

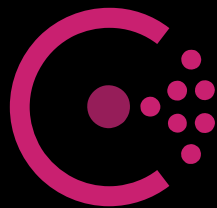


# Connecting and Migrating Applications with Consul Service Mesh

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Consul Engineer at HashiCorp



HashiCorp

Consul

Pulse

**Contributors**

Community

Traffic

Commits

Code frequency

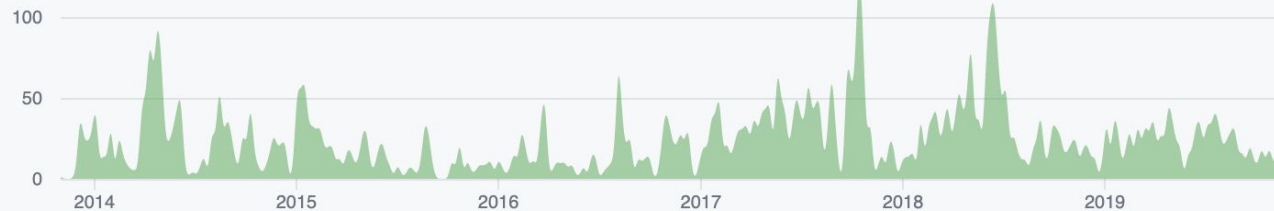
Dependency graph

Network

Nov 3, 2013 – Nov 17, 2019

Contributions: Commits ▾

Contributions to master, excluding merge commits





# Consul Service Mesh



## Secure By Default

All traffic is mTLS encrypted / SPIFFE identity



## Multi Platform

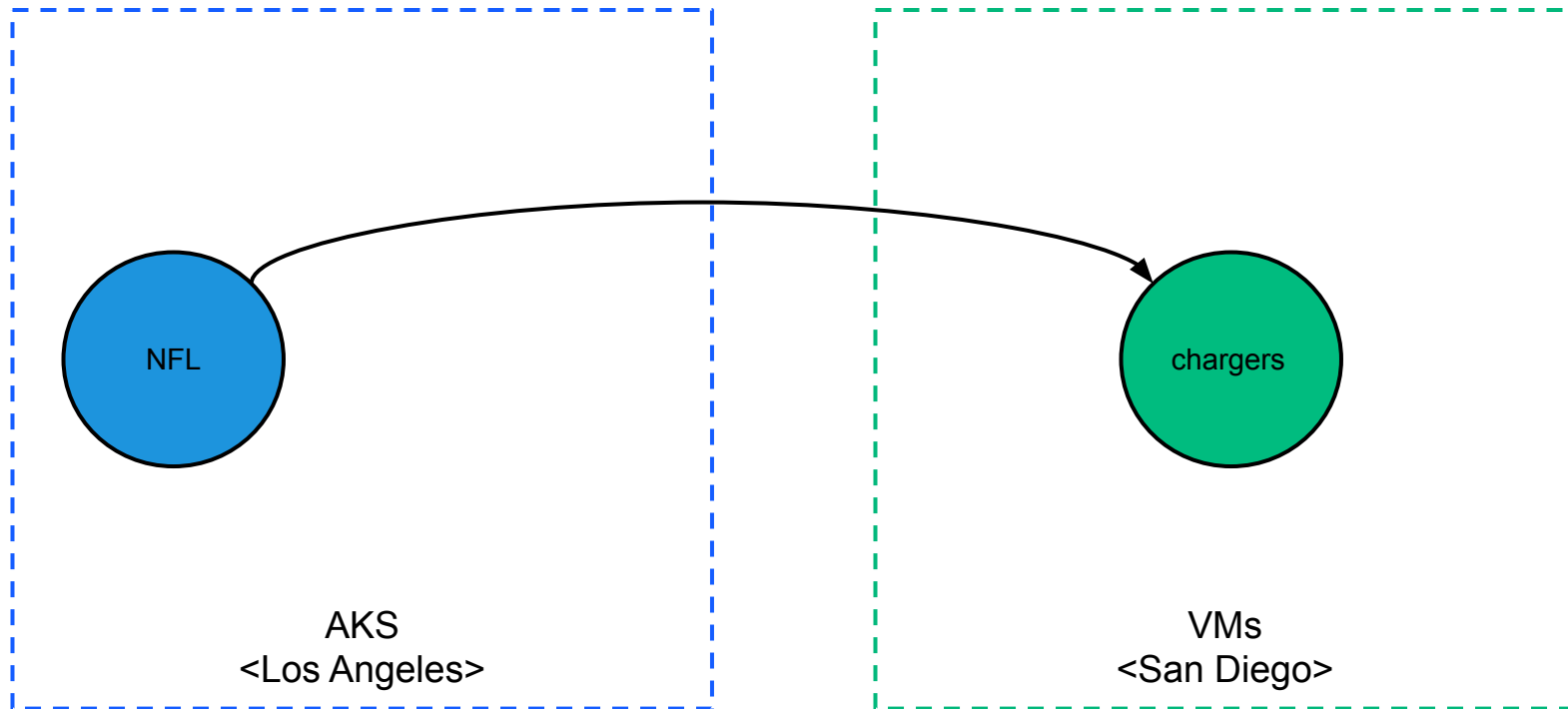
Connect Kube clusters, VMs, bare metal



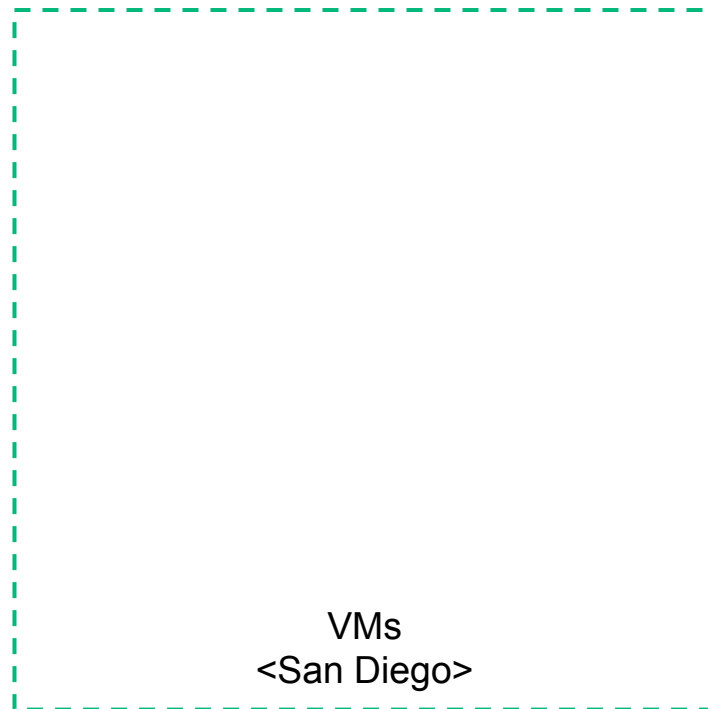
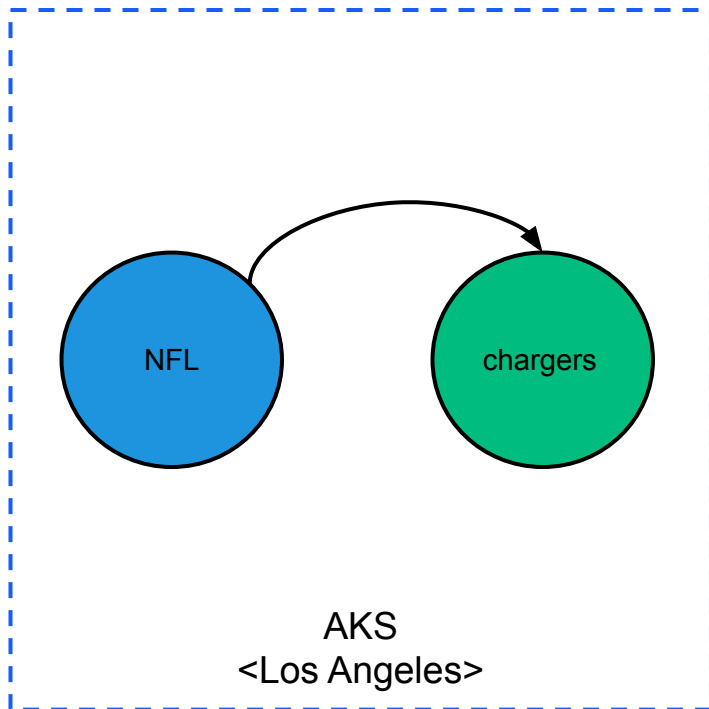
## Layer 7 Traffic Management

