

ReplicaSets

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Introduction to ReplicaSets

Get a list of all pods in the default namespace.

```
kubectl get pods
```

Create a ReplicaSet object manifest file.

```
cat > replica-set.yaml <<EOF
apiVersion: extensions/v1beta1
kind: ReplicaSet
metadata:
  name: myfirstreplicaset
  namespace: myproject
spec:
  selector:
    matchLabels:
      app: myfirstapp
  replicas: 3
  template:
    metadata:
      labels:
        app: myfirstapp
    spec:
      serviceAccountName: useroot
      containers:
        - name: nodejs
          image: quay.io/coreostrainme/hello-whoami:2.0.1
EOF
```

Create the ReplicaSet.

```
oc apply -f replica-set.yaml
```

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

```
oc get pods -l app=myfirstapp --show-labels -w
```

Delete the pod and watch a new one spawn!

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

Imperatively scale the ReplicaSet to 6 replicas

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

Imperatively scale down the ReplicaSet to 3 replicas using `curl`.

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

The `kubectl scale` command interacts with the `/scale` endpoint.

```
curl -X GET http://localhost:8001/apis/extensions/v1beta1/namespaces/myproject/replicasets/myfirstreplicaset/scale
```

Use the `PUT` method against the `/scale` endpoint to change the number of replicas to 5.

```
curl -X PUT localhost:8001/apis/extensions/v1beta1/namespaces/myproject/replicasets/myfirstreplicaset/scale -H "Content-type: application/json" -d '{"kind":"Scale","apiVersion":"extensions/v1beta1","metadata":{"name":"myfirstreplicaset","namespace":"myproject"},"spec":{"replicas":5}}'
```

You can also get information regarding the pod by using the `GET` method against the `/status` endpoint.

```
curl -X GET http://localhost:8001/apis/extensions/v1beta1/namespaces/myproject/replicasets/myfirstreplicaset/status
```

The status endpoint's primary purpose is to allow a controller (with proper RBAC permissions) to send a `PUT` method along with the desired status.