Lab 4.5 Deployment Upgrades & Rollout

1. Check the current state

**kubectl get all**

1. Create a new Deployment using deployment-definition.yml file

**kubectl create -f deployment-definition.yml**

1. Check the Rollout status of the deployment

**kubectl rollout status deployment/myapp-deployment**

1. Checkout the Rollout History and check that the Change Cause is blank

**kubectl rollout history deployment/myapp-deployment**

1. Delete the deployment

**kubectl delete deployment myapp-deployment**

**kubectl get all**

1. Recreate the deployment and this time record the rollout cause
2. Open the Docker Hub for nginx image and degrade to version nginx:1.18. Change the image tag in deployment-definition.yml file

**kubectl apply -f deployment-definition.yml**

1. Have a look at the events in deployment

**kubectl describe deployment**

1. Observe the Rollout history to check the new version getting created

**kubectl rollout history deployment/myapp-deployment**

1. Run the set image command on deployment to update the deployment image

**Kubectl set image deployment/myapp-deployment nginx-container=nginx:1.18-perl**

1. Checkout the Rollout status

**kubectl rollout status deployment/myapp-deployment**

1. Checkout the Rollout History to see a new version getting created

**kubectl rollout history deployment/myapp-deployment**

1. Checkout the Events in deployment

**kubectl describe deployment/myapp-deployment**

1. Let’s assume that the third revision did not result in a success and things went wrong. So undo the revision 3

**kubectl rollout undo deployment/myapp-deployment**

1. Checkout the Rollout status and Rollout history

**kubectl rollout status deployment/myapp-deployment**

**kubectl rollout history deployment/myapp-deployment**

1. Have a look at deployment events and notice the docker image version.

**kubectl describe deployment/myapp-deployment**

1. One more scenario to test is – Change the version of nginx to something that does not exist. Use the tag nginx:1.5-err in the deployment-definition.yml file and apply the change

**kubectl apply -f deployment-definition.yml –record**

1. Observe the Rollout status and Rollout history

**kubectl rollout status deployment/myapp-deployment**

**kubectl rollout history deployment/myapp-deployment**

1. Have a look at the status of the Pods

**kubectl get pods**

1. Checkout the deployment state

**kubectl get deployment**

1. Since the last revision did not go through, undo the change

**kubectl rollout undo deployment/myapp-deployment**

1. Checkout the Rollout history after the undo

**kubectl rollout history deployment/myapp-deployment**

1. Get the status of the deployment once again and of the pods as well.

**kubectl describe deployment/myapp-deployment**

**kubectl get pods**