Control traffic via config

# Service Migration

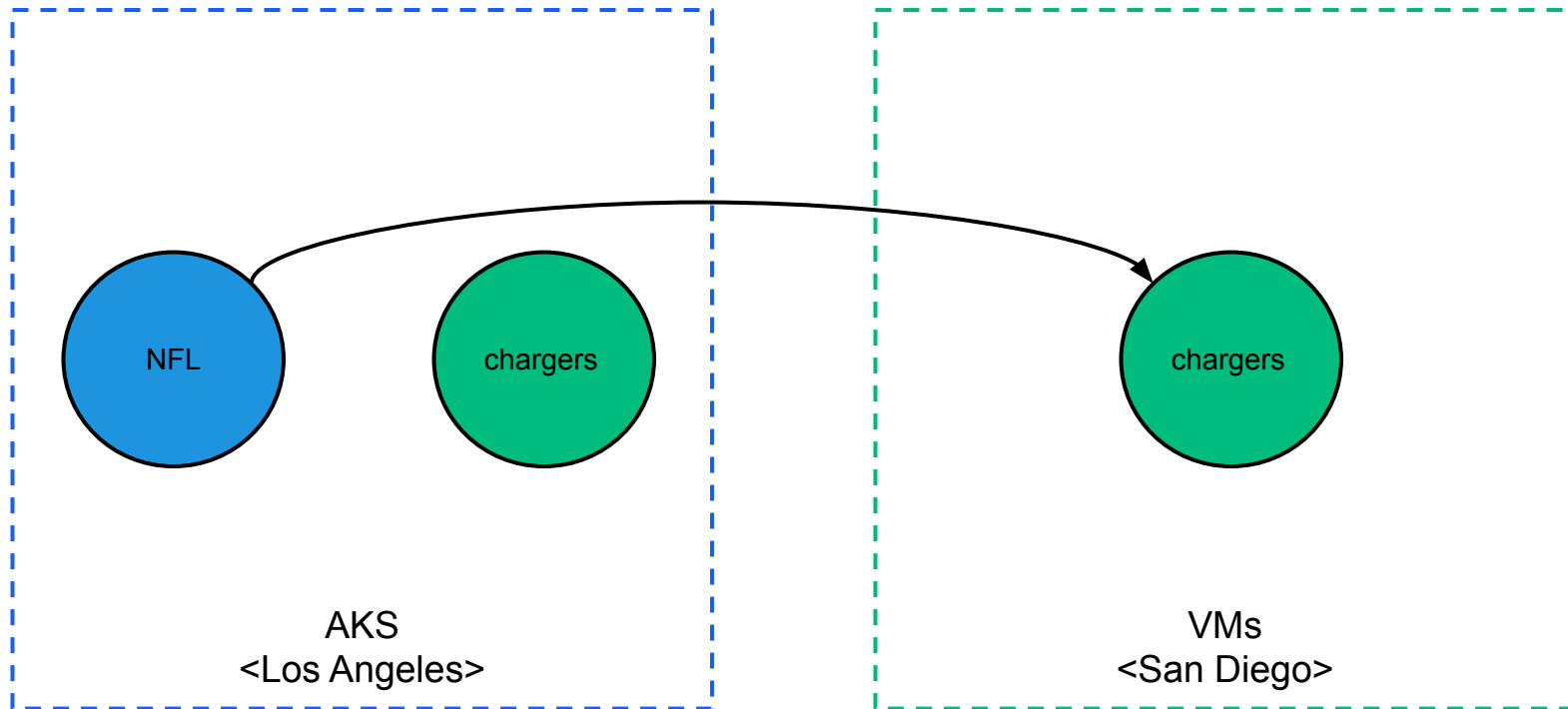


# Service Migration



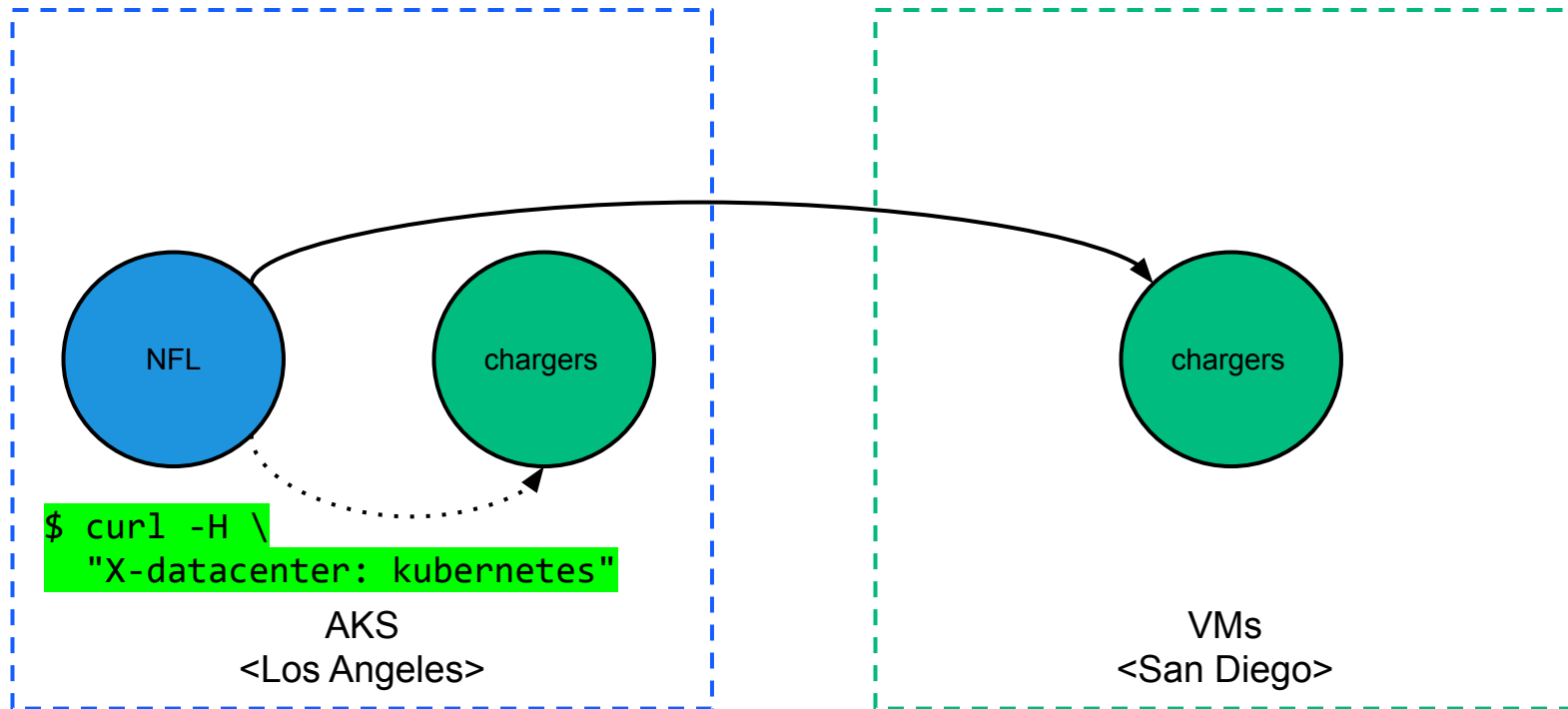
# Service Migration

## Step 1 - Deploy to Kubernetes



