Play with KinD, nGinx Ingress Controller and Secured gRPC server

InfraCloud Technologies
24th June 2021

https://twitter.com/infracloudio

About me

Mahendra Bagul

Senior Software Engineer @InfraCloud

Github : github.com/mahendrabagul

Interests : Kubernetes, Golang and cloud-native technologies
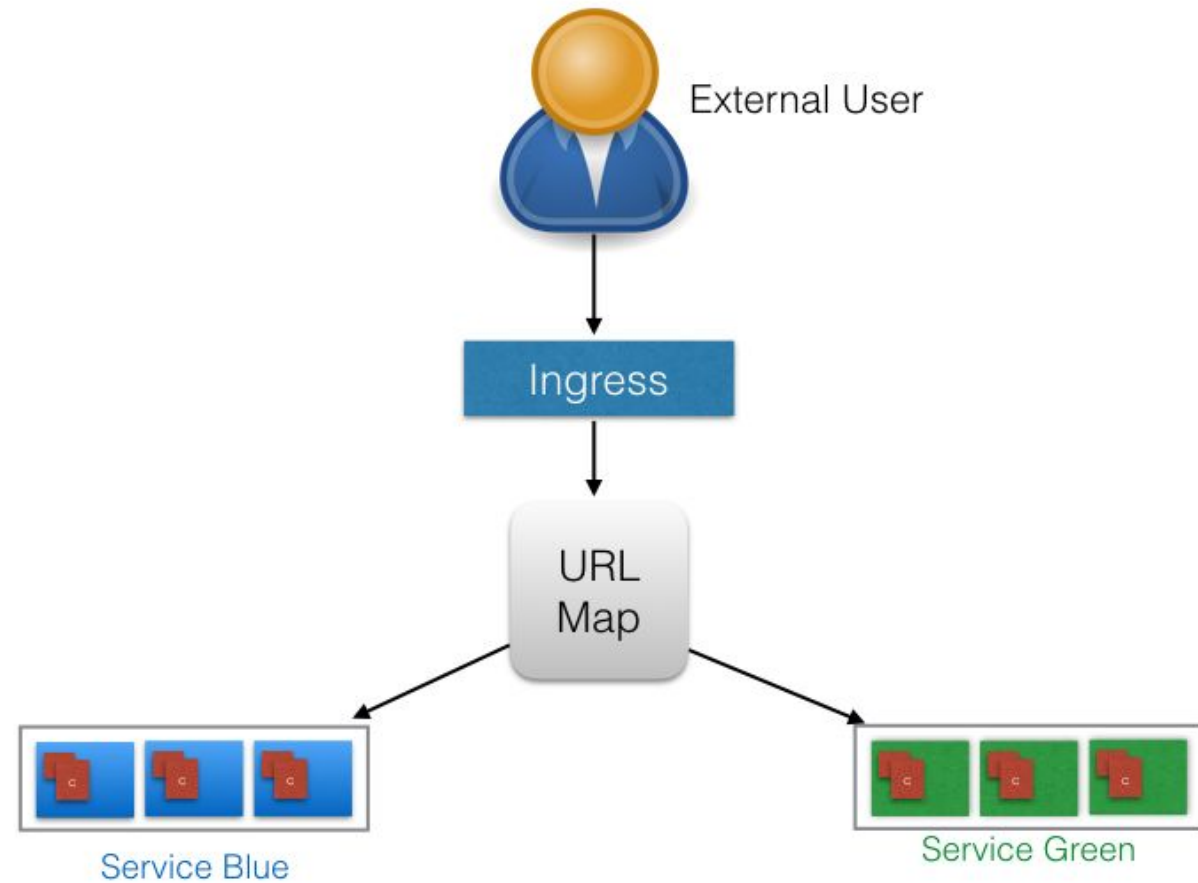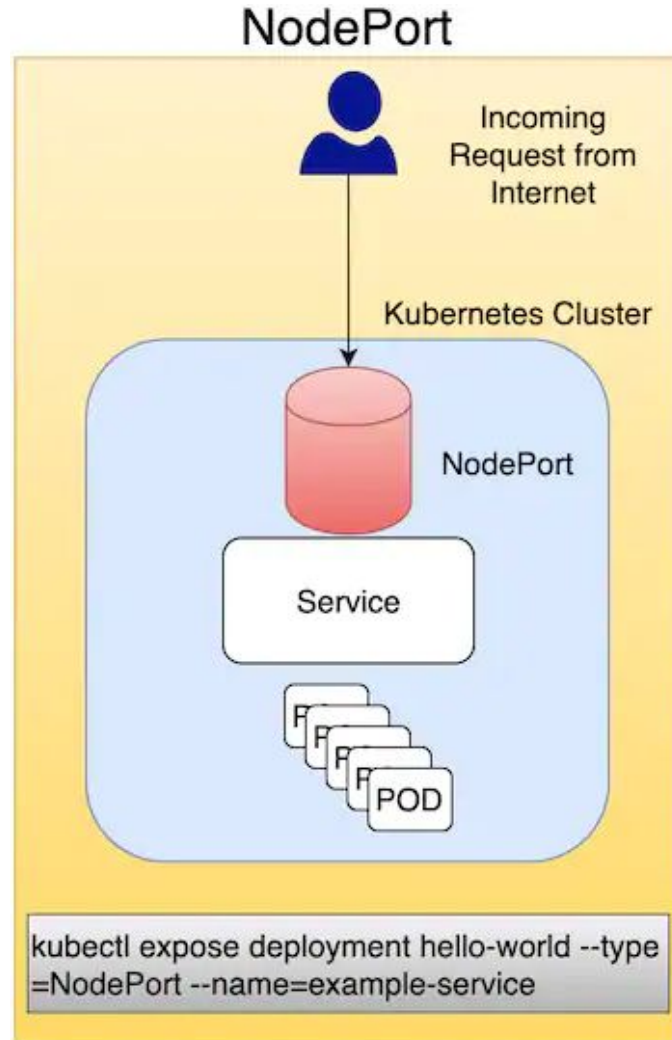
Brief Agenda

