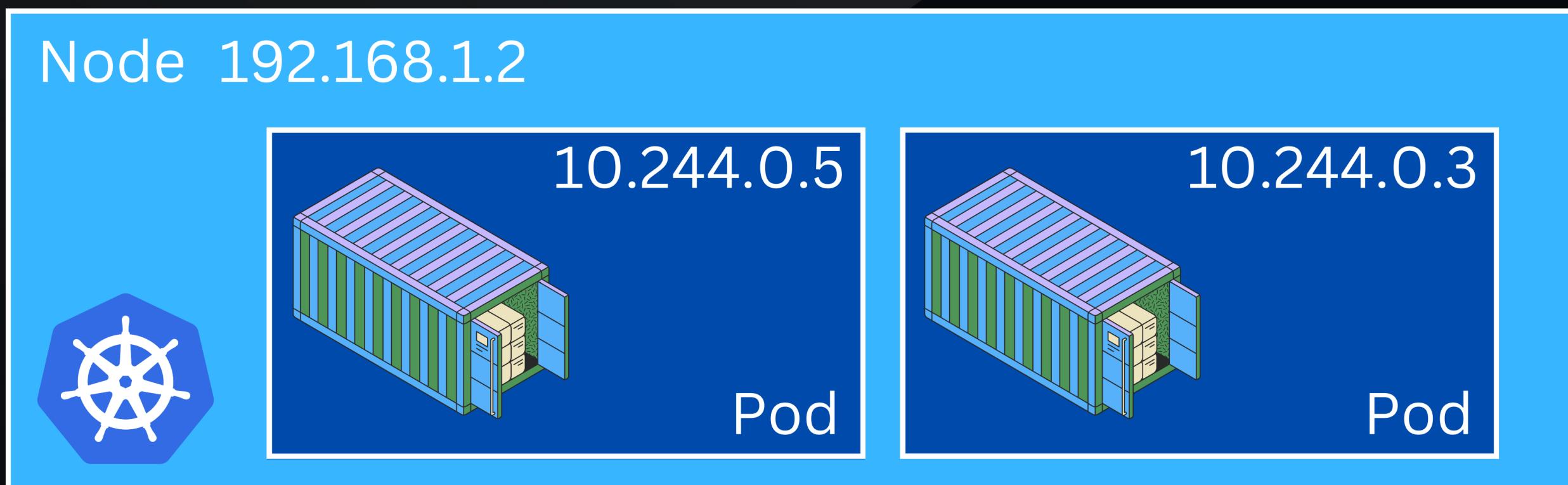


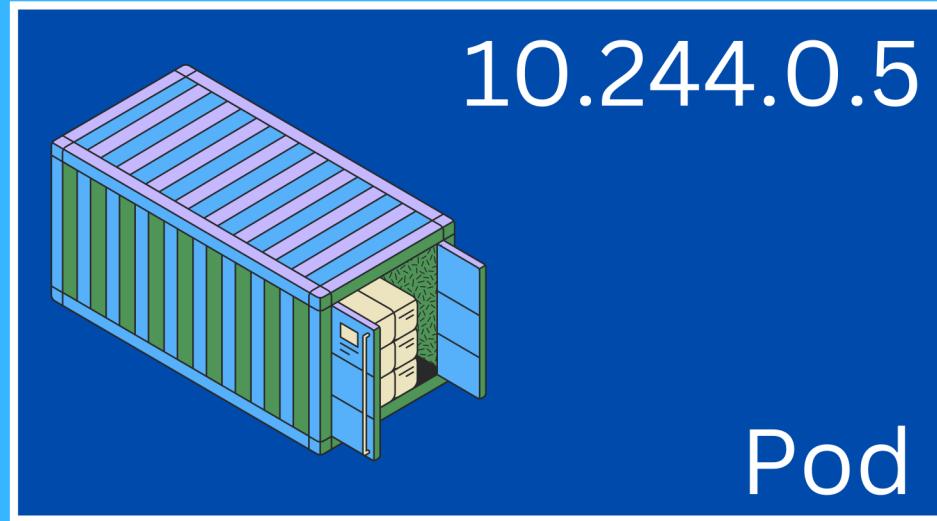
NETWORK

- How does one pod talk to other pod in the **same node**?
- How does one pod talk to other pod in the **other node** in the cluster?

