

```
[root@controlplane yum.repos.d]# k version
Client Version: v1.30.11
Kustomize Version: v5.0.4-0.20230601165947-6ce0bf390ce3
Server Version: v1.30.11
[root@controlplane yum.repos.d]#
```

```
[root@controlplane ~]# k version
Client Version: v1.38.11
Kustomize Version: v5.0.4-0.20230601165947-6ce0bf390ce3
Server Version: v1.38.11
[root@controlplane ~]# kgn
NAME      STATUS   ROLES          AGE     VERSION    INTERNAL-IP      EXTERNAL-IP   OS-IMAGE             KERNEL-VERSION      CONTAINER-RUNTIME
controlplane Ready   control-plane 43h    v1.38.11   10.159.176.195  <none>        Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.e18.18.x86_64  containerd://1.6.32
dataplane-1  Ready   <none>        26h    v1.38.11   10.159.175.218  <none>        Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.e18.18.x86_64  containerd://1.6.32
dataplane-2  Ready   <none>        26h    v1.38.11   10.159.175.198  <none>        Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.e18.18.x86_64  containerd://1.6.32
[root@controlplane ~]#
```

```
sudo yum list --showduplicates kubeadm --disableexcludes=kubernetes
```

```
[root@controlplane ~]# sudo yum list --showduplicates kubeadm --disblexcludes=kubernetes
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 5:18:16 ago on Mon 24 Mar 2025 02:26:45 AM EDT.

Installed Packages
kubeadm.x86_64                                1.30.11-150500.1.1                                     @kubernetes

Available Packages
kubeadm.arch64                                    1.30.0-150500.1.1                                     @kubernetes
kubeadm.i686                                      1.30.0-150500.1.1                                     @kubernetes
kubeadm.s390x                                     1.30.0-150500.1.1                                     @kubernetes
kubeadm.src                                       1.30.0-150500.1.1                                     @kubernetes
kubeadm.x86_64                                    1.30.0-150500.1.1                                     @kubernetes
kubeadm.arch64                                    1.30.1-150500.1.1                                     @kubernetes
kubeadm.i686                                      1.30.1-150500.1.1                                     @kubernetes
kubeadm.s390x                                     1.30.1-150500.1.1                                     @kubernetes
kubeadm.src                                       1.30.1-150500.1.1                                     @kubernetes
kubeadm.x86_64                                    1.30.2-150500.1.1                                     @kubernetes
kubeadm.arch64                                    1.30.2-150500.1.1                                     @kubernetes
kubeadm.i686                                      1.30.2-150500.1.1                                     @kubernetes
kubeadm.s390x                                     1.30.2-150500.1.1                                     @kubernetes
kubeadm.src                                       1.30.2-150500.1.1                                     @kubernetes
kubeadm.x86_64                                    1.30.3-150500.1.1                                     @kubernetes
kubeadm.arch64                                    1.30.3-150500.1.1                                     @kubernetes
kubeadm.i686                                      1.30.3-150500.1.1                                     @kubernetes
kubeadm.s390x                                     1.30.3-150500.1.1                                     @kubernetes
kubeadm.src                                       1.30.3-150500.1.1                                     @kubernetes
```

```
yum list --showduplicates kubeadm --disableexcludes=kubernetes
```

```
kubeadm.src          1.31.6-1585000.1.1
kubeadm.x86_64      1.31.6-1585000.1.1
kubeadm.aarch64     1.31.6-1585000.1.1
kubeadm.ppc64le     1.31.6-1585000.1.1
kubeadm.s390x       1.31.6-1585000.1.1
kubeadm.src          1.31.7-1585000.1.1
kubeadm.x86_64      1.31.7-1585000.1.1
kubeadm.aarch64     1.31.7-1585000.1.1
kubeadm.ppc64le     1.31.7-1585000.1.1
kubeadm.s390x       1.31.7-1585000.1.1
kubeadm.src          1.31.7-1585000.1.1
kubeadm.x86_64      1.31.7-1585000.1.1
kubeadm.aarch64     1.31.7-1585000.1.1
kubeadm.ppc64le     1.31.7-1585000.1.1
kubeadm.s390x       1.31.7-1585000.1.1

[root@controlplane yum.repos.d]#
[root@controlplane yum.repos.d]# yum install -y kubeadm-'1.31.7-1585000.1.1' --disablerepo=kubernetes
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use subscription-manager to register.

Last metadata expiration check: 0:00:57 ago on Mon 24 Mar 2025 08:03:53 AM EDT.
Dependencies resolved.