- **Theory**
  - Kubernetes Architecture
  - KinD (Kubernetes in Docker)
  - nGinx Ingress Controller
  - Kubernetes and Ingress Deployment
  - Certificates/mTLS
  - Architecture of the final Deployment
- **Demo**
  - KinD and nGinx Ingress Controller Configuration
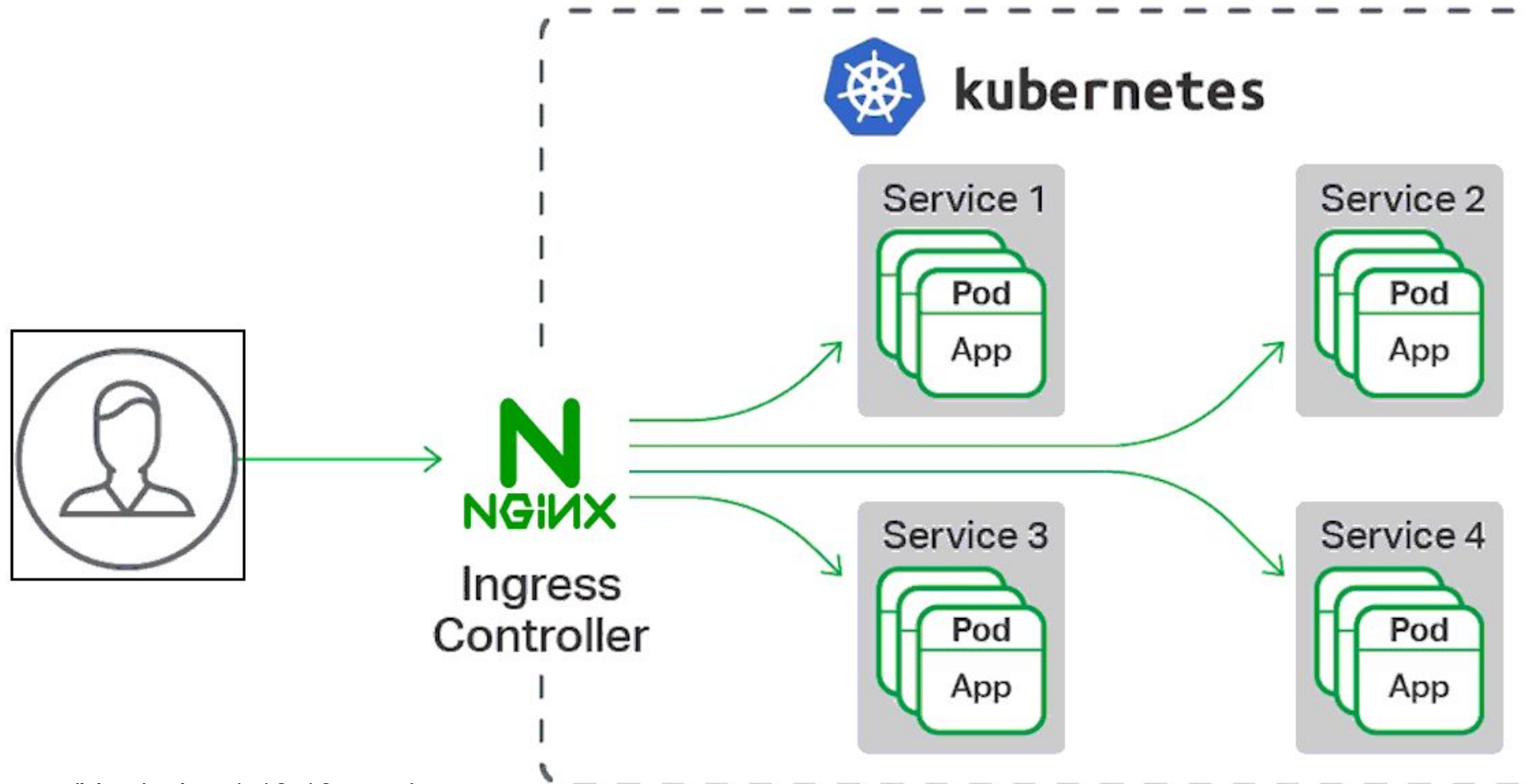 - Run secured gRPC server behind Ingress

