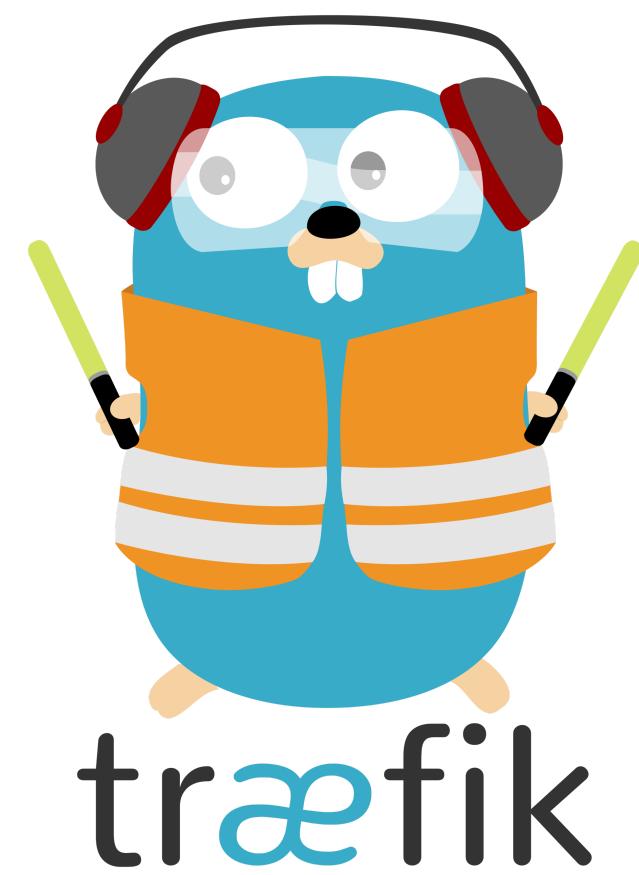


How To Easily Deploy And Manage Your Microservices With Traefik And Maesh



OpenShift meetup #9 - -Janvier 2020

Whoami

Michael Matur

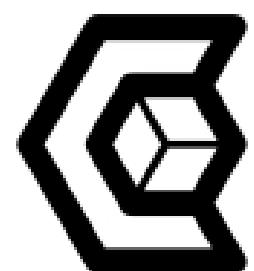
- Solution Architect @ Containous
- Blacksmith on Traefik
-  @michaelmatur
-  mmatur



Containous

<https://containo.us>

- We Believe in Open Source
- We Deliver Traefik, Traefik Enterprise Edition, Maesh
- Commercial Support
- 30 people distributed, 90% tech



CONTAINOUS

Why Traefik



Why, Mr Anderson?

THE EVOLUTION OF
SOFTWARE ARCHITECTURE

1990's

SPAGHETTI-ORIENTED
ARCHITECTURE
(aka Copy & Paste)



2000's

LASAGNA-ORIENTED
ARCHITECTURE
(aka Layered Monolith)



2010's

RAVIOLI-ORIENTED
ARCHITECTURE
(aka Microservices)



WHAT'S NEXT?
PROBABLY PIZZA-ORIENTED ARCHITECTURE

By @benorama

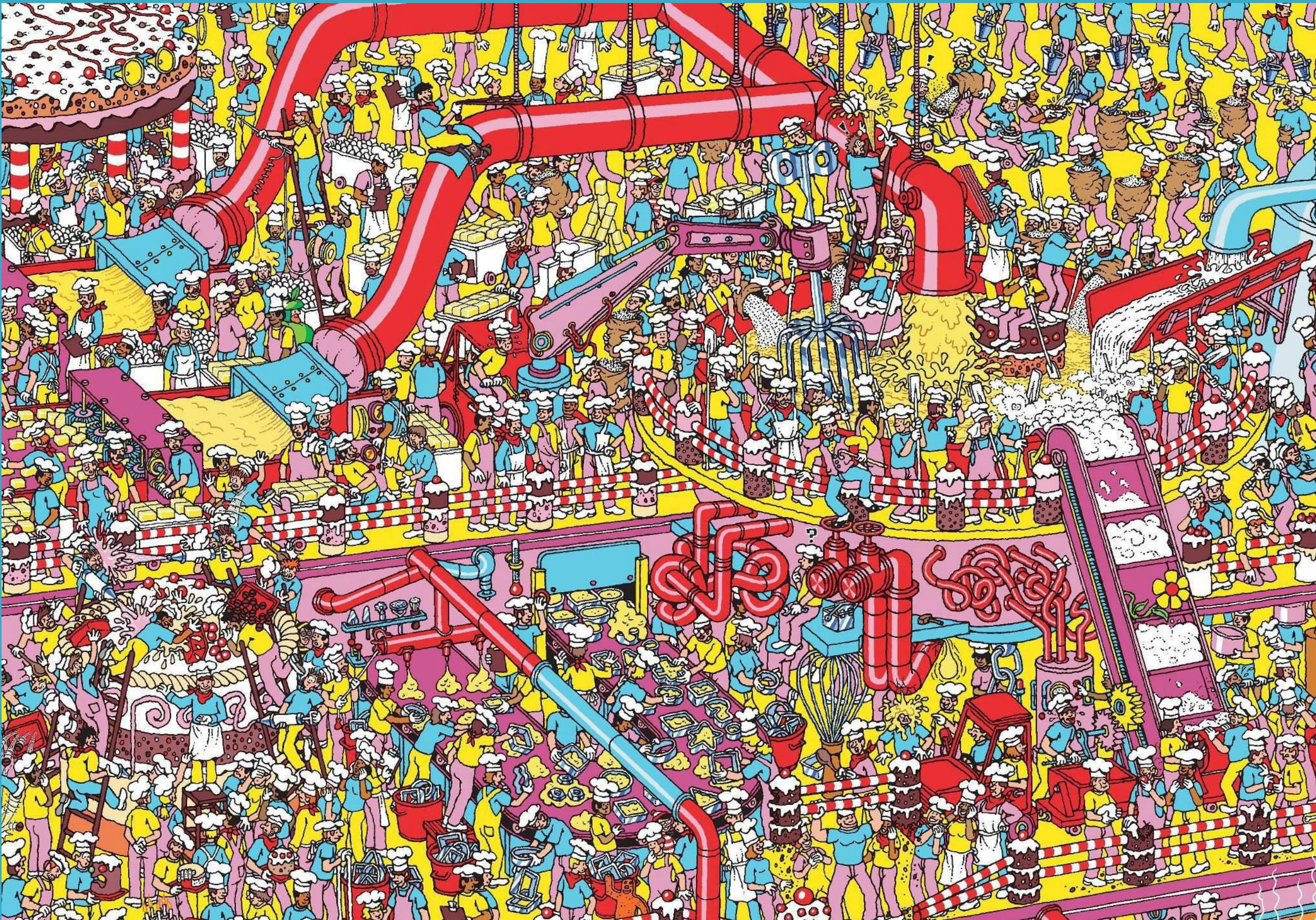
The Premise Of Microservices...



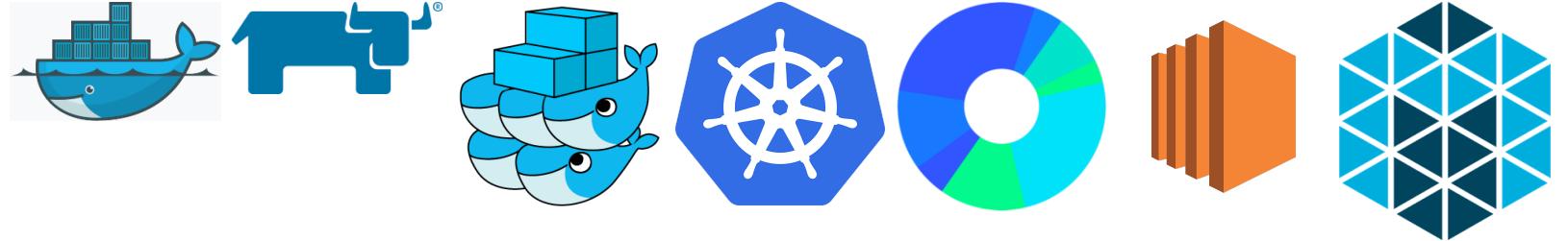
...And What Happens

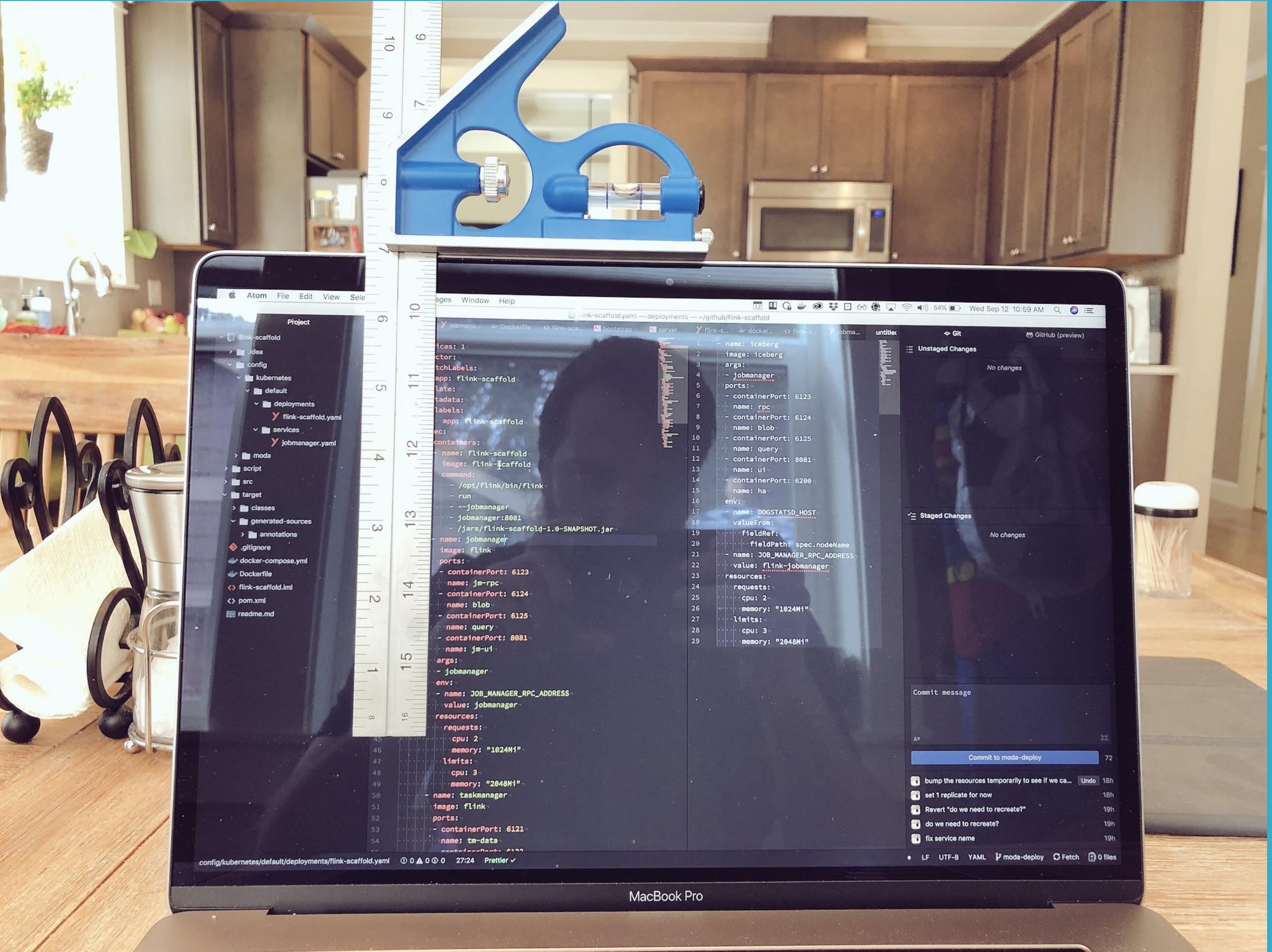


Where's My Service?