-----  


| Package               | Architecture | Version            | Repository | Size  |
|-----------------------|--------------|--------------------|------------|-------|
| Upgrading:<br>kubeadm | x86_64       | 1.31.7-1585000.1.1 | kubernetes | 11 MB |


-----  

Transaction Summary  

Upgrade 1 Package  

  

Total download size: 11 M
Downloading Packages:
[kubeadm-1.31.7-1585000.1.1.x86_64.rpm
62% [=====
```

```
yum install -y kubeadm-`1.31.7-150500.1.1` --disableexcludes=kubernetes
```

```
transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing : 
  Running scriptlet: kubeadm-1.31.7-150500.1.1.x86_64
  Upgrading   : kubeadm-1.31.7-150500.1.1.x86_64
  Cleanup     : kubeadm-1.30.11-150500.1.1.x86_64
  Running scriptlet: kubeadm-1.30.11-150500.1.1.x86_64
  Verifying    : kubeadm-1.31.7-150500.1.1.x86_64
  Verifying    : kubeadm-1.30.11-150500.1.1.x86_64
Installed products updated.

Upgraded:
  kubeadm-1.31.7-150500.1.1.x86_64

Complete!
[root@controlplane yum.repos.d]# cat kubernetes.repo
[kubernetes]
name=Kubernetes
baseurl=https://pkgs.k8s.io/core:/stable/:v1.31/rpm/
enabled=1
gpgcheck=1
gpgkey=https://pkgs.k8s.io/core:/stable/:v1.31/rpm/repo/repodata/repomd.xml.key
[root@controlplane yum.repos.d]#
```

kubeadm version

```
[root@ControlPlane yum.repos.d]# kubeadm version  
Kubeadm version: &version.Info{Major:"1", Minor:"1", GitVersion:"v1.31.7", GitCommit:"da53587841b49e6bd3bd2af1ec6101b57c79aff4", GitTreeState:"clean", BuildDate:"2025-03-11T20:02:21Z", GoVersion:"go1.23.6", Compiler:"gc", Platform:"linux/amd64"}  
[root@ControlPlane yum.repos.d]#
```

```
kubeadm upgrade plan --v=5
```

```

10324 08:09:19.488721 75208 kubelet[101:0] Starting a job with the plan: upgrade health check in the namespace kube-system
10324 08:09:20.325162 75208 health.go:287] Job "upgrade-health-check-wb9n9" in the namespace "kube-system" is not yet complete, retrying
10324 08:09:21.324951 75208 health.go:287] Job "upgrade-health-check-wb9n9" in the namespace "kube-system" is not yet complete, retrying
10324 08:09:22.326147 75208 health.go:287] Job "upgrade-health-check-wb9n9" in the namespace "kube-system" is not yet complete, retrying
10324 08:09:23.325101 75208 health.go:287] Job "upgrade-health-check-wb9n9" in the namespace "kube-system" is not yet complete, retrying
10324 08:09:24.356868 75208 health.go:287] Job "upgrade-health-check-wb9n9" in the namespace "kube-system" is not yet complete, retrying
10324 08:09:25.325649 75208 health.go:287] Job "upgrade-health-check-wb9n9" in the namespace "kube-system" is not yet complete, retrying
10324 08:09:26.324984 75208 health.go:287] Job "upgrade-health-check-wb9n9" in the namespace "kube-system" is not yet complete, retrying
10324 08:09:27.324848 75208 health.go:287] Job "upgrade-health-check-wb9n9" in the namespace "kube-system" is not yet complete, retrying
10324 08:09:28.324988 75208 health.go:287] Job "upgrade-health-check-wb9n9" in the namespace "kube-system" is not yet complete, retrying
10324 08:09:29.325735 75208 health.go:287] Job "upgrade-health-check-wb9n9" in the namespace "kube-system" is not yet complete, retrying
10324 08:09:30.325811 75208 health.go:287] Job "upgrade-health-check-wb9n9" in the namespace "kube-system" is not yet complete, retrying
10324 08:09:31.327299 75208 plan.go:110] [upgrade/plan] computing upgrade possibilities
[upgrade] Fetching available versions to upgrade to
[upgrade/versions] Cluster version: v1.30.11
[upgrade/versions] kubeadm version: v1.31.7
10324 08:09:31.332564 75208 version.go:192] fetching Kubernetes version from URL: https://dl.k8s.io/release/stable.txt
w8324 08:09:31.451528 75208 version.go:109] could not fetch a Kubernetes version from the internet: unable to get URL "https://dl.k8s.io/release/stable.txt": Get "https://dl.k8s.io/release/stable.txt": connection refused
w8324 08:09:31.451556 75208 version.go:101] falling back to the local client version: v1.31.7
[upgrade/versions] Target version: v1.31.7
10324 08:09:31.454408 75208 version.go:192] fetching Kubernetes version from URL: https://dl.k8s.io/release/stable-1.30.txt
w8324 08:09:32.387877 75208 version.go:109] could not fetch a Kubernetes version from the internet: unable to get URL "https://dl.k8s.io/release/stable-1.30.txt": Get "https://dl.k8s.io/release/stable-1.30.txt": connection refused
w8324 08:09:32.387902 75208 version.go:101] falling back to the local client version: v1.31.7
[upgrade/versions] Latest version in the v1.30 series: v1.31.7
```

```

10324 08:09:32.387954 75208 plan.go:129] [upgrade/plan] analysing component config version states
10324 08:09:32.387991 75208 kubeProxy.go:55] attempting to download the KubeProxyConfiguration from ConfigMap "kube-proxy"
10324 08:09:32.311462 75208 kubelet.go:73] attempting to download the KubeletConfiguration from ConfigMap "kubelet-config"
Components that must be upgraded manually after you have upgraded the control plane with 'kubeadm upgrade apply':
COMPONENT NODE CURRENT TARGET
kubelet controlplane v1.39.11 v1.31.7
kubelet dataplane-1 v1.39.11 v1.31.7
kubelet dataplane-2 v1.39.11 v1.31.7

Upgrade to the latest version in the v1.30 series:

COMPONENT NODE CURRENT TARGET
kubelet controlplane v1.30.11 v1.31.7
kubelet dataplane-1 v1.30.11 v1.31.7
kubelet dataplane-2 v1.30.11 v1.31.7

You can now apply the upgrade by executing the following command:
kubeadm upgrade apply v1.31.7

-----
The table below shows the current state of component configs as understood by this version of kubeadm.
