

Kube-proxy is an important component of each Kubernetes worker node. It is responsible for providing network routing to support Kubernetes networking components. In this lesson, we will configure our kube-proxy `systemd` service. Since this is the last of the three worker node services that we need to configure, we will also go ahead and start all of our worker node services once we're done. Finally, we will complete some steps to verify that our cluster is set up properly and functioning as expected so far. After completing this lesson, you should have two Kubernetes worker nodes up and running, and they should be able to successfully register themselves with the cluster.

You can configure the kube-proxy service like so. Run these commands on both worker nodes:

```
sudo mv kube-proxy.kubeconfig /var/lib/kube-proxy/kubeconfig
```

Create the kube-proxy config file:

```
cat << EOF | sudo tee /var/lib/kube-proxy/kube-proxy-config.yaml
kind: KubeProxyConfiguration
apiVersion: kubeproxy.config.k8s.io/v1alpha1
clientConnection:
  kubeconfig: "/var/lib/kube-proxy/kubeconfig"
mode: "iptables"
clusterCIDR: "10.200.0.0/16"
EOF
```

Create the kube-proxy unit file:

```
cat << EOF | sudo tee /etc/systemd/system/kube-proxy.service
[Unit]
Description=Kubernetes Kube Proxy
Documentation=https://github.com/kubernetes/kubernetes

[Service]
ExecStart=/usr/local/bin/kube-proxy \\\
  --config=/var/lib/kube-proxy/kube-proxy-config.yaml
Restart=on-failure
RestartSec=5

[Install]
WantedBy=multi-user.target
EOF
```

Now you are ready to start up the worker node services! Run these:

```
sudo systemctl daemon-reload
sudo systemctl enable containerd kubelet kube-proxy
sudo systemctl start containerd kubelet kube-proxy
```

Check the status of each service to make sure they are all `active (running)` on both worker nodes:

```
sudo systemctl status containerd kubelet kube-proxy
```

Finally, verify that both workers have registered themselves with the cluster. Log in to one of your control nodes and run this:

```
kubectl get nodes
```

You should see the hostnames for both worker nodes listed. Note that it is expected for them to be in the NotReady state at this point.