Kubernetes Architecture
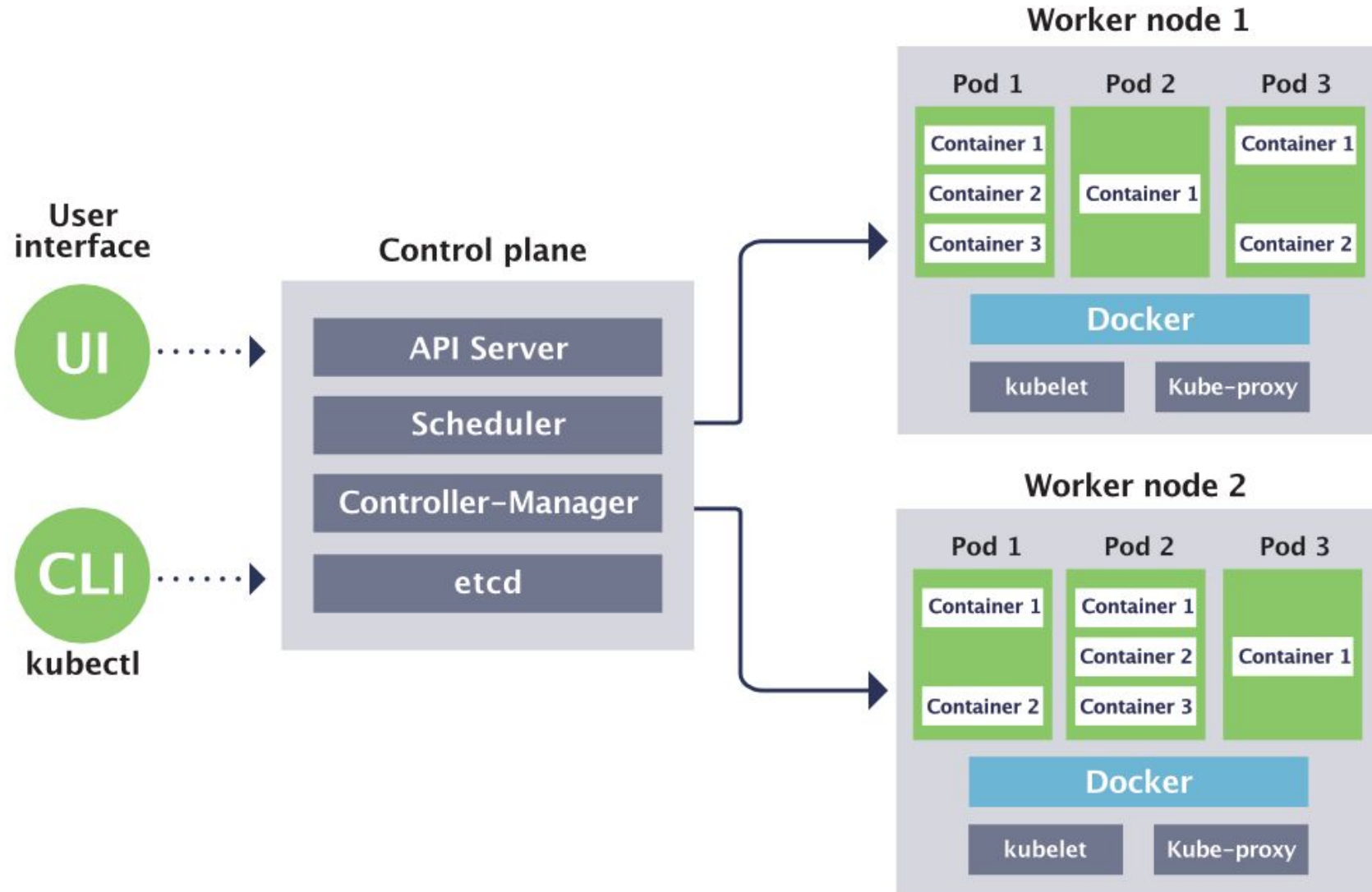