Configs that have a "yes" mark in the "MANUAL UPGRADE REQUIRED" column require manual config upgrade or
resetting to kubeadm defaults before a successful upgrade can be performed. The version to manually
upgrade to is denoted in the "PREFERRED VERSION" column.

API GROUP CURRENT VERSION PREFERRED VERSION MANUAL UPGRADE REQUIRED
kubeProxy.config.k8s.io v1alpha1 v1alpha1 no
kubelet.config.k8s.io v1beta1 v1beta1 no
```

kubeadm upgrade apply v1.31.7

```

[root@controlplane yum.repos.d]# 
[root@controlplane yum.repos.d]# k version
Client Version: v1.38.1
Kubernetes Version: v1.38.1
Server Version: v1.38.11
[root@controlplane yum.repos.d]#
[root@controlplane yum.repos.d]#
[root@controlplane yum.repos.d]#
[root@controlplane yum.repos.d]# kubeadm version
kubeadm version: &version.Info{Major:"1", Minor:"31", GitVersion:"v1.31.7", GitCommit:"da53587841b4968dc3bd2af1ec6101b57c79aff4", GitTreeState:"clean", BuildDate:"2025-03-11T20:02:21Z", GoVersion:"go1.23.6", Compiler:"gc", Platform:"linux/amd64"}
[root@controlplane yum.repos.d]# 
```

```
[root@controlplane yum.repos.d]# kubeadm version
kubeadm version: vversion.Info{Major:"1", Minor:"31", GitVersion:"v1.31.7", GitCommit:"da53587841b496dc3bd2afec6101b57c79aff4", GitTreeState:"clean", BuildDate:"2025-03-11T20:02:21Z", GoVersion:"go1.23.6", Compiler:"gc", Platform:"linux/amd64"}
[root@controlplane yum.repos.d]# kubeadm upgrade plan
[preflight] Running pre-flight checks.
[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'.
[upgrade] Running cluster health checks
[upgrade] Fetching available versions to upgrade to
[upgrade] Latest version in the v1.30 series: v1.31.7
[upgrade/version] kubelet version: v1.31.7
[upgrade/version] 77654.version.go(189) could not fetch a Kubernetes version from the internet: unable to get URL "https://dl.k8s.io/release/stable.txt": Get "https://dl.k8s.io/release/stable.txt": dial tcp 34.107.204.286:443: connection refused
[upgrade/version] kubelet version: v1.31.7
[upgrade/version] kubelet version: v1.31.7
[upgrade/version] kubelet version: v1.31.7
Components that must be upgraded manually after you have upgraded the control plane with 'kubeadm upgrade apply':
COMPONENT      NODE            CURRENT   TARGET
kube-advisor    controlplane   v1.30.11  v1.31.7
kube-controller-manager controlplane v1.30.11  v1.31.7
kube-scheduler  controlplane   v1.30.11  v1.31.7
kube-proxy      v1.30.11       v1.31.7
etcd           controlplane   3.5.15-0   3.5.15-0
You can now apply the upgrade by executing the following command:
kubeadm upgrade apply v1.31.7

The table below shows the current state of component configs as understood by this version of kubeadm.
Configs that have a 'yellow' mark in the 'MANUAL_UPGRADE_REQUIRED' column require manual config upgrade or reversion. The default is that a successful upgrade can be performed. The version to manually upgrade to is denoted in the 'PREFERRED VERSION' column.
