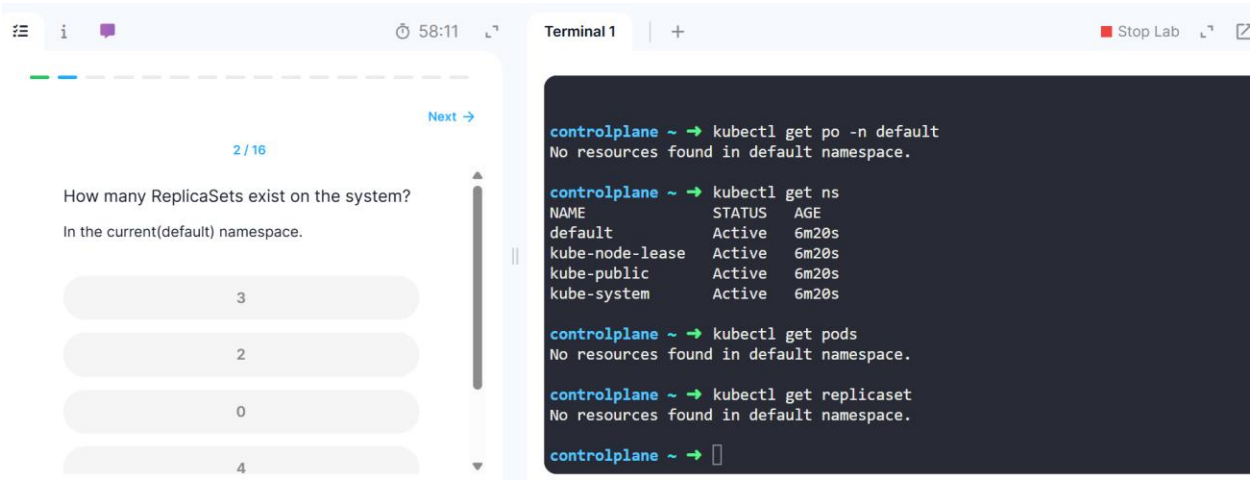
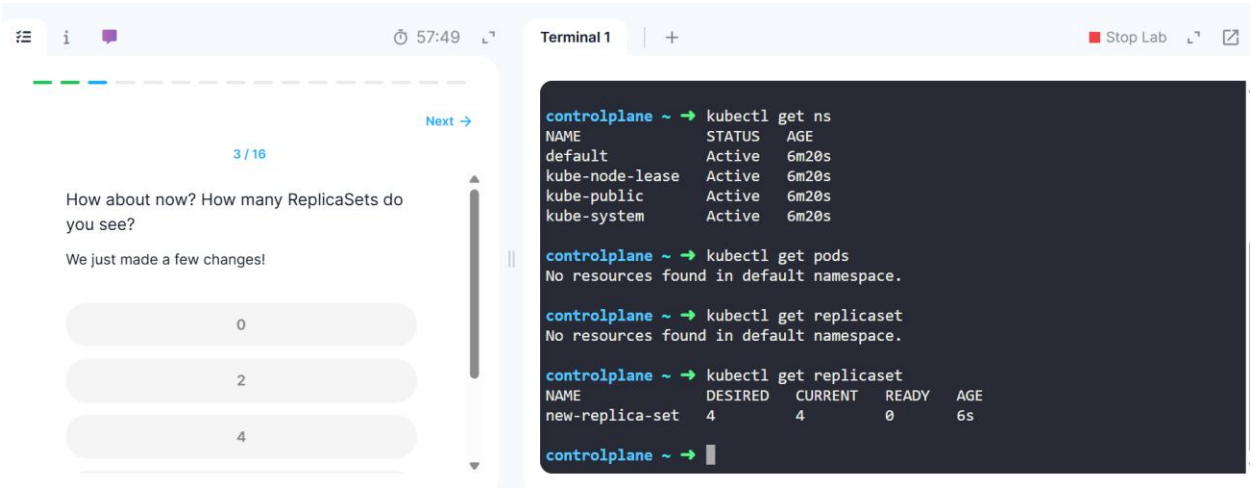
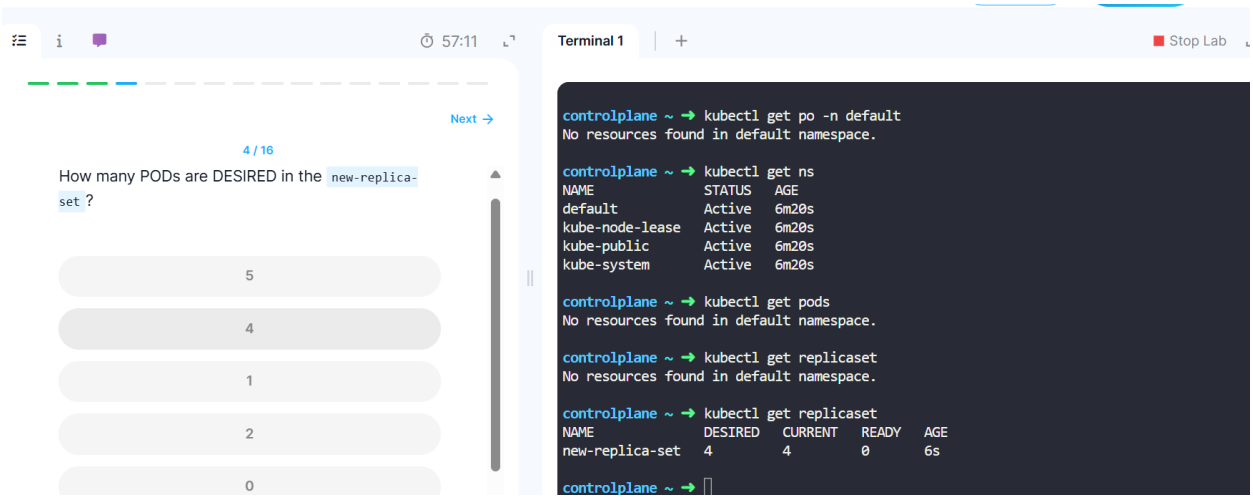
