

There is only Zuul

Configuring and customizing the Zuul API gateway

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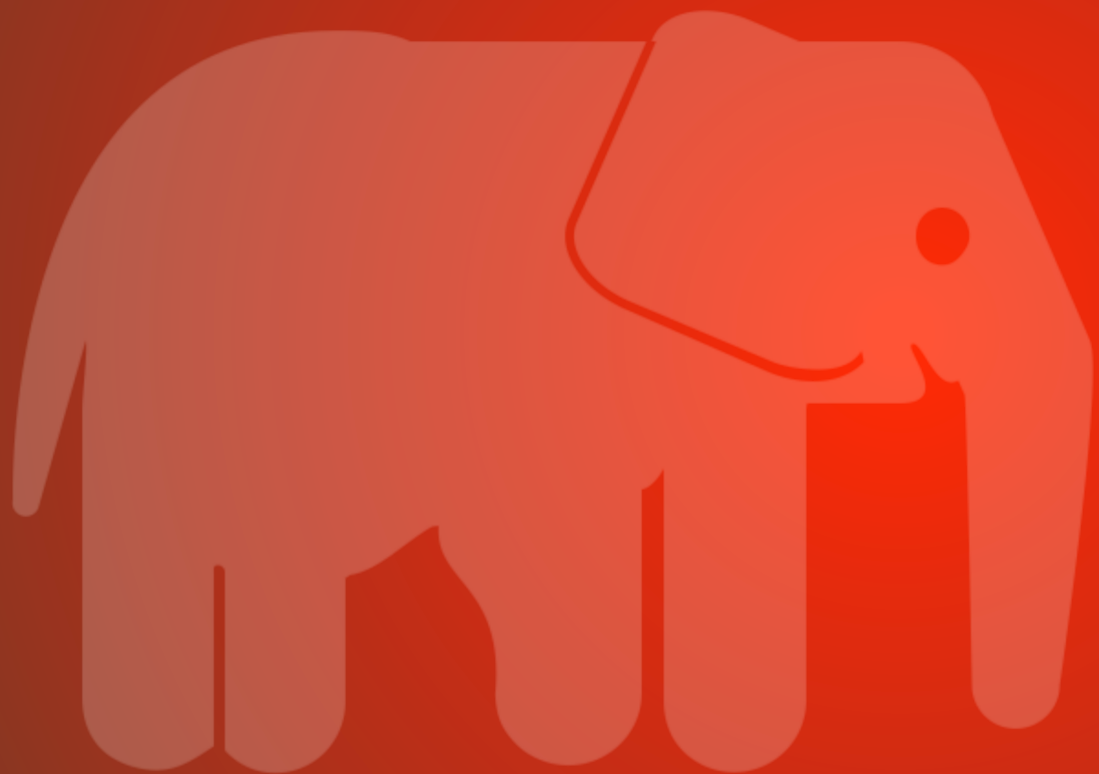
**Shoutout to
Michael