

Labels, Selectors & Annota	<del>tions (0</del>	
<u> Practice Test - Kubernetes</u>	<del>- CKAD</del>	
Solution - Labels and Selectors (op		
Rolling Updates & Rollbacks (06:47)		
<u>Updating a Deployment</u>		
<u>Practice Test - Kubernetes - CKAD</u>		
Solution: Rolling Updates and Rollb		
<u>Jobs (08:07)</u>		
<u>Cron Jobs (01:45)</u>		
Practice Test - Kubernetes - CKAD		
Solution - Jobs and Cronjobs (optio		
<u>Feedback</u>		
Services & Networking	16 Topics	0
State Persistence	17 Topics	
UPDATES: Sep 2021 Chang	33 Topics	
Additional Practice - Kuberne	et 1 Topic	
<u>Certification Tips</u>	<u>1 Topic</u>	$\bigcirc$
<u>Lightning Labs</u>	5 Topics	$\bigcirc$
Mock Evams	7 Topics	

POD DESIGN > UPDATING A DEPLOYMENT

In Progress Mark Complete

## Updating a Deployment

Here are some handy examples related to updating a Kubernetes Deployment:

 Creating a deployment, checking the rollout status and history:

In the example below, we will first create a simple deployment and inspect the rollout status and the rollout history:

controlplane \$ kubectl create
deployment nginx -image=nginx:1.16
deployment.apps/nginx created

controlplane \$ kubectl rollout status deployment nginx Waiting for deployment "nginx" rollout to finish: 0 of 1 updated replicas are available... deployment "nginx" successfully rolled out

controlplane \$

controlplane \$ kubectl rollout
history deployment nginx
deployment.apps/nginx
REVISION CHANGE-CAUSE
1 <none>

controlplane \$

• Using the - -revision flag:



<u>Labels, Selectors &amp; Annotat</u>	<del>ions (0</del>	
Practice Test - Kubernetes	<del>- CKAD</del>	
Solution - Labels and Selec	<del>tors (op</del>	
Rolling Updates & Rollbacks	<del>s (06:47)</del>	
<u>Updating a Deployment</u>		
<u>Practice Test - Kubernetes - CKAD</u>		
Solution: Rolling Updates ar	nd Rollb	
<u>Jobs (08:07)</u>		
<u>Cron Jobs (01:45)</u>		
<u>Practice Test - Kubernetes - CKAD</u>		
Solution - Jobs and Cronjobs (optio		
<u>Feedback</u>		
Services & Networking	16 Topics	0
State Persistence	17 Topics	0
UPDATES: Sep 2021 Chang	33 Topics	$\bigcirc$
Additional Practice - Kuberne	<u>t</u> <u>1 Topic</u>	0
<u>Certification Tips</u>	<u>1 Topic</u>	$\bigcirc$
<u>Lightning Labs</u>	5 Topics	0

7 Topics

**Mock Exams** 

Here revision 1 is the first version where the deployment was created.

You can check the status of each revision individually by using the – - revision flag:

controlplane \$ kubectl rollout history deployment nginx -revision=1 deployment.apps/nginx with revision #1 Pod Template: Labels: app=nginx pod-template-hash=78449c65d4 Containers: nginx: Image: nginx:1.16 Port: <none> Host Port: <none> Environment: <none> Mounts: <none> Volumes: controlplane \$

## • Using the – -record flag:

You would have noticed that the "change-cause" field is empty in the rollout history output. We can use the --record flag to save the command used to create/update a deployment against the revision number.



<del>Labels, Selectors &amp; Annotations (0</del>		
Practice Test - Kubernetes - CKAD		
Solution - Labels and Selectors (op		
Rolling Updates & Rollbacks (06:47)		
<u>Updating a Deployment</u>		
<u>Practice Test - Kubernetes - CKAD</u>		
Solution: Rolling Updates and Rollb		
<u>Jobs (08:07)</u>		
<u>Cron Jobs (01:45)</u>		
<u>Practice Test - Kubernetes - CKAD</u>		
Solution - Jobs and Cronjobs (optio		
<u>Feedback</u>		
Services & Networking 16 Topics		
State Persistence 17 Topics		
UPDATES: Sep 2021 Chang 33 Topics		
Additional Practice - Kubernet 1 Topic		
Certification Tips 1 Topic		
<u>Lightning Labs</u> <u>5 Topics</u>		

7 Topics

**Mock Exams** 

ontrolplane \$ kubectl set image deployment nginx nginx=nginx:1.17 --record Flag --record has been deprecated, --record will be removed in the future deployment.apps/nginx image updated controlplane \$ controlplane \$ kubectl rollout history deployment nginx deployment.apps/nginx REVISION CHANGE-CAUSE 1 <none> kubectl set image deployment nginx nginx=nginx:1.17 --record=true

controlplane \$

You can now see that the **change- cause** is recorded for the revision 2 of this deployment.