Tools Of The Trade





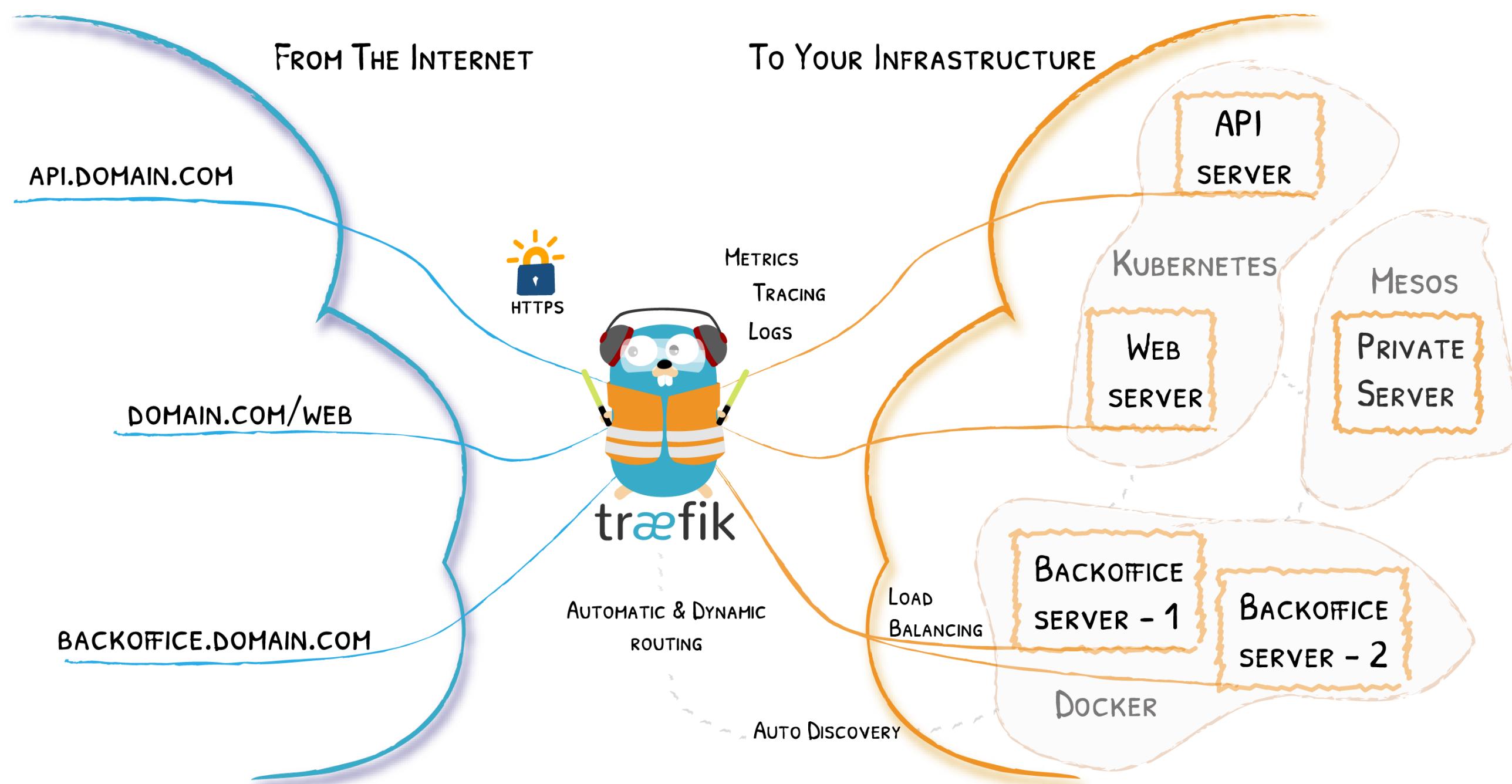
Source: <https://twitter.com/Caged/status/1039937162769096704>

What If I Told You?



That You Don't Have to Write This Configuration File...?

Here Comes Traefik!



