

The background of the slide features a dark, semi-transparent image of the Golden Gate Bridge in San Francisco. The bridge's towers and cables are visible against a hazy sky, with the city skyline faintly visible in the distance.

Pivotal

# Cloud Native Applications

Introducing Spring Cloud Netflix

# Cloud Native Architectures

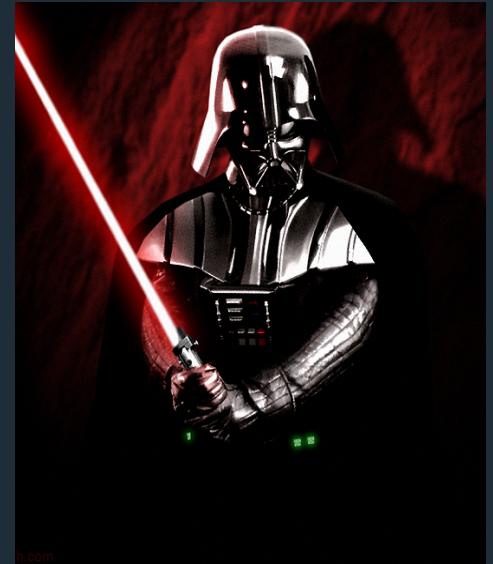
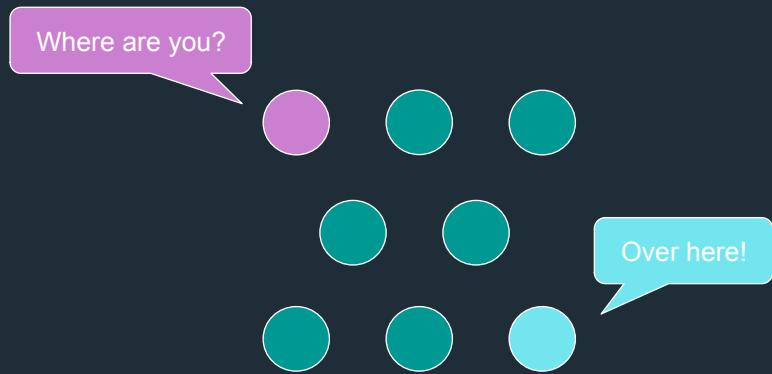
## Light Side of the Cloud

- Scalability
- High Availability
- Velocity: Continuous Delivery
- On-Demand Provisioning



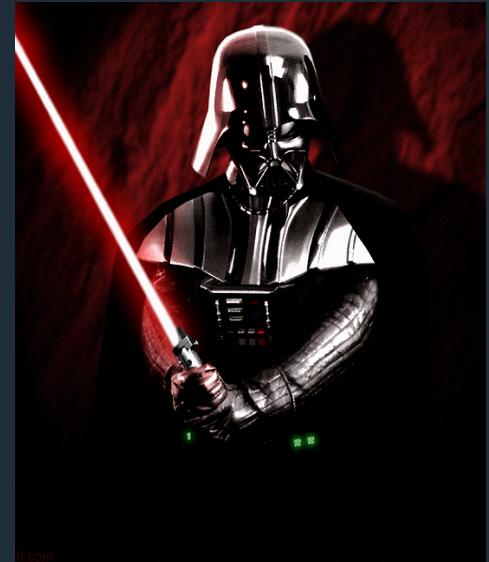
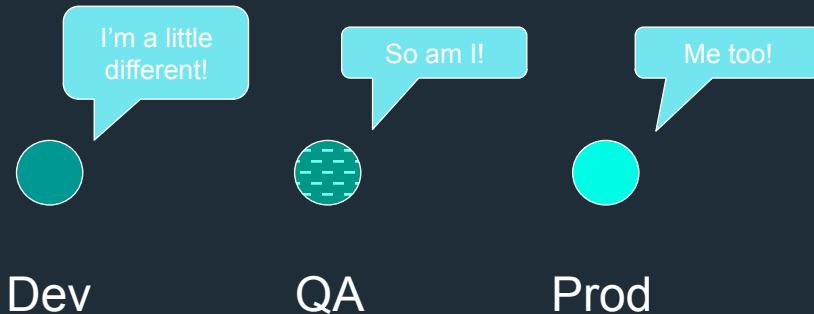
# Cloud Native Architectures

