# **Lab x: Upgrading a kubeadm K8s cluster**

## **Upgrading to newer version of K8s using kubeadm**

1. kubeadm allows us to upgrade our cluster components in the proper order
2. Get the version of the API server:

$ kubectl version –short

1. View the version of kubelet:

$ kubectl describe nodes

1. View the version of controller-manager pod:

$ kubectl get po [controller\_pod\_name] -o yaml -n kube-system

1. Release the hold on versions of kubeadm and kubelet:

$ sudo apt-mark unhold kubeadm kubelet

1. Install version 1.16.6 of kubeadm:

$ sudo apt install -y kubeadm=1.16.6-00

1. Hold the version of kubeadm at 1.16.6:

$ sudo apt-mark hold kubeadm

1. Verify the version of kubeadm:

$ kubeadm version

1. Plan the upgrade of all the controller components:

$ sudo kubeadm upgrade plan

1. Upgrade the controller components:
2. $ sudo kubeadm upgrade apply v1.16.6
3. Release the hold on the version of kubectl:

$ sudo apt-mark unhold kubectl

1. Upgrade kubectl:

$ sudo apt install -y kubectl=1.16.6-00

1. Hold the version of kubectl at 1.16.6:

$ sudo apt-mark hold kubectl

1. Upgrade the version of kubelet:

$ sudo apt install -y kubelet=1.16.6-00

1. Hold the version of kubelet at 1.16.6:

$ sudo apt-mark hold kubelet