Traefik Project



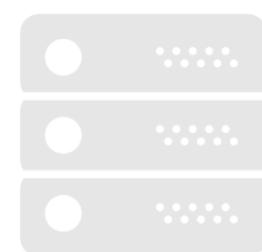
27,000+

stars on GitHub



450+

contributors



100K +
living
instances



1.4 B+

downloads



TOP 15

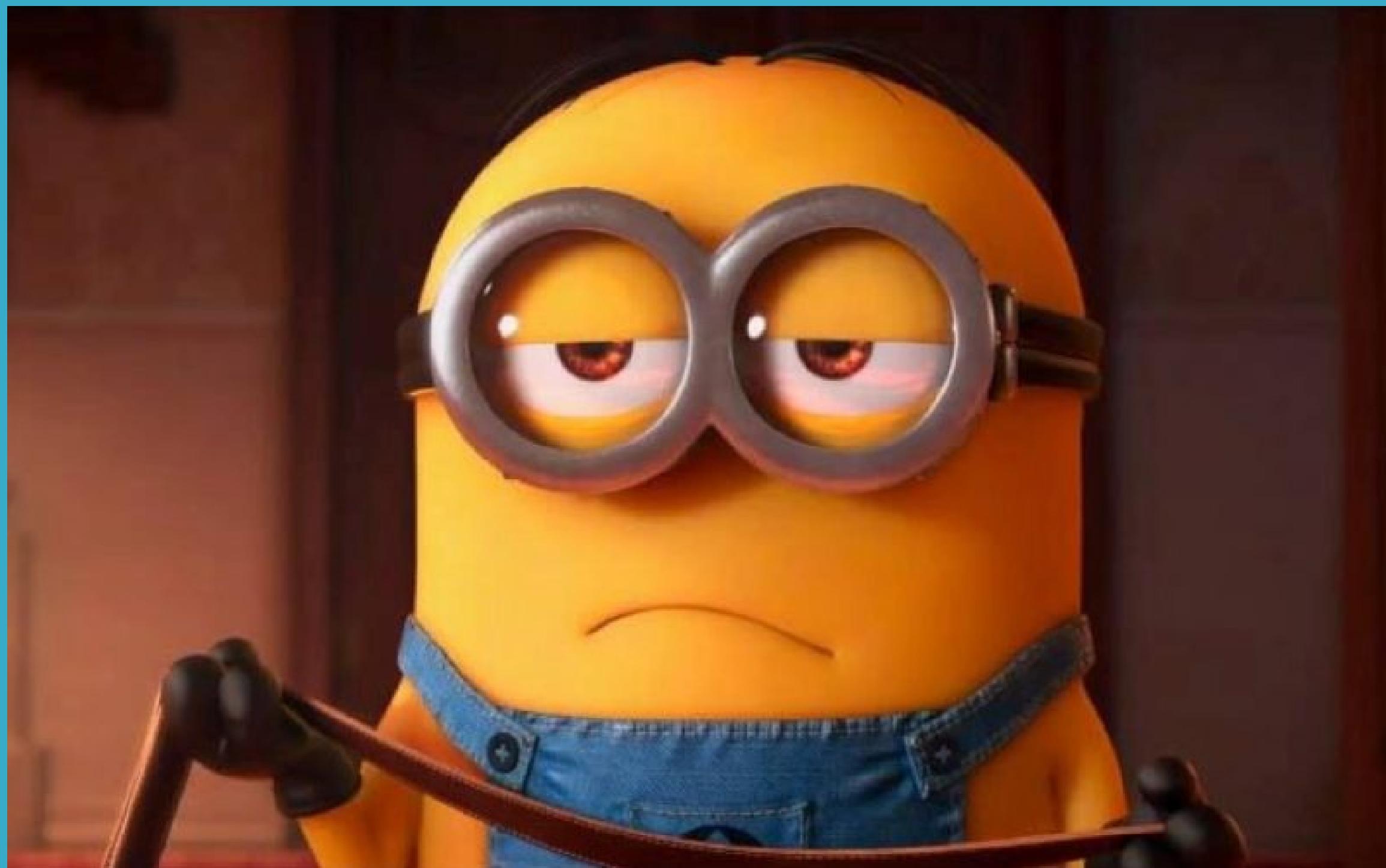
golang project

Traefik 2.0 Quick Overview

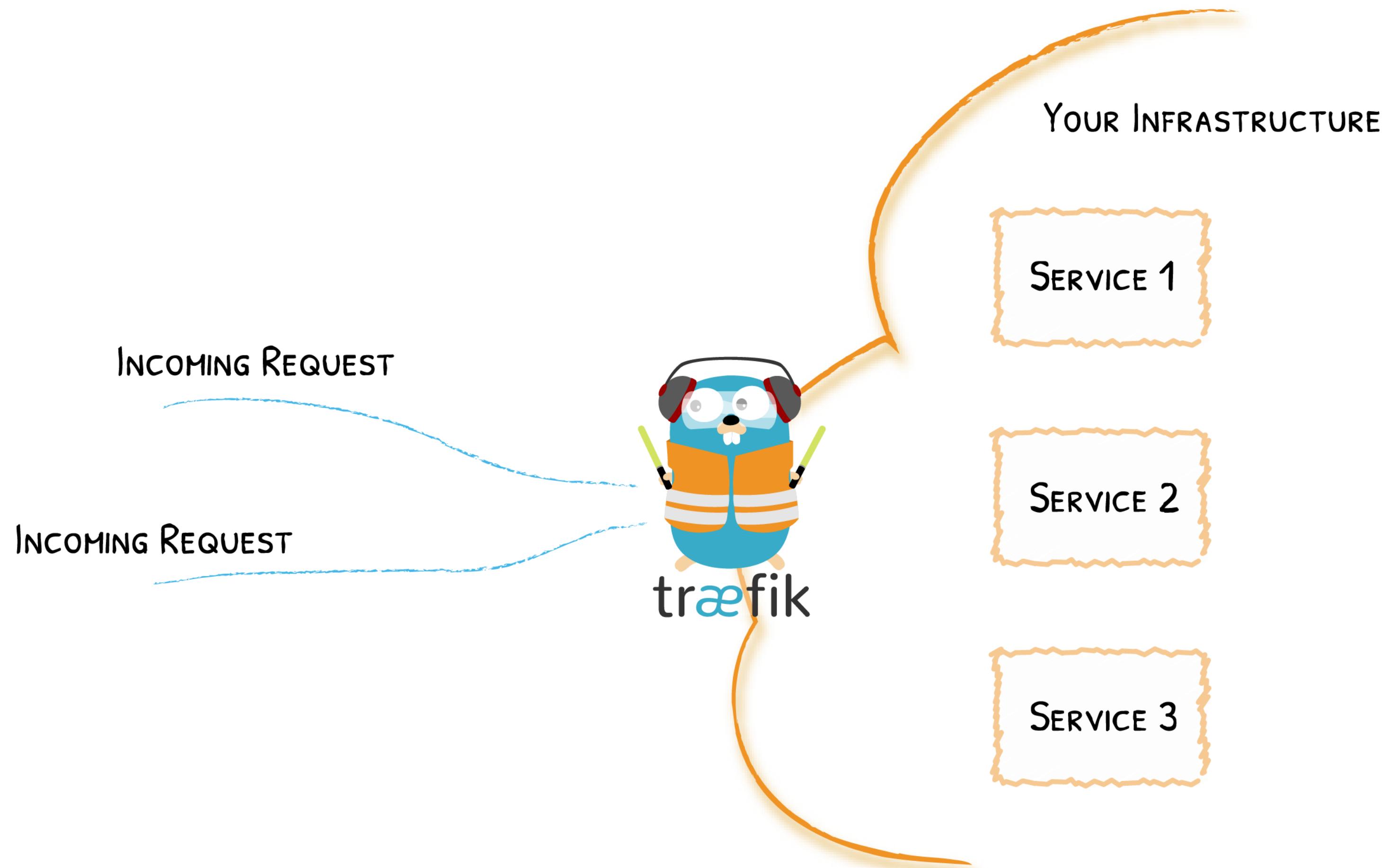
- Revamped Documentation
- Clarified Concepts
- Expressive Routing Rule Syntax
- Middlewares
- TCP Support
- Canary / Mirroring
- And so Much More...