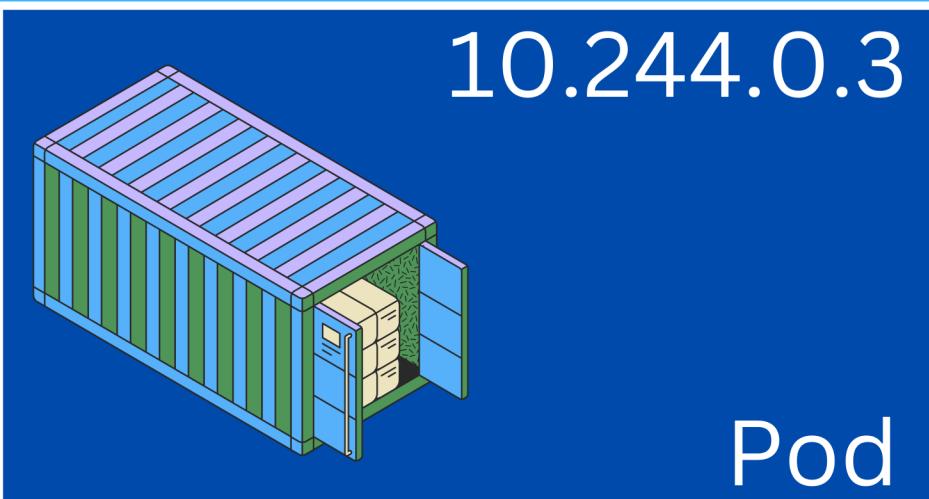
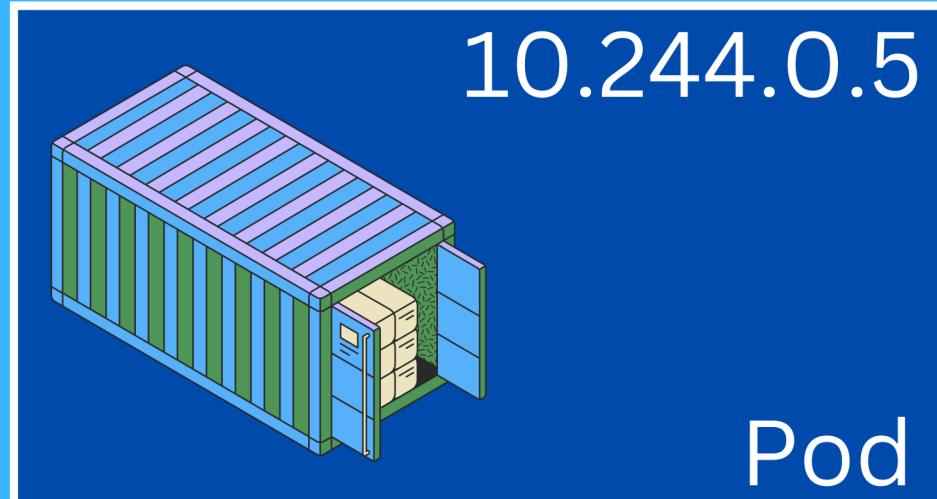


