- **Kubeadm Kubernetes Cluster Upgrade**

My node version
For master node

```
root@FARDIN:/mnt/f/k8sCluster_kubeadm_terraform# kgn
NAME        STATUS    ROLES           AGE     VERSION
master      Ready     control-plane   7m50s   v1.25.16
worker-0    Ready     <none>          6m51s   v1.25.16
worker-1    Ready     <none>          7m24s   v1.25.16
```

```
ubuntu@ip-172-31-16-106:~$ sudo su -
root@ip-172-31-16-106:~# kubeadm version -o json
{
  "clientVersion": {
    "major": "1",
    "minor": "25",
    "gitVersion": "v1.25.16",
    "gitCommit": "c5f43560a4f98f2af3743a59299fb79f07924373",
    "gitTreeState": "clean",
    "buildDate": "2023-11-15T22:36:51Z",
    "goVersion": "go1.20.10",
    "compiler": "gc",
    "platform": "linux/amd64"
  }
}
root@ip-172-31-16-106:~#
```

```
root@ip-172-31-16-106:/etc/apt/keyrings# apt-cache madison kubeadm
    kubeadm | 1.26.14-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.13-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.12-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.11-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.10-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.9-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.8-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.7-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.6-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.5-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.4-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.3-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.2-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.1-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
    kubeadm | 1.26.0-2.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
```

Now upgrading to Kubeadm version from from kubeadm=1.25.16-1.1 to kubeadm=1.26.12-1.1

```
root@ip-172-31-16-106:~#
root@ip-172-31-16-106:~#
root@ip-172-31-16-106:~# sudo kubeadm upgrade plan
[upgrade/config] Making sure the configuration is correct:
[upgrade/config] Reading configuration from the cluster...
[upgrade/config] FYI: You can look at this config file with 'kubectl -n kube-system get cm kubeadm-config -o yaml
[preflight] Running pre-flight checks.
[upgrade] Running cluster health checks
[upgrade] Fetching available versions to upgrade to
[upgrade/versions] Cluster version: v1.25.16
[upgrade/versions] kubeadm version: v1.25.16
I0305 09:28:30.212228    11625 version.go:256] remote version is much newer: v1.29.2; falling back to: stable-1.25
[upgrade/versions] Target version: v1.25.16
[upgrade/versions] Latest version in the v1.25 series: v1.25.16

root@ip-172-31-16-106:~#
```

```
root@ip-172-31-16-106:/etc/apt/keyrings# sudo apt-mark hold kubeadm
kubeadm set on hold.
root@ip-172-31-16-106:/etc/apt/keyrings# sudo kubeadm upgrade node
[upgrade] Reading configuration from the cluster...
[upgrade] FYI: You can look at this config file with 'kubectl -n kube-system get cm kubeadm-config -o yaml'
W0305 10:01:42.628191    26040 configset.go:177] error unmarshaling configuration schema.GroupVersionKind{Group:"kubeproxy.config.k8s.
io", Version:"v1alpha1", Kind:"KubeProxyConfiguration"}: strict decoding error: unknown field "udpIdleTimeout"
[preflight] Running pre-flight checks
[preflight] Pulling images required for setting up a Kubernetes cluster
[preflight] This might take a minute or two, depending on the speed of your internet connection
[preflight] You can also perform this action in beforehand using 'kubeadm config images pull'
[upgrade] Upgrading your Static Pod-hosted control plane instance to version "v1.25.16"...
[upgrade/etcd] Upgrading to TLS for etcd
[upgrade/etcd] Non fatal issue encountered during upgrade: the desired etcd version "3.5.6-0" is older than the currently installed "
3.5.9-0". Skipping etcd upgrade
[upgrade/staticpods] Writing new Static Pod manifests to "/etc/kubernetes/tmp/kubeadm-upgraded-manifests755701009"
[upgrade/staticpods] Preparing for "kube-apiserver" upgrade
[upgrade/staticpods] Current and new manifests of kube-apiserver are equal, skipping upgrade
[upgrade/staticpods] Preparing for "kube-controller-manager" upgrade
[upgrade/staticpods] Current and new manifests of kube-controller-manager are equal, skipping upgrade
[upgrade/staticpods] Preparing for "kube-scheduler" upgrade
[upgrade/staticpods] Current and new manifests of kube-scheduler are equal, skipping upgrade
[upgrade] The control plane instance for this node was successfully updated!