Learn more on the blog post

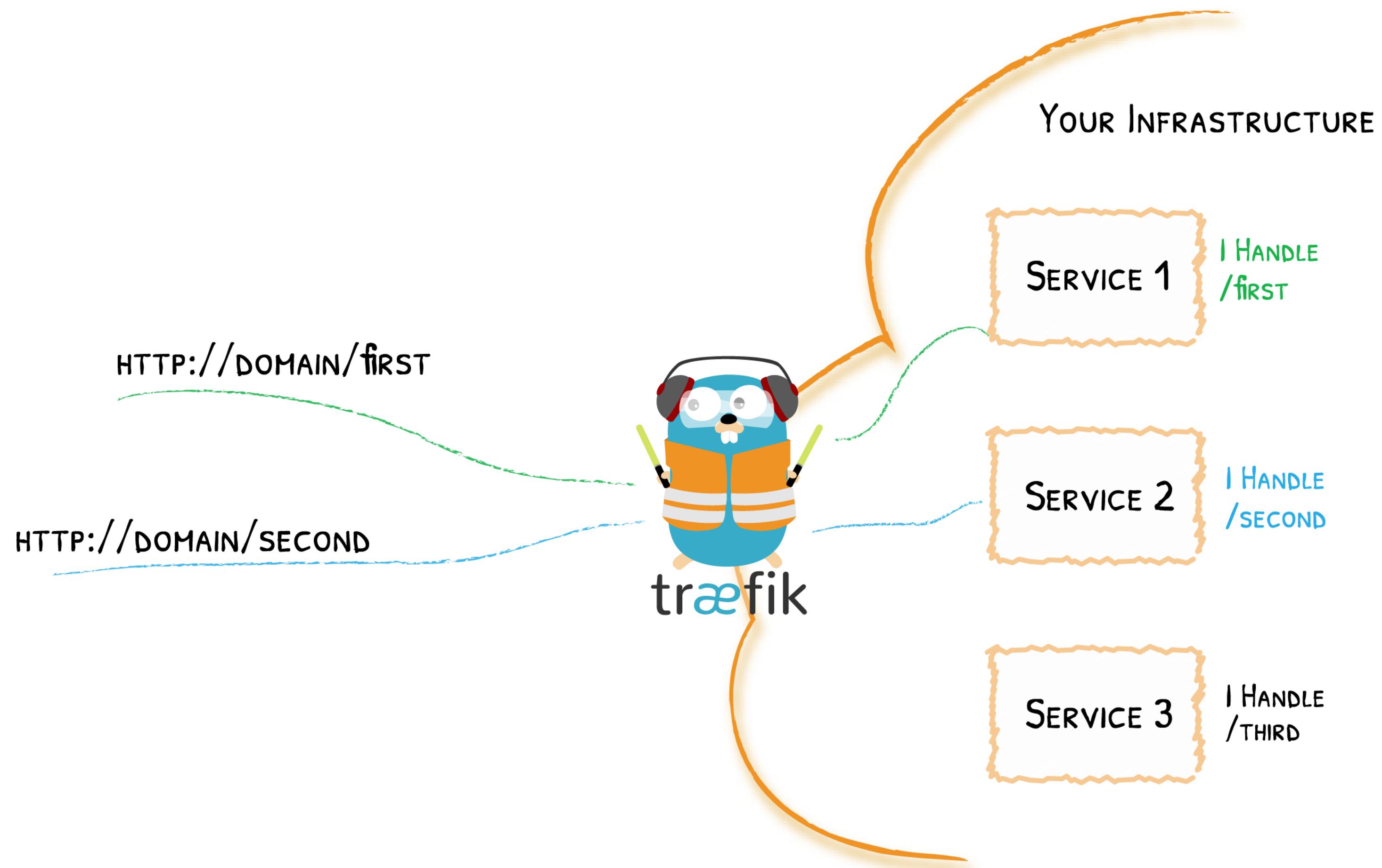
Traefik (V2.0) Core Concepts



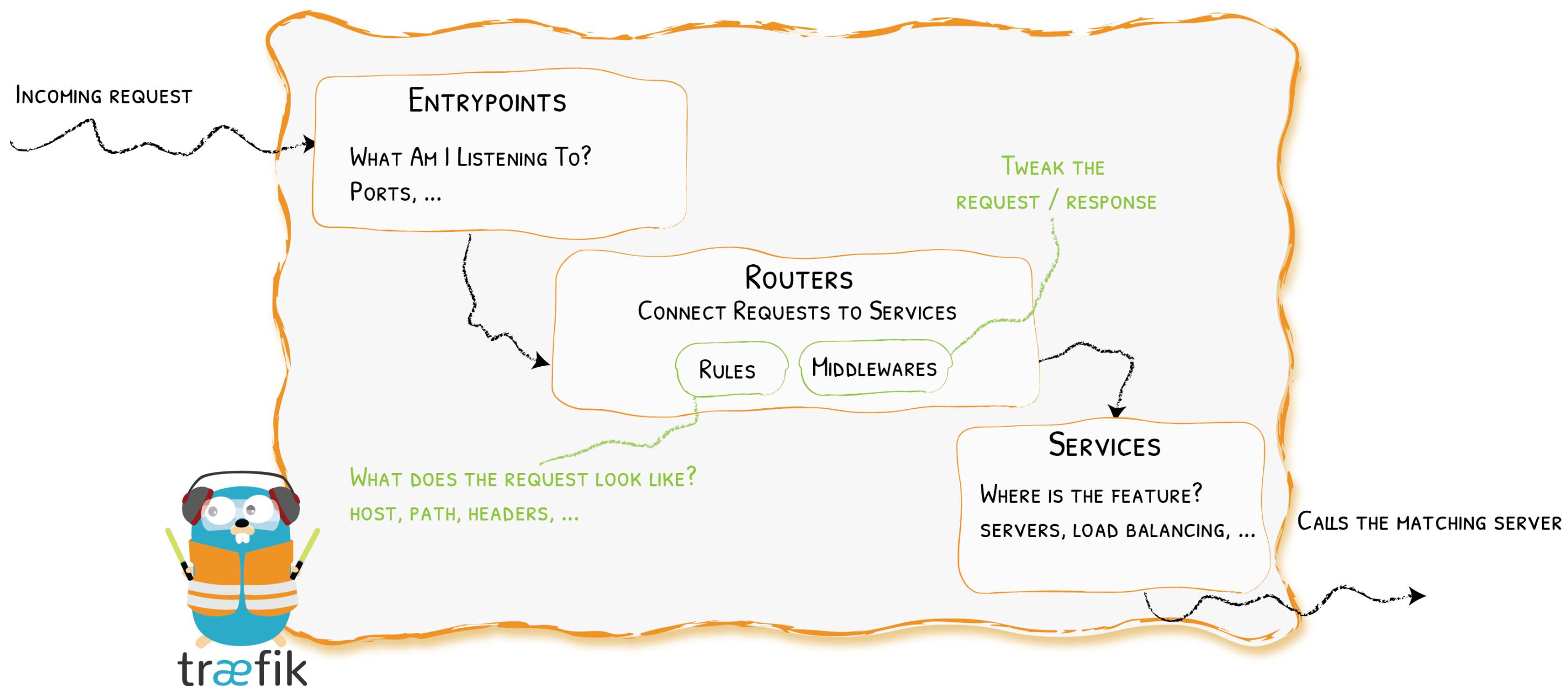
Traefik Is An Edge Router



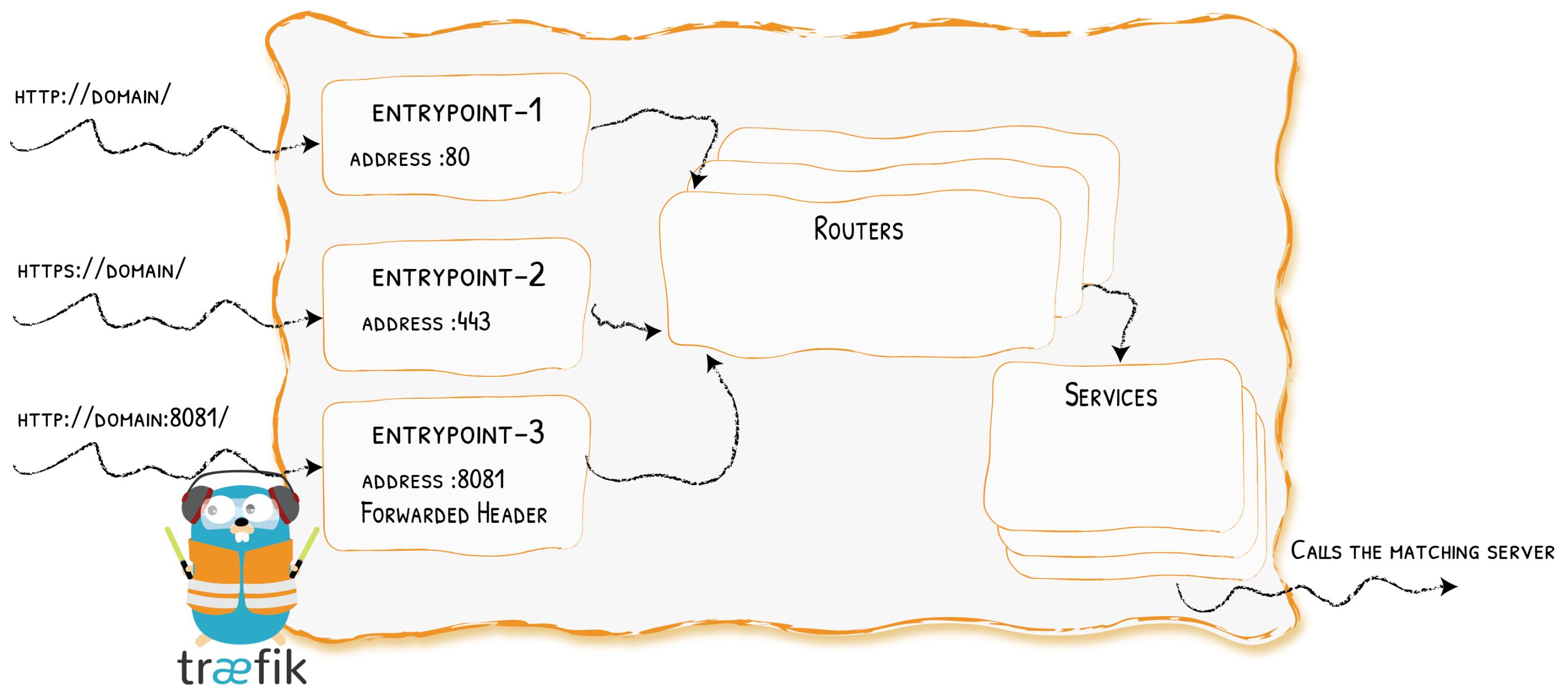
Dynamically Discovers Services



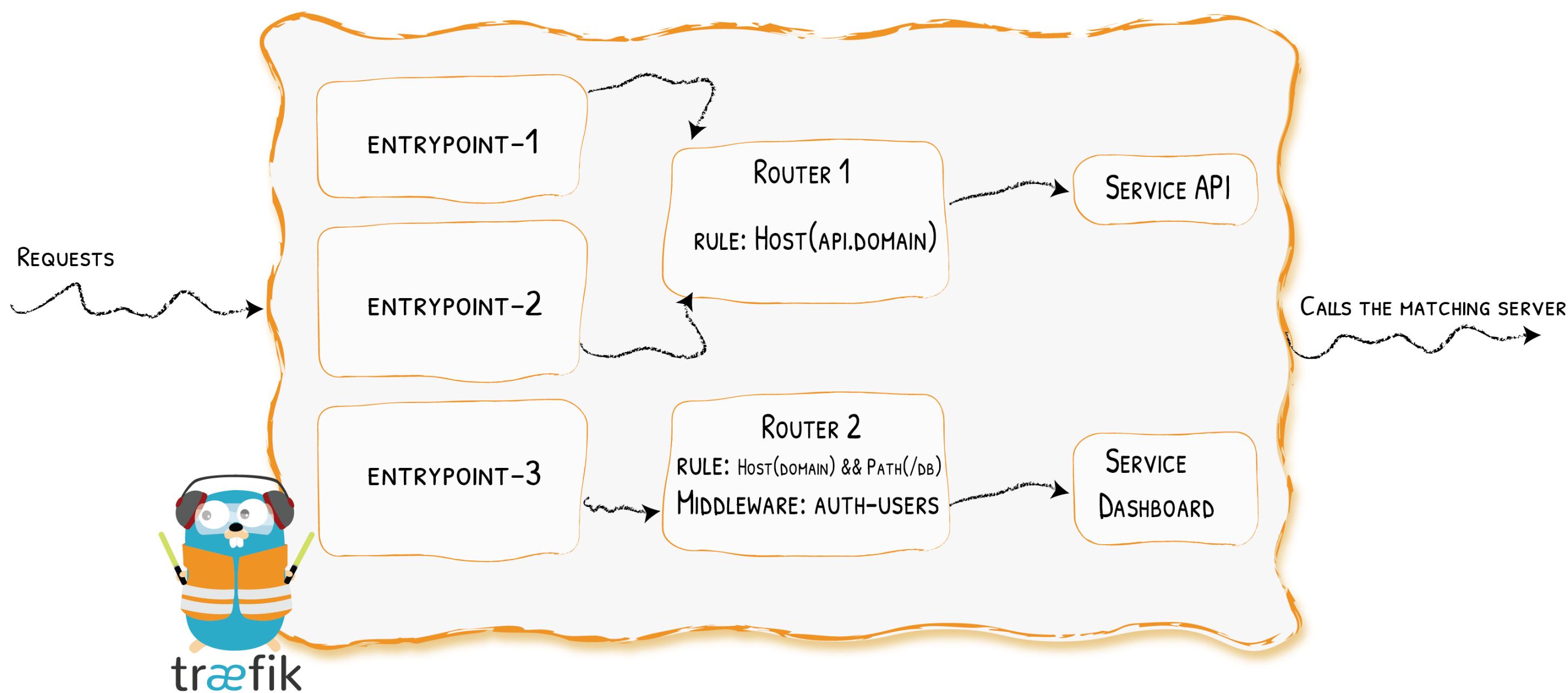
Architecture (V2.0) At A Glance



