

API Days Paris 2018

Taming your Monoliths & Microservices

with Tyk API Management Platform



Ahmet Soormally

Software Engineer

Tweet: [SoormallyAhmet](#)

Email: Ahmet@tyk.io

Github: github.com/asoorm





Agenda

- Intro
- A little background about Tyk
- High-Level overview of the feature-set
- Key Stakeholders
- Some example deployment options & architecture diagrams
- Demo / Walkthrough (follow-along if you like)

Background

- Humble Beginnings from an Open Source Gateway
- Designed by Software Engineers, for Software Engineers
- Purely organic adoption growth & profitable
- Community & Client driven project

Cloud Native

Microservices to manage microservices



Cloud Native

Infrastructure as a Service



Cloud Native

APIs to manage your APIs



Cloud Native

Infrastructure as Code



Cloud Native

Horizontally Scalable



Cloud Native

Trivial Orchestration



Warp Speed

Token Hashing & Validation

Security Checks

Quota Management

Rate Limiting

Analytics Gathering

~~Optimising for benchmarks?~~

~~Deploying on SuperComputers?~~

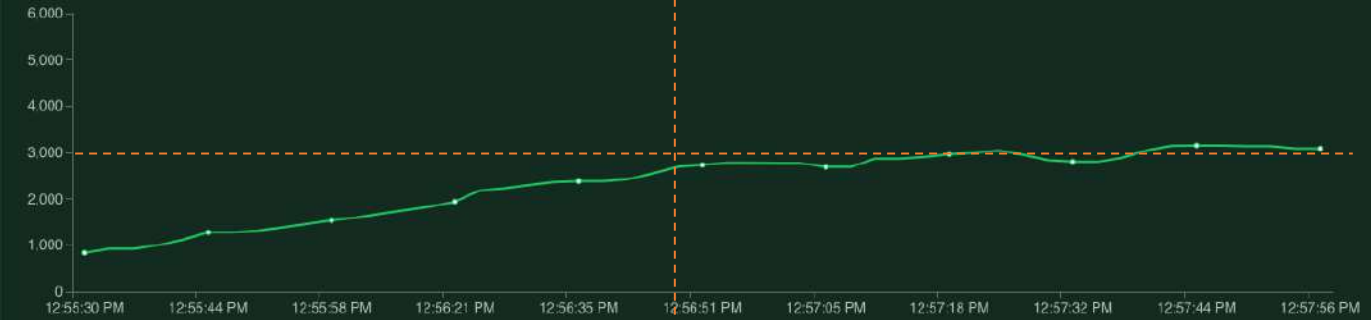
~~Sub-Millisecond inner DC latency?~~

2-core, 2-GB \$20 DO Droplet stable ~3000 RPS

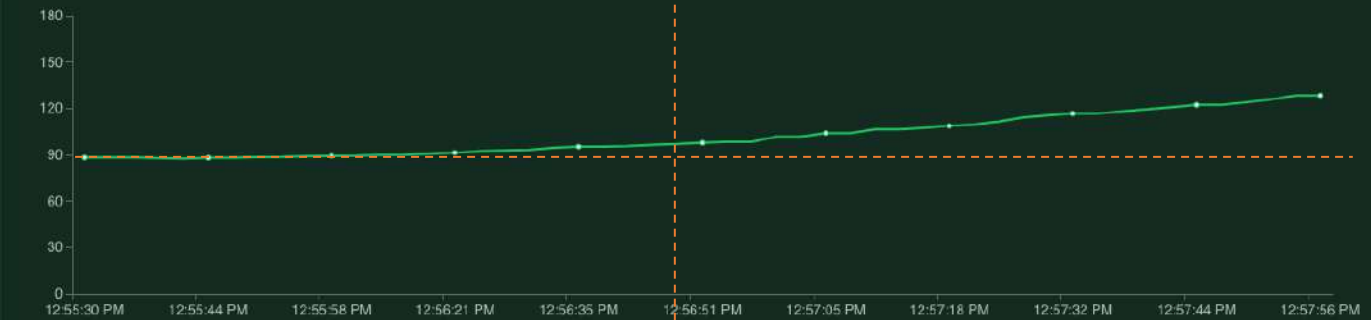


Warp Speed

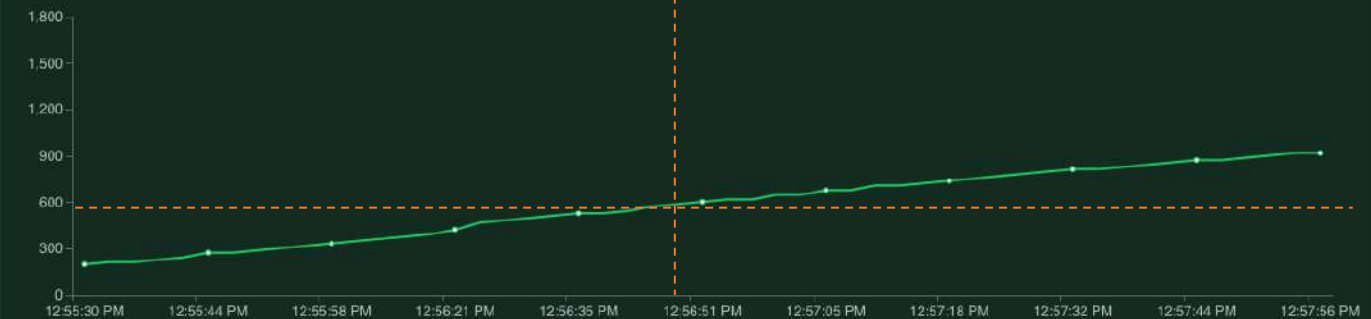
Total Requests per Second



Average Response Time



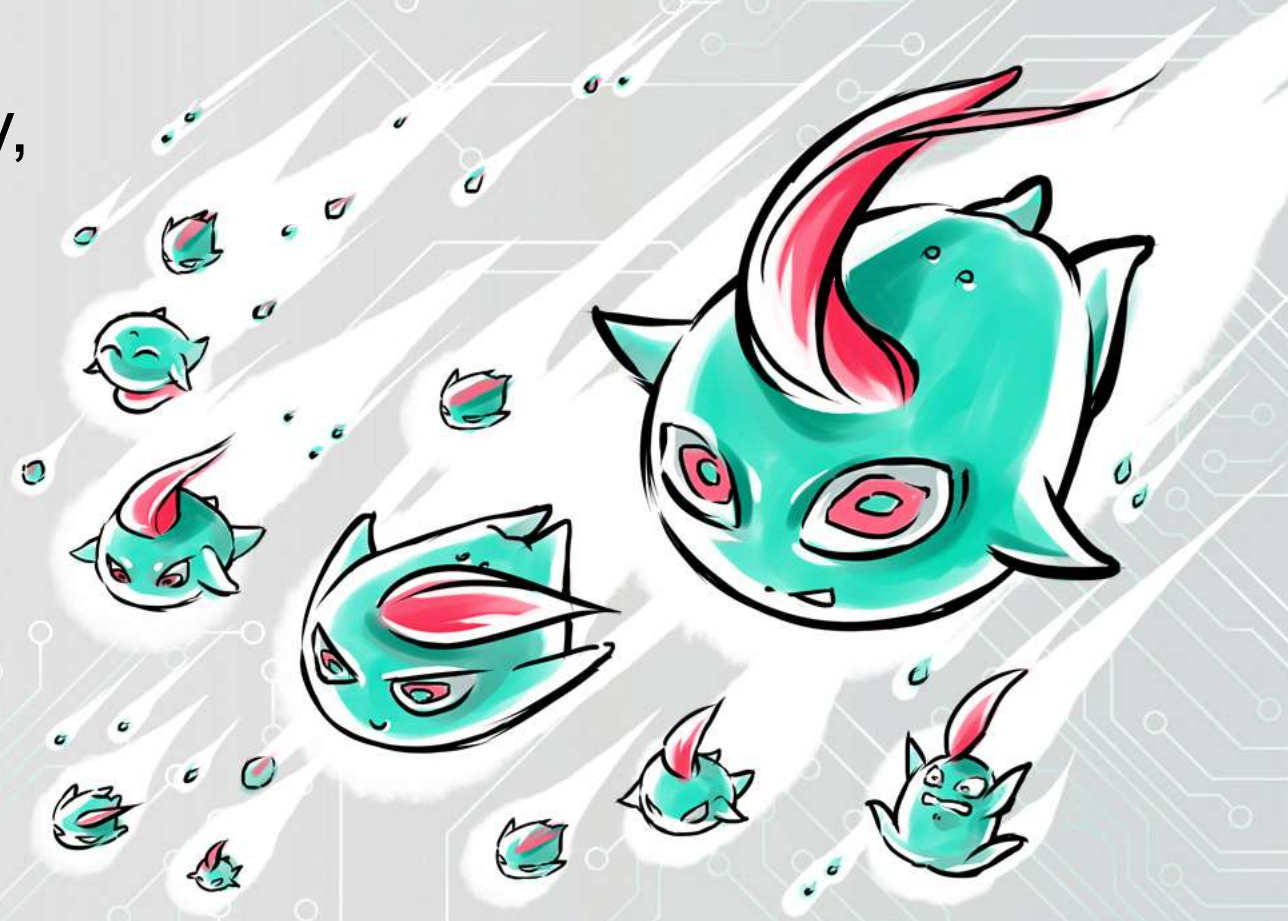
Number of Users



Open Source Innovation

