Deployments

Let's Create an Example Application

Create the deployment

We will deploy a simple, stateless Hello World application written in **golang**.

Create the deployment object manifest file.

```
cat > simple-deployment.yaml<<EOF
apiVersion: extensions/v1beta1
kind: Deployment
metadata:
  name: simple-deployment
  namespace: default
  labels:
    k8s-app: simple
spec:
  replicas: 3
  template:
    metadata:
      labels:
        k8s-app: simple
    spec:
      containers:
        - name: hieveryone
          image: quay.io/coreostrainme/hieveryone:1.0.0
          imagePullPolicy: Always
          ports:
            - name: helloworldport
              containerPort: 80
EOF
```

Create the deployment based off our newly created deployment object manifest file.

```
kubectl create -f simple-deployment.yaml --record=true
```

Deployments keep track of any changes we make to our pod template and allow us to pause, resume, and rollback to previous configurations.

View the rollout help.

```
kubectl rollout --help
```

View rollout history.

```
kubectl rollout history deployment simple-deployment
```

Get details about revision 1

```
kubectl rollout history deployment simple-deployment --revision=1
```

Verify the deployment was successfully created.

```
kubectl get deployments
```

View the pods associated with the deployment.

```
kubectl get pods
```

Create the service

We will now expose this deployment as a service type LoadBalancer (AWS Elastic Load Balancer).

Create the service object manifest file.

```
cat > simple-service.yaml<<EOF
kind: Service
apiVersion: v1
metadata:
  name: simple-service
  namespace: default
spec:
  selector:
    k8s-app: simple
  ports:
  - protocol: TCP
    port: 8080
    targetPort: 80
  type: LoadBalancer
EOF
```

Create the deployment based off our newly created deployment object manifest file.

```
kubectl create -f simple-service.yaml
```

Verify the service was successfully created.

```
kubectl get service
```

Fetch the url for your AWS Load Balancer.

```
kubectl get service simple-service -o wide
```

Copy and paste the Load Balancer URL into your favorite web browser! Be Patient! It may take a minute for DNS to resolve