

[6] Deployment & Pod Scale

1. Pod Scale out

□ Pod Scale Out

- Expand the number of running pods in “eshop-order” to 5.
 - □ □ □ □: k8s
 - namespace: devops
 - deployment: eshop-order

Reference

docs□ reference □ → scale

[Kubectl Reference Docs](#)



```
# □ □ □ □ □
[user@console ~]$ kubectl config use-context k8s

# devops□ namespace□ □ □ □
[user@console ~]$ kubectl get namespaces devops

# namespace□ devops□ □ □ deployment□ □ □ □
# □ □ □ □ 2□ pod□ □ □ □ □ □
[user@console ~]$ kubectl get deployments.app -n devops
NAME          READY
eshop-order   2/2
```

```
# Deployment → ReplicaSet → 5 Pods
[user@console ~]$ kubectl scale deployment eshop-order -n devops --replicas=5

# 查看 5 Pods
[user@console ~]$ kubectl get deployments.app -n devops
NAME          READY
eshop-order   5/5
```

2. deployment 部署 scaling

部署 deployment scaling

- create a deployment as follows:
 - 环境: k8s
 - TASK:
 - name: webserver
 - 2 replicas
 - label: app_env_stage=dev
 - container name: webserver
 - container image: nginx:1.14
 - Scale Out deployment
 - Scale the deployment webserver to 3 pods



```
# 创建 deployment
# webserver.yaml 创建 YAML 文件
[user@console ~]$ kubectl create deployment webserver --image=nginx:1.14 --replicas=2 --dry-run=client -o
yaml > webserver.yaml

# webserver.yaml 内容
[user@console ~]$ vi webserver.yaml

matchLabels:
  app: webserver
---
apiVersion: apps/v1
kind: Deployment
metadata:
  name: webserver
spec:
  replicas: 2
  selector:
    matchLabels:
      app: webserver
  template:
    metadata:
      labels:
        app: webserver
    spec:
      containers:
        - name: webserver
          image: nginx:1.14
```

matchLabels:

app_env_stage: dev

pod

metadata labels

container name webserver

:wq

yml

[user@console ~]\$ kubectl apply -f webserver.yml

#

[user@console ~]\$ kubectl get deployments -o wide

3 Scale Out

[user@console ~]\$ kubectl scale deployments webserver --replicas=3

(label)

[user@console ~]\$ kubectl get pods --show-labels

Deployment (10)

Task: Scale the deployment webserver to 3 pods.

-

kubectl get deployments

--> webserver deployment

kubectl scale deployment webserver --replicas=3

Deployment (14)

Task: Scale the deployment presentation to 6 pods.

- 

```
# presentation deployment
kubectl get deployments presentation
```

```
kubectl scale deployment presentation --replicas=6
```

LAB (65)

Create a deployment spec file that will: Launch 7 replicas of the nginx Image with the label app_runtime_stage=dev deployment name: kual00201.

Save a copy of this spec file to /opt/KUAL00201/spec_deployment.yaml (or /opt/KUAL00201/spec_deployment.json). When you are done, clean up (delete) any new Kubernetes API object that you produced during this task.

- 

```
kubectl create deploy kual00201 --image=nginx --dry-run=client -o yaml >
/opt/KUAL00201/spec_deployment.yaml
```

```
vi /opt/KUAL00201/spec_deployment.yaml
```

```
apiVersion: apps/v1
kind: Deployment
metadata:
  creationTimestamp: null
  labels:
    app_runtime_stage: dev
  name: kual00201
spec:
  replicas: 7
  selector:
    matchLabels:
      app_runtime_stage: dev
  strategy: {}
  template:
    metadata:
      creationTimestamp: null
    labels:
```

```
    app_runtime_stage: dev
spec:
  containers:
  - image: nginx
    name: nginx
    resources: {}
status: {}

:wq
```

```
kubectl apply -f /opt/KUAL00201/spec_deployment.yaml
```

```
# 查看部署
kubectl get deploy kual00201
```

```
# 删除部署
rm -rf /opt/KUAL00201/spec_deployment.yaml

kubectl delete deploy kual00201
```

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