A thriving open source community, extending features, functions and services

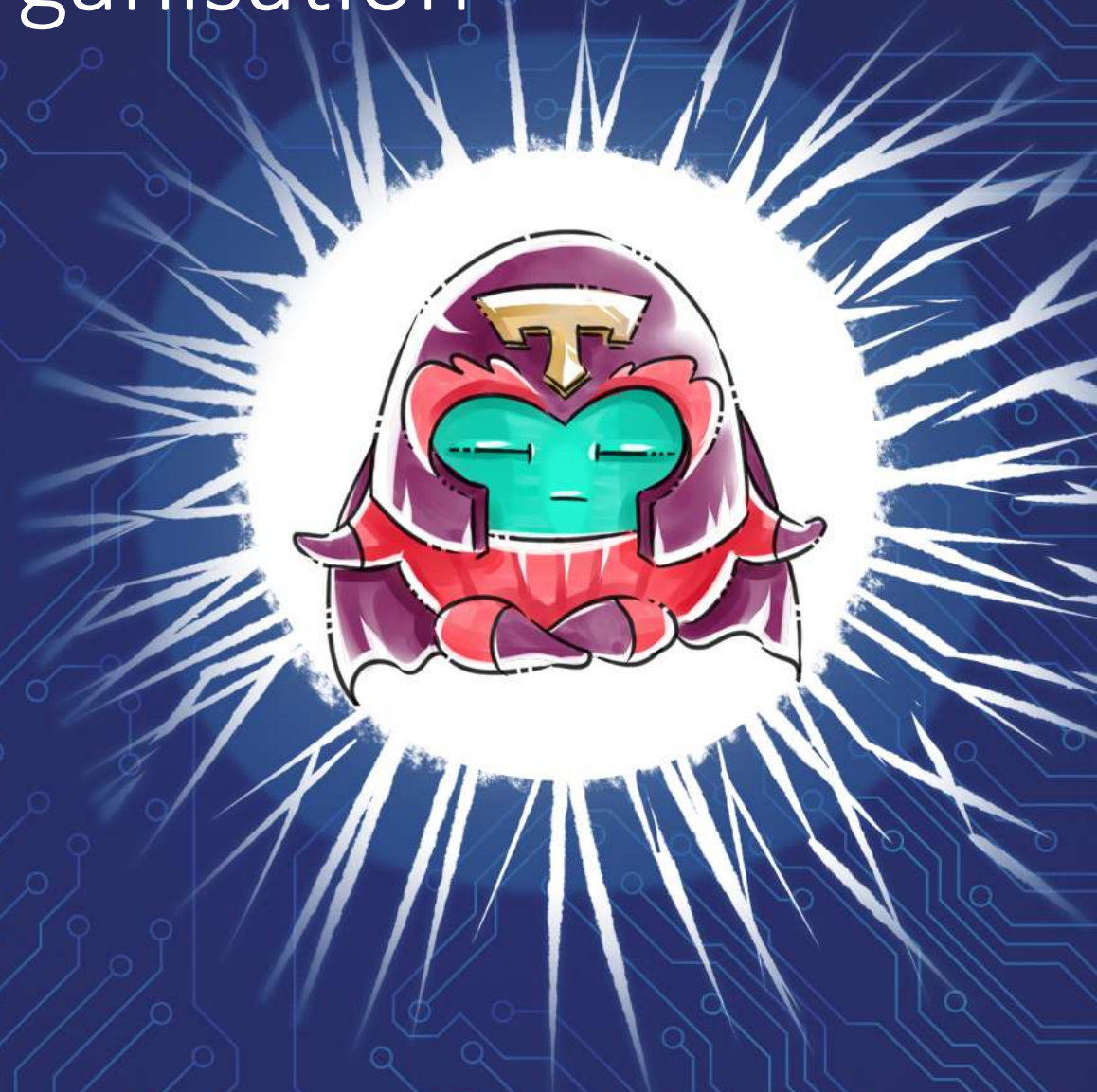
- 3,000+ Cloud Users
- 1m+ DockerHub pulls
- ~1,900 Forum members
- 75+ Contributors
- <https://github.com/TykTechnologies/tyk>



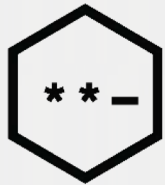
Empowering the entire Organisation

Precision engineering, developed to support the needs of your teams

- Your API Owners
- Your API Developers
- Partners & 3rd Party Developers
- Your ops team