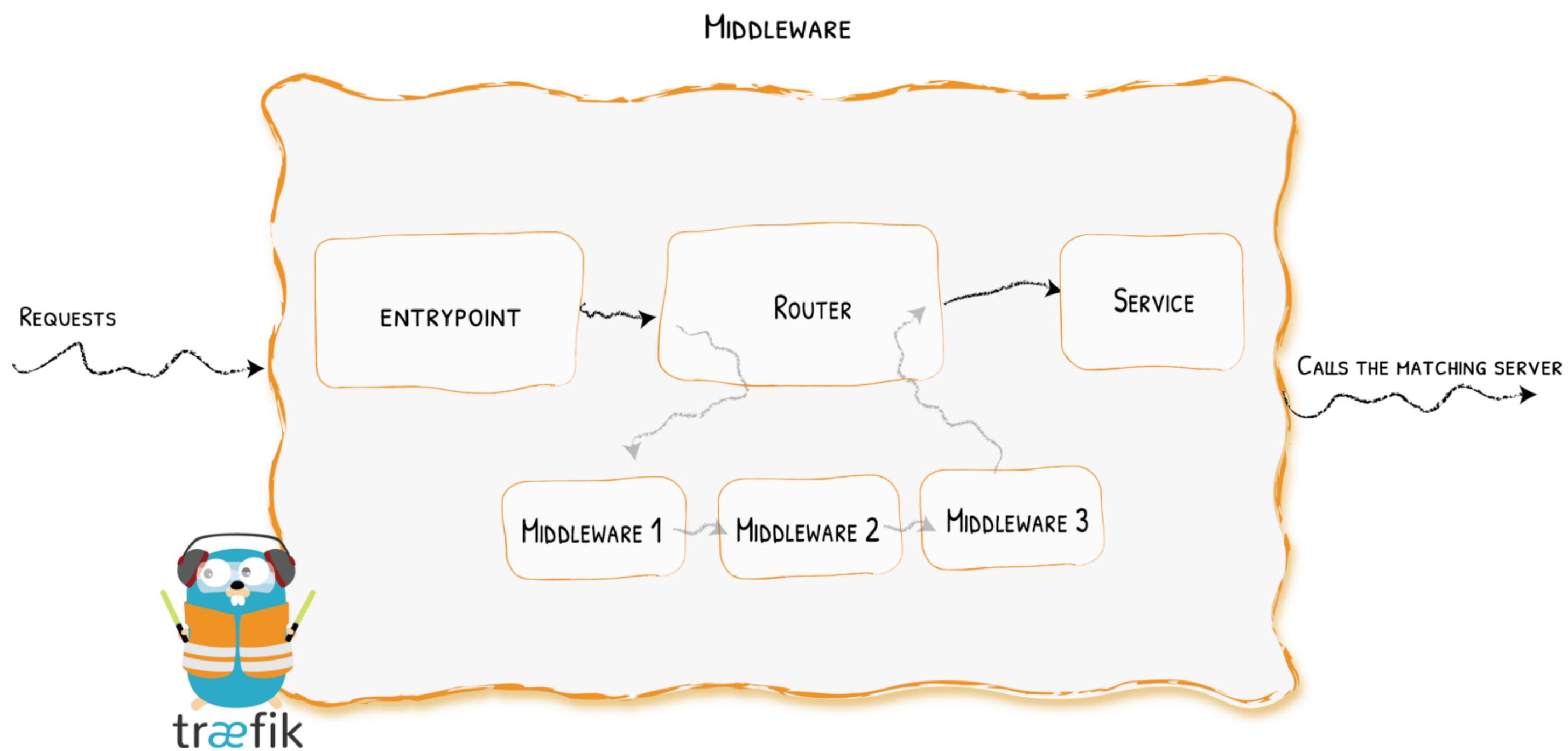
Entrypoints



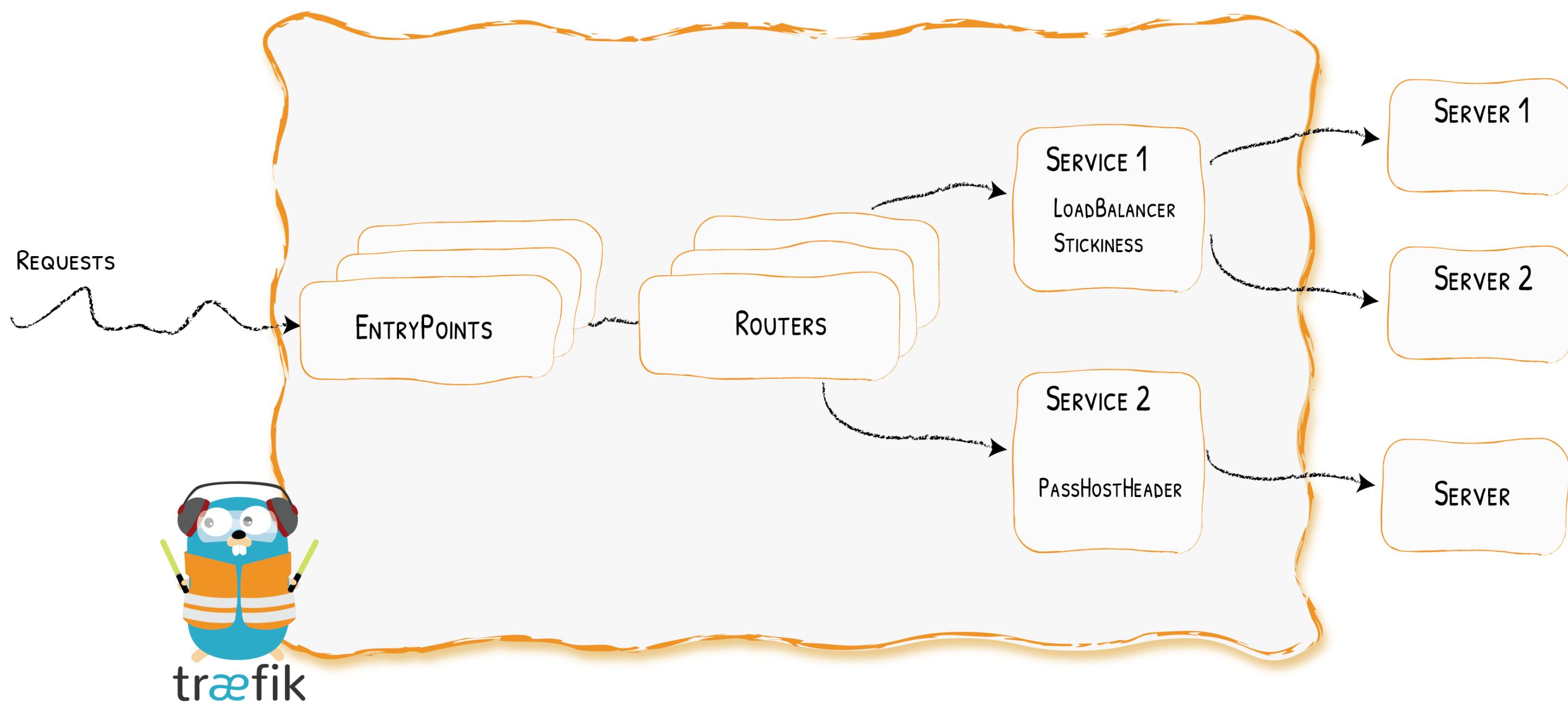
Routers



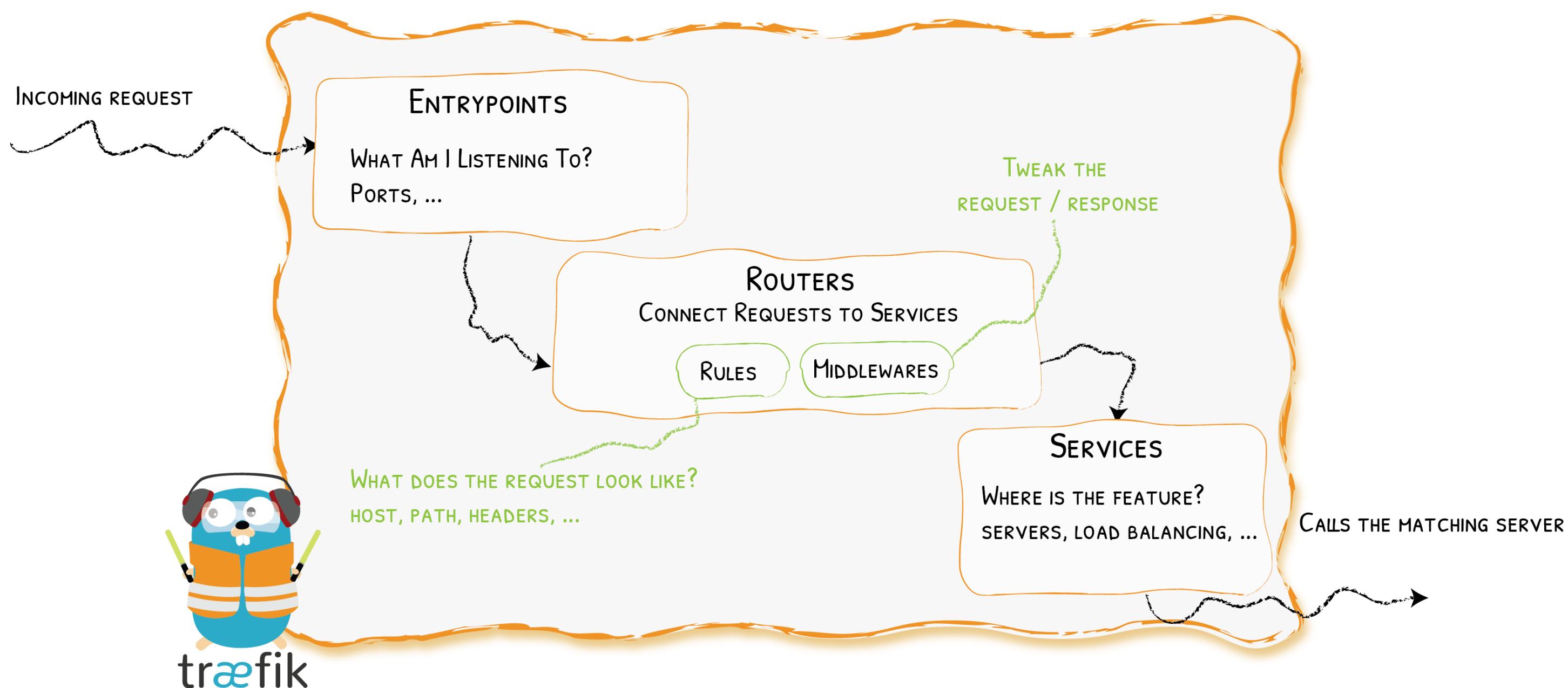
Middlewares



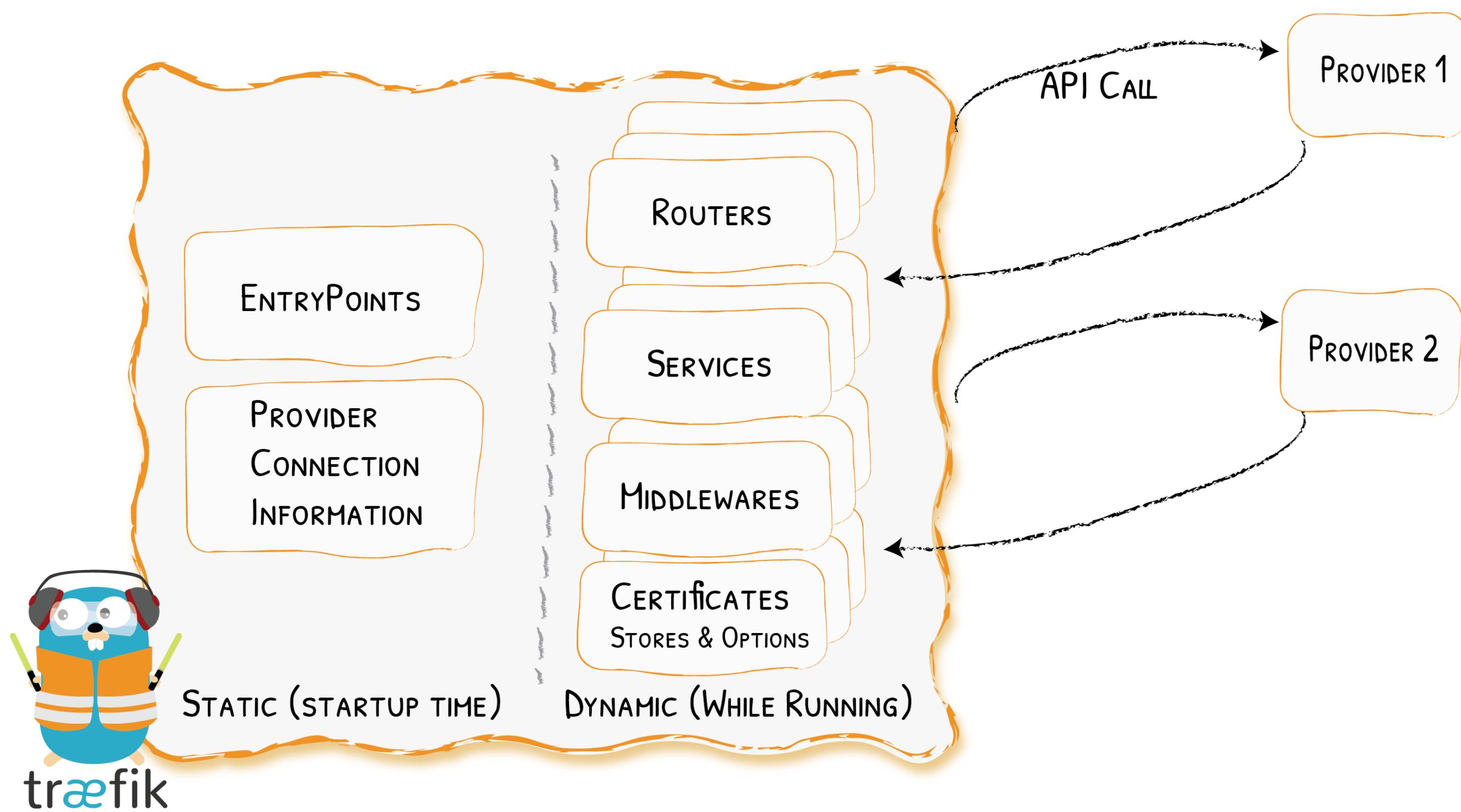
Services



Architecture (Again) At A Glance

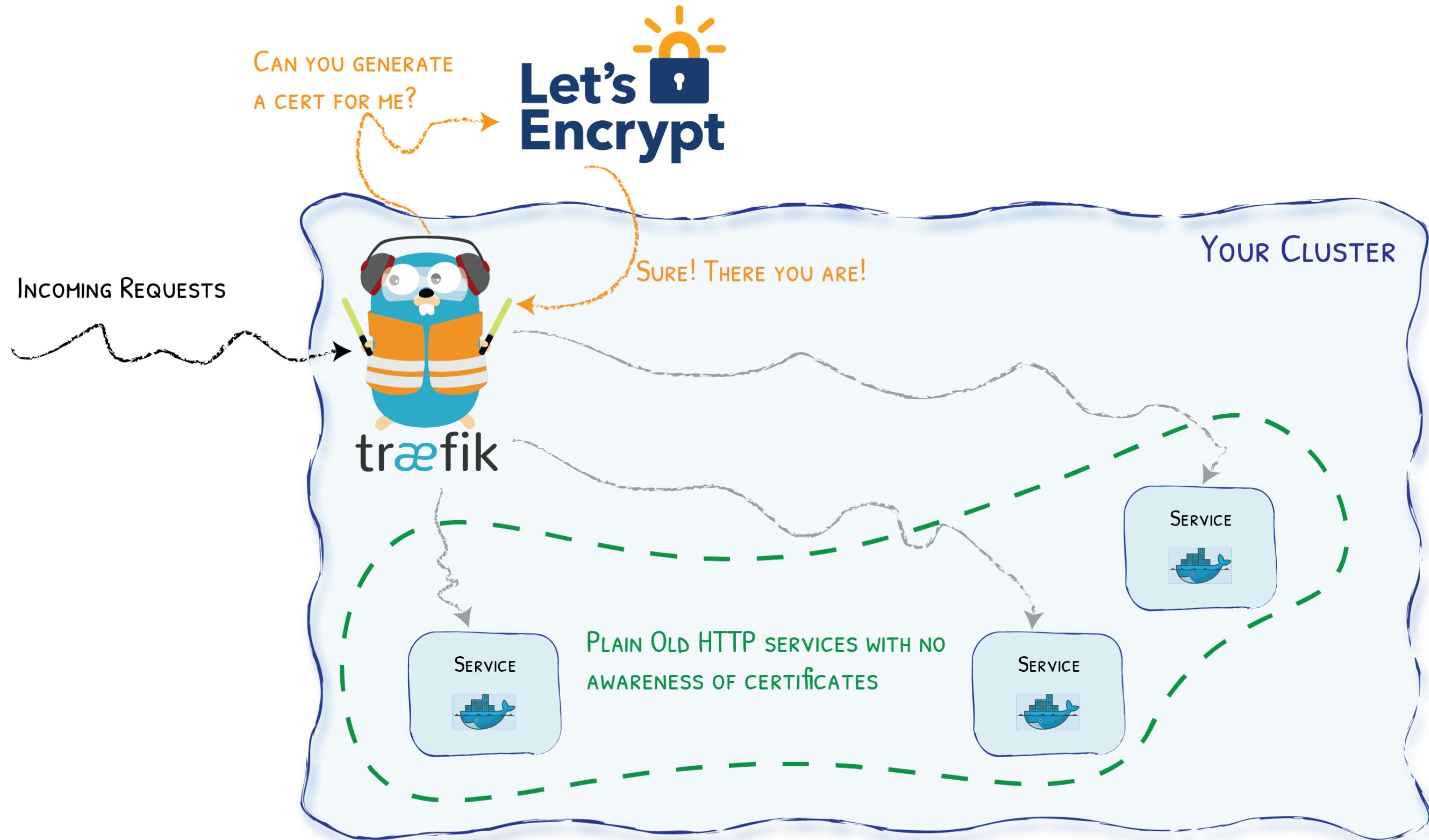


Static & Dynamic Configuration