# Service Migration

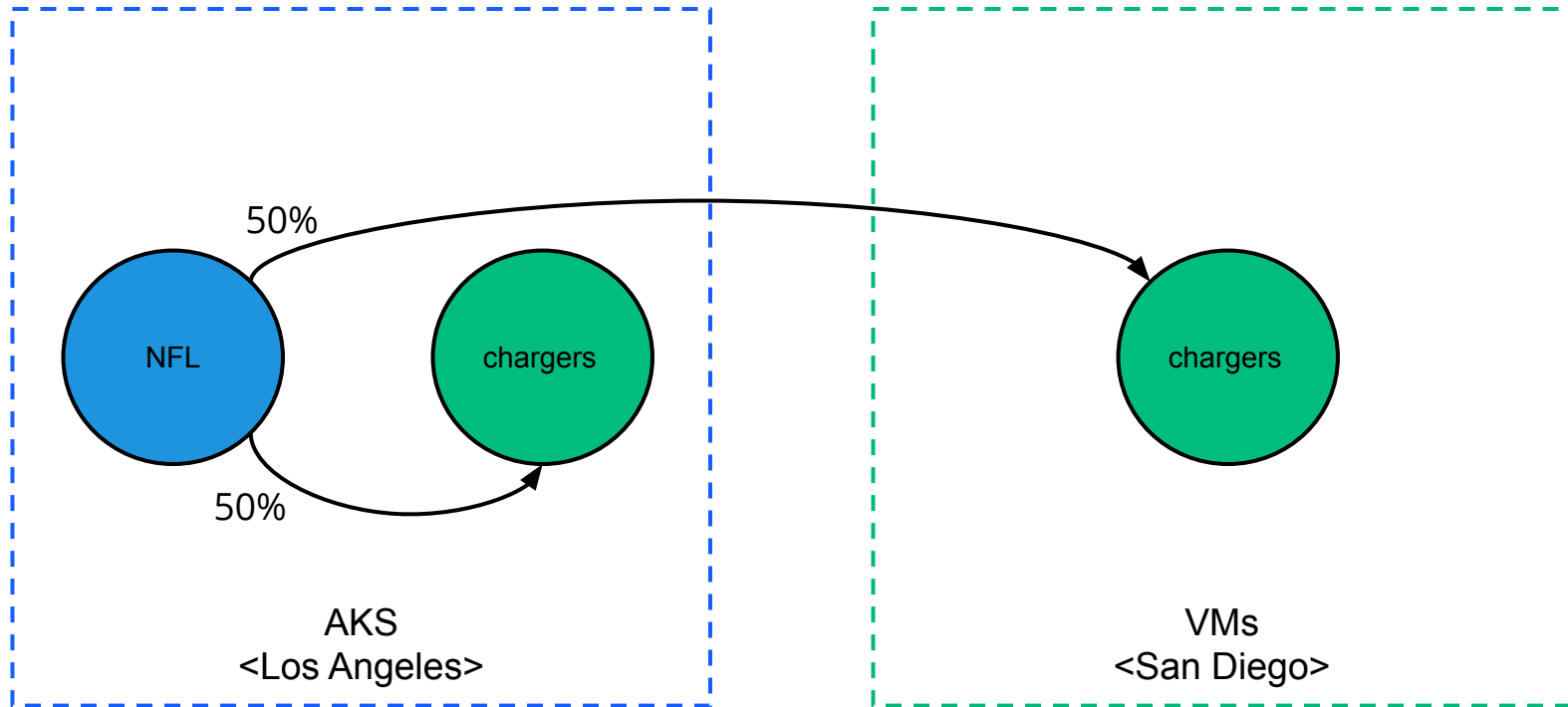
## Step 2 - Test that routing works





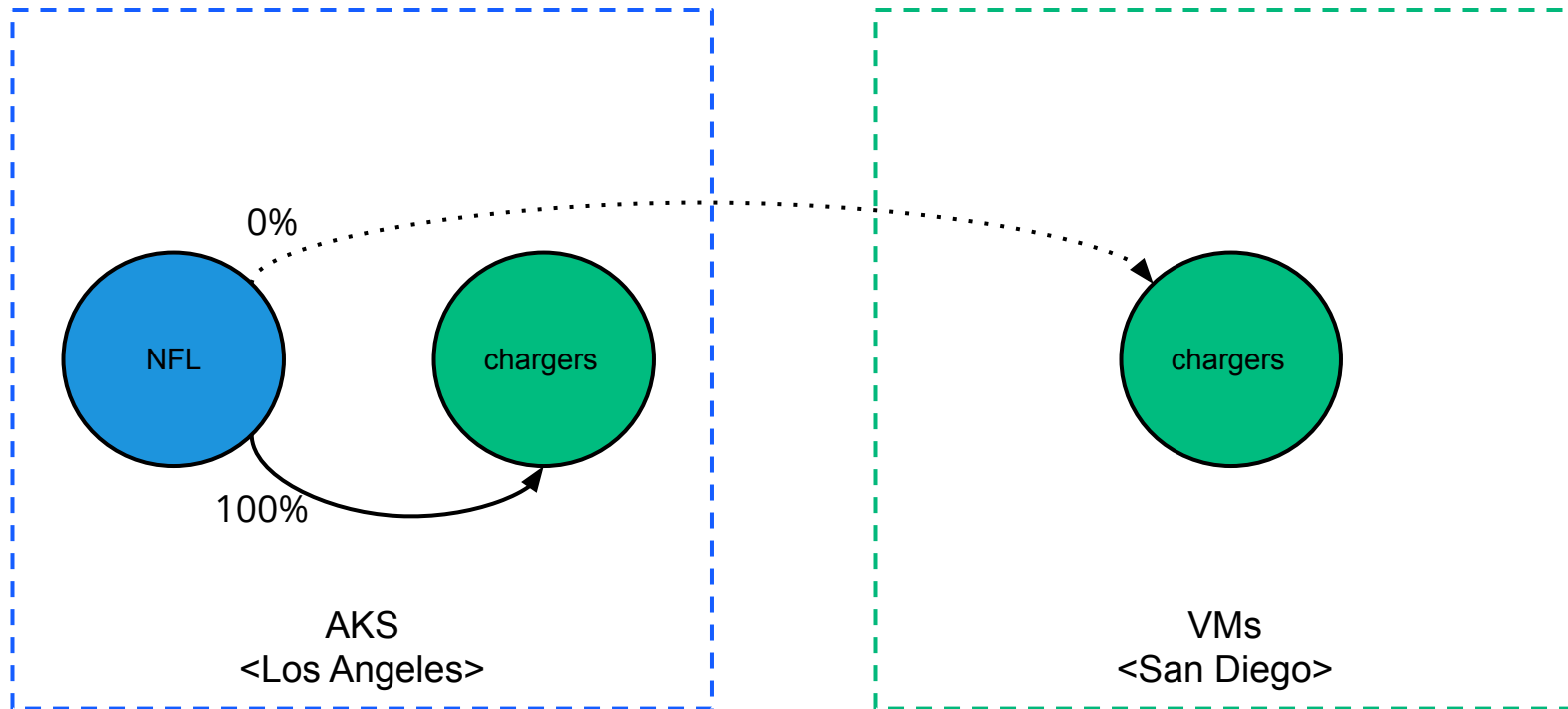
# Service Migration

## Step 3 - Split traffic



# Service Migration

