1; done;`

Set the new image for our deployment to `2.0.0`

```
oc set image deployment simple-deployment hieveryone=quay.io/coreostrainme/hieveryone:2.0.0 --record=true
```

You should now see a deployment revision number indicating a record of the change

```
oc rollout history deployment simple-deployment
```

Open up your web browser and view the newly updated application…but why isn't it as seamless as we would like?

We need Readiness Probes!

Create the new deployment object manifest which adds our readiness probes.

```
cat > updated-deployment.yaml<<EOF
apiVersion: extensions/v1beta1
kind: Deployment
metadata:
  name: simple-deployment
  namespace: myproject
  labels:
    k8s-app: simple
spec:
  replicas: 3
  revisionHistoryLimit: 10
  strategy:
    type: RollingUpdate
    rollingUpdate:
      maxUnavailable: 0%
      maxSurge: 10%
  template:
    metadata:
      labels:
        k8s-app: simple
    spec:
      serviceAccountName: useroot
      containers:
        - name: hieveryone
          image: quay.io/coreostrainme/hieveryone:1.0.0
          imagePullPolicy: Always
          ports:
            - name: http
              containerPort: 80
          readinessProbe:
           httpGet:
             path: /
             port: 80
             scheme: HTTP
  EOF
```

Replace the simple-deployment.

```
oc replace -f updated-deployment.yaml
```

Set the image for our deployment to v2.0.0.

```
oc set image deployment simple-deployment hieveryone=quay.io/coreostrainme/hieveryone:2.0.0 --record=true
```

Thanks to the Readiness Probe, our end users should experience seamless updates.

Clean Up

Let's clean up the Deployment, Service, and Route.

```
oc delete deployment simple-deployment
oc delete service simple-service
oc delete route simple-service-route
```