APL GROUP      CURRENT VERSION  PREFERRED VERSION  MANUAL_UPGRADE REQUIRED
kubeProxy.config.k8s.io  v1alpha1  v1beta1        no
kubernetes.config.k8s.io  v1beta1  v1beta1        no
```

```
Components that must be upgraded manually after you have upgraded the control plane with 'kubeadm upgrade apply':
COMPONENT      NODE            CURRENT   TARGET
kubelet        controlplane   v1.30.11  v1.31.7
kubelet        dataplane-1   v1.30.11  v1.31.7
kubelet        dataplane-2   v1.30.11  v1.31.7
```

```
[root@controlplane yum.repos.d]# kubectl version
Client Version: v1.38.11
Kubernetes Version: v1.38.11+0.20230601165947-0ce0bf398ce3
Server Version: v1.38.11
[root@controlplane yum.repos.d]# kubeadm version
kubeadm version: vversion.Info{Major:"1", Minor:"31", GitVersion:"v1.31.7", GitCommit:"da53587841b496dc3bd2afec6101b57c79aff4", GitTreeState:"clean", BuildDate:"2025-03-11T20:02:21Z", GoVersion:"go1.23.6", Compiler:"gc", Platform:"linux/amd64"}
[root@controlplane yum.repos.d]# kublet --version
Kubernetes v1.38.11
[root@controlplane yum.repos.d]#
```

kubeadm upgrade apply v1.31.7

```
[root@controlplane yum.repos.d]#
[root@controlplane yum.repos.d]# kubeadm upgrade apply v1.31.7
[preflight] Running pre-flight checks.
[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'.
[upgrade] Running cluster health checks
[upgrade/version] You have chosen to change the cluster version to "v1.31.7"
[upgrade/versions] Cluster version: v1.30.11
[upgrade/versions] kubeadm version: v1.31.7
[upgrade] Are you sure you want to proceed? [y/N]: ■
```

```
[upgrade] Are you sure you want to proceed? [y/N]: y
[upgrade/repull] Pulling images required for setting up a Kubernetes cluster
[upgrade/repull] This might take a minute or two, depending on the speed of your internet connection
[upgrade/repull] If you are behind a proxy, please make sure to set it correctly
[upgrade/repull] registry.k8s.io/pause:3.10 detected that the sandbox image "registry.k8s.io/pause:3.6" of the container runtime is inconsistent with that used by kubeadm. It is recommended to use "registry.k8s.io/pause:3.10" as the CR nodeImage.
[upgrade] Upgrading your Static Pod-hosted control plane to version "v1.31.7" (timeout: 5m0s)...
[upgrade/staticpods] Writing new Static Pod manifests to "/etc/kubernetes/rmp/kubeadm-upgraded-manifests34/2384134"
[upgrade/staticpods] Preparing for "etcd" upgrade
[upgrade/staticpods] Renewing etcd-peer certificate
[upgrade/staticpods] Renewing etcd-peer certificate
[upgrade/staticpods] Renewing etcd-healthcheck-client certificate
[upgrade/staticpods] Renewing etcd-healthcheck-client certificate
[upgrade/staticpods] Waiting for the kubelet to restart the component
[upgrade/staticpods] This can take up to 5m0s
[upgrade/staticpods] Found 1 Pod for label selector component=kube-spiserver
[upgrade/staticpods] Component "kube-spiserver" upgraded successfully!
[upgrade/staticpods] Waiting for etcd to become available
[upgrade/staticpods] Preparing for "controller-manager" upgrade
[upgrade/staticpods] Renewing controller-manager-client certificate
[upgrade/staticpods] Renewing controller-manager-client certificate
[upgrade/staticpods] Renewing controller-manager-client certificate
[upgrade/staticpods] Moving new manifest to "/etc/kubernetes/manifests/etcd.yaml" and backing up old manifest to "/etc/kubernetes/tmp/kubeadm-backup-manifests-2025-03-24-09-48-07/etcd.yaml"
[upgrade/staticpods] Waiting for the kubelet to restart the component
[upgrade/staticpods] This can take up to 5m0s
[upgrade/staticpods] Found 1 Pod for label selector component=kube-spiserver
[upgrade/staticpods] Component "kube-spiserver" upgraded successfully!
[upgrade/staticpods] Waiting for controller-manager to become available
[upgrade/staticpods] Renewing controller-manager.conf certificate
[upgrade/staticpods] Moving new manifest to "/etc/kubernetes/manifests/kube-controller-manager.yaml" and backing up old manifest to "/etc/kubernetes/tmp/kubeadm-backup-manifests-2025-03-24-09-48-07/kube-controller-manager.yaml"
[upgrade/staticpods] This can take up to 5m0s
[upgrade/staticpods] Found 1 Pod for label selector component=kube-controller-manager
[upgrade/staticpods] Component "kube-controller-manager" upgraded successfully!
[upgrade/staticpods] Preparing for "kube-scheduler" upgrade
[upgrade/staticpods] Renewing scheduler.conf certificate
[upgrade/staticpods] Moving new manifest to "/etc/kubernetes/manifests/kube-scheduler.yaml" and backing up old manifest to "/etc/kubernetes/tmp/kubeadm-backup-manifests-2025-03-24-09-48-07/kube-scheduler.yaml"
[upgrade/staticpods] Waiting for the kubelet to restart the component
[upgrade/staticpods] This can take up to 5m0s
[upgrade/staticpods] Component "kube-scheduler" upgraded successfully!