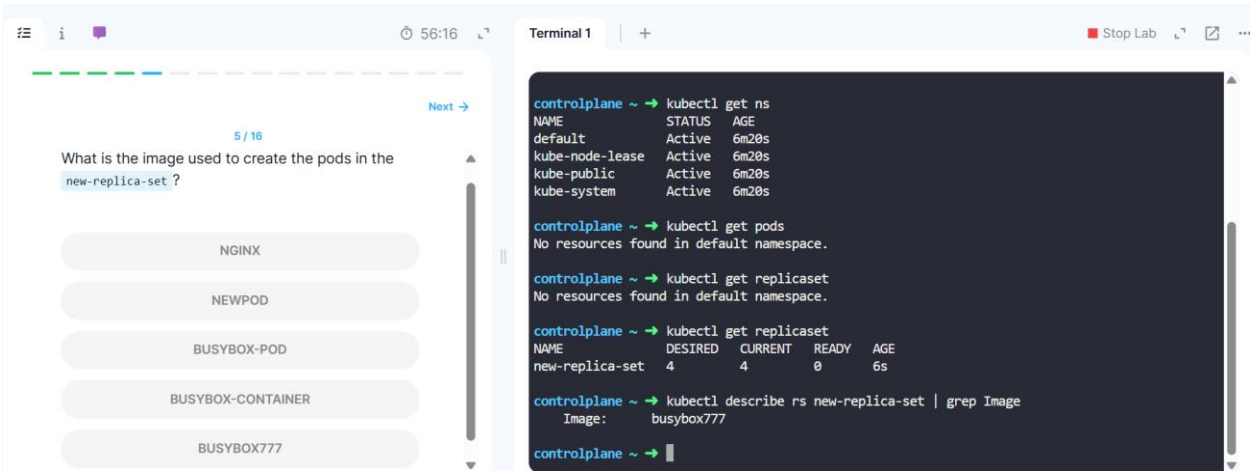
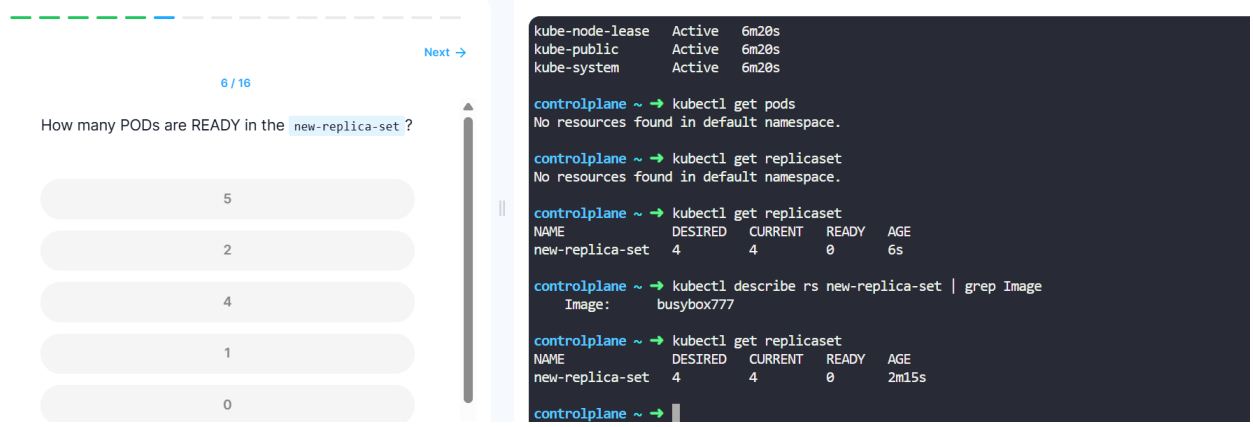
Lab3