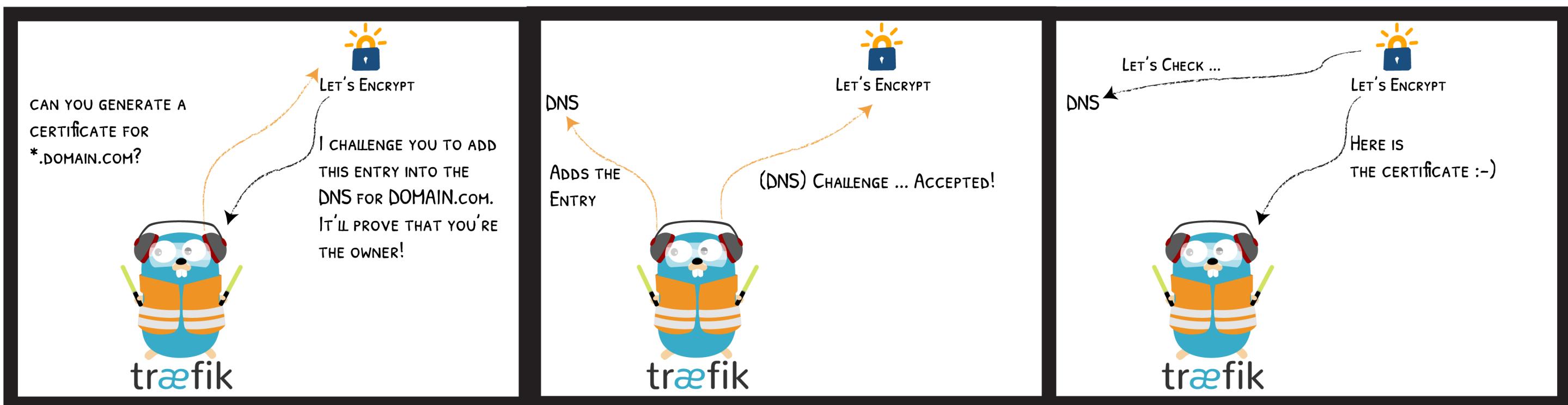


Traefik And Let's Encrypt

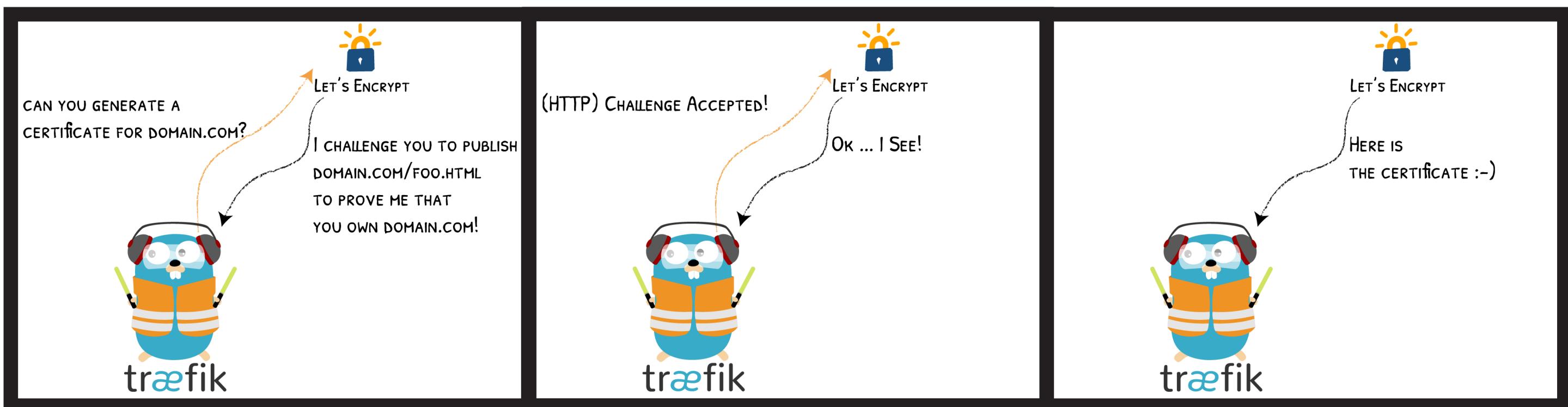
HTTPS & Let's Encrypt



Let's Encrypt DNS Challenge



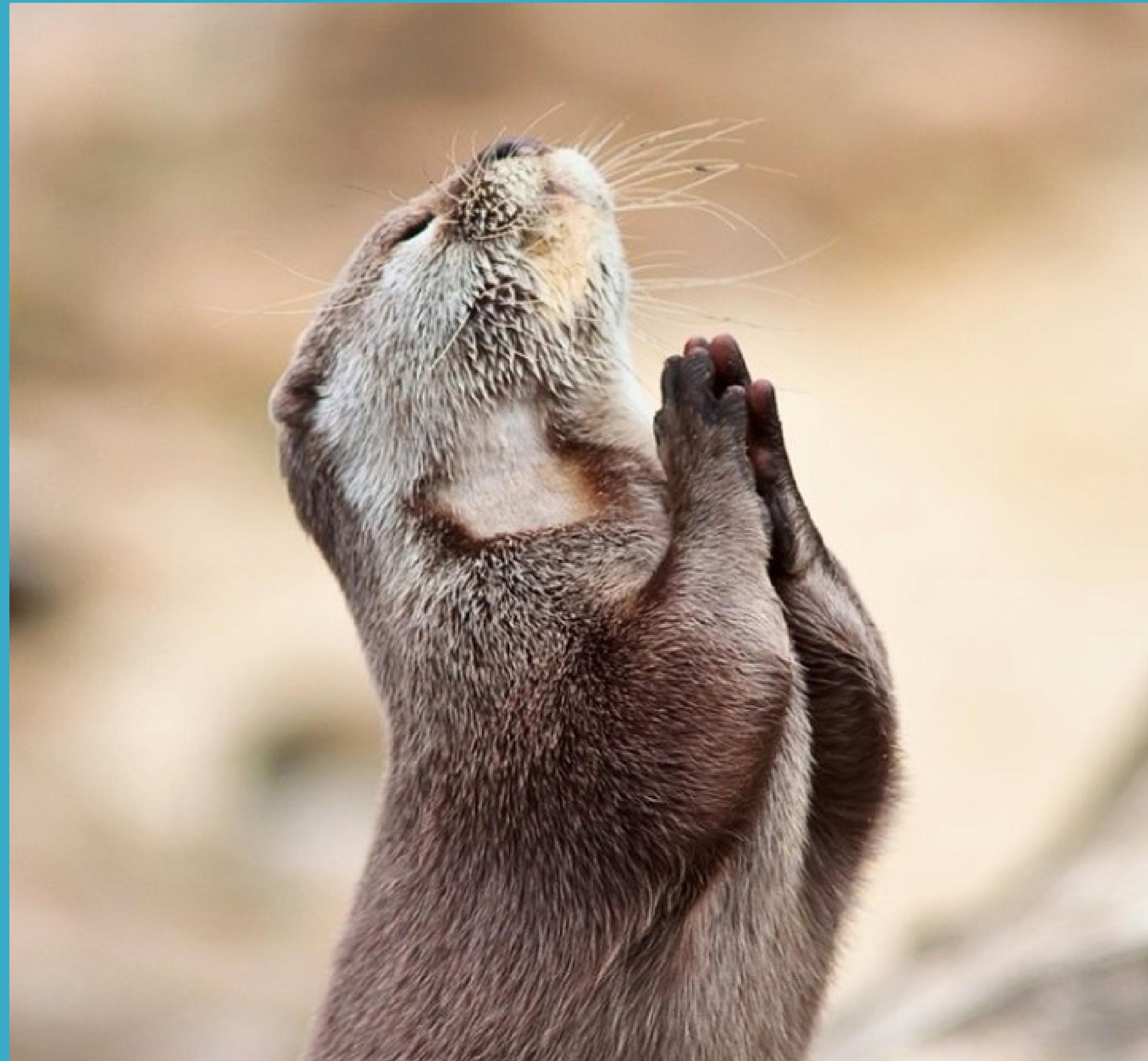
Let's Encrypt HTTP Challenge



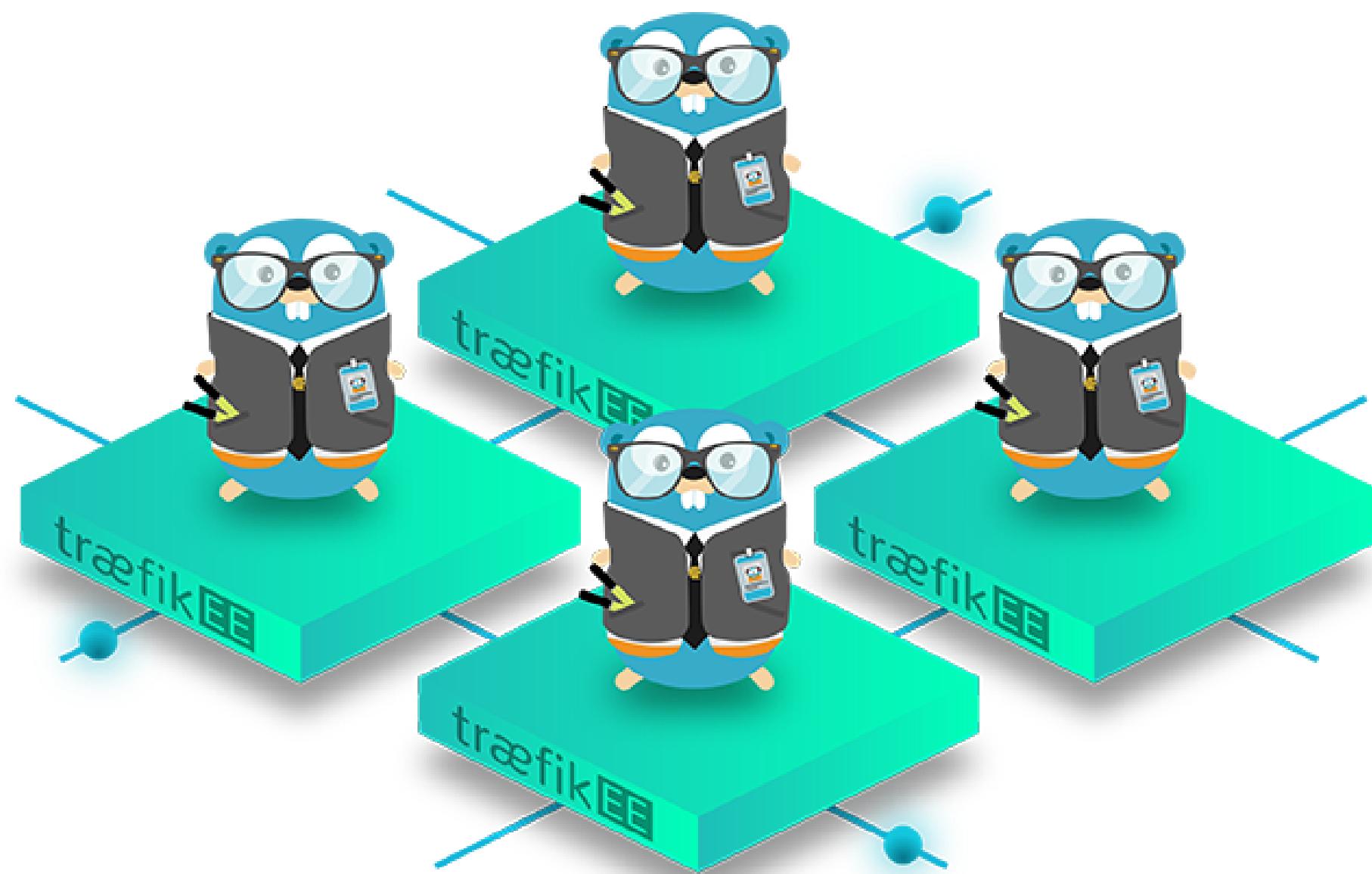
Let's Encrypt TLS Challenge



Demo



Traefik Also Comes In Herd