NETWORK IN CLUSTER

Node 192.168.1.3

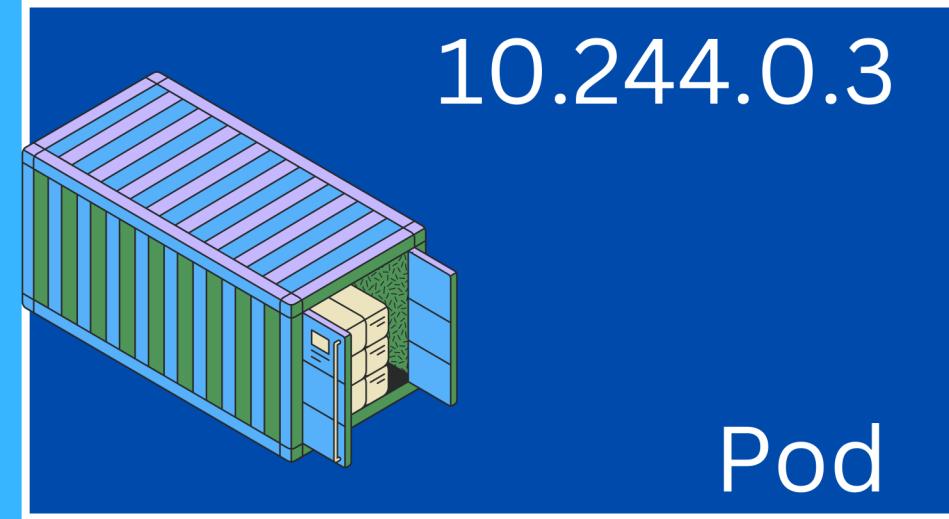
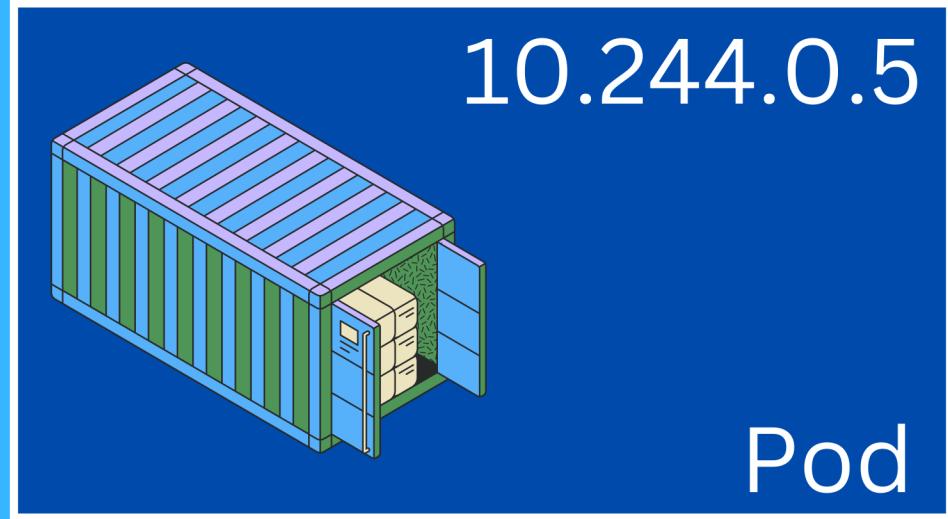


Node 192.168.1.2

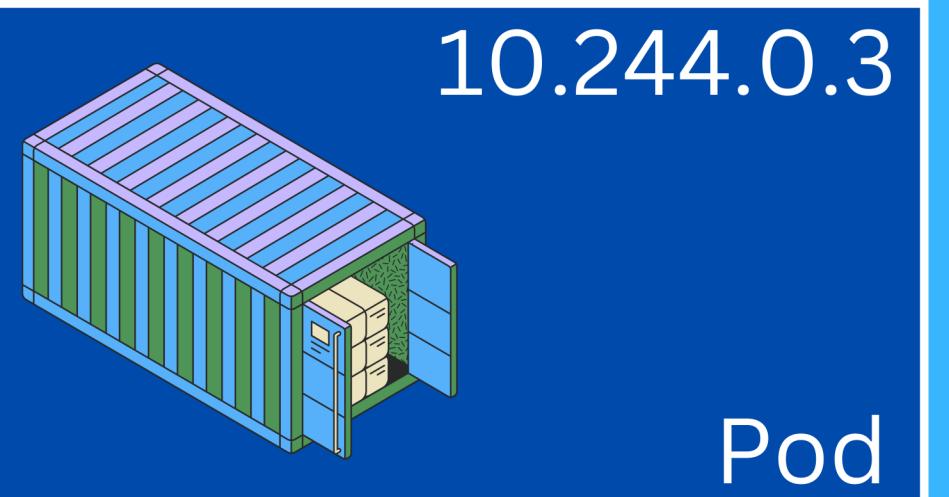
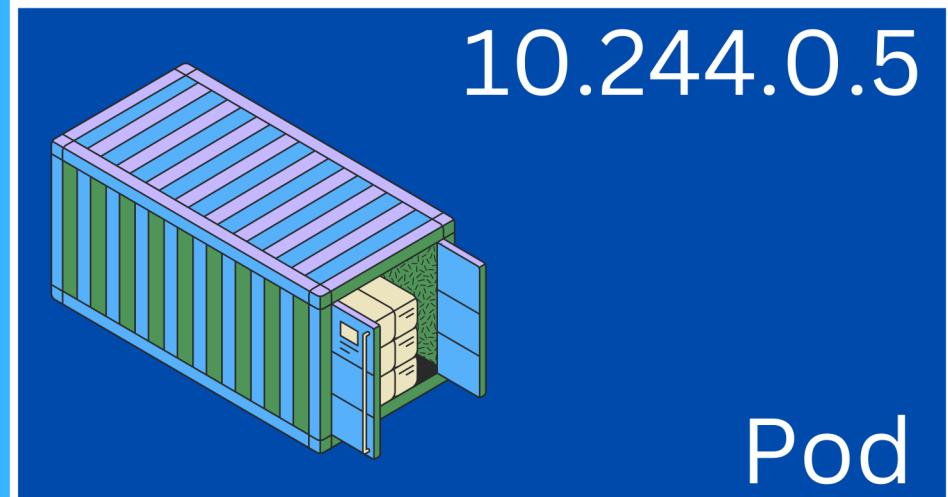