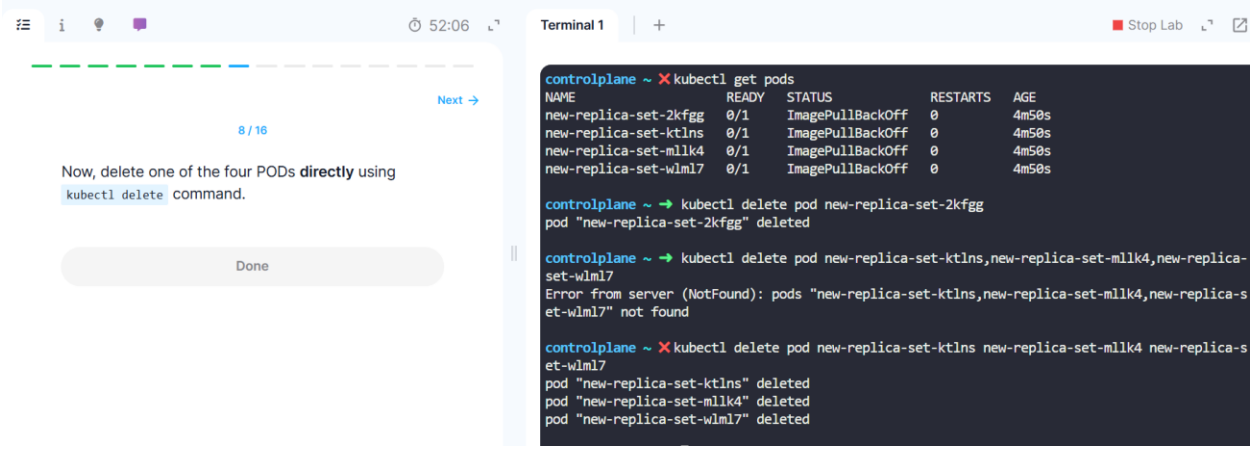

58:11
Terminal 1
Stop Lab
Next →
2 / 16
How many ReplicaSets exist on the system?
In the current(default) namespace.
3
2
0
4
controlplane ~ ➜ kubectl get po -n default
No resources found in default namespace.
controlplane ~ ➜ kubectl get ns
NAME STATUS AGE
default Active 6m20s
kube-node-lease Active 6m20s
kube-public Active 6m20s
kube-system Active 6m20s
controlplane ~ ➜ kubectl get pods
No resources found in default namespace.
controlplane ~ ➜ kubectl get replicaset
No resources found in default namespace.
controlplane ~ ➜