[upgrade-config] Storing the configuration used in ConfigMap "kubeadm-config" in the "kube-system" Namespace
[upgrade-config] Creating a configmap named "kubeadm-config" containing the configuration for the kubelets in the cluster
[upgrade] Basing the kubelet config file to /etc/kubernetes/manifests/kubeadm-config34/2384134/config.yaml
[kublet-start] Writing kubelet configuration to file "/var/lib/kubelet/config.yaml"
[bootstrap-token] Configured RBAC rules to allow node Bootstrap tokens to get long term certificate credentials
[bootstrap-token] Configured RBAC rules to allow Node clients to self-register with CSRs in order for nodes to get long term certificate credentials
[bootstrap-token] Configured RBAC rules to allow the e2e-prover controller automatically approve CSRs from a Node Bootstrap Token
[bootstrap-token] Configured RBAC rules to allow certificate rotation for all node client certificates in the cluster
[addons] Applied essential add-on: kube-proxy
[upgrade/successful] SUCCESS! Your Cluster was upgraded to "v1.31.7". Enjoy!
[upgrade/kublet] Now that your control plane is upgraded, please proceed with upgrading your kublets if you haven't already done so.
[root@controlplane yum.repos.d]#
```

kubectl drain <node-to-drain> --ignore-daemonsets

```
[root@controlplane yum.repos.d]# kubectl drain controlplane --ignore-daemonsets
node/controlplane cordoned
[1/2] evicting pod kube-system/coredns-55ccb8b774-wm48g
evicting pod kube-system/coredns-55ccb8b774-hj629
pod/coredns-55ccb8b774-wm48g evicted
pod/coredns-55ccb8b774-hj629 evicted
node/controlplane cordoned
[root@controlplane yum.repos.d]# kgn
NAME          STATUS    ROLES     AGE   VERSION INTERNAL-IP   EXTERNAL-IP OS-IMAGE           KERNEL-VERSION   CONTAINER-RUNTIME
controlplane  Ready,SchedulingDisabled  control-plane  46h  v1.38.11  10.159.174.135  <none>   Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
dataplane-1   Ready      <none>    31h  v1.38.11  10.159.175.218  <none>   Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
dataplane-2   Ready      <none>    31h  v1.38.11  10.159.175.130  <none>   Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
[root@controlplane yum.repos.d]#
```

sudo yum install -y kubelet-'1.31.7-150500.1.1' kubectl-'1.31.7-150500.1.1*' -- disableexcludes=kubernetes

```
[root@controlplane yum.repos.d]# yum install -y kubelet-'1.31.7-*' kubectl-'1.31.7-*' --disableexcludes=kubernetes
Updating Subscription Management repositories.
Unable to read consumer identity
This system is not registered with an entitlement server. You can use subscription-manager to register.
Kubernetes Dependencies resolved.
=====
Package           Architecture Version       Repository  S
Upgrading:
kubernetes-kubelet x86_64        1.31.7-150500.1.1  kubernetes  1
=====
Transaction Summary
Upgraded 2 Packages
Total download size: 26 M
Downloading Packages:
(1/2): kubelet-1.31.7-150500.1.1.x86_64.rpm 4.3 MB/s | 16 MB  00:03
(2/2): kubectl-1.31.7-150500.1.1.x86_64.rpm 2.0 MB/s | 11 MB  00:03
=====
Total
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing
Running scriptlet: kubelet-1.31.7-150500.1.1.x86_64
Upgrading: kubelet-1.31.7-150500.1.1.x86_64
Running scriptlet: kubelet-1.31.7-150500.1.1.x86_64
Upgrading: kubelet-1.31.7-150500.1.1.x86_64
Running scriptlet: kubelet-1.38.11-150500.1.1.x86_64
Running scriptlet: kubelet-1.38.11-150500.1.1.x86_64
Cleanup
Running scriptlet: kubelet-1.38.11-150500.1.1.x86_64
Running scriptlet: kubelet-1.38.11-150500.1.1.x86_64
Running scriptlet: kubelet-1.38.11-150500.1.1.x86_64
Verifying : kubelet-1.38.11-150500.1.1.x86_64
Verifying : kubelet-1.31.7-150500.1.1.x86_64
Verifying : kubelet-1.31.7-150500.1.1.x86_64
Verifying : kubelet-1.31.7-150500.1.1.x86_64
Installed products updated.
Upgraded:
kubernetes-kubelet-1.31.7-150500.1.1.x86_64
=====
Complete!
[root@controlplane yum.repos.d]#
```

sudo systemctl daemon-reload
sudo systemctl restart kubelet

```
[root@controlplane yum.repos.d]# sudo systemctl daemon-reload
[root@controlplane yum.repos.d]# sudo systemctl restart kubelet
[root@controlplane yum.repos.d]#
[root@controlplane yum.repos.d]# kgn
[root@controlplane yum.repos.d]# kgn
The connection to the server 10.159.174.135:6443 was refused - did you specify the right host or port?