NodePort Service vs Ingress
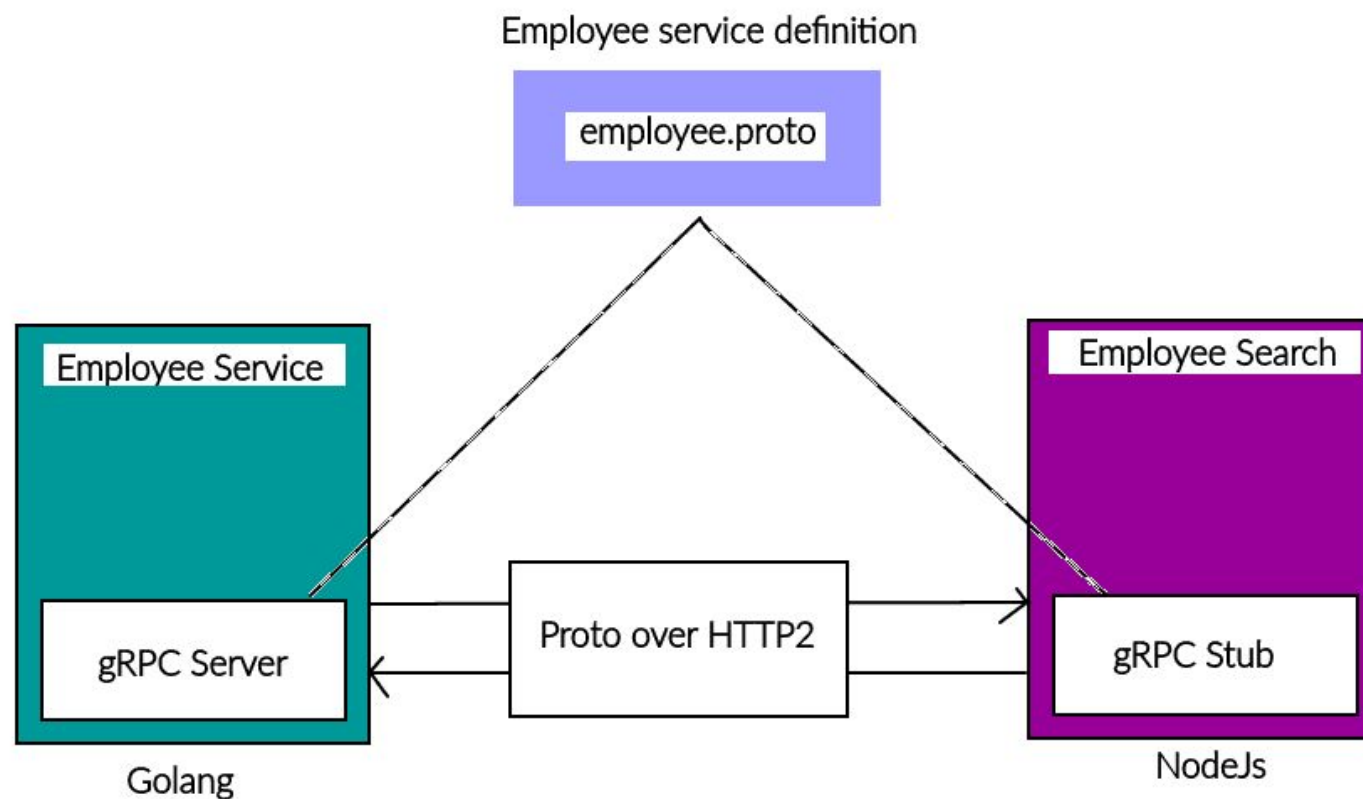