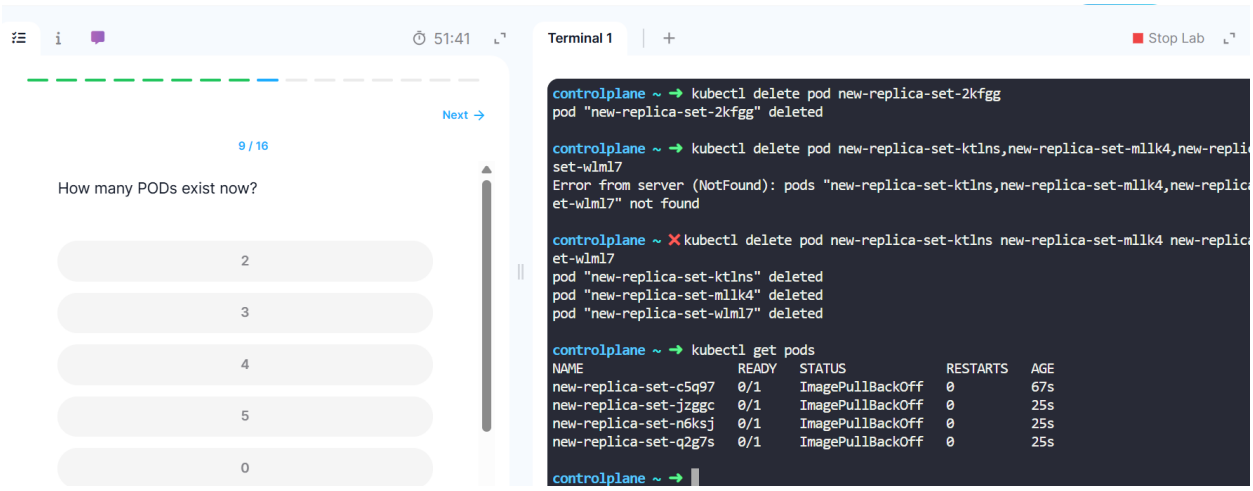

57:49
Terminal 1
Stop Lab
Next →
3 / 16
How about now? How many ReplicaSets do you see?
We just made a few changes!
0
2
4
controlplane ~ ➜ kubectl get ns
NAME STATUS AGE
default Active 6m20s
kube-node-lease Active 6m20s
kube-public Active 6m20s
kube-system Active 6m20s
controlplane ~ ➜ kubectl get pods
No resources found in default namespace.
controlplane ~ ➜ kubectl get replicaset
No resources found in default namespace.
controlplane ~ ➜ kubectl get replicaset
NAME DESIRED CURRENT READY AGE
new-replica-set 4 4 0 6s
controlplane ~ ➜