[root@controlplane yum.repos.d]#
[root@controlplane yum.repos.d]# kgn
NAME          STATUS    ROLES     AGE   VERSION INTERNAL-IP   EXTERNAL-IP OS-IMAGE           KERNEL-VERSION   CONTAINER-RUNTIME
controlplane  Ready,SchedulingDisabled  control-plane  46h  v1.31.7  10.159.174.135  <none>   Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
dataplane-1   Ready      <none>    32h  v1.38.11  10.159.175.218  <none>   Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
dataplane-2   Ready      <none>    32h  v1.38.11  10.159.175.130  <none>   Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
[root@controlplane yum.repos.d]#
```

Woker node

```
[root@dataplane-1 yum.repos.d]# yum install kubeadm
Updating Subscription Management repositories.
Unable to read consumer identity
This system is not registered with an entitlement server. You can use subscription-manager to register.
Last metadata expiration check: 0:00:35 ago on Mon 24 Mar 2025 10:16:06 AM EDT.
Package kubeadm-1.38.11-150800.1.1.x86_64 is already installed.
Dependencies resolved.
Transaction Summary
Upgrade: 1 Package
Total download size: 11 M
Is this ok [y/N]: y
```

```
[root@dataplane-1 yum.repos.d]# yum install kubeadm
Updating Subscription Management repositories.
Unable to read consumer identity
This system is not registered with an entitlement server. You can use subscription-manager to register.
Kubernetes
Package kubeadm-1.38.11-150800.1.1.x86_64 is already installed.
Dependencies resolved.
Transaction Summary
Upgrade: 1 Package
Total download size: 11 M
Is this ok [y/N]: y
Downloading Packages:
kubeadm-1.31.7-150800.1.1.x86_64.rpm
Total
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing: 
  Preparing scriptlets: kubeadm-1.31.7-150800.1.1.x86_64
Upgrading: 
  Upgrading : kubeadm-1.31.7-150800.1.1.x86_64
Cleanup : 
  Cleanup : kubeadm-1.38.11-150800.1.1.x86_64
Running scriptlets: 
  Running scriptlets: kubeadm-1.31.7-150800.1.1.x86_64
  Verifying : kubeadm-1.31.7-150800.1.1.x86_64
  Verifying : kubeadm-1.38.11-150800.1.1.x86_64
  Installed products updated.
Upgraded: 
  Upgraded: kubeadm-1.31.7-150800.1.1.x86_64
Complete!
[root@dataplane-1 yum.repos.d]#
```

kubeadm upgrade node

```
[root@dataplane-1 yum.repos.d]# [root@dataplane-1 yum.repos.d]# 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'
[preflight] Running pre-flight checks
[upgrade] Skipping phase. Not a control plane node.
[upgrade] Skipping phase. Not a control plane node.
[upgrade] Skipping phase. Not a control plane node.
[upgrade] Backing up kubelet config file to /etc/kubernetes/tmp/kubeadm-kubelet-config3689987811/config.yaml
[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@dataplane-1 yum.repos.d]#
```

kubectl drain dataplane-1 --ignore-daemonsets --delete-emptydir-data --force

```
[root@controlplane yum.repos.d]# [root@controlplane yum.repos.d]# kubectl drain dataplane-1 --ignore-daemonsets --delete-emptydir-data --force
node/dataplane-1 already cordoned
Warning: deleting Pods that declare no controller: levoai/nginx-logging; ignoring DaemonSet-managed Pods: kube-system/kube-proxy-znvx4, kube-system/weave-net-581d9
evicting pod levoai/nginx-logging-deployment-5fdcc87977-t76tv
evicting pod levoai/nginx-logging
evicting pod levoai/nginx-logging-deployment-5fdcc87977-jzhqs
```

yum install kubelet kubectl

```
[root@dataplane-1 yum.repos.d]# yum install kubelet kubectl
[root@dataplane-1 yum.repos.d]# yum install kubelet kubectl
Updating Subscription Management repositories.
Unable to read consumer identity
This system is not registered with an entitlement server. You can use subscription-manager to register.
Last metadata expiration check: 0:04:09 ago on Mon 24 Mar 2025 10:17:27 AM EDT.
Package kubelet-1.38.11-158680.1.1.x86_64 is already installed.
Package kubectl-1.38.11-158680.1.1.x86_64 is already installed.
Dependencies resolved.