[kubelet-start] Writing kubelet configuration to file "/var/lib/kubelet/config.yaml"
[upgrade] The configuration for this node was successfully updated!
[upgrade] Now you should go ahead and upgrade the kubelet package using your package manager.
root@ip-172-31-16-106:/etc/apt/keyrings#
```

```
root@ip-172-31-16-106:/etc/apt/keyrings# kubeadm version -o json
{
  "clientVersion": {
    "major": "1",
    "minor": "26",
    "gitVersion": "v1.26.12",
    "gitCommit": "df63cd7cd818dd2262473d2170f4957c6735ba53",
    "gitTreeState": "clean",
    "buildDate": "2023-12-19T13:41:12Z",
    "goVersion": "go1.20.12",
    "compiler": "gc",
    "platform": "linux/amd64"
  }
}
root@ip-172-31-16-106:/etc/apt/keyrings#
```

Now Upgrade Kubelet and Kubectl.

```
root@ip-172-31-16-106:~# kubelet version
E0305 10:23:10.357489    1550 run.go:74] "command failed" err="unknown command version"
root@ip-172-31-16-106:~# kubelet --version
Kubernetes v1.25.16
root@ip-172-31-16-106:~# sudo apt-mark unhold kubelet kubectl
kubelet was already not hold.
kubectl was already not hold.
root@ip-172-31-16-106:~# sudo apt-mark unhold kubelet kubectl
kubelet was already not hold.
kubectl was already not hold.
```

```
root@ip-172-31-16-106:~# sudo apt-get update && sudo apt-get install -y kubelet=1.26.12-1.1 kubectl=1.26.12-1.1
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:5 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages will be upgraded:
  kubectl kubelet
2 upgraded, 0 newly installed, 0 to remove and 10 not upgraded.
Need to get 31.2 MB of archives.
After this operation, 13.1 MB of additional disk space will be used.
Get:1 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  kubectl 1.26.12-1.1 [10.2 MB]
Get:2 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  kubelet 1.26.12-1.1 [21.0 MB]
Fetched 31.2 MB in 1s (40.4 MB/s)
(Reading database ... 58639 files and directories currently installed.)
Preparing to unpack .../kubectl_1.26.12-1.1_amd64.deb ...
Unpacking kubectl (1.26.12-1.1) over (1.25.16-1.1) ...
Preparing to unpack .../kubelet_1.26.12-1.1_amd64.deb ...
Unpacking kubelet (1.26.12-1.1) over (1.25.16-1.1) ...
Setting up kubelet (1.26.12-1.1) ...
Setting up kubectl (1.26.12-1.1) ...
root@ip-172-31-16-106:~#
```

```
root@ip-172-31-16-106:~# sudo apt-mark hold kubelet kubectl
kubelet set on hold.
kubectl set on hold.
root@ip-172-31-16-106:~#
```

```
root@ip-172-31-16-106:~# sudo systemctl daemon-reload
root@ip-172-31-16-106:~# sudo systemctl restart kubelet
root@ip-172-31-16-106:~#
```

```
root@FARDIN:/mnt/f/k8sCluster_kubeadm_terraform# kubectl uncordon master
node/master uncordoned
root@FARDIN:/mnt/f/k8sCluster_kubeadm_terraform# kubectl get nodes
NAME        STATUS    ROLES            AGE    VERSION
master      Ready     control-plane    75m    v1.26.12
worker-0    Ready     <none>           74m    v1.25.16
worker-1    Ready     <none>           74m    v1.25.16
root@FARDIN:/mnt/f/k8sCluster_kubeadm_terraform#
```

On worker node

```
ubuntu@ip-172-31-29-32:~$ sudo su -
root@ip-172-31-29-32:~# sudo apt-mark unhold kubelet kubectl
kubelet was already not hold.