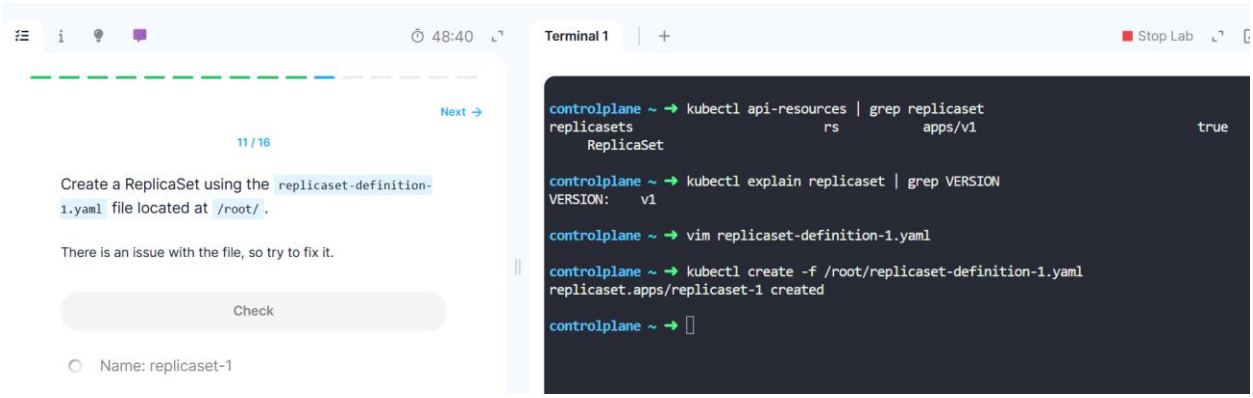

57:11
Terminal 1
Stop Lab
Next →
4 / 16
How many PODs are DESIRED in the new-replica-set ?
5
4
1
2
0
controlplane ~ ➜ kubectl get po -n default
No resources found in default namespace.
controlplane ~ ➜ kubectl get ns
NAME STATUS AGE
default Active 6m20s
kube-node-lease Active 6m20s
kube-public Active 6m20s
kube-system Active 6m20s
controlplane ~ ➜ kubectl get pods
No resources found in default namespace.
controlplane ~ ➜ kubectl get replicaset
No resources found in default namespace.
controlplane ~ ➜ kubectl get replicaset
NAME DESIRED CURRENT READY AGE
new-replica-set 4 4 0 6s
controlplane ~ ➜

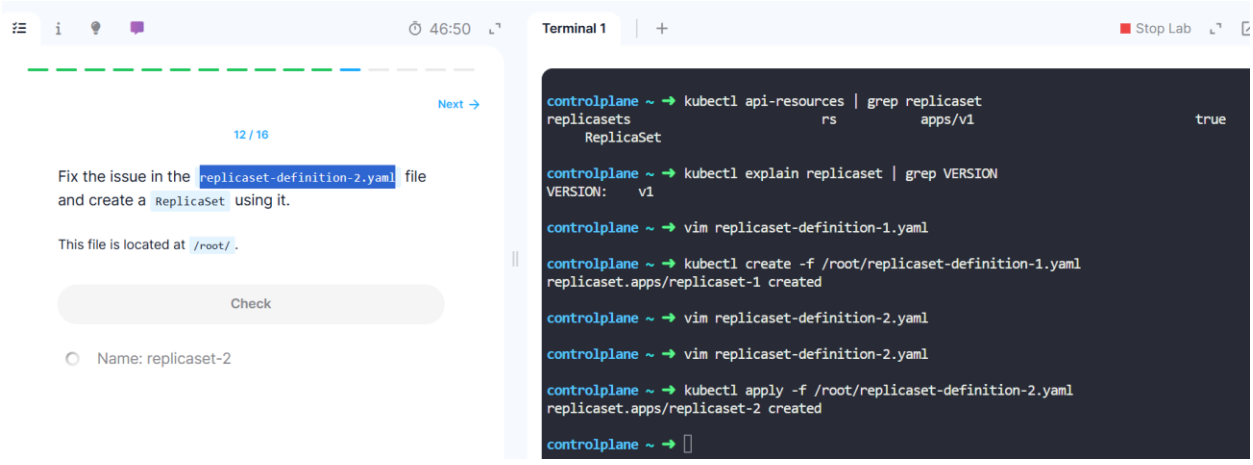

56:16
Terminal 1
Stop Lab
Next →
5 / 16
What is the image used to create the pods in the new-replica-set ?
NGINX
NEWPOD
BUSYBOX-POD
BUSYBOX-CONTAINER
BUSYBOX777
controlplane ~ ➜ kubectl get ns
NAME STATUS AGE
default Active 6m20s
kube-node-lease Active 6m20s
kube-public Active 6m20s
kube-system Active 6m20s
controlplane ~ ➜ kubectl get pods
No resources found in default namespace.
controlplane ~ ➜ kubectl get replicaset
No resources found in default namespace.
controlplane ~ ➜ kubectl get replicaset
NAME DESIRED CURRENT READY AGE
new-replica-set 4 4 0 6s
controlplane ~ ➜ kubectl describe rs new-replica-set | grep Image
Image: busybox777
controlplane ~ ➜