Transaction Summary
  Upgrade 2 Packages
Total download size: 26 M
Is this ok [y/N]: y
Download Only:
(1/2): kubelet-1.31.7-158680.1.1.x86_64.rpm 2.0 MB/s | 15 MB 00:07
(2/2): kubectl-1.31.7-158680.1.1.x86_64.rpm 114 kB/s | 11 MB 01:37
Total
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing : kubelet-1.31.7-158680.1.1.x86_64
Running scriptlet: kubelet-1.31.7-158680.1.1.x86_64
Upgrading : kubelet-1.31.7-158680.1.1.x86_64
Running scriptlet: kubectl-1.31.7-158680.1.1.x86_64
Upgrading : kubectl-1.31.7-158680.1.1.x86_64
Running scriptlet: kubectl-1.38.11-158680.1.1.x86_64
Running scriptlet: kubelet-1.38.11-158680.1.1.x86_64
Configuring : kubelet-1.31.7-158680.1.1.x86_64
Running scriptlet: kubectl-1.38.11-158680.1.1.x86_64
Configuring : kubectl-1.31.7-158680.1.1.x86_64
Running scriptlet: kubelet-1.38.11-158680.1.1.x86_64
Verifying   : kubelet-1.31.7-158680.1.1.x86_64
Verifying   : kubectl-1.38.11-158680.1.1.x86_64
Verifying   : kubelet-1.38.11-158680.1.1.x86_64
Installed products updated.
Upgraded:
  kubelet-1.31.7-158680.1.1.x86_64
Completing...
[root@dataplane-1 yum.repos.d]#
```

sudo systemctl daemon-reload
 sudo systemctl restart kubelet

```
[root@controlplane yum.repos.d]# kubectl get no
[root@controlplane yum.repos.d]# kgn
NAME     STATUS    ROLES      AGE   VERSION  INTERNAL-IP   EXTERNAL-IP  OS-IMAGE           KERNEL-VERSION   CONTAINER-RUNTIME
controlplane   Ready   control-plane   47h  v1.31.7  10.159.174.135  <none>        Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
dataplane-1   Ready   SchedulingDisabled 32h  v1.31.7  10.159.175.218  <none>        Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
dataplane-2   Ready   <none>       32h  v1.38.11 10.159.175.130  <none>        Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
[root@controlplane yum.repos.d]#
```

kubectl uncordon dataplane-1

```
[root@controlplane yum.repos.d]# kubectl uncordon dataplane-1
[root@controlplane yum.repos.d]# node/dataplane-1 uncordoned
[root@controlplane yum.repos.d]# kgn
NAME     STATUS    ROLES      AGE   VERSION  INTERNAL-IP   EXTERNAL-IP  OS-IMAGE           KERNEL-VERSION   CONTAINER-RUNTIME
controlplane   Ready   control-plane   47h  v1.31.7  10.159.174.135  <none>        Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
dataplane-1   Ready   <none>       32h  v1.31.7  10.159.175.218  <none>        Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
dataplane-2   Ready   <none>       32h  v1.38.11 10.159.175.130  <none>        Red Hat Enterprise Linux 8.8 (Ootpa)  4.18.0-553.36.1.el8_10.x86_64  containerd://1.6.32
[root@controlplane yum.repos.d]#
```

Worker node -2

```
[root@dataplane-2 yum.repos.d]# yum install kubeadm
[root@dataplane-2 yum.repos.d]# yum install kubeadm
Updating Subscription Management repositories.
Unable to read consumer identity
This system is not registered with an entitlement server. You can use subscription-manager to register.
Docker CE Stable - x86_64
Kubernetes
Package kubeadm-1.38.11-158680.1.1.x86_64 is already installed.
Dependencies resolved.
Transaction Summary
  Upgrade 1 Package
Total download size: 11 M
Is this ok [y/N]: y
Downloading Packages:
kubeadm-1.31.7-158680.1.1.x86_64.rpm 3.6 MB/s | 11 MB 00:03
Total
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing : kubeadm-1.31.7-158680.1.1.x86_64
Upgrading : kubeadm-1.31.7-158680.1.1.x86_64
Cleanup   : kubeadm-1.38.11-158680.1.1.x86_64
Running scriptlet: kubeadm-1.38.11-158680.1.1.x86_64
Running scriptlet: kubeadm-1.31.7-158680.1.1.x86_64
Verifying  : kubeadm-1.38.11-158680.1.1.x86_64
Verifying  : kubeadm-1.31.7-158680.1.1.x86_64
Installed products updated.
Upgraded:
  kubeadm-1.31.7-158680.1.1.x86_64
Completing...
[root@dataplane-2 yum.repos.d]#
```

```
[root@dataplane-2 yum.repos.d]# 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'
[preflight] Running pre-flight checks
[preflight] Skipping prepull. Not a control plane node.
[upgrade] Skipping phase. Not a control plane node.
[upgrade] Skipping phase. Not a control plane node.