HIGH AVAILABILITY

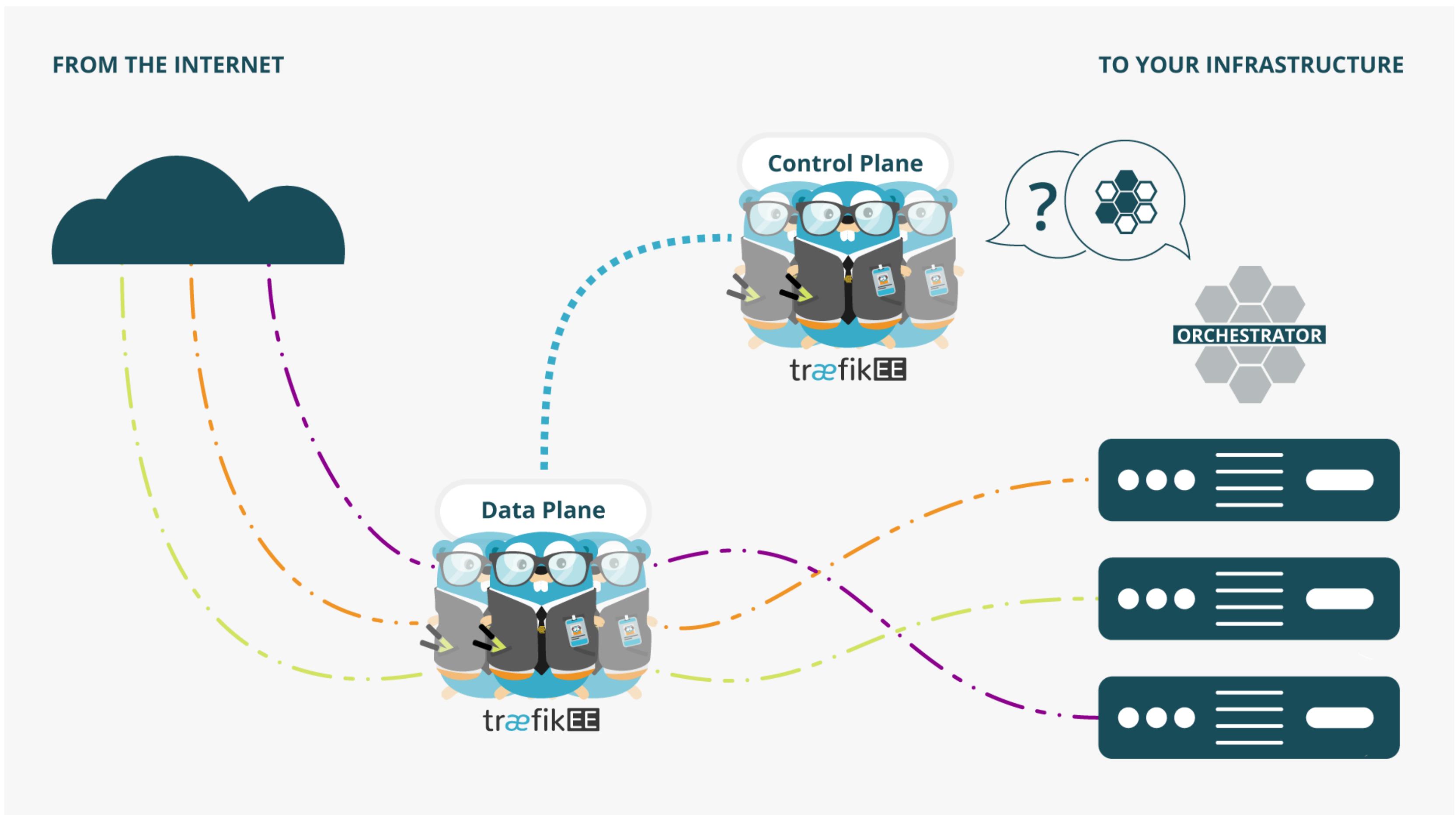
traefik ENTERPRISE EDITION

SECURITY

traefik ENTERPRISE EDITION

SCALABILITY

traefik ENTERPRISE EDITION



As Simple As Traefik

- Install it:

```
# Cluster Installation
traefikeectl install \
--licensekey="SuperSecretLicence" \
--dashboard \
--kubernetes # Or --swarm
```