kubectl was already not hold.
root@ip-172-31-29-32:~# sudo apt-mark unhold kubelet kubectl
kubelet was already not hold.
kubectl was already not hold.
root@ip-172-31-29-32:~#
```

```
root@ip-172-31-29-32:~# sudo apt-cache madison kubeadm | tac
   kubeadm |   1.25.0-2.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm |   1.25.1-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm |   1.25.2-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm |   1.25.3-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm |   1.25.4-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm |   1.25.5-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm |   1.25.6-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm |   1.25.7-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm |   1.25.8-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm |   1.25.9-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm |  1.25.10-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb   Packages
   kubeadm |  1.25.11-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb   Packages
   kubeadm |  1.25.12-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb   Packages
   kubeadm |  1.25.13-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb   Packages
   kubeadm |  1.25.14-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb   Packages
   kubeadm |  1.25.15-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb   Packages
   kubeadm |  1.25.16-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb   Packages
   kubeadm |   1.26.0-2.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm |   1.26.1-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm |   1.26.2-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm |   1.26.3-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm |   1.26.4-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm |   1.26.5-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm |   1.26.6-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm |   1.26.7-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm |   1.26.8-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm |   1.26.9-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm |  1.26.10-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb   Packages
   kubeadm |  1.26.11-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb   Packages
   kubeadm |  1.26.12-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb   Packages
```

```
root@ip-172-31-29-32:~# kubeadm version -o json
{
  "clientVersion": {
    "major": "1",
    "minor": "26",
    "gitVersion": "v1.26.12",
    "gitCommit": "df63cd7cd818dd2262473d2170f4957c6735ba53",
    "gitTreeState": "clean",
    "buildDate": "2023-12-19T13:41:12Z",
    "goVersion": "go1.20.12",
    "compiler": "gc",
    "platform": "linux/amd64"
  }
}
root@ip-172-31-29-32:~#
```

On worker node

Upgrade Kubelet and Kubectl.

```
root@ip-172-31-29-32:~# sudo apt-mark unhold kubelet kubectl
kubelet was already not hold.
kubectl was already not hold.
root@ip-172-31-29-32:~#
```

```
root@ip-172-31-29-32:~# sudo apt-get update && sudo apt-get install -y kubelet=1.26.12-1.1 kubectl=1.26.12-1.1
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:5 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.25/deb  InRelease
Hit:6 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages will be upgraded:
  kubectl kubelet
2 upgraded, 0 newly installed, 0 to remove and 10 not upgraded.
Need to get 31.2 MB of archives.
After this operation, 13.1 MB of additional disk space will be used.
Get:1 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  kubectl 1.26.12-1.1 [10.2 MB]
Get:2 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  kubelet 1.26.12-1.1 [21.0 MB]
Fetched 31.2 MB in 1s (41.5 MB/s)
(Reading database ... 58639 files and directories currently installed.)
Preparing to unpack .../kubectl_1.26.12-1.1_amd64.deb ...
Unpacking kubectl (1.26.12-1.1) over (1.25.16-1.1) ...
Preparing to unpack .../kubelet_1.26.12-1.1_amd64.deb ...
Unpacking kubelet (1.26.12-1.1) over (1.25.16-1.1) ...
Setting up kubelet (1.26.12-1.1) ...