## Dark Side of the Cloud: Finding Services



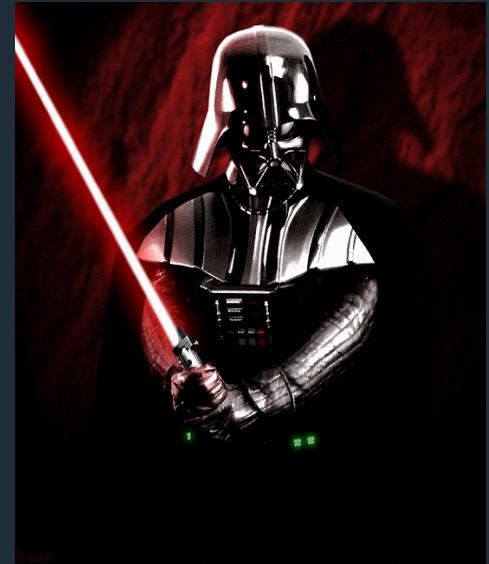
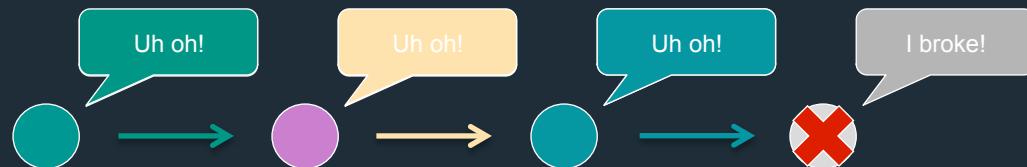
# Cloud Native Architectures

## Dark Side of the Cloud: Managing Configuration Differences



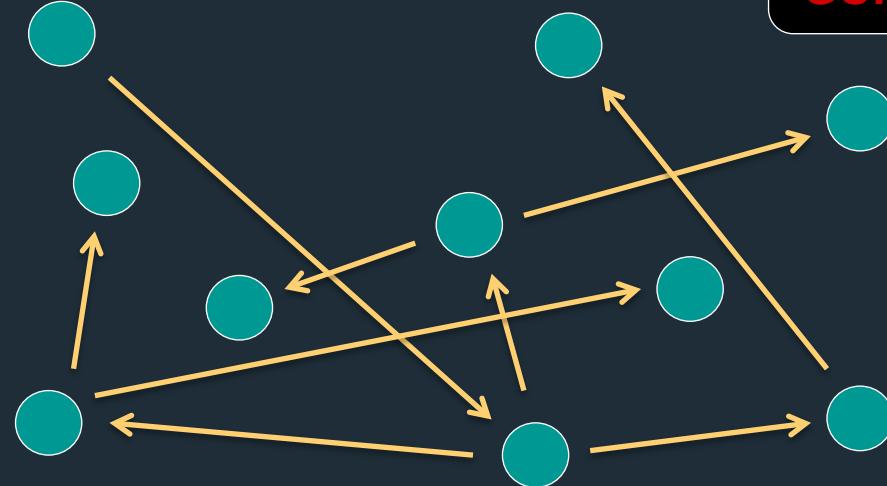
# Cloud Native Architectures

Dark Side of the Cloud: Handling Failure

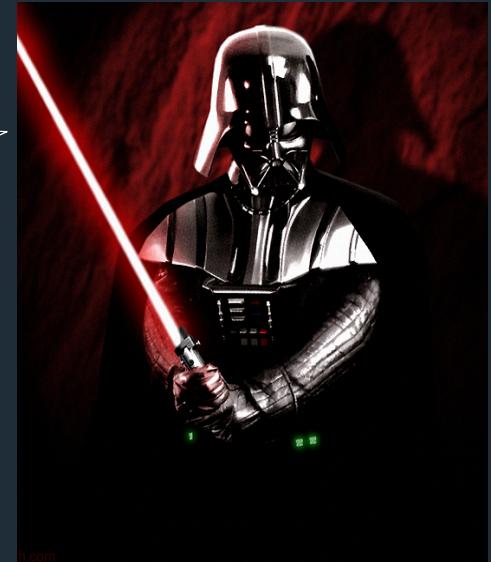


# Cloud Native Architectures

Dark Side of the Cloud: Following call graphs



**WHAT'S  
GOING ON?!?**



# Netflix Cloud Libraries

- Netflix needed to be faster to win / disrupt
- Pioneer and vocal proponent of microservices – the key to their speed and success
- Netflix OSS supplies parts, but it's not a solution



# Spring Cloud Netflix Components



Client

Server

# Open Source Cloud Libraries

- Companies like Twitter, Facebook, and Hashicorp have open-sourced other cloud infrastructure libraries
- Complementary and competing solutions from top technology companies form a bazaar of ideas