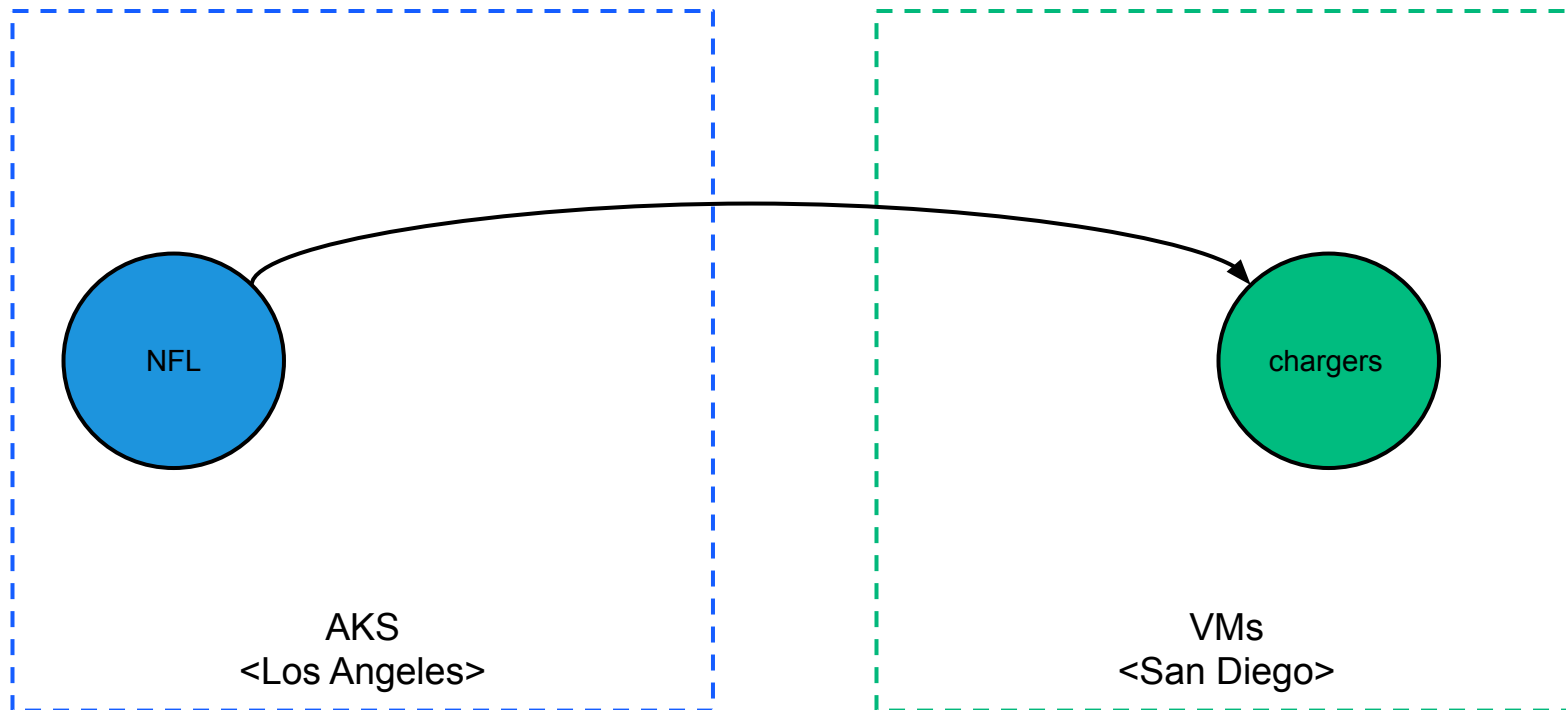
## Step 4 - Fully switch over



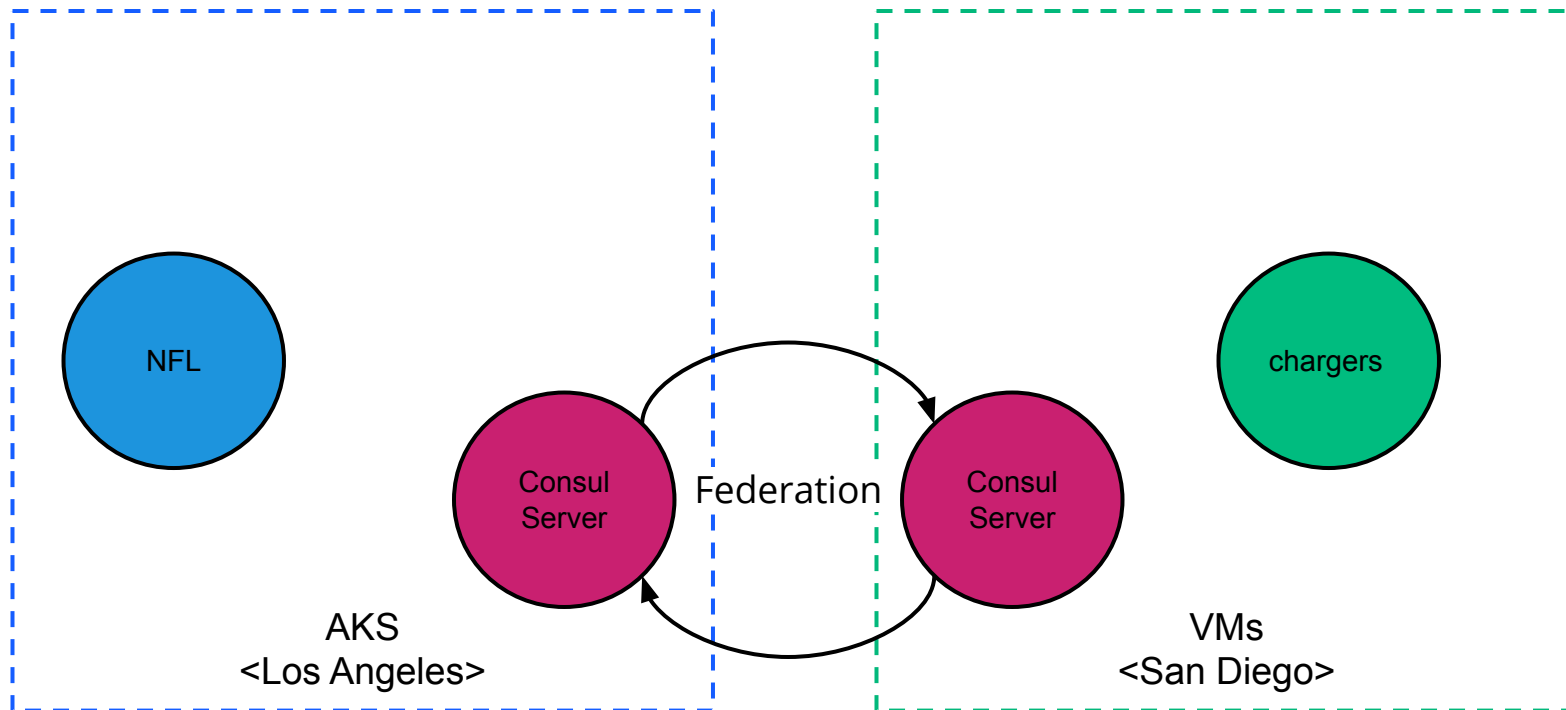


# Demo Time!

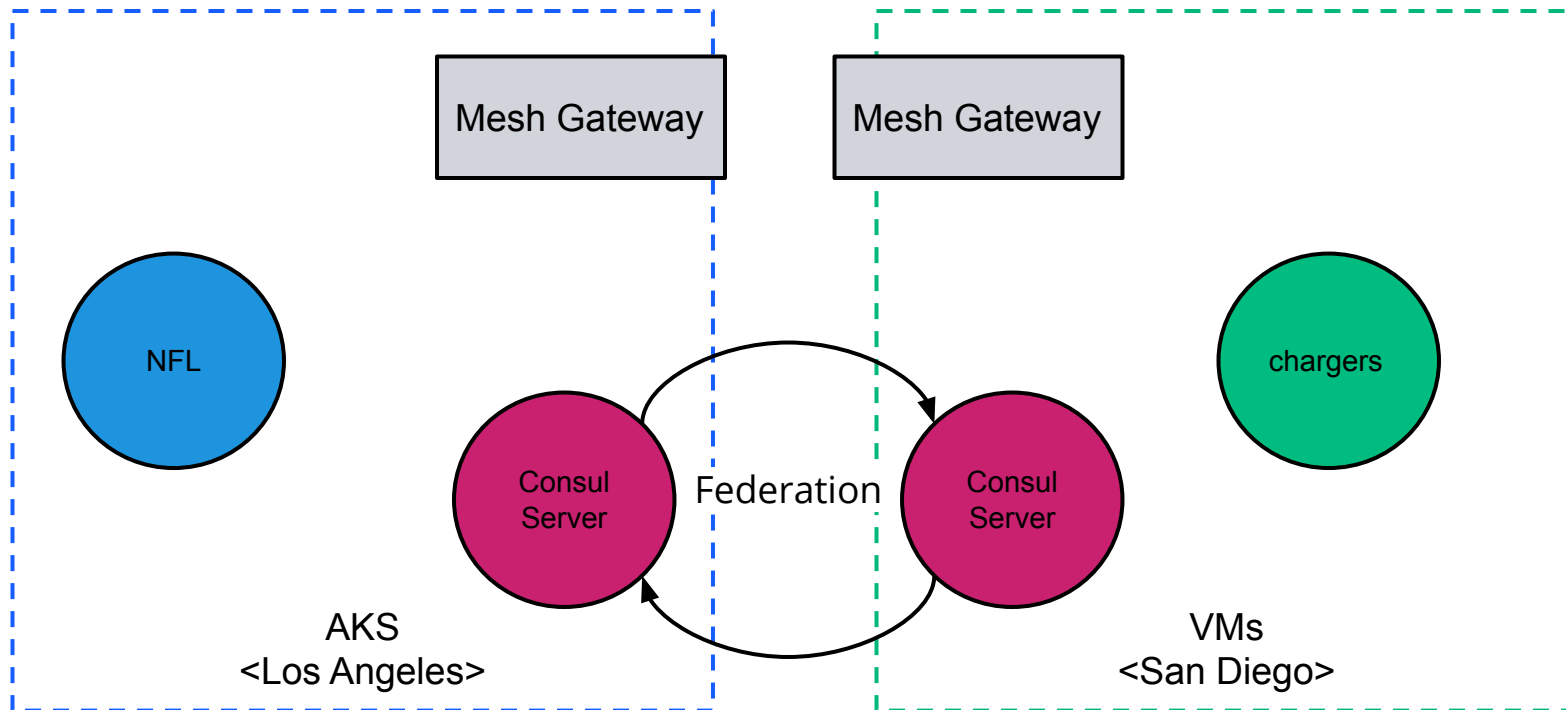
# Architecture



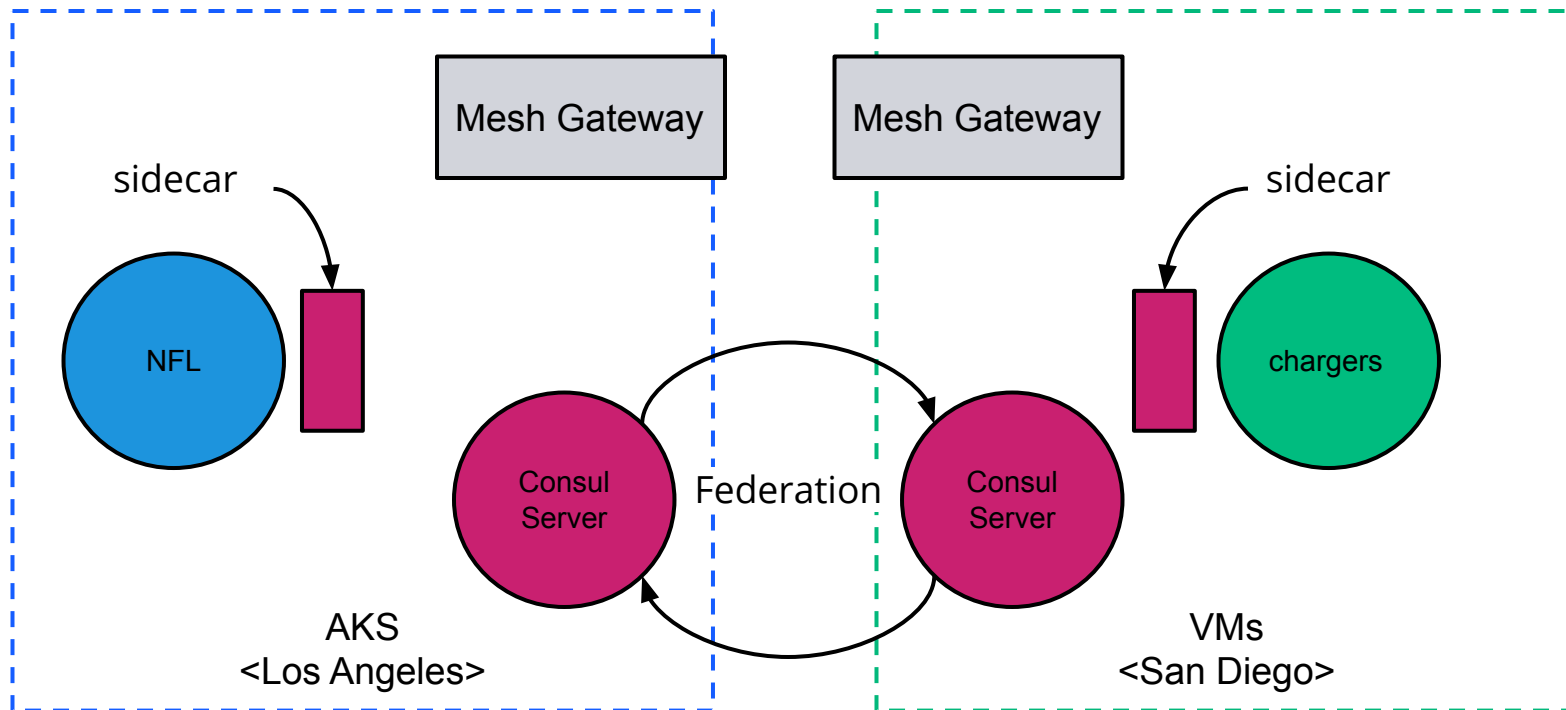