Setting up kubectl (1.26.12-1.1) ...
root@ip-172-31-29-32:~#
```

```
root@ip-172-31-29-32:~# sudo apt-mark hold kubelet kubectl
kubelet set on hold.
kubectl set on hold.
root@ip-172-31-29-32:~#
```

```
root@ip-172-31-29-32:~# sudo systemctl daemon-reload
root@ip-172-31-29-32:~# sudo systemctl restart kubelet
root@ip-172-31-29-32:~#
```

```
root@FARDIN:~# kubectl uncordon worker-1
node/worker-1 already uncordoned
root@FARDIN:~# kgn
NAME        STATUS    ROLES           AGE      VERSION
master      Ready     control-plane   3h19m    v1.26.12
worker-0    Ready     <none>          3h18m    v1.25.16
worker-1    Ready     <none>          3h19m    v1.26.12
root@FARDIN:~#
```

ON worker 0

```
drwxr-xr-x 2 root root 4096 Mar  5 09:13  /
drwxr-xr-x 8 root root 4096 Mar  5 09:13  /
-rw-r--r-- 1 root root 1200 Mar  5 09:13 kubernetes-apt-keyring.gpg
root@ip-172-31-17-89:/etc/apt/keyrings# mv kubernetes-apt-keyring.gpg kubernetes-apt-keyring-1.25.gpg
root@ip-172-31-17-89:/etc/apt/keyrings# curl -fsSL https://pkgs.k8s.io/core:/stable:/v1.26/deb/Release.key | sudo gpg --dearmor -o /e
tc/apt/keyrings/kubernetes-apt-keyring.gpg
root@ip-172-31-17-89:/etc/apt/keyrings#
root@ip-172-31-17-89:/etc/apt/keyrings#
root@ip-172-31-17-89:/etc/apt/keyrings# echo 'deb [signed-by=/etc/apt/keyrings/kubernetes-apt-keyring.gpg] https://pkgs.k8s.io/core:/
stable:/v1.26/deb/ /' | sudo tee -a /etc/apt/sources.list.d/kubernetes.list
deb [signed-by=/etc/apt/keyrings/kubernetes-apt-keyring.gpg] https://pkgs.k8s.io/core:/stable:/v1.26/deb/ /
root@ip-172-31-17-89:/etc/apt/keyrings#
```

```
root@ip-172-31-17-89:/etc/apt/keyrings# apt update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:5 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.25/deb  InRelease
Get:6 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  InRelease [1192 B]
Get:7 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  Packages [20.8 kB]
Fetched 22.0 kB in 1s (21.7 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
12 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@ip-172-31-17-89:/etc/apt/keyrings#
```

```
Reading state information... Done
12 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@ip-172-31-17-89:/etc/apt/keyrings# sudo apt-cache madison kubeadm | tac
   kubeadm | 1.25.0-2.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.1-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.2-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.3-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.4-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.5-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.6-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.7-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.8-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.9-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.10-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.11-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.12-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.13-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.14-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.15-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.25.16-1.1 | https://pkgs.k8s.io/core:/stable:/v1.25/deb  Packages
   kubeadm | 1.26.0-2.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.1-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.2-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.3-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.4-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.5-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.6-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.7-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.8-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.9-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.10-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.11-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
   kubeadm | 1.26.12-1.1 | https://pkgs.k8s.io/core:/stable:/v1.26/deb  Packages
```

```
root@ip-172-31-17-89:/etc/apt/keyrings# sudo apt-mark unhold kubeadm
kubeadm was already not hold.
root@ip-172-31-17-89:/etc/apt/keyrings# sudo apt-get update && sudo apt-get install -y kubeadm=1.26.12-1.1
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:6 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:4 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.25/deb  InRelease
Hit:5 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages will be upgraded:
  kubeadm
1 upgraded, 0 newly installed, 0 to remove and 11 not upgraded.
Need to get 9871 kB of archives.
After this operation, 3232 kB of additional disk space will be used.
Get:1 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  kubeadm 1.26.12-1.1 [9871 kB]
Fetched 9871 kB in 1s (13.6 MB/s)
(Reading database ... 58639 files and directories currently installed.)
Preparing to unpack .../kubeadm_1.26.12-1.1_amd64.deb ...
Unpacking kubeadm (1.26.12-1.1) over (1.25.16-1.1) ...