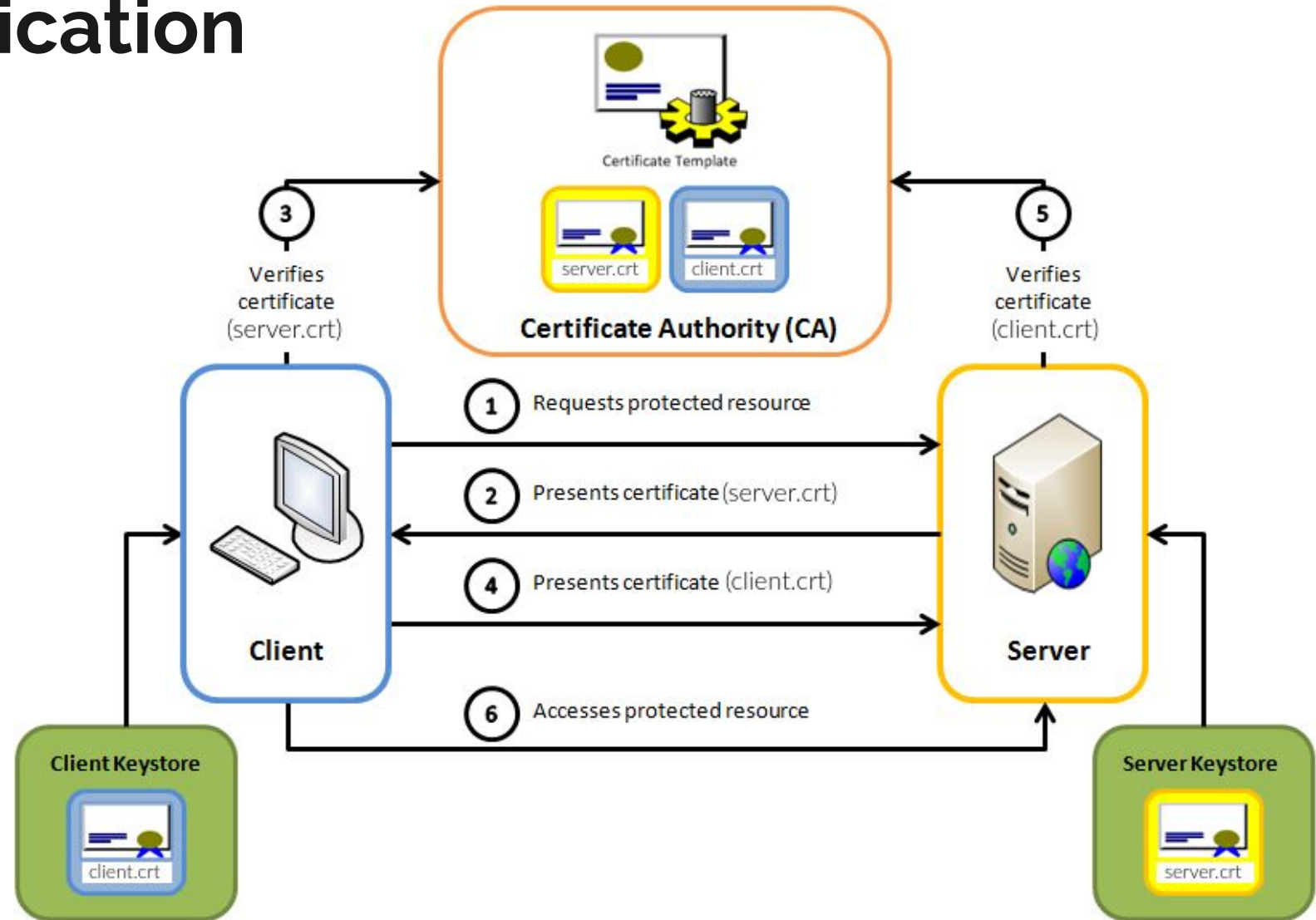# Kubernetes setup with nGinx Ingress Controller

