⌂ KUBERNETES FUNDAMENTALS (LFS258)   SUPPORT   SIGN OUT
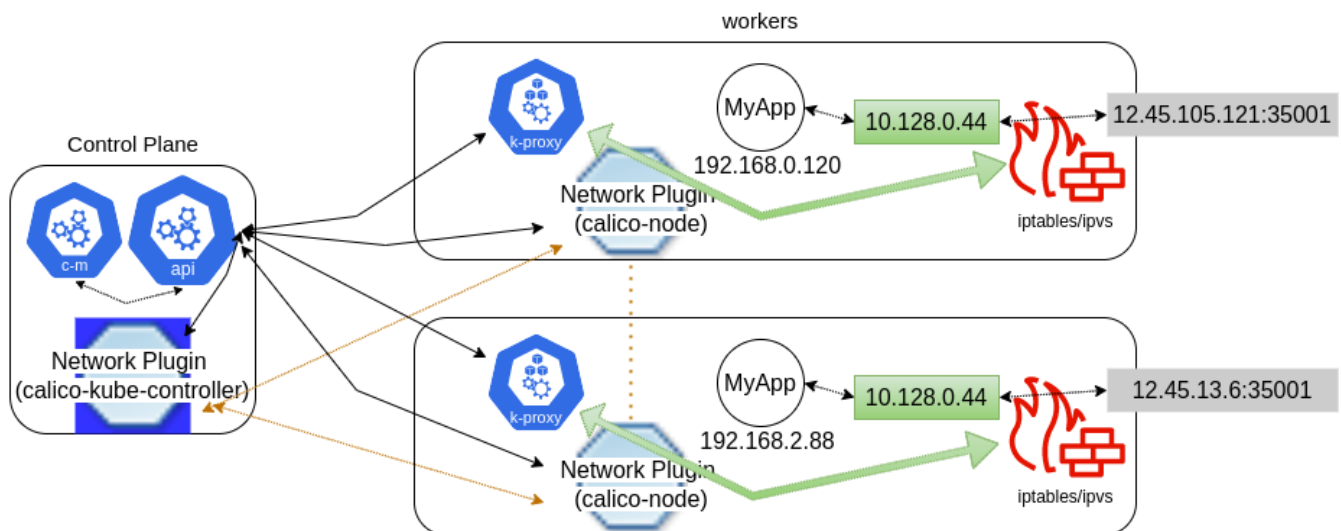
SERVICES
Services

Services Diagram

The controllers of services and endpoints run inside the kube-controller-manager and send API calls to the kube-apiserver. API calls are then sent to the network plugin, such as calico-kube-controller, which then communicates with agents on each node, such as calico-node. Every kube-proxy is also sent an API call so that it can manage the firewall locally. The firewall is often iptables or ipvs. The kube-proxy mode is configured via a flag sent during initialization, such as `mode=iptables`, and could also be `IPVS` or `userspace`.

Service Traffic

In the iptables proxy mode, kube-proxy continues to get updates from the API server for changes in Service and Endpoint objects, and updates rules for each object when created or removed.

The graphic above shows two workers, each with a replica of MyApp running. A NodePort has been configured, which will direct traffic from port 35001 to the ClusterIP and on to the ephemeral IP of the pod. All nodes use the same firewall rule. As a result, you can connect to any node, and Calico will get the traffic to a node which is running the pod.