Setting up kubeadm (1.26.12-1.1) ...
root@ip-172-31-17-89:/etc/apt/keyrings#
```

```
root@ip-172-31-17-89:/etc/apt/keyrings# sudo apt-mark hold kubeadm
kubeadm set on hold.
root@ip-172-31-17-89:/etc/apt/keyrings#
```

```
kubeadm set on hold.
root@ip-172-31-17-89:/etc/apt/keyrings# sudo kubeadm upgrade node
[upgrade] Reading configuration from the cluster...
[upgrade] FYI: You can look at this config file with 'kubectl -n kube-system get cm kubeadm-config -o yaml'
W0305 12:40:56.586599   30655 configset.go:177] error unmarshaling configuration schema.GroupVersionKind{Group:"kubeproxy.config.k8s.
io", Version:"v1alpha1", Kind:"KubeProxyConfiguration"}: strict decoding error: unknown field "udpIdleTimeout"
[preflight] Running pre-flight checks
[preflight] Skipping prepull. Not a control plane node.
[upgrade] Skipping phase. Not a control plane node.
[kubelet-start] Writing kubelet configuration to file "/var/lib/kubelet/config.yaml"
[upgrade] The configuration for this node was successfully updated!
[upgrade] Now you should go ahead and upgrade the kubelet package using your package manager.
root@ip-172-31-17-89:/etc/apt/keyrings#
```

```
root@FARDIN:~# kubectl drain worker-0 --ignore-daemonsets
node/worker-0 cordoned
WARNING: ignoring DaemonSet-managed Pods: kube-system/calico-node-v8vnj, kube-system/kube-proxy-tf97b
node/worker-0 drained
root@FARDIN:~#
```

Upgrade Kubelet & Kubectl

```
root@ip-172-31-17-89:~# sudo apt-mark unhold kubelet kubectl
kubelet was already not hold.
kubectl was already not hold.
root@ip-172-31-17-89:~#
root@ip-172-31-17-89:~#
root@ip-172-31-17-89:~# sudo apt-get update && sudo apt-get install -y kubelet=1.26.12-1.1 kubectl=1.26.12-1.1
Hit:1 http://security.ubuntu.com/ubuntu bionic-security InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic InRelease
Hit:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:2 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.25/deb  InRelease
Hit:6 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages will be upgraded:
  kubectl kubelet
2 upgraded, 0 newly installed, 0 to remove and 10 not upgraded.
Need to get 31.2 MB of archives.
After this operation, 13.1 MB of additional disk space will be used.
Get:1 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  kubectl 1.26.12-1.1 [10.2 MB]
Get:2 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.26/deb  kubelet 1.26.12-1.1 [21.0 MB]
Fetched 31.2 MB in 1s (44.2 MB/s)
(Reading database ... 58639 files and directories currently installed.)
Preparing to unpack .../kubectl_1.26.12-1.1_amd64.deb ...
Unpacking kubectl (1.26.12-1.1) over (1.25.16-1.1) ...
Preparing to unpack .../kubelet_1.26.12-1.1_amd64.deb ...
Unpacking kubelet (1.26.12-1.1) over (1.25.16-1.1) ...
Setting up kubelet (1.26.12-1.1) ...
Setting up kubectl (1.26.12-1.1) ...
root@ip-172-31-17-89:~#
```

```
root@ip-172-31-17-89:~# sudo apt-mark hold kubelet kubectl
kubelet set on hold.
kubectl set on hold.
root@ip-172-31-17-89:~#
```

```
root@ip-172-31-17-89:~# sudo systemctl daemon-reload
root@ip-172-31-17-89:~# sudo systemctl restart kubelet
```

```
root@FARDIN:~# kubectl uncordon worker-0
node/worker-0 uncordoned
root@FARDIN:~# kgn
NAME        STATUS   ROLES           AGE     VERSION
master      Ready    control-plane   3h31m   v1.26.12
worker-0    Ready    <none>          3h30m   v1.26.12
worker-1    Ready    <none>          3h30m   v1.26.12
root@FARDIN:~#
```