# Architecture



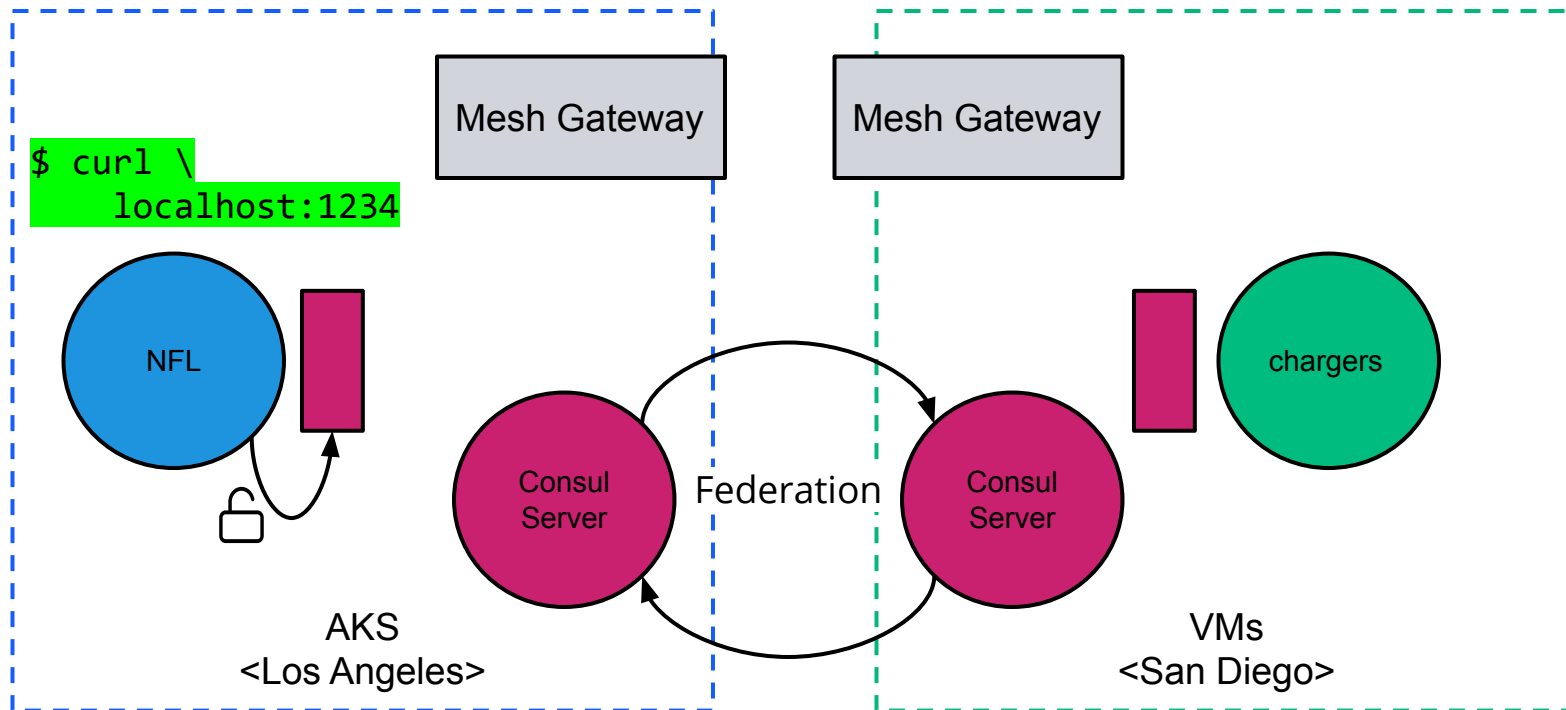
# Architecture



# Architecture

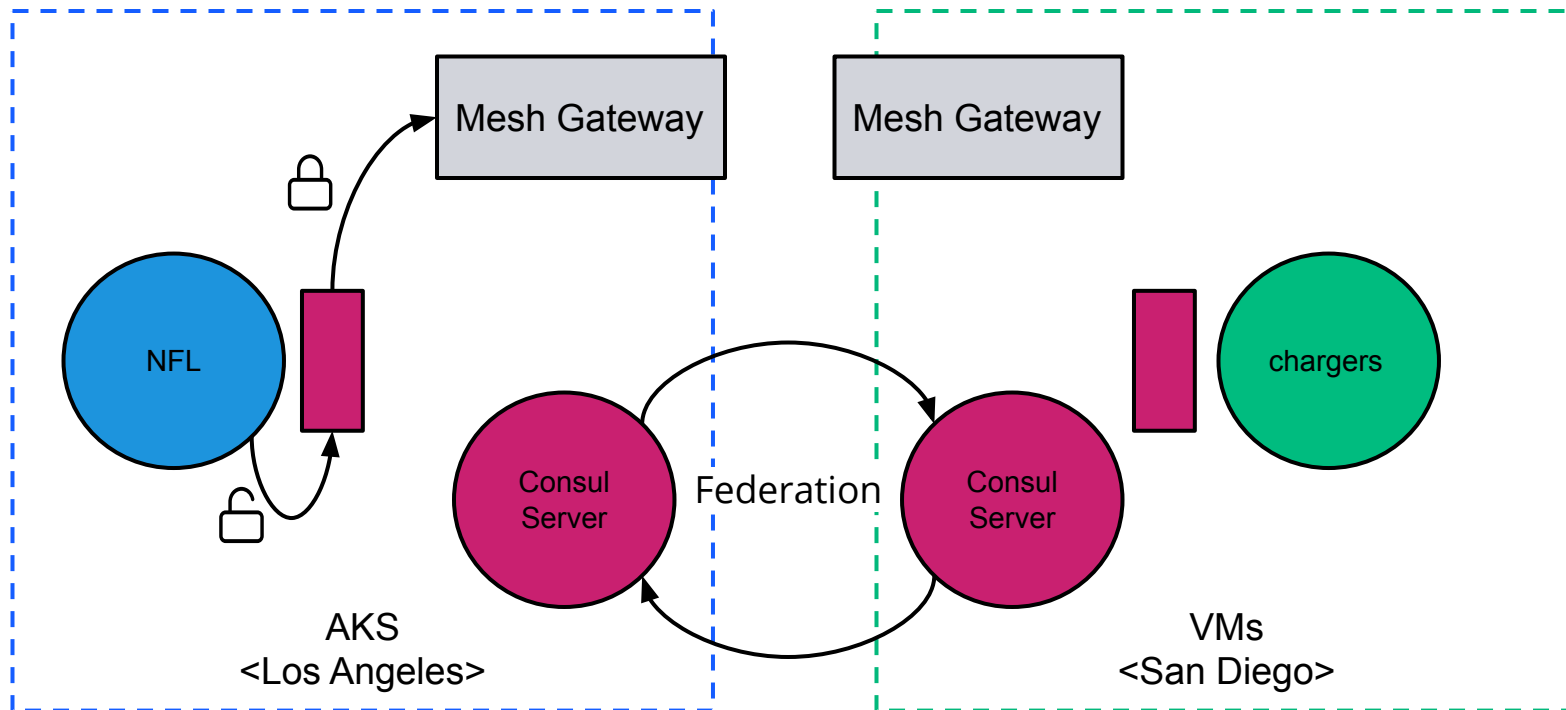


# Architecture

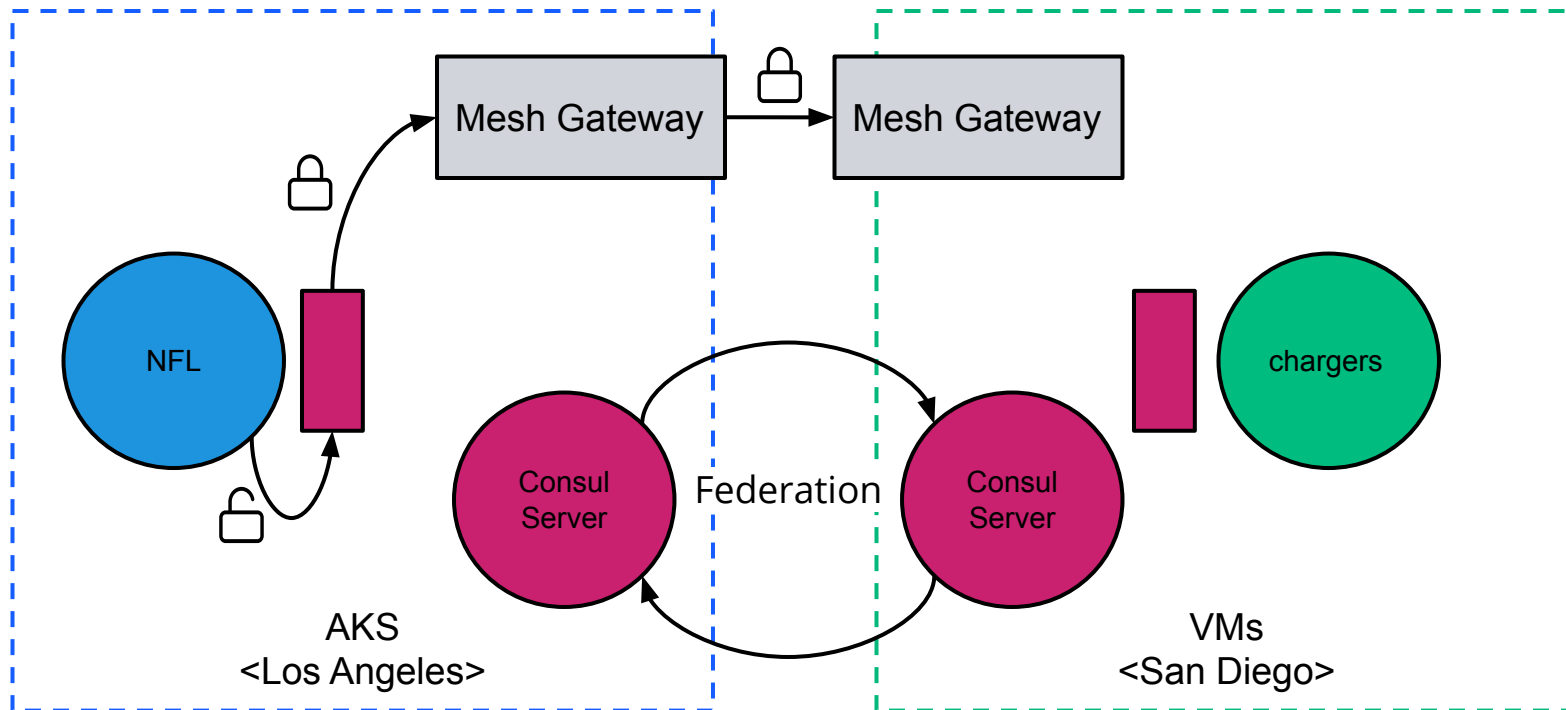




