Lab

Let us explore the environment first. How many nodes do you see in the cluster?

Including the controlplane and worker nodes.

$ kubectl get nodes

Which nodes are the applications hosted on?

$ kubectl get pods -o wide

A screenshot of a computer

Description automatically generated

We need to take node01 out for maintenance. Empty the node of all applications and mark it unschedulable.

Node node01 Unschedulable

Pods evicted from node01

$ kubectl drain node01

A computer screen shot of a computer program

Description automatically generated

A screen shot of a computer

Description automatically generated

The maintenance tasks have been completed. Configure the node node01 to be schedulable again.

$ kubectl uncordon node01

A computer code with white text

Description automatically generated

Why there is pod running on control plane ? Because there is no Taint set on node plane

A computer screen shot of a program

Description automatically generated

Notes -🡪 you cannot drain cordon nodes

A screen shot of a computer

Description automatically generated

What would happen to hr-app if node01 is drained forcefully? Hr-app pod is is just pod not part of rs or deployment so it will be evicted

hr-app is a critical app and we do not want it to be removed and we do not want to schedule any more pods on node01.  
Mark node01 as unschedulable so that no new pods are scheduled on this node.

Make sure that hr-app is not affected.

hr-app  --🡪 deployment with on replica

Requirement

Node01 Unschedulable

hr-app still running on node01?

$ kubectl cordon node01

A screen shot of a computer

Description automatically generated