[upgrade] Backing up kubelet config file to /etc/kubernetes/tmp/kubeadm-kubelet-config639707032/config.yaml
[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@dataplane-2 yum.repos.d]#
```

```
[root@Controlplane yum.repos.d]# kubectl drain dataplane-2 --ignore-daemonsets --delete-emptydir-data
node/dataplane-2 already cordoned
warning: ignoring DaemonSet-managed Pods: kube-system/kube-proxy-srz2f, kube-system/weave-net-76cxw
evicting pod kube-system/nginx-logging-deployment-5fdc87977-8kh9q
evicting pod kube-system/coredns-55cb5b774-m1cng
evicting pod kube-system/coredns-55cb5b774-zb1nn
evicting pod levoai/nginx-logging-deployment-5fdc87977-8kh9q
evicting pod levoai/nginx-logging-deployment-5fdc87977-8kh9q
evicting pod levoai/nginx-logging-deployment-5fdc87977-8kh9q
evicting pod levoai/nginx-logging-deployment-5fdc87977-8kh9q
10324 10:28:39.344941 81567 request.go:708] Waited for 1.09884562s due to client-side throttling, not priority and fairness, request: GET:https://10.159.174.135:6443/api/v1/namespaces/levoai/pods/nginx-logging-deployment-5fdc87977-8kh9q
10324 10:28:49.344964 81567 request.go:708] Waited for 1.094464592s due to client-side throttling, not priority and fairness, request: GET:https://10.159.174.135:6443/api/v1/namespaces/kube-system/pods/coredns-55cb5b774-m1cng
[]
```

```
[root@Controlplane-2 yum.repos.d]# yum install -y kubelet
Updating Subscription Management repositories.
Unable to read consumer identity
This system is not registered with an entitlement server. You can use subscription-manager to register.

Dependencies resolved.
=====
Transaction Summary
Upgrade 2 Packages
Total download size: 26 M
Downgrading Packages:
  (1/2): kubelet-1.31.7-158580.1.1.x86_64.rpm
  [MIRROR] https://prod-cdn.packages.k8s.io/repositories/lsv:/kubernetes:/core/stable/:v1.31/rpm/x86_64/kubelet-1.31.7-158580.1.1.x86_64.rpm [Operation]
Less than 1000 bytes/sec transferred the last 30 seconds
(2/2): kubelet-1.31.7-158580.1.1.x86_64.rpm
286 kB/s | 15 MB
=====
Total
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing :
    Running scriptlet: kubelet-1.31.7-158580.1.1.x86_64
  Upgrading : kubelet-1.31.7-158580.1.1.x86_64
    Running scriptlet: kubelet-1.31.7-158580.1.1.x86_64
  Upgrading : kubelet-1.31.7-158580.1.1.x86_64
    Running scriptlet: kubelet-1.31.7-158580.1.1.x86_64
  Cleanup   : kubelet-1.38.11-158580.1.1.x86_64
    Running scriptlet: kubelet-1.38.11-158580.1.1.x86_64
  Removing  : kubelet-1.38.11-158580.1.1.x86_64
    Verifying  : kubelet-1.31.7-158580.1.1.x86_64
  Verifying   : kubelet-1.38.11-158580.1.1.x86_64
  Verifying   : kubelet-1.31.7-158580.1.1.x86_64
  Verifying   : kubelet-1.38.11-158580.1.1.x86_64
  Verifying   : kubelet-1.31.7-158580.1.1.x86_64
  Verifying   : kubelet-1.38.11-158580.1.1.x86_64
  Verifying   : kubelet-1.31.7-158580.1.1.x86_64
  Verifying   : kubelet-1.38.11-158580.1.1.x86_64
  Verifying   : kubelet-1.31.7-158580.1.1.x86_64
  Verifying   : kubelet-1.38.11-158580.1.1.x86_64
  Installed products updated.

Upgraded:
  kubelet-1.31.7-158580.1.1.x86_64
=====
Complete!
[root@Controlplane-2 yum.repos.d]#
```

```
[root@Controlplane yum.repos.d]#
[root@Controlplane yum.repos.d]# kubectl uncordon dataplane-2
node/dataplane-2 uncordoned
[root@Controlplane yum.repos.d]#
[root@Controlplane yum.repos.d]# kubectl get no --selector=k8s-role=control-plane
NAME           STATUS    ROLES   AGE     VERSION   INTERNAL-IP      EXTERNAL-IP   OS-IMAGE             KERNEL-VERSION   CONTAINER-RUNTIME
controlplane   Ready    control-plane   v1.31.7   10d   109.176.135   <none>        Red Hat Enterprise Linux 8.8 (Ootpa)   4.18.0-553.36.1.el8_10.x86_64   containerd://1.6.32
dataplane-1    Ready    <none>    32h   v1.31.7   10.159.175.218   <none>        Red Hat Enterprise Linux 8.8 (Ootpa)   4.18.0-553.36.1.el8_10.x86_64   containerd://1.6.32
dataplane-2    Ready    <none>    32h   v1.31.7   10.159.175.138   <none>        Red Hat Enterprise Linux 8.8 (Ootpa)   4.18.0-553.36.1.el8_10.x86_64   containerd://1.6.32
[root@Controlplane yum.repos.d]#
```