

Deployments provide a variety of features to help you automatically manage groups of replica pods. In this lesson, we will discuss what deployments are. We will also create a simple deployment and go through the process of scaling the deployment up and down by changing the number of desired replicas.

Relevant Documentation

- <https://kubernetes.io/docs/concepts/workloads/controllers/deployment/>

Lesson Reference

Here is a simple deployment for three replica pods running nginx.

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: nginx-deployment
spec:
  replicas: 3
  selector:
    matchLabels:
      app: nginx
  template:
    metadata:
      labels:
        app: nginx
    spec:
      containers:
        - name: nginx
          image: nginx:1.7.9
          ports:
            - containerPort: 80
```

You can explore and manage deployments using the same kubectl commands you would use for other object types.

```
kubectl get deployments

kubectl get deployment <deployment name>

kubectl describe deployment <deployment name>

kubectl edit deployment <deployment name>

kubectl delete deployment <deployment name>
```