



## MANAGING STATE WITH DEPLOYMENTS

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### Deployments

**ReplicationControllers** (RC) ensure that a specified number of pod replicas is running at any one time. ReplicationControllers also give you the ability to perform rolling updates. However, those updates are managed on the client side. This is problematic if the client loses connectivity, and can leave the cluster in an unplanned state. To avoid problems when scaling the ReplicationControllers on the client side, a new resource was introduced in the **apps/v1** API group: Deployments.

Deployments allow server-side updates to pods at a specified rate. They are used for canary and other deployment patterns. Deployments generate ReplicaSets, which offer more selection features than ReplicationControllers, such as **matchExpressions**. See the command and output below:

```
$ kubectl create deployment dev-web --image=nginx:1.13.7-alpine  
deployment "dev-web" created
```