Functionality: API Owners



Authentication
Authorisation



Policies
Quotas
Rate limits



Analytics



Active
Monitoring

Functionality: API Developers



**Mock
Responses**



**Request &
Response
Transforms**



REST API



**Virtual
Endpoints**



Extensible

Functionality: Partners & Third Party Devs



Developer Portal



Documentation



Self Catering

Functionality: Ops Team



**System
events**



**Gateway
Sharding**



**Service
discovery**



**Microservice
Features**

Architecture: A flavour for everybody



Cloud



Multi-Cloud

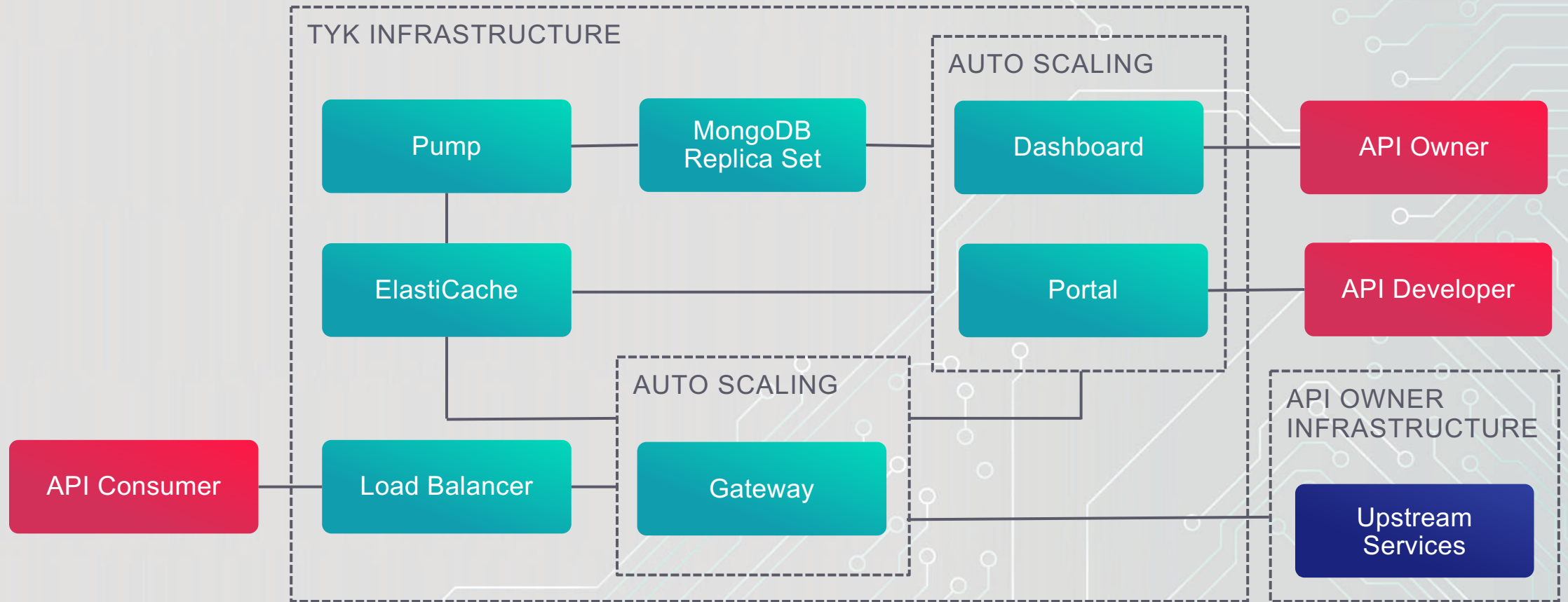


On-Premises