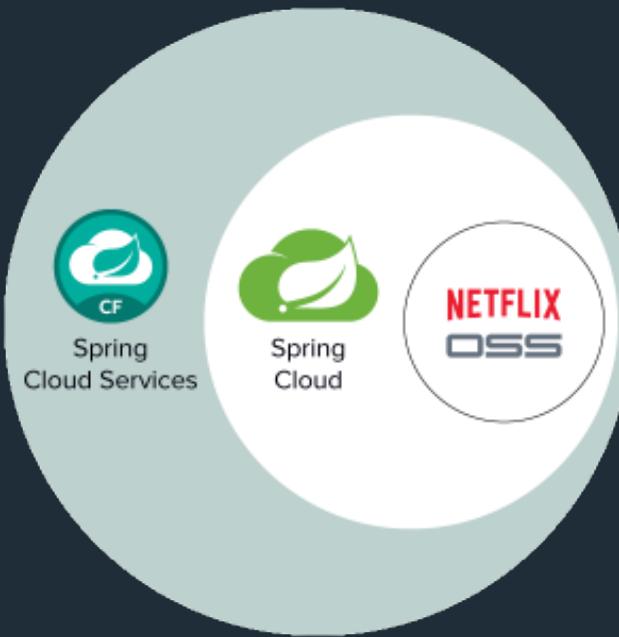


# Spring Cloud

- Easy developer access to a curated selection of open source cloud infrastructure libraries
- Additional capabilities include Cloud Connectors and Config Server
- Brings the Spring philosophy of convention over configuration, opinionated defaults, and developer simplicity



# Spring Cloud Services



## Services Marketplace



### Circuit Breaker

Circuit Breaker Dashboard for Spring Cloud Applications



### Config Server

Config Server for Spring Cloud Applications



### Service Registry

Service Registry for Spring Cloud Applications

Pivotal™

# Spring Cloud Services



Spring Cloud  
Services



Service Registry

- Service Registration and Discovery via Netflix OSS Eureka
- Registration via CF Route



Config Server

- Git URL for Config Repo provided via Service Dashboard (post-provisioning)
- Single tenant, scoped to CF space

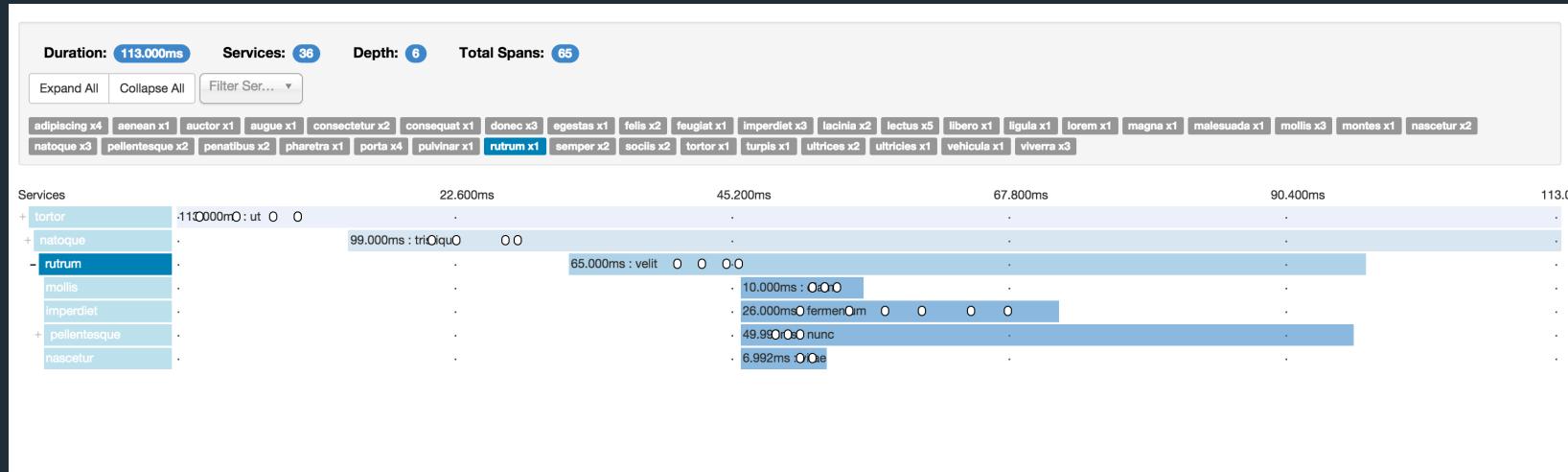


Circuit Breaker

- Netflix OSS Turbine + Hystrix Dashboard
- Aggregation via AMQP (RabbitMQ)

# And More... Spring Cloud Sleuth

- Distributed Tracing for the Cloud. Invocations are captured in logfiles, remote collector services, and realtime Web UIs.





Open.  
Agile.  
Cloud-Ready.