NETWORK IN CLUSTER

Node 192.168.1.3



Node 192.168.1.2



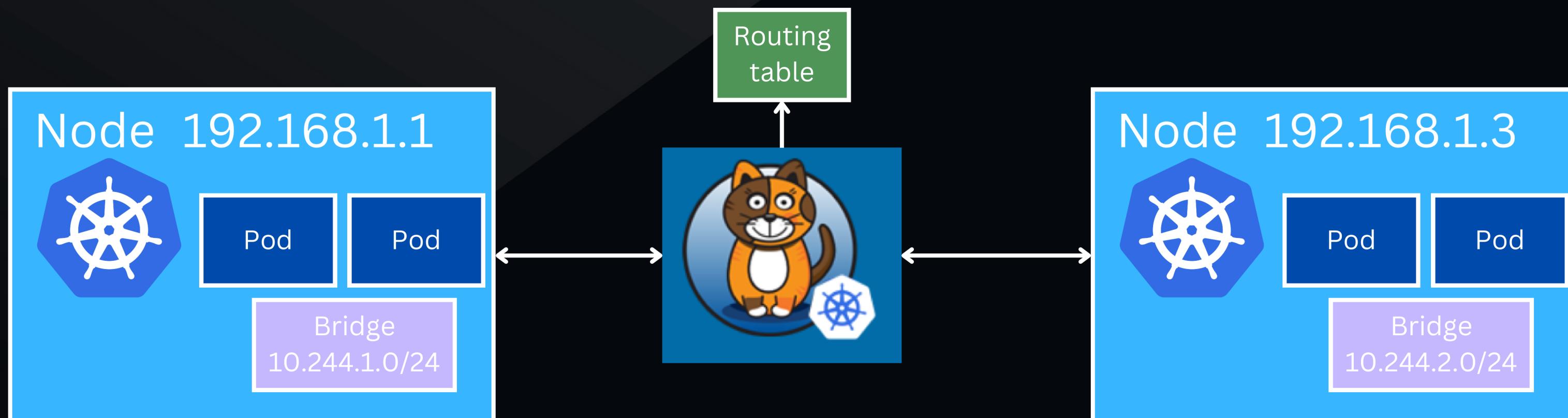
NETWORK IN CLUSTER

- Configure the networking for the cluster by installing a **CNI (Container Network Interface) plugin**. Popular options include **Calico, Flannel, and Weave Net**. The CNI plugin will enable communication between the nodes in the cluster, allowing pods to communicate with each other and with external networks
- the CNI plugin in Kubernetes is **responsible for creating and managing the routing tables** that enable communication between pods and services in the cluster



NETWORKING MODEL

- Every Pod needs an ip address
- Every Pod needs to communicate with every other Pod in the same node - virtual bridge
- Every Pod needs to communicate with every other Pod on other nodes without NAT(Network Address Translation - translate local network to a single public ip address) - routing table, CNI



SUMMARY TO SET UP K8S

1. Set up a control plane node
2. Install and configure worker nodes
3. Configure the networking for the cluster
4. Join the worker nodes to the cluster: Running command on each worker node
5. Deploy containerized applications on the cluster