

Once the Kubernetes cluster is set up, we still need to configure cluster networking in order to make the cluster fully functional. In this lesson, we will walk through the process of configuring a cluster network using Flannel. You can find more information on Flannel at the official site: <https://coreos.com/flannel/docs/latest/>.

Here are the commands used in this lesson:

- On all three nodes, run the following:

```
echo "net.bridge.bridge-nf-call-iptables=1" | sudo tee -a /etc/sysctl.conf
sudo sysctl -p
```

- Install Flannel in the cluster by running this only on the Master node:

```
kubectl apply -f https://raw.githubusercontent.com/coreos/flannel/master/Documentation/kube-flannel.yml
```

- Verify that all the nodes now have a STATUS of `Ready` :

```
kubectl get nodes
```

You should see all three of your servers listed, and all should have a STATUS of `Ready` . It should look something like this:

NAME	STATUS	ROLES	AGE	VERSION
wboyd1c.mylabserver.com	Ready	master	5m17s	v1.12.2
wboyd2c.mylabserver.com	Ready	<none>	53s	v1.12.2
wboyd3c.mylabserver.com	Ready	<none>	31s	v1.12.2

Note: It may take a few moments for all nodes to enter the `Ready` status, so if they are not all `Ready` , wait a few moments and try again.

- It is also a good idea to verify that the Flannel pods are up and running. Run this command to get a list of system pods:

```
kubectl get pods -n kube-system
```

You should have three pods with `flannel` in the name, and all three should have a status of `Running` .