ReplicaSets

» Replica Sets

Introduction to ReplicaSets

Get a list of all pods in the default namespace.

```
kubectl get pods
```

Run a simple web application pod. This web application returns the container hostname it resides on.

```
kubectl run myfirstapp --image quay.io/coreostrainme/hello-whoami:2.0.1  --restart=Never -l app=myfirstapp,version=1
```

Confirm the pod was successfully created.

```
kubectl get pods -l app=myfirstapp,version=1
```

Create a ReplicaSet object manifest file.

```
cat > replica-set.yaml <<EOF
apiVersion: extensions/v1beta1
kind: ReplicaSet
metadata:
  name: myfirstreplicaset
spec:
  selector:
    matchLabels:
     app: myfirstapp
  replicas: 1
  template:
    metadata:
      labels:
        app: myfirstapp
    spec:
      containers:
        - name: nodejs
          image: quay.io/coreostrainme/hello-whoami:2.0.1
EOF
```

Create the ReplicaSet.

```
kubectl create -f replica-set.yaml
```

Your pod is now under the control of a ReplicaSet!

```
kubectl describe replicaset myfirstreplicaset
```

View your pod YAML

```
kubectl get pod myfirstapp -o yaml
```

In a new terminal window, select all pods that match app=myfirstapp

```
watch -n.1 kubectl get pods -l app=myfirstapp --show-labels
```

Delete the pod and watch a new one spawn!

```
kubectl delete pod -l app=myfirstapp
```

Imperatively scale the ReplicaSet to 6 replicas

```
kubectl scale replicaset myfirstreplicaset --replicas=6
```

Imperatively scale down the ReplicaSet to 3 replicas

```
kubectl scale replicaset myfirstreplicaset --replicas=3
```