

Supercharge your Kubernetes Ingress with Kong Ingress Controller

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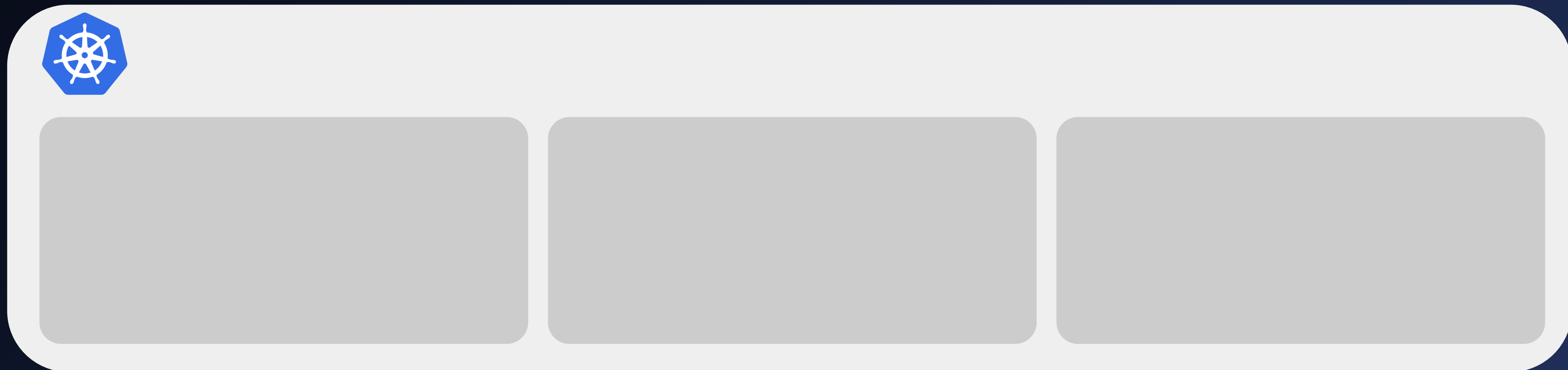
Agenda

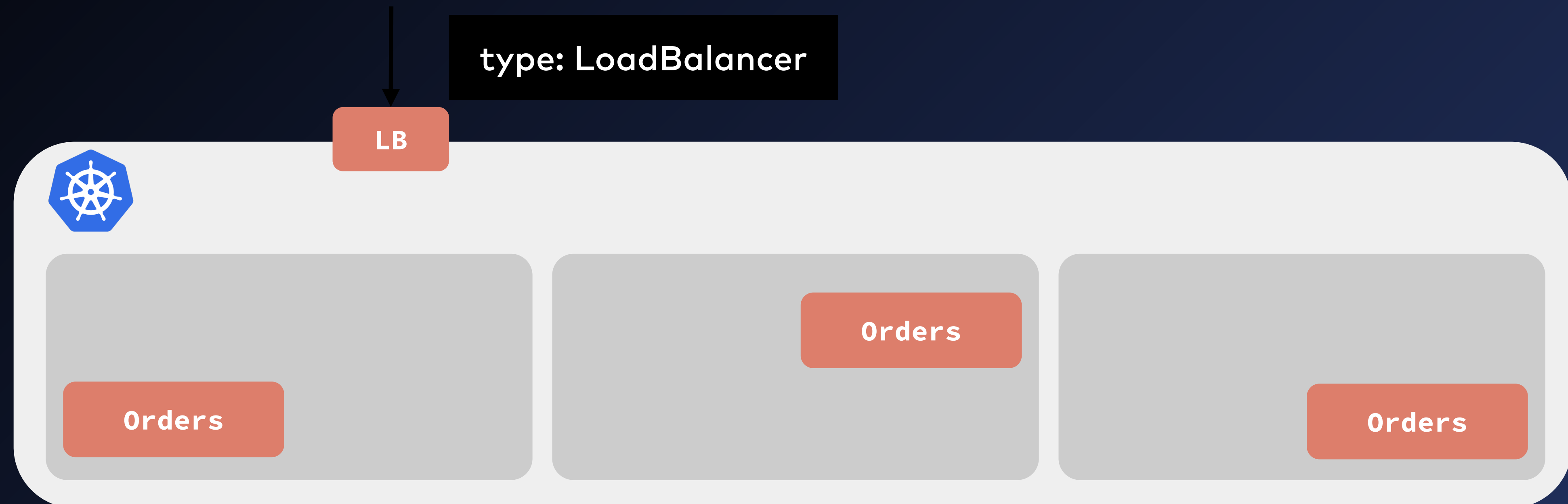
- Cloud-Native / Kubernetes Native Application Management
- Intro to Kubernetes Ingress
 - Exposing REST services
 - Exposing gRPC
- Advanced Features

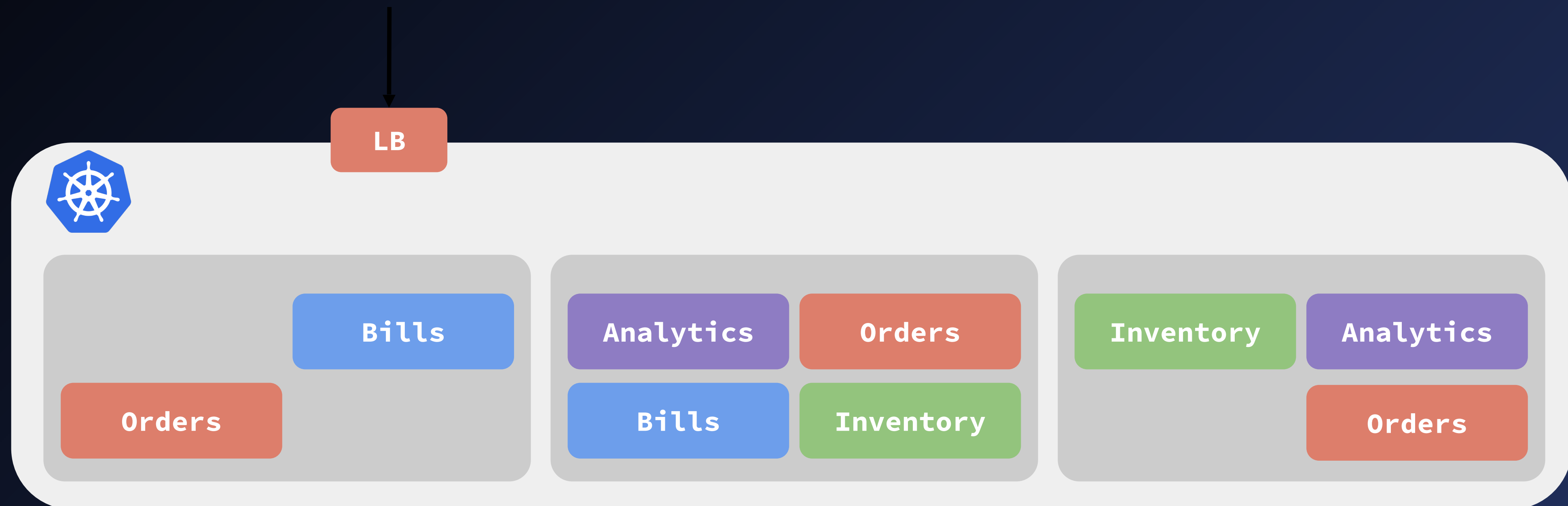
KUBERNETES NATIVE APPS

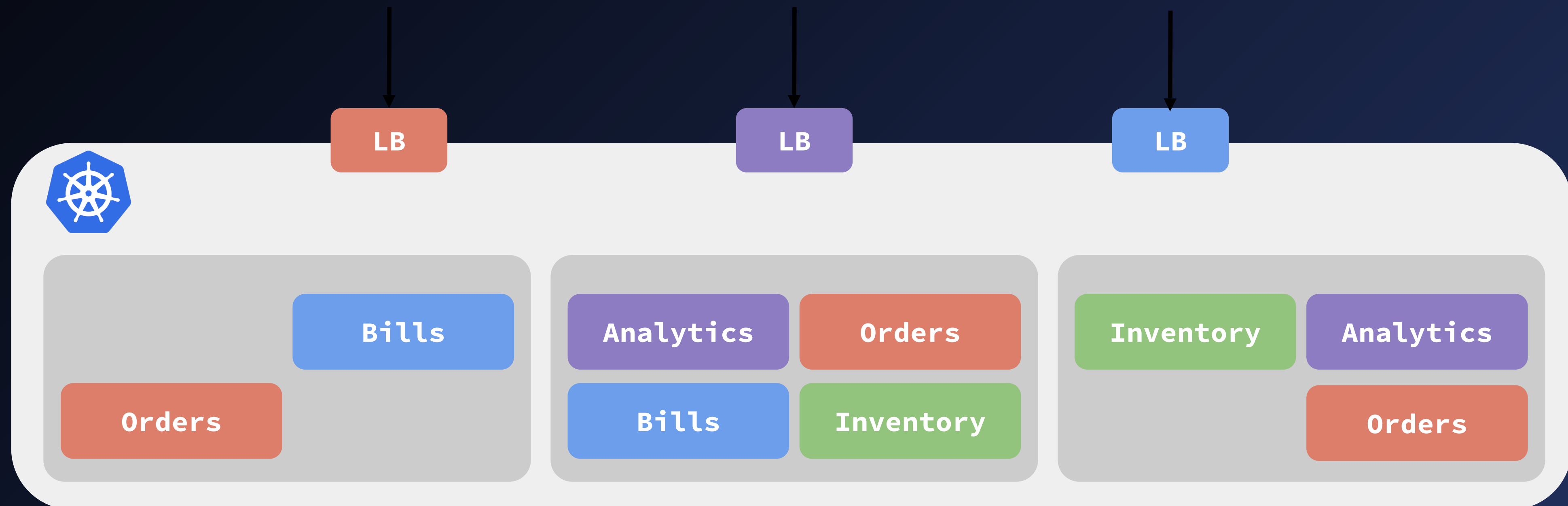
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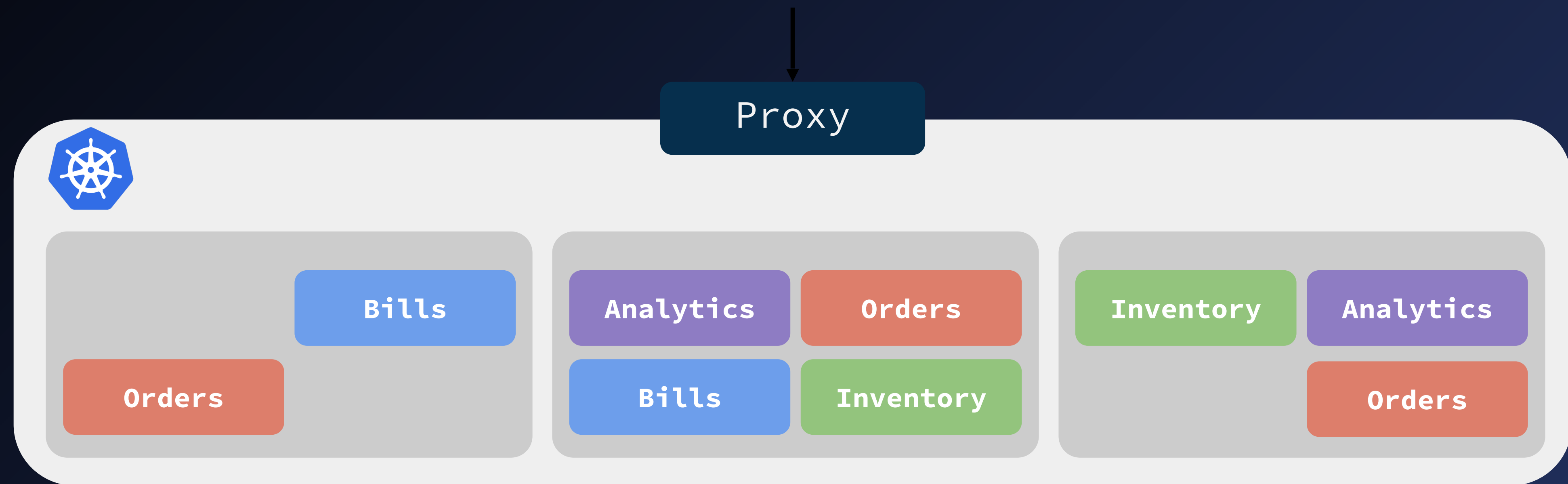
- A long time ago, in a galaxy far far away...







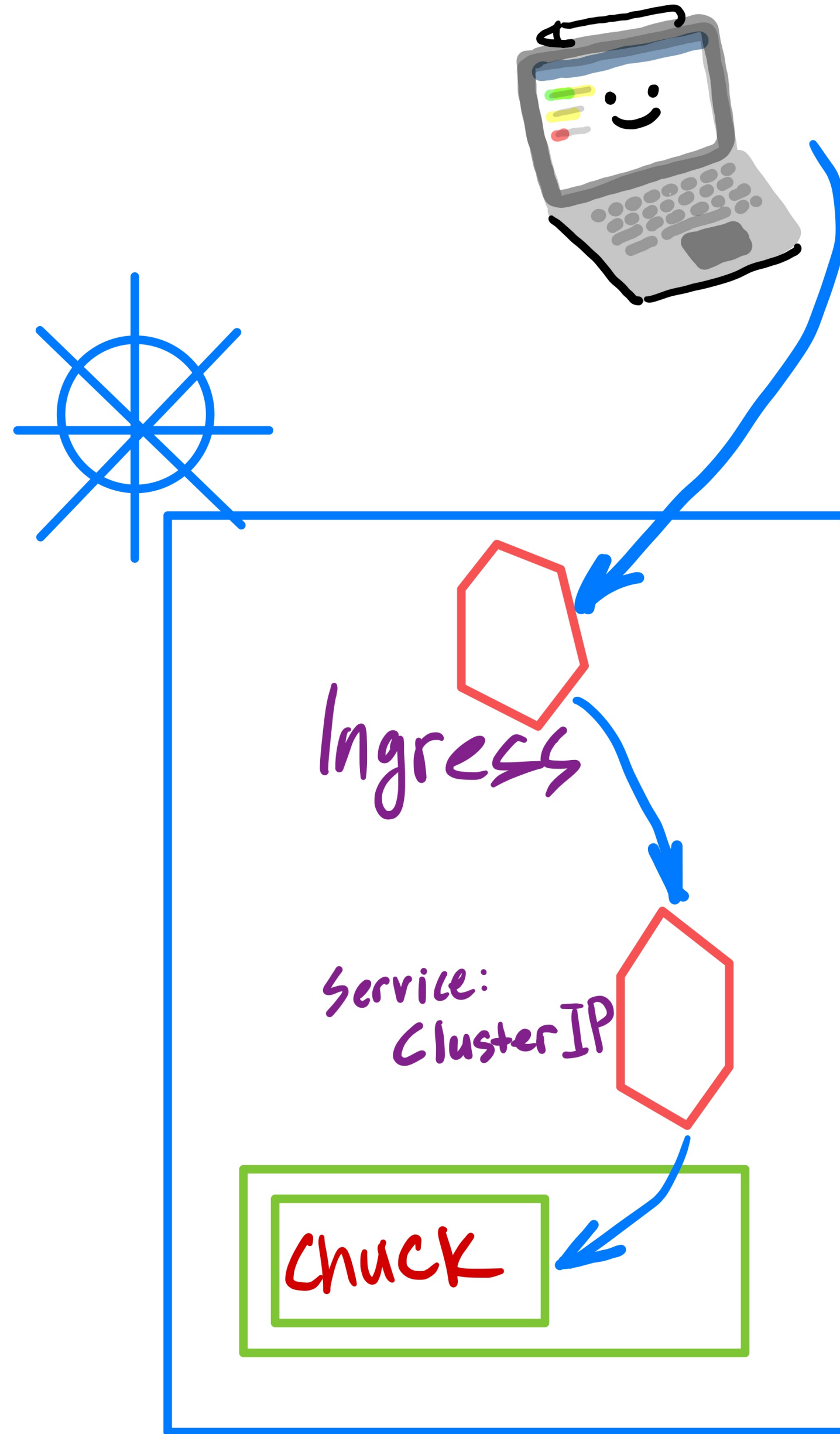






KUBERNETES INGRESS

<https://chuck.kongproxy.me>



Vendor Neutral Spec

apiVersion: networking.k8s.io/v1

kind: Ingress

metadata:

name: finance-apis

spec:

rules:

– **host:** example.com

http:

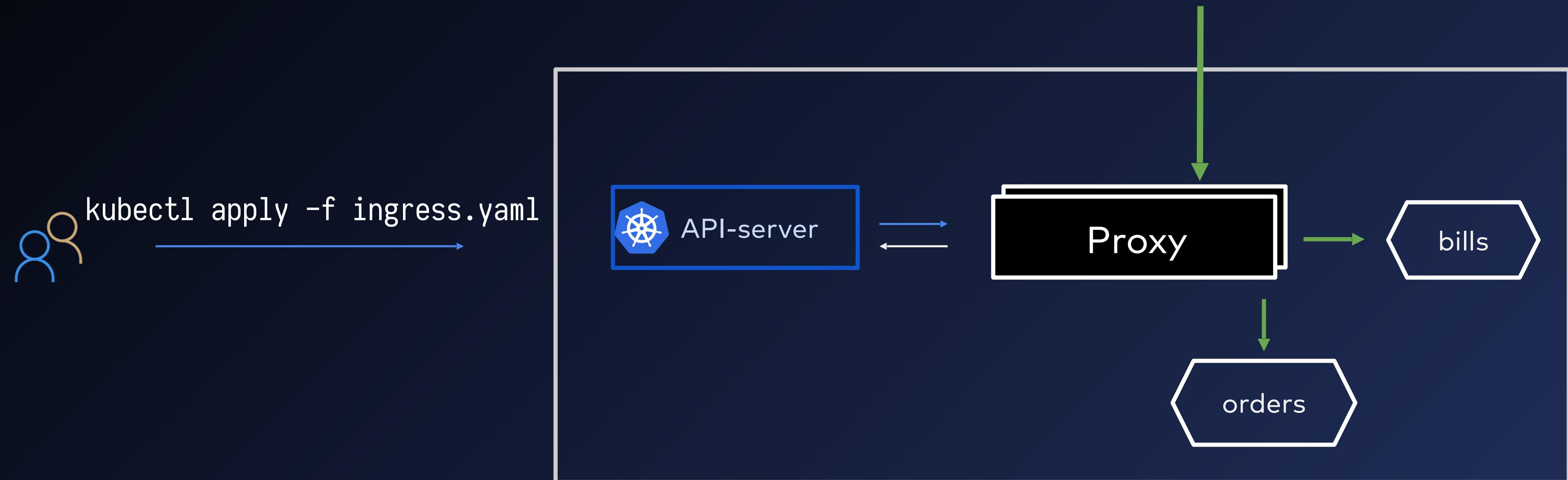
paths:

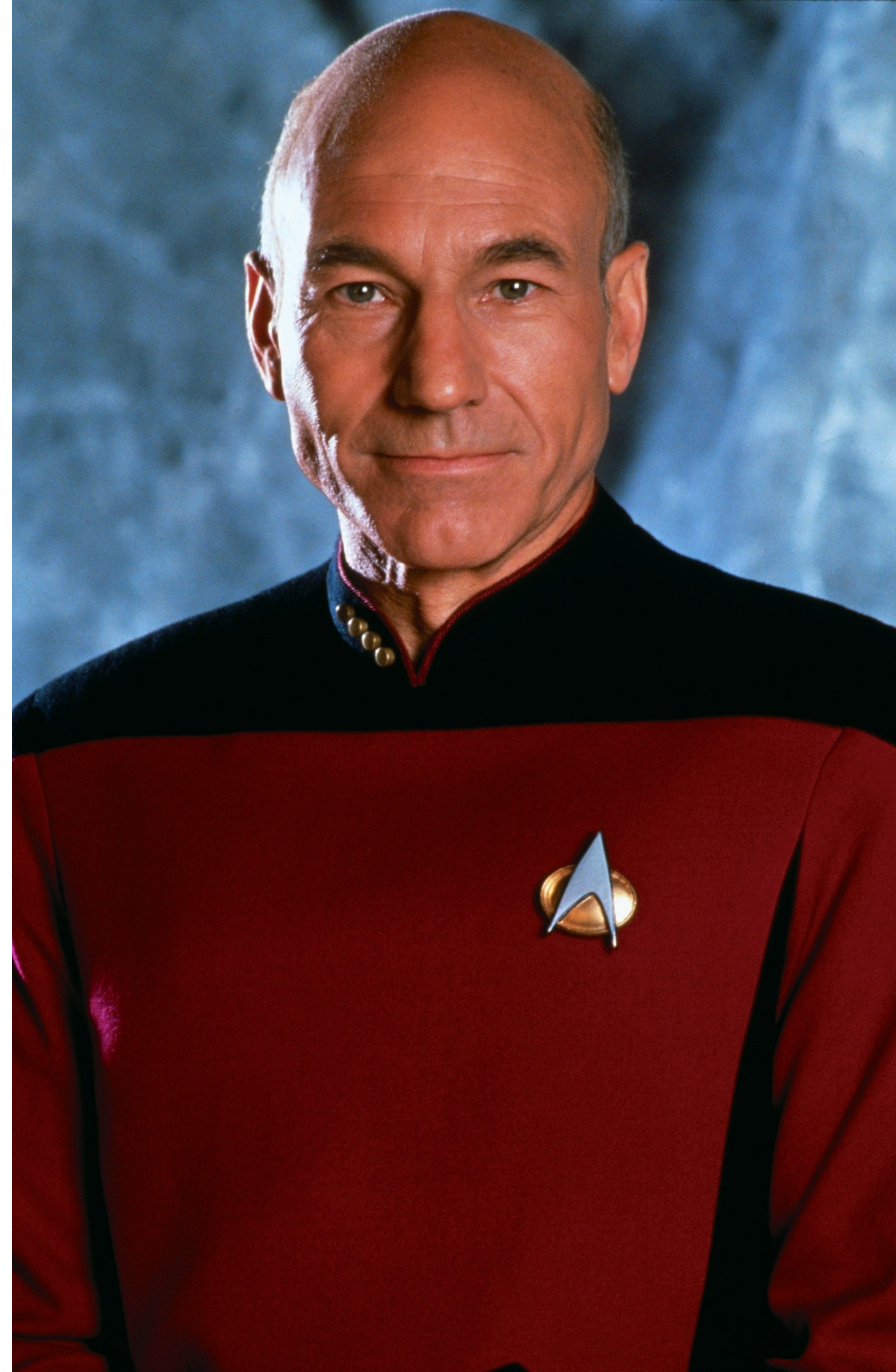
– **path:** /bills

backend:

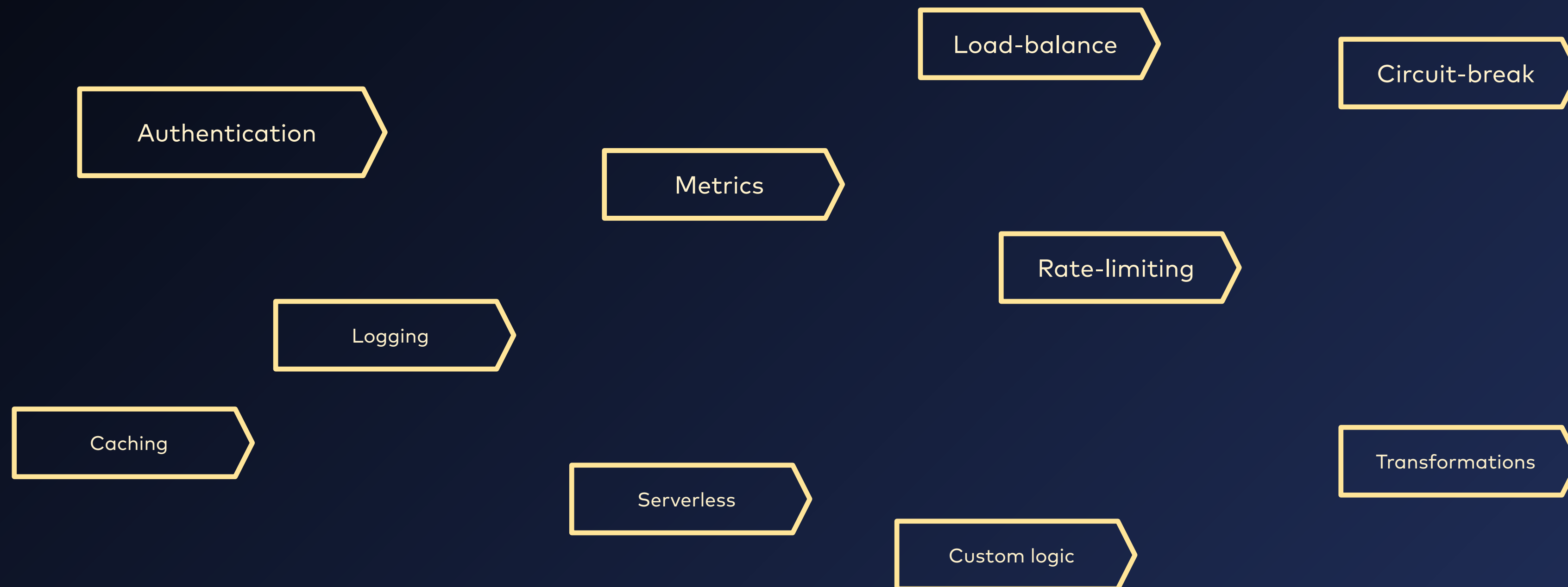
service:

name: bills





Who will implement all this?

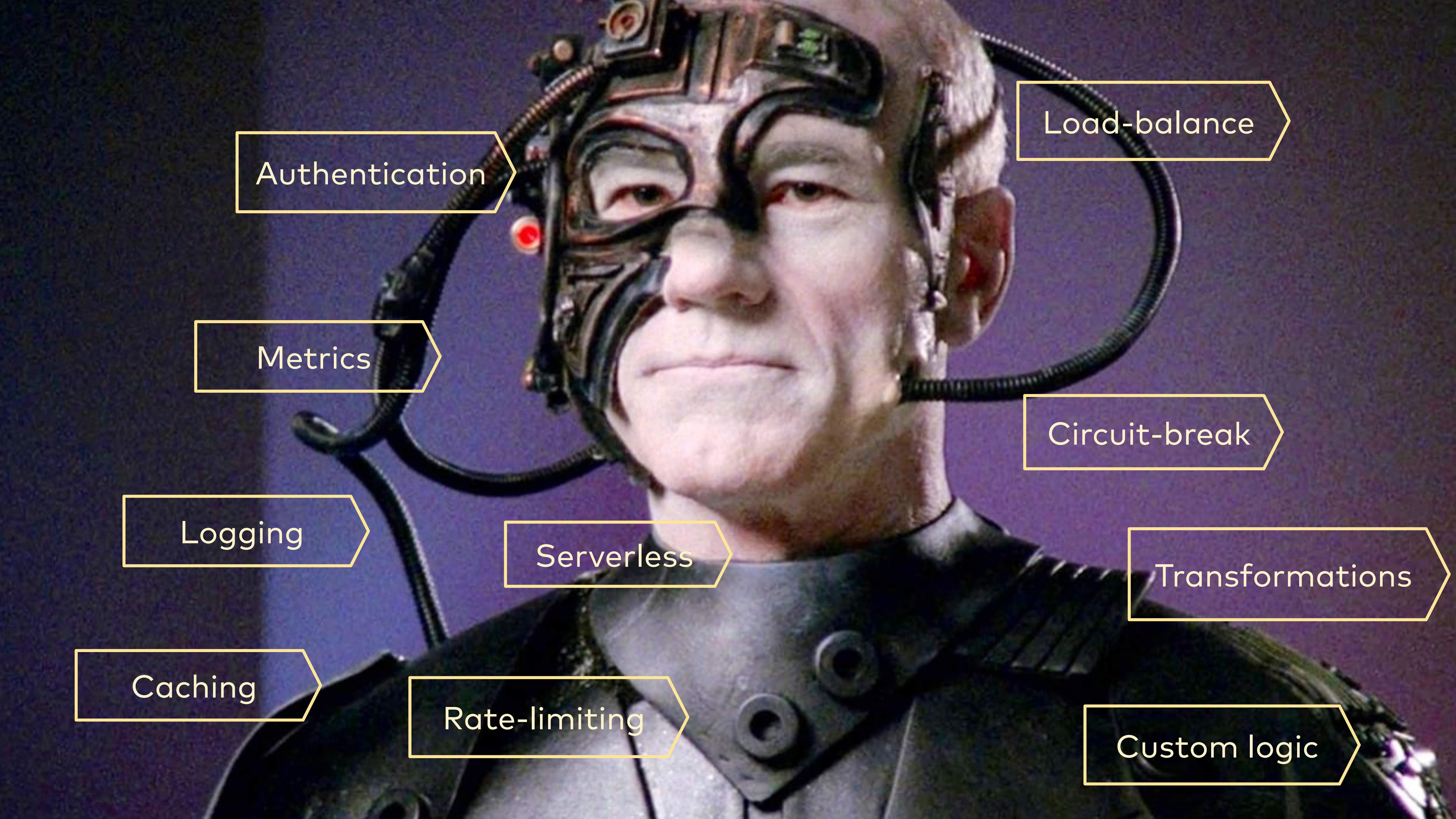




**BUT HOW WILL I
IMPLEMENT ALL THESE THINGS?**



THAT'S THE NEAT PART - YOU DON'T

A man with a cybernetic head, featuring various mechanical components, wires, and a red light. He is wearing a dark, high-collared jacket. The background is a dark, textured surface.

Authentication

Load-balance

Metrics

Circuit-break

Logging

Serverless

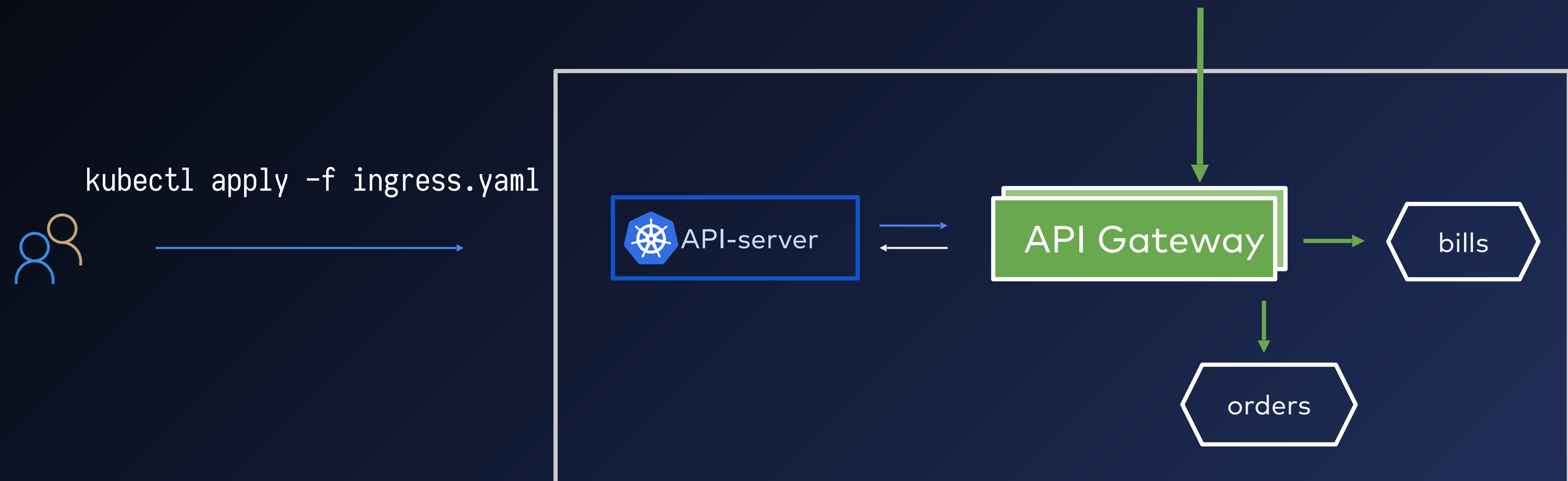
Transformations

Caching

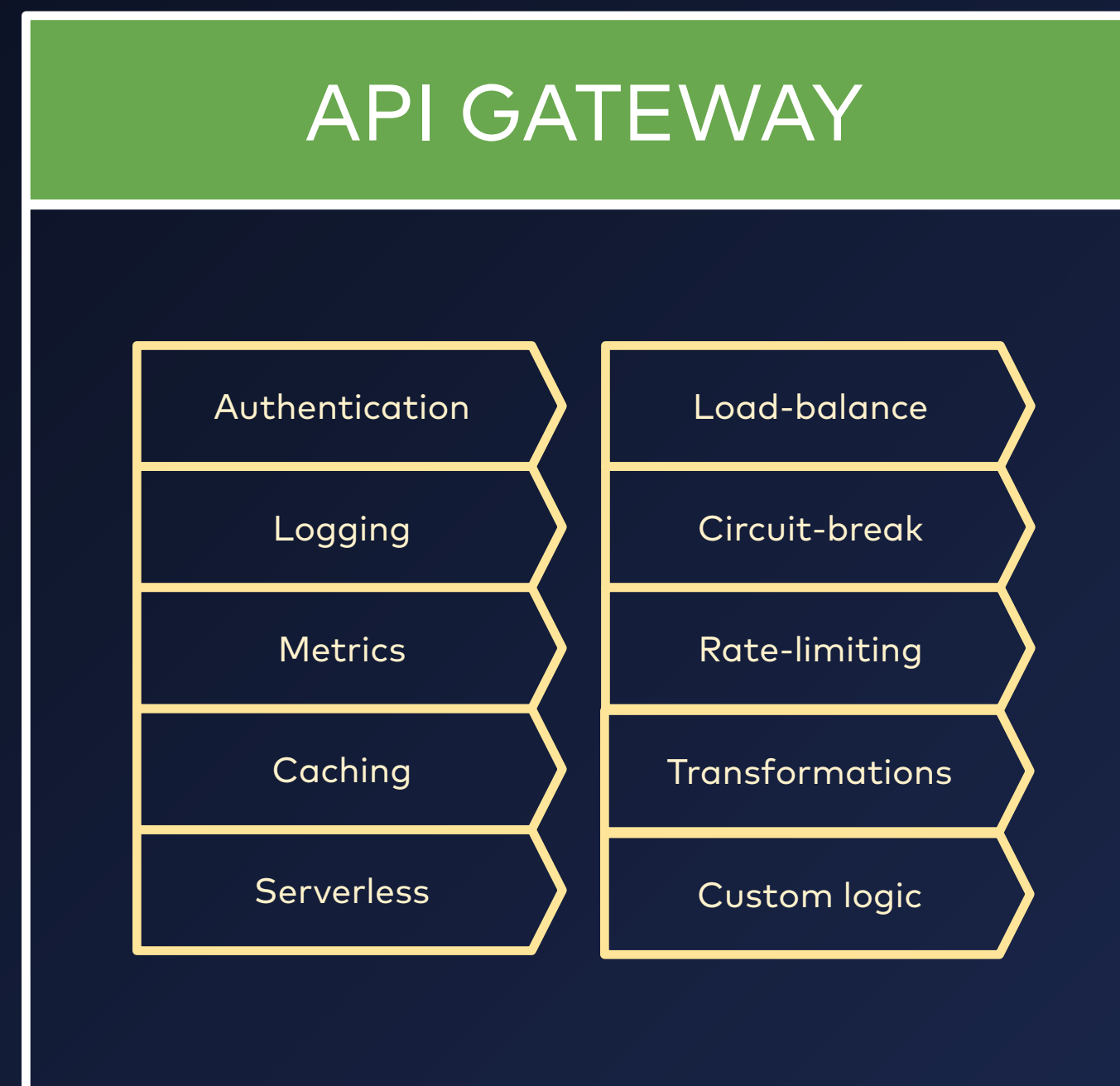
Rate-limiting

Custom logic

What is happening when we apply Ingress resource?



What is API Gateway?



What's Kong?



configuration.konghq.com/v1

Custom Resource Definition

KongPlugins

Additional functions that can be executed as requests are proxied to each Service



Define Policies

apiVersion: configuration.konghq.com/v1

kind: KongPlugin

metadata:

name: api-auth

plugin: key-auth *# name of plugin in Kong*

config: *# plugin specific settings*

key_names: apikey

hide_credentials: true

Apply Them

apiVersion: networking.k8s.io/v1

kind: Ingress

metadata:

name: finance-apis

annotations:

konghq.com/plugins: api-auth *#or add multiple plugins*

spec:

rules:

– **host:** example.com

http:

paths:

– **path:** /bills

– **path:** /orders

Add more policy

apiVersion: networking.k8s.io/v1

kind: Ingress

metadata:

name: finance-apis

annotations:

konghq.com/plugins: api-auth, admins-acl-group, rate-limit-5rpm

spec:

rules:

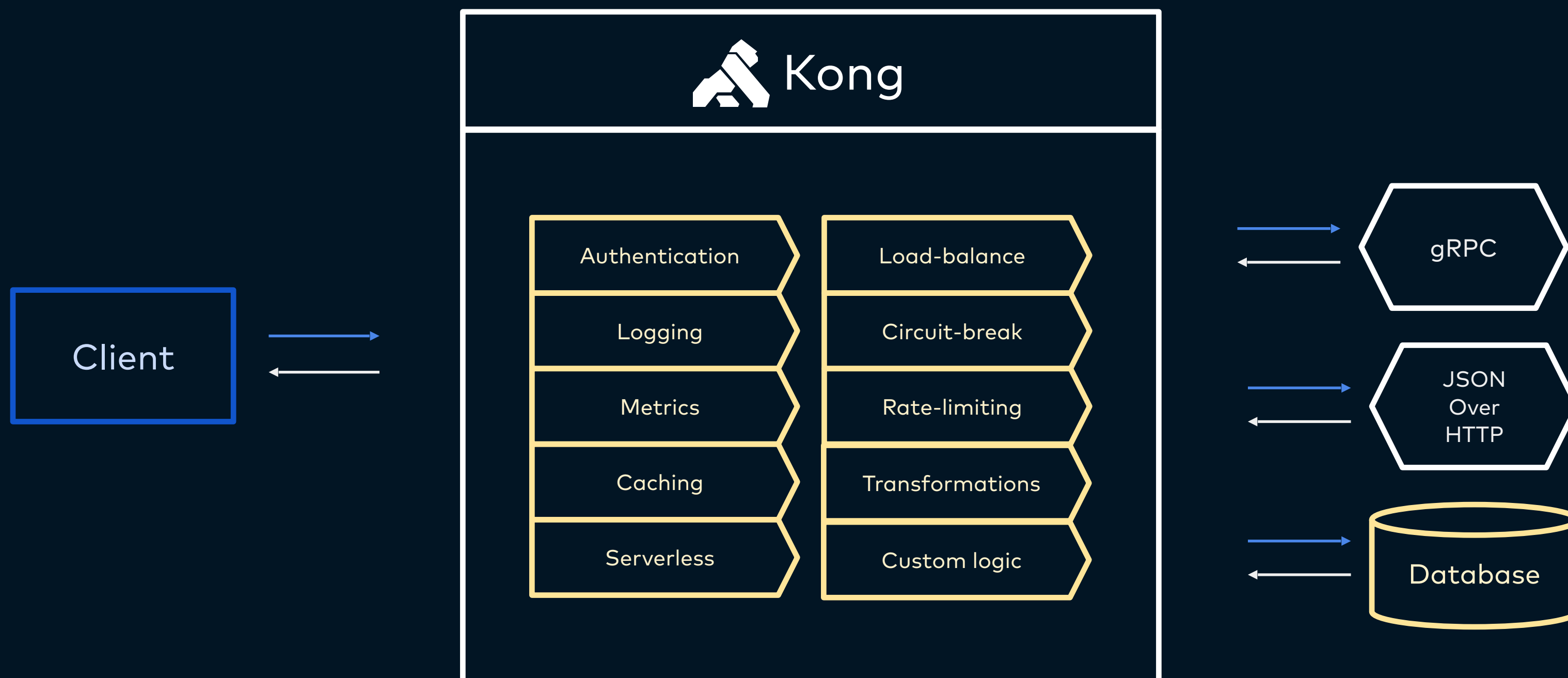
– **host:** example.com

http:

paths:

– **path:** /bills

– **path:** /orders



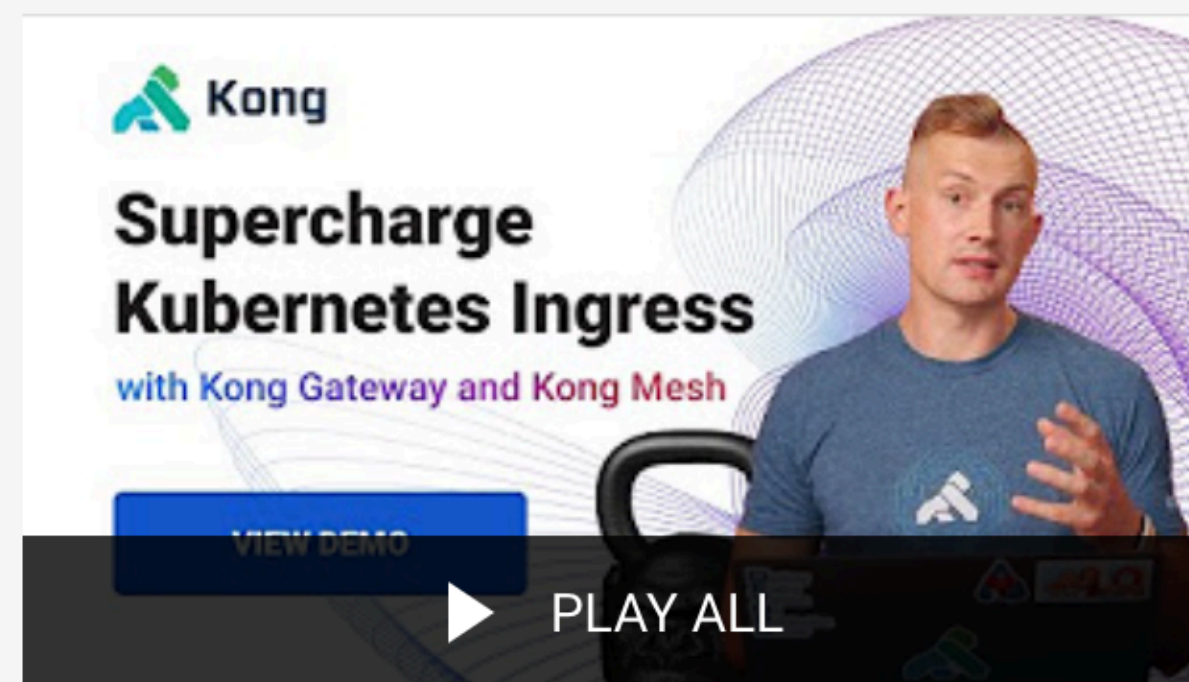
The background features a dark blue gradient with a series of concentric, wavy lines that create a sense of depth and movement. On the left side, there is a faint, stylized outline of a ship's steering wheel. On the right side, a series of lines converge to form a cone-like shape, pointing towards the top right corner.

LET'S SEE SOME CODE

Talk is cheap TM!

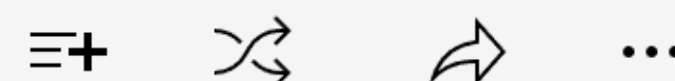


<https://www.youtube.com/konginc>



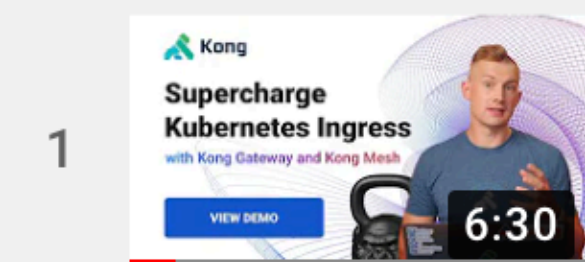
Kong's Kubernetes Ingress Controller

9 videos • 143 views • Updated 7 days ago



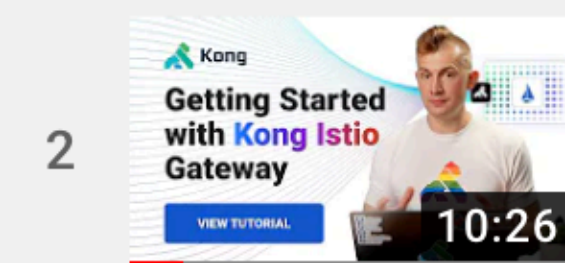
Kong

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Supercharge Kubernetes Ingress with

Kong



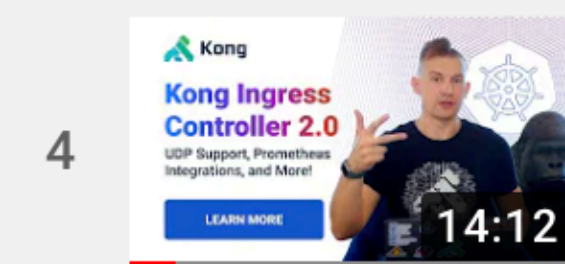
Getting Started with Kong Istio Gate

Kong



Kong Ingress Controller 2.0 - What's

Kong



Kong Ingress Controller 2.0: UDP Su

Kong



APM with Prometheus and Grafana

Kong



Kubernetes Ingress gRPC Example v

Kong



API Gateway Plugins for Kubernetes

Kong

Join Kong Nation!

Links

- <https://konghq.com/kong-summit>
- <https://youtube.com/konginc>
- <https://konghq.com/community/>