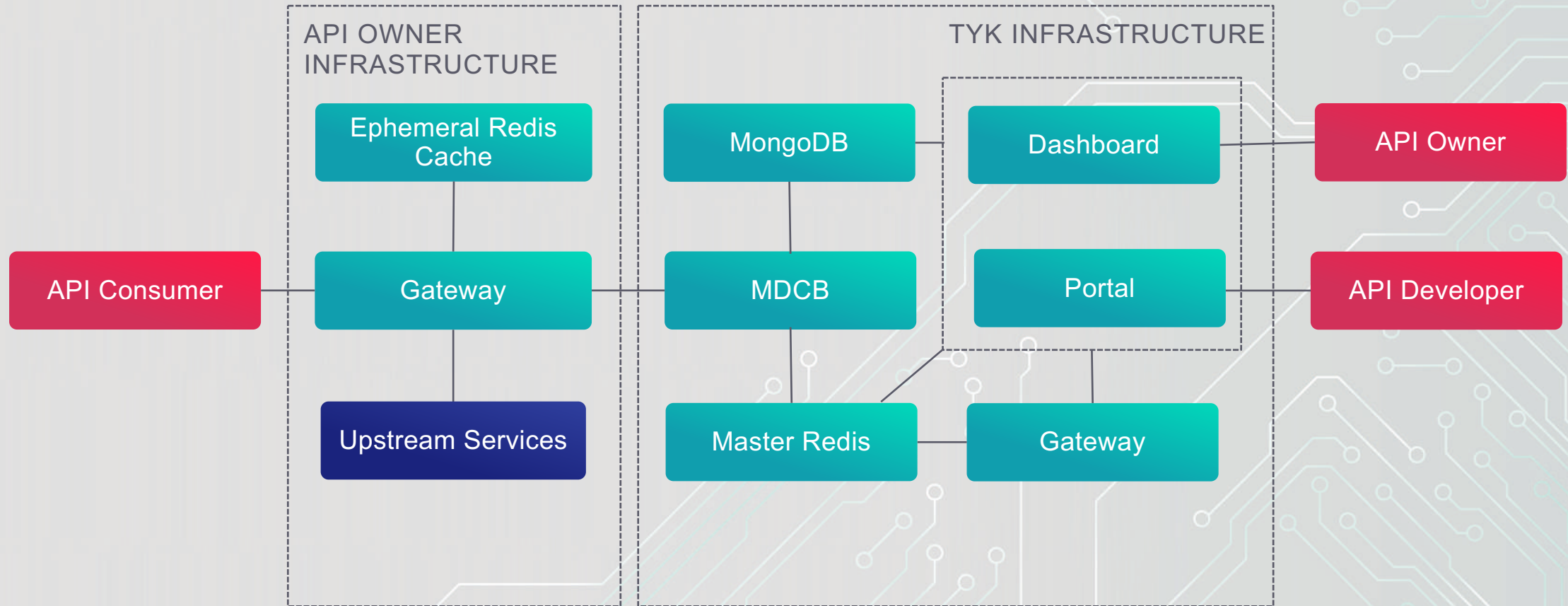


Multi-DC
On-Premises

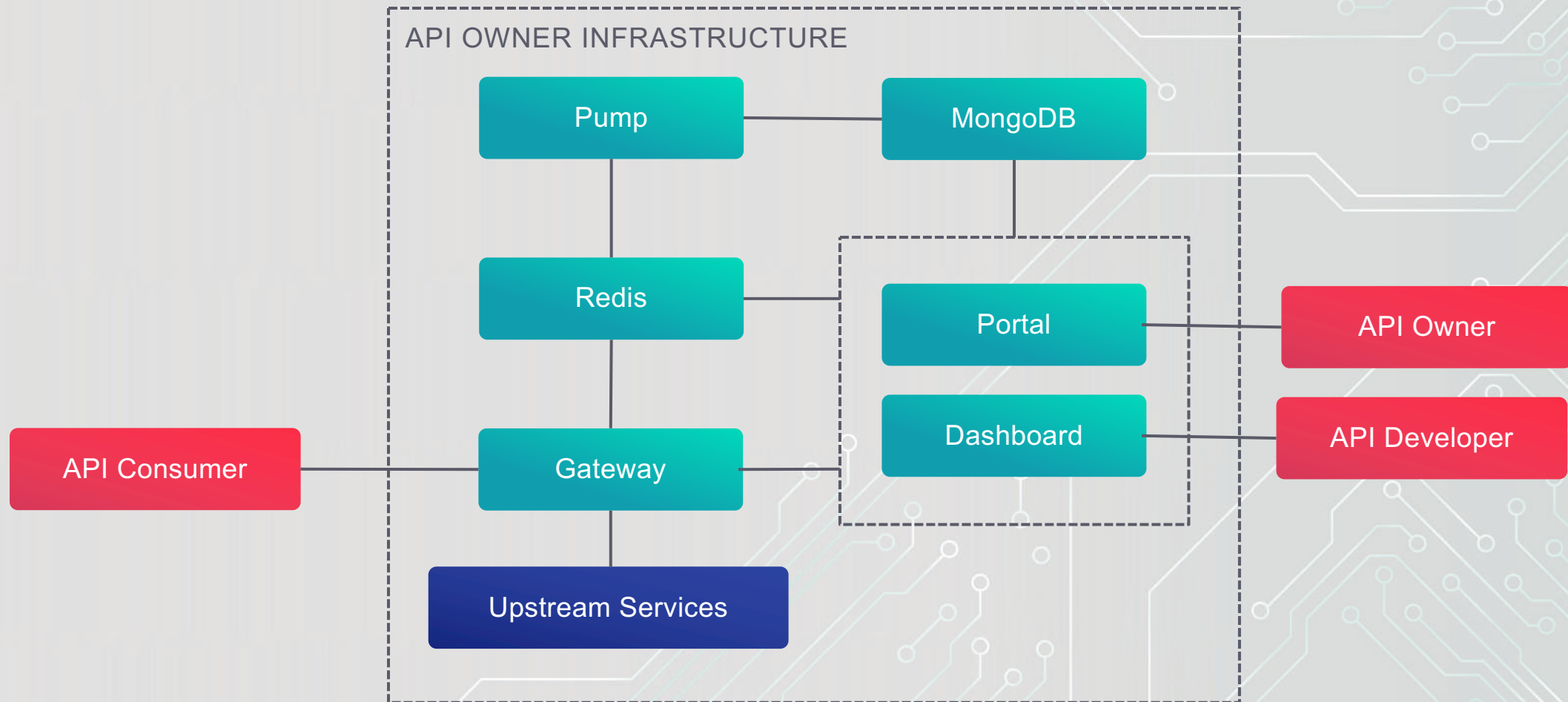
Architecture Example: Cloud



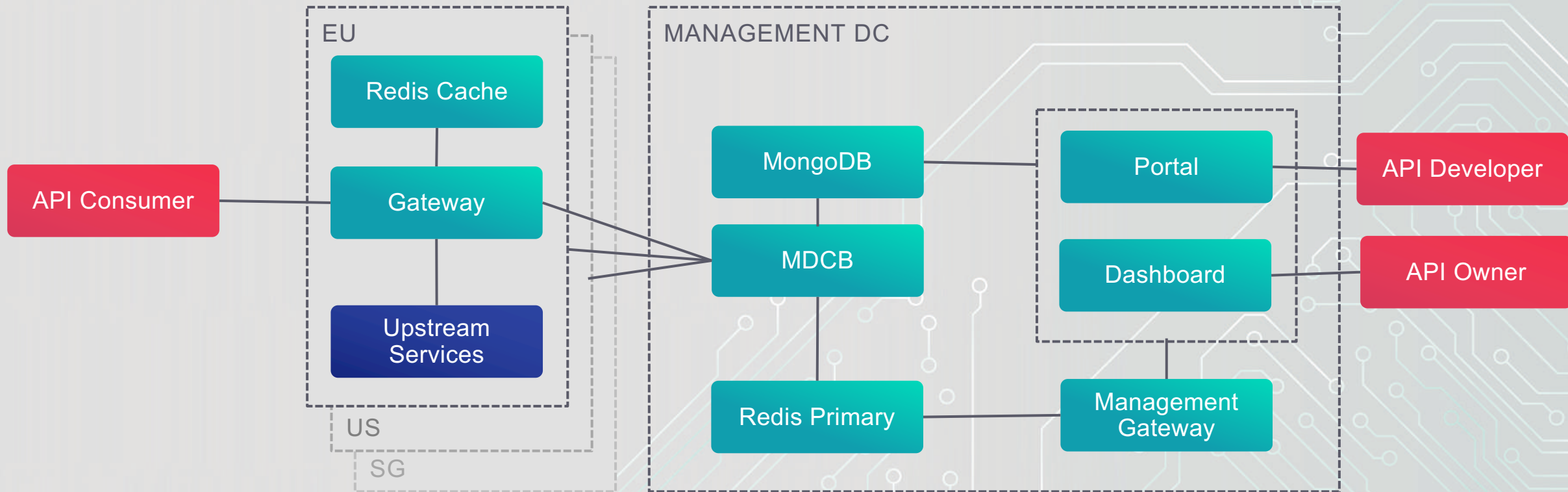
Architecture Example: Multi-Cloud



Architecture Example: On-Premises



Architecture Example: Multi-DC On-Premises



Stop! Demo Time