Kubernetes in Docker-(KinD)

kind is a tool for running local Kubernetes clusters using Docker container "nodes". kind was primarily designed for testing Kubernetes itself, but may be used for local development or CI.
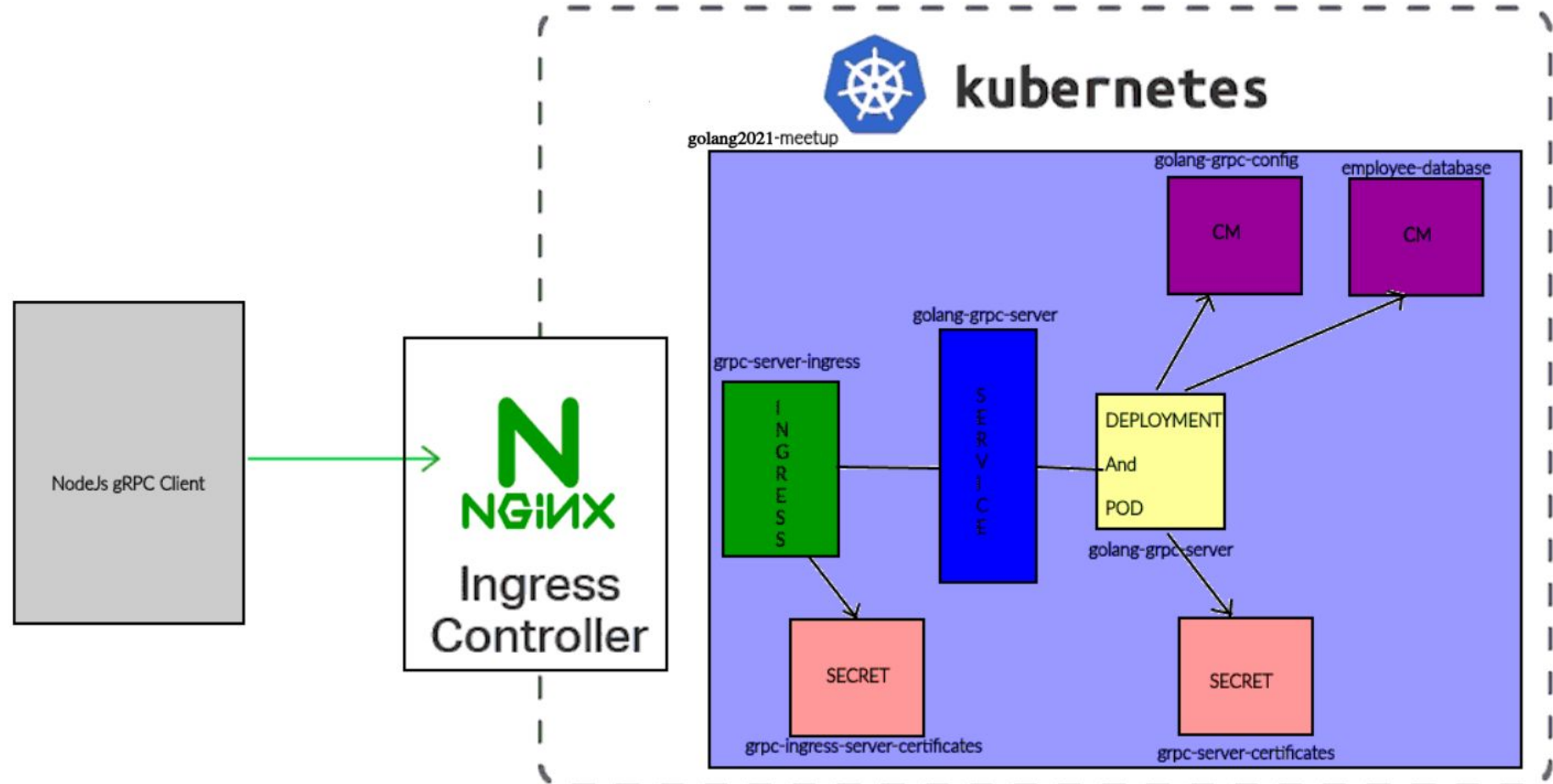
gRPC communication