Lets make some more changes. In the example below, we are editing the deployment and changing the image from nginx:1.17 to nginx:latest while making use of the –record flag.



**Mock Exams** 

Labels, Selectors & Annotations (0... Practice Test - Kubernetes -Solution - Labels and Selectors (op... Rolling Updates & Rollbacks (06:47) <none> 2 <u>Updating a Deployment</u> --record=true Practice Test - Kubernetes - CKAD ... record=true Solution: Rolling Updates and Rollb... Jobs (08:07) revision=3 Cron Jobs (01:45) revision #3 Practice Test - Kubernetes - CKAD ... Pod Template: Labels: Solution - Jobs and Cronjobs (optio... hash=787f54657b Annotations: Feedback Services & Networking 16 Topics Containers: nginx: Image: State Persistence 17 Topics Port: UPDATES: Sep 2021 Chang... 33 Topics Mounts: Volumes: Additional Practice - Kubernet ... 1 Topic controlplane \$ **Certification Tips** 1 Topic Undo a change: 5 Topics **Lightning Labs** revision:

7 Topics

controlplane \$ kubectl edit deployments.apps nginx --record Flag --record has been deprecated, --record will be removed in the future deployment.apps/nginx edited controlplane \$ kubectl rollout history deployment nginx deployment.apps/nginx REVISION CHANGE-CAUSE kubectl set image deployment nginx nginx=nginx:1.17 kubectl edit deployments.apps nginx -controlplane \$ kubectl rollout history deployment nginx -deployment.apps/nginx with app=nginx pod-templatekubernetes.io/change-cause: kubectl edit deployments.apps nginx --record=true nginx <none> Host Port: <none> Environment: <none> <none>

Lets now rollback to the previous



Labels, Selectors & Annotations (0... removed in the future Practice Test - Kubernetes -Solution - Labels and Selectors (op... history deployment nginx deployment.apps/nginx REVISION CHANGE-CAUSE Rolling Updates & Rollbacks (06:47) <none> 2 <u>Updating a Deployment</u> --record=true kubectl edit Practice Test - Kubernetes - CKAD ... deployments.apps nginx -record=true Solution: Rolling Updates and Rollb... Jobs (08:07) revision=3 Cron Jobs (01:45) revision #3 Practice Test - Kubernetes - CKAD ... Pod Template: Labels: pod-template-Solution - Jobs and Cronjobs (optio... hash=787f54657b Annotations: Feedback nginx --record=true Services & Networking 16 Topics Containers: nginx: Image: nginx State Persistence 17 Topics Port: <none> Host Port: <none> Environment: <none> UPDATES: Sep 2021 Chang... 33 Topics <none> Mounts: Volumes: Additional Practice - Kubernet... 1 Topic **Certification Tips** 1 Topic image: Image: **5 Topics Lightning Labs** controlplane \$

7 Topics

**Mock Exams** 

```
deployments.apps nginx --record
Flag --record has been
deprecated, --record will be
deployment.apps/nginx edited
controlplane $ kubectl rollout
          kubectl set image
deployment nginx nginx=nginx:1.17
controlplane $ kubectl rollout
history deployment nginx --
deployment.apps/nginx with
                app=nginx
kubernetes.io/change-cause:
kubectl edit deployments.apps
controlplane $ kubectl describe
deployments. nginx | grep -i
                  nginx:1.17
```

controlplane \$ kubectl edit



Labels, Selectors & Annotations (0... Practice Test - Kubernetes Solution - Labels and Selectors (op... Rolling Updates & Rollbacks (06:47) <u>Updating a Deployment</u> Practice Test - Kubernetes - CKAD ... Solution: Rolling Updates and Rollb... <u>Jobs (08:07)</u> Cron Jobs (01:45) Practice Test - Kubernetes - CKAD ... Solution - Jobs and Cronjobs (optio... **Feedback** Services & Networking 16 Topics State Persistence 17 Topics UPDATES: Sep 2021 Chang... 33 Topics Additional Practice - Kubernet ... 1 Topic **Certification Tips** 1 Topic 5 Topics **Lightning Labs** 

7 Topics

Mock Exams

With this, we have rolled back to the previous version of the deployment with the image = nginx:1.17.

```
controlplane $ kubectl rollout
history deployment nginx --
revision=1
deployment.apps/nginx with
revision #1
Pod Template:
  Labels:
                app=nginx
        pod-template-
hash=78449c65d4
  Containers:
  nginx:
    Image:
                nginx:1.16
   Port:
                <none>
   Host Port: <none>
    Environment: <none>
   Mounts:
                <none>
 Volumes:
controlplane $ kubectl rollout
undo deployment nginx --to-
revision=1
deployment.apps/nginx rolled back
```

To rollback to specific revision we will use the \_--to-revision flag.

With \_--to-revision=1 , it will be rolled back with the first image we used to create a deployment as we can see in the \_rollout history output.

```
controlplane $ kubectl describe
deployments. nginx | grep -i
image:
Image: nginx:1.16
```