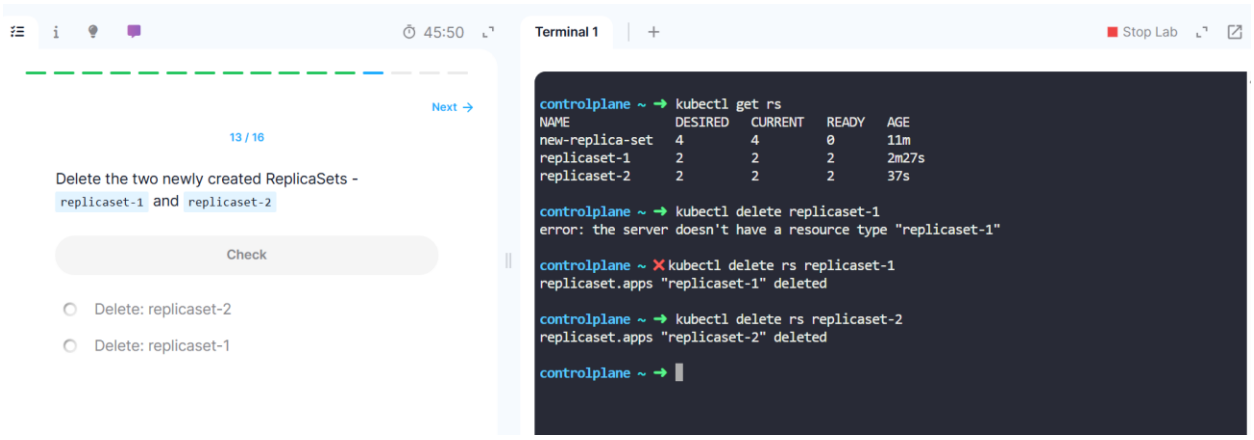

Next →
6 / 16
How many PODs are READY in the new-replica-set ?
5
2
4
1
0
kube-node-lease Active 6m20s
kube-public Active 6m20s
kube-system Active 6m20s
controlplane ~ ➜ kubectl get pods
No resources found in default namespace.
controlplane ~ ➜ kubectl get replicaset
No resources found in default namespace.
controlplane ~ ➜ kubectl get replicaset
NAME DESIRED CURRENT READY AGE
new-replica-set 4 4 0 6s
controlplane ~ ➜ kubectl describe rs new-replica-set | grep Image
Image: busybox777
controlplane ~ ➜ kubectl get replicaset
NAME DESIRED CURRENT READY AGE
new-replica-set 4 4 0 2m15s
controlplane ~ ➜

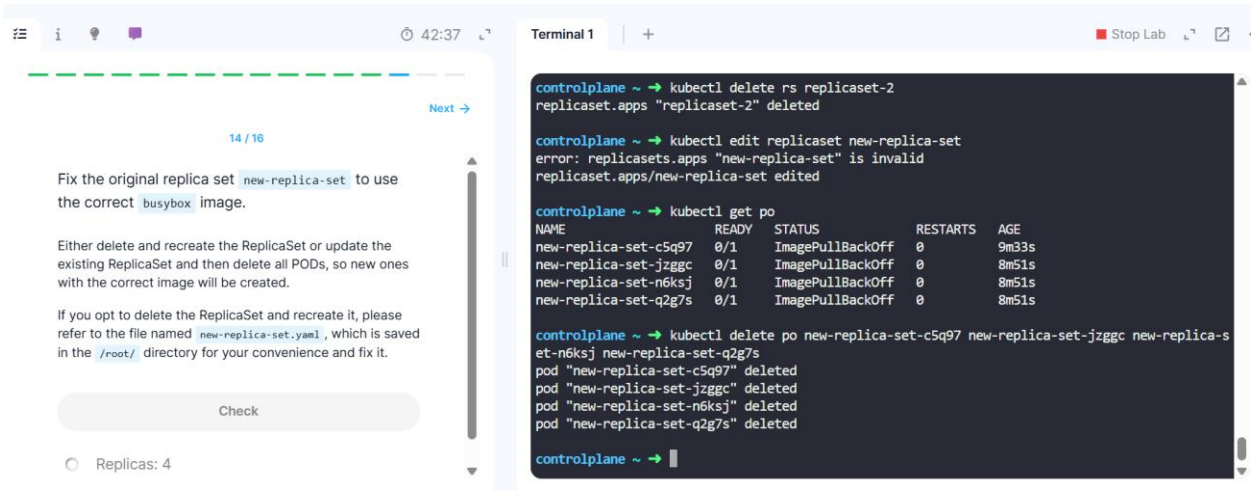

52:06
Terminal 1
Stop Lab
Next →
8 / 16
Now, delete one of the four PODs directly using kubectl delete command.
Done
controlplane ~ ✖ kubectl get pods
NAME READY STATUS RESTARTS AGE
new-replica-set-2kfgg 0/1 ImagePullBackOff 0 4m50s
new-replica-set-ktlns 0/1 ImagePullBackOff 0 4m50s
new-replica-set-mllk4 0/1 ImagePullBackOff 0 4m50s
new-replica-set-wlml7 0/1 ImagePullBackOff 0 4m50s
controlplane ~ ➜ kubectl delete pod new-replica-set-2kfgg
pod "new-replica-set-2kfgg" deleted
controlplane ~ ➜ kubectl delete pod new-replica-set-ktlns,new-replica-set-mllk4,new-replica-set-wlml7
Error from server (NotFound): pods "new-replica-set-ktlns,new-replica-set-mllk4,new-replica-set-wlml7" not found
controlplane ~ ✖ kubectl delete pod new-replica-set-ktlns new-replica-set-mllk4 new-replica-set-wlml7
pod "new-replica-set-ktlns" deleted
pod "new-replica-set-mllk4" deleted
pod "new-replica-set-wlml7" deleted

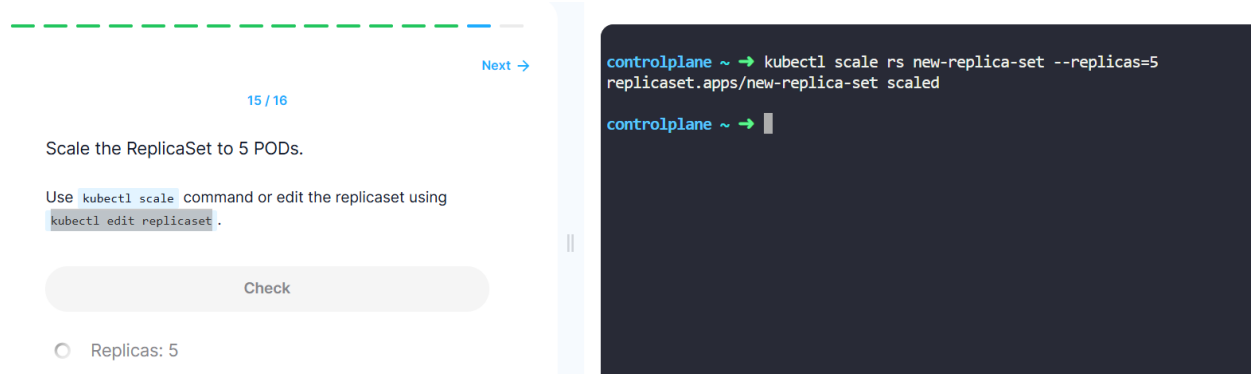

51:41
Next →
9 / 16
How many PODs exist now?
2
3
4
5
0
Terminal 1
Stop Lab
controlplane ~ ➜ kubectl delete pod new-replica-set-2kfgg
pod "new-replica-set-2kfgg" deleted
controlplane ~ ➜ kubectl delete pod new-replica-set-ktlns,new-replica-set-mllk4,new-replic
set-wlml7
Error from server (NotFound): pods "new-replica-set-ktlns,new-replica-set-mllk4,new-replica
et-wlml7" not found
controlplane ~ ✖ kubectl delete pod new-replica-set-ktlns new-replica-set-mllk4 new-replica
et-wlml7
pod "new-replica-set-ktlns" deleted
pod "new-replica-set-mllk4" deleted
pod "new-replica-set-wlml7" deleted
controlplane ~ ➜ kubectl get pods
NAME READY STATUS RESTARTS AGE
new-replica-set-c5q97 0/1 ImagePullBackOff 0 67s
new-replica-set-jzggc 0/1 ImagePullBackOff 0 25s
new-replica-set-n6ksj 0/1 ImagePullBackOff 0 25s
new-replica-set-q2g7s 0/1 ImagePullBackOff 0 25s
controlplane ~ ➜


48:40
Next →
11 / 16
Create a ReplicaSet using the replicaset-definition-1.yaml file located at /root/ .
There is an issue with the file, so try to fix it.
Check
Name: replicaset-1
Terminal 1
Stop Lab
controlplane ~ ➜ kubectl api-resources | grep replicaset
replicasets rs apps/v1 true
ReplicaSet
controlplane ~ ➜ kubectl explain replicaset | grep VERSION
VERSION: v1
controlplane ~ ➜ vim replicaset-definition-1.yaml
controlplane ~ ➜ kubectl create -f /root/replicaset-definition-1.yaml
replicaset.apps/replicaset-1 created
controlplane ~ ➜