mTLS Communication

Certificate based mutual authentication

gRPC Server on Kubernetes exposed via ingress

Demo 1

Create KinD cluster and install nGinx Ingress Controller

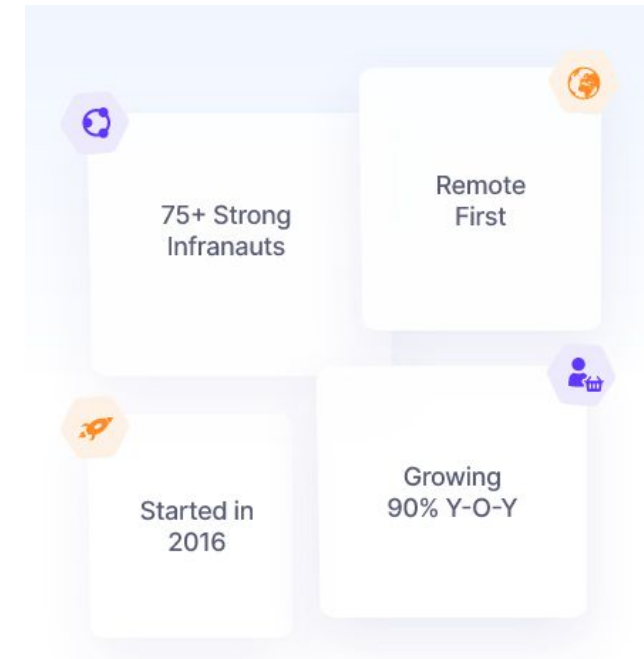**Demo 2**

Deploy gRPC server on Kubernetes behind nGinx Ingress

We are hiring!!!

INFRACLOUD

https://www.infracloud.io/careers

Send us your resume on
careers@infracloud.io

Thank you!

INFRACLOUD

ধন্যবাদ!

Dank je!

Kiitos!

આભાર!

धन्यवाद!

Grazie!

Je vous remercie!

ありがとうございました！

ਤੁਹਾਡਾ ਧੰਨਵਾਦ!

நன்றி!

ధన్యవాదాలు!

ನಂದಿ!

THANK YOU!

Follow us https://twitter.com/infracloudio