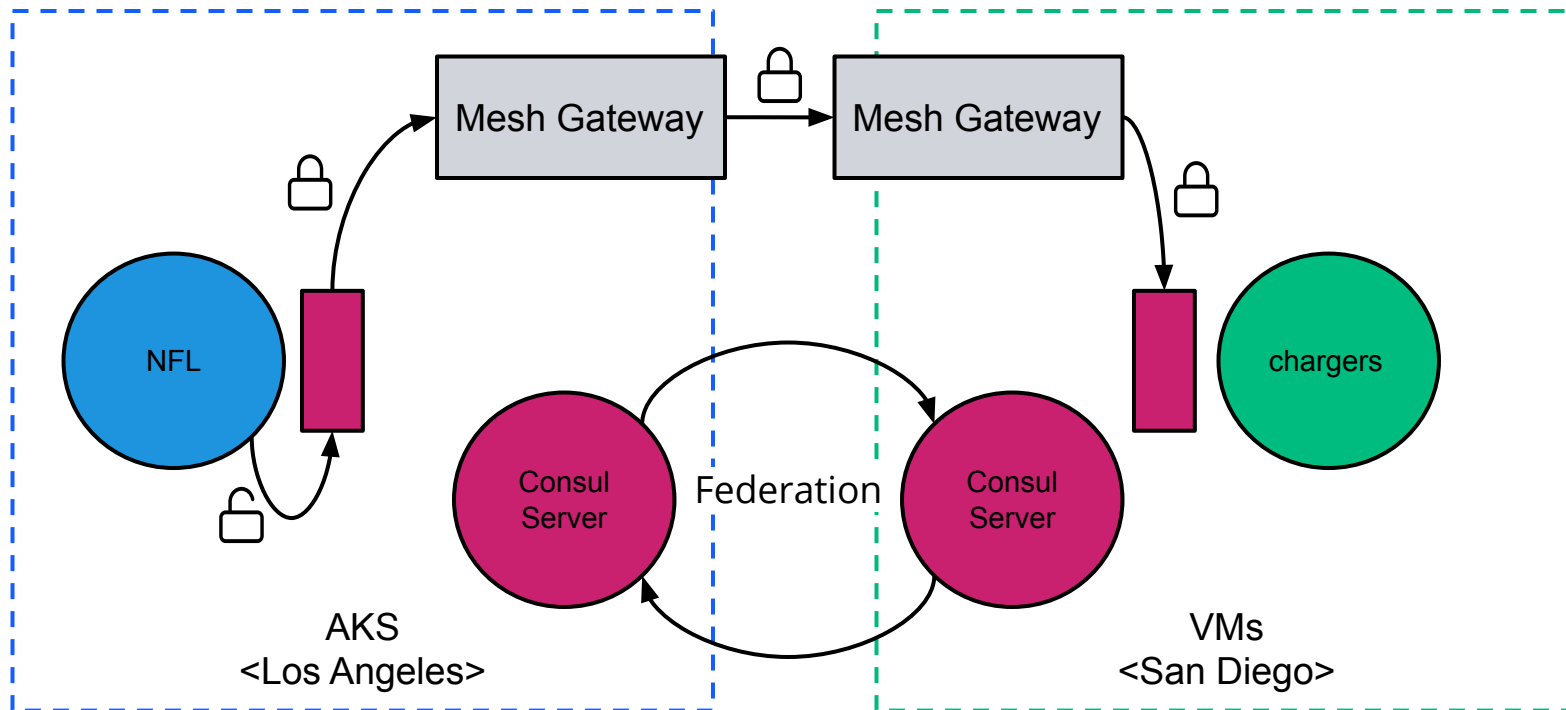
# Architecture



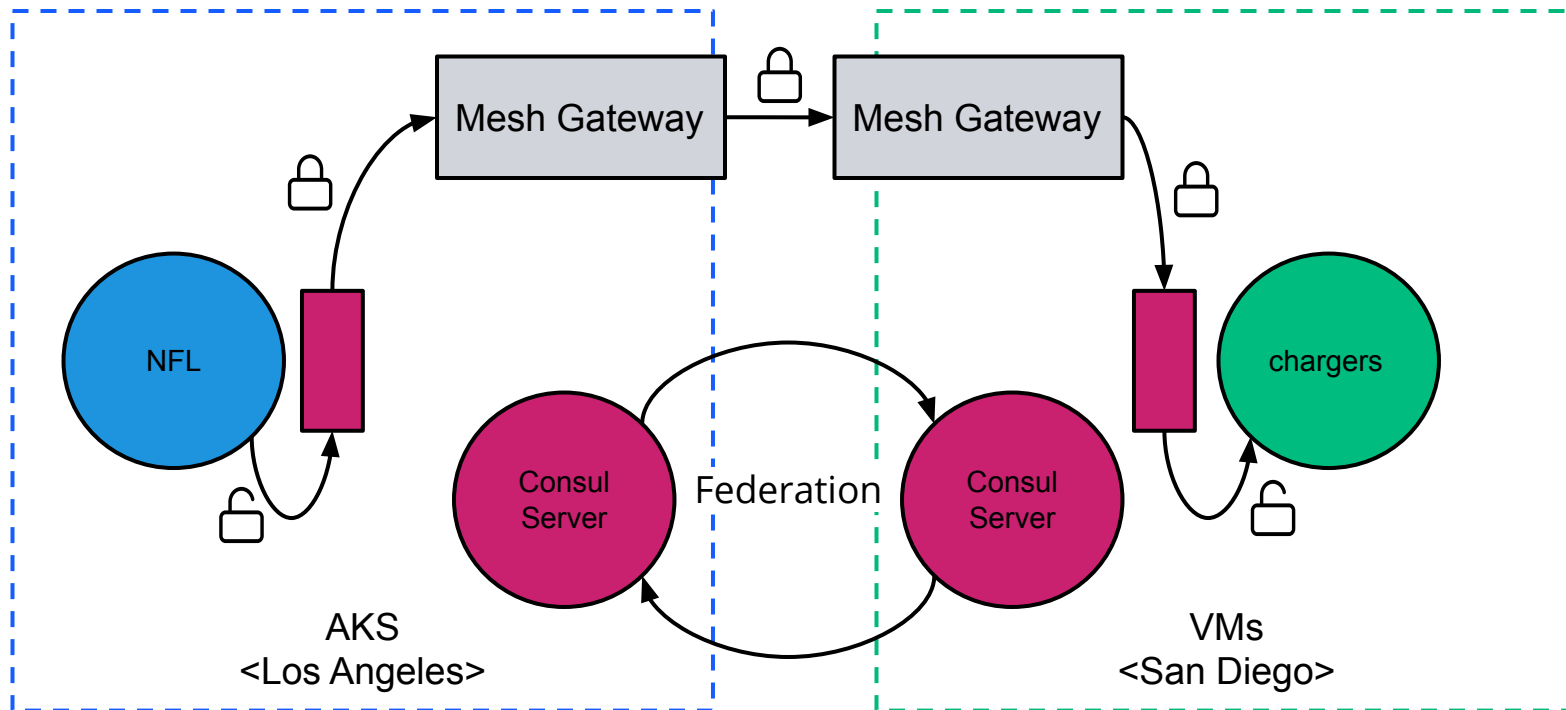
# Architecture

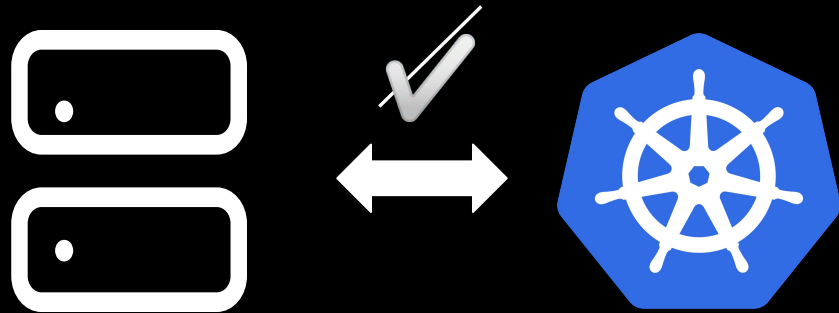


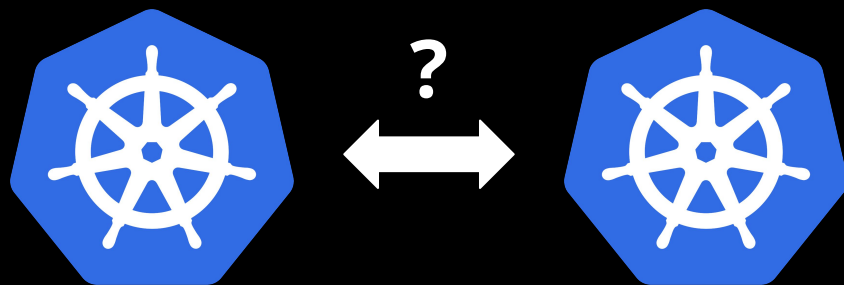
# Architecture



# Architecture







# Helm Install



```
● ● ●  
TERMINAL  
  
$ kubectl config use-context london  
$ helm install ./consul-helm --name=consul
```



# Not Covered



## Installation

\$ helm install --name consul



## Observability

Integration with Prometheus, Datadog, etc.



## Intentions

\$ consul intention create -allow nfl chargers



## External Certificate Authorities

E.g. HashiCorp Vault, AWS PCA





**Thank You!**

@lkysow