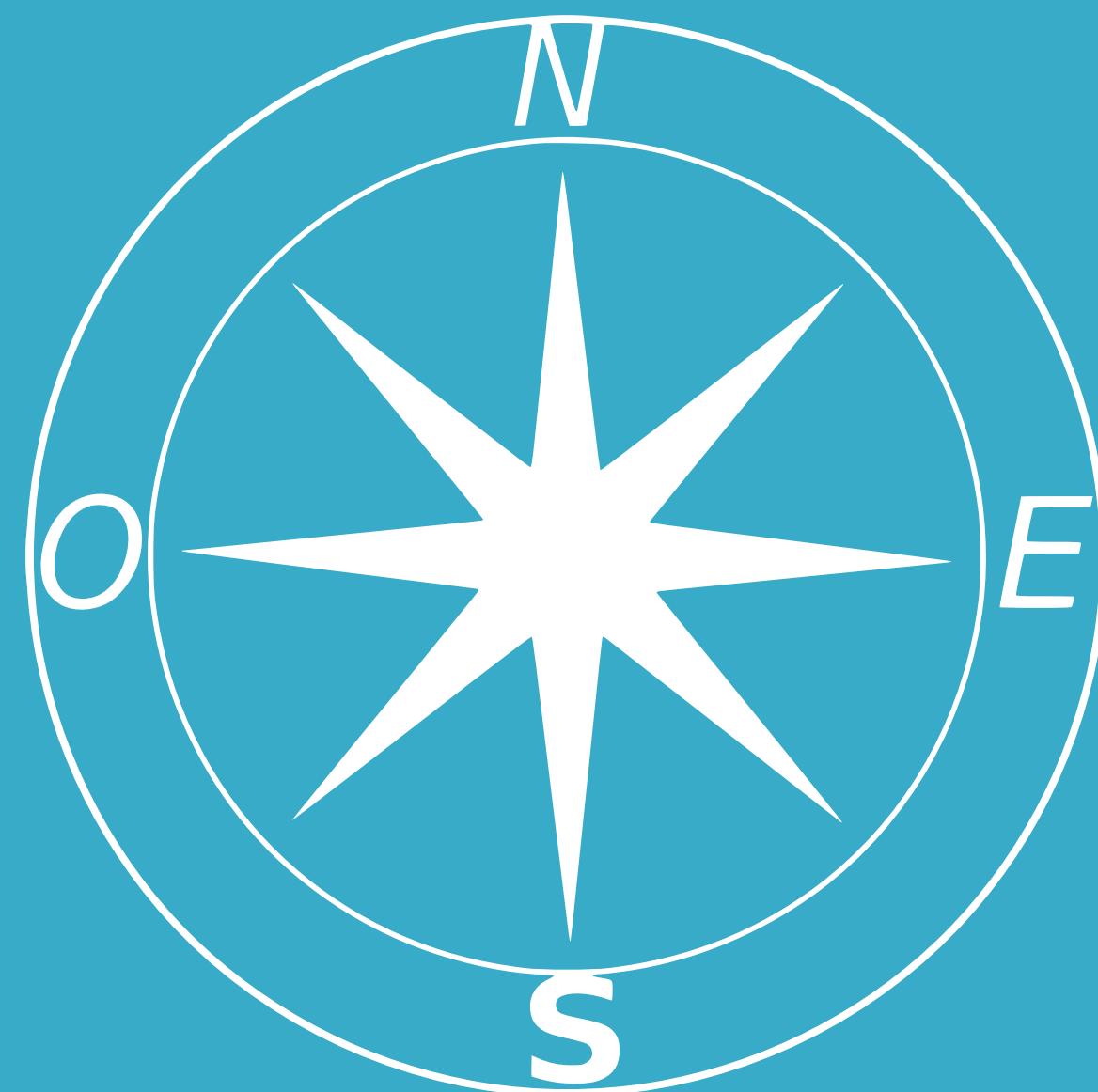
- Configure it:

```
# Routing Configuration, same as Traefik's
traefikeectl deploy \
--defaultentrypoints=http,https \
--entryPoints='Name:http Address::80' \
--entryPoints='Name:https Address::443 TLS' \
--logLevel=INFO \
--kubernetes
```

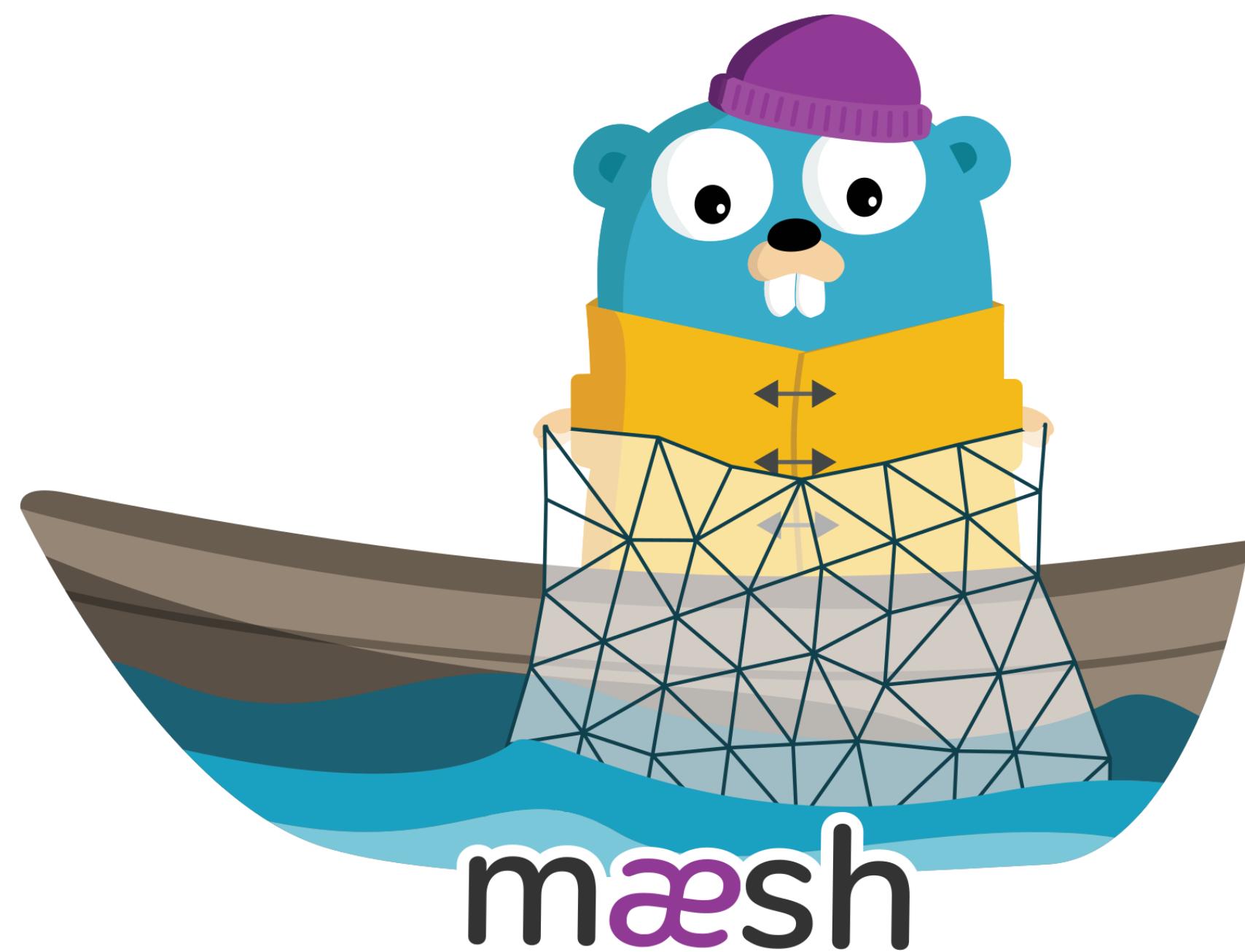
Free Trial

<https://containo.us/traefikee>

East / West Traefik



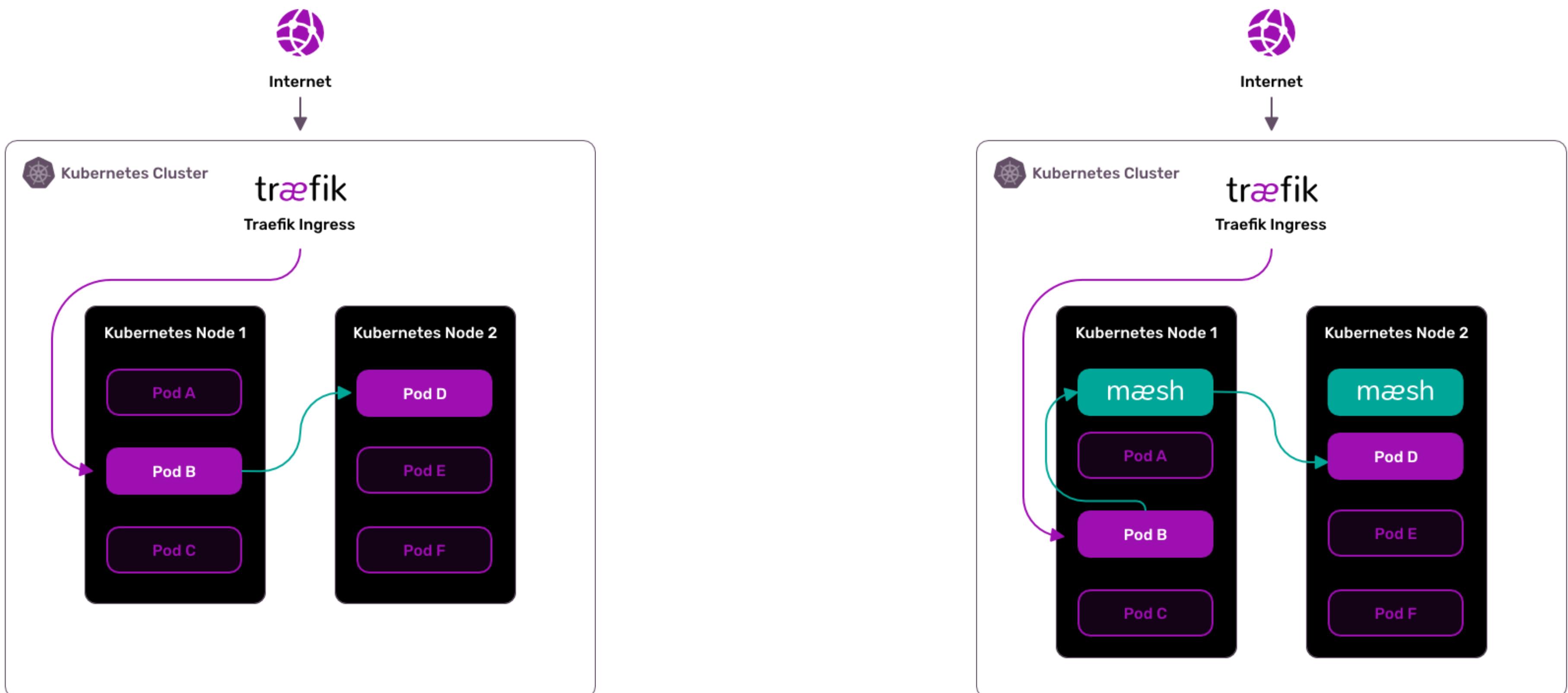
Say Hello To Maesh



What Is Maesh?

Maesh is a lightweight, easy to configure, and non-invasive service mesh that allows visibility and management of the traffic flows inside any Kubernetes cluster.

Maesh Architecture



More On Maesh

- Built on top of Traefik,
- SMI (Service Mesh Interface specification) compliant,
- Opt-in by default.

Maesh Website

That's All Folks!



We Have
Stickers!

traefik

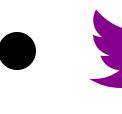
We Are Hiring!



CONTAINOUS

```
docker run -it containous/jobs
```

Thank You!

-  @michaelmatur
-  mmatur



- Slides (HTML): <https://containous.github.io/slides/meetup-openshift-paris-2020>
- Slides (PDF): <https://containous.github.io/slides/meetup-openshift-paris-2020/slides.pdf>
- Source on : <https://github.com/containous/slides/tree/meetup-openshift-paris-2020>