46:50
Next →
12 / 16
Fix the issue in the replicaset-definition-2.yaml file and create a ReplicaSet using it.
This file is located at /root/ .
Check
Name: replicaset-2
Terminal 1
Stop Lab
controlplane ~ ➜ kubectl api-resources | grep replicaset
replicasets rs apps/v1 true
ReplicaSet
controlplane ~ ➜ kubectl explain replicaset | grep VERSION
VERSION: v1
controlplane ~ ➜ vim replicaset-definition-1.yaml
controlplane ~ ➜ kubectl create -f /root/replicaset-definition-1.yaml
replicaset.apps/replicaset-1 created
controlplane ~ ➜ vim replicaset-definition-2.yaml
controlplane ~ ➜ vim replicaset-definition-2.yaml
controlplane ~ ➜ kubectl apply -f /root/replicaset-definition-2.yaml
replicaset.apps/replicaset-2 created
controlplane ~ ➜


45:50
Terminal 1
Stop Lab
Next →
13 / 16
Delete the two newly created ReplicaSets - replicaset-1 and replicaset-2
Check
Delete: replicaset-2
Delete: replicaset-1
controlplane ~ ➜ kubectl get rs
NAME DESIRED CURRENT READY AGE
new-replica-set 4 4 0 11m
replicaset-1 2 2 2 2m27s
replicaset-2 2 2 2 37s
controlplane ~ ➜ kubectl delete replicaset-1
error: the server doesn't have a resource type "replicaset-1"
controlplane ~ ✗ kubectl delete rs replicaset-1
replicaset.apps "replicaset-1" deleted
controlplane ~ ➜ kubectl delete rs replicaset-2
replicaset.apps "replicaset-2" deleted
controlplane ~ ➜


42:37
Terminal 1
Stop Lab
Next →
14 / 16
Fix the original replica set new-replica-set to use the correct busybox image.
Either delete and recreate the ReplicaSet or update the existing ReplicaSet and then delete all PODs, so new ones with the correct image will be created.
If you opt to delete the ReplicaSet and recreate it, please refer to the file named new-replica-set.yaml, which is saved in the /root/ directory for your convenience and fix it.
Check
Replicas: 4
controlplane ~ ➜ kubectl delete rs replicaset-2
replicaset.apps "replicaset-2" deleted
controlplane ~ ➜ kubectl edit replicaset new-replica-set
error: replicasets.apps "new-replica-set" is invalid
replicaset.apps/new-replica-set edited
controlplane ~ ➜ kubectl get po
NAME READY STATUS RESTARTS AGE
new-replica-set-c5q97 0/1 ImagePullBackOff 0 9m33s
new-replica-set-jzggc 0/1 ImagePullBackOff 0 8m51s
new-replica-set-n6ksj 0/1 ImagePullBackOff 0 8m51s
new-replica-set-q2g7s 0/1 ImagePullBackOff 0 8m51s
controlplane ~ ➜ kubectl delete po new-replica-set-c5q97 new-replica-set-jzggc new-replica-set-n6ksj new-replica-set-q2g7s
pod "new-replica-set-c5q97" deleted
pod "new-replica-set-jzggc" deleted
pod "new-replica-set-n6ksj" deleted
pod "new-replica-set-q2g7s" deleted
controlplane ~ ➜


Next →
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Scale the ReplicaSet to 5 PODs.
Use kubectl scale command or edit the replicaset using kubectl edit replicaset .
Check
Replicas: 5
controlplane ~ ➜ kubectl scale rs new-replica-set --replicas=5
replicaset.apps/new-replica-set scaled
controlplane ~ ➜

Next →

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Now scale the ReplicaSet down to 2 PODs.

Use the `kubectl scale` command or edit the replicaset using `kubectl edit replicaset`.

Check

Replicas: 2

```
controlplane ~ ➜ kubectl scale rs new-replica-set --replicas=5
replicaset.apps/new-replica-set scaled

controlplane ~ ➜ kubectl scale rs new-replica-set --replicas=2
replicaset.apps/new-replica-set scaled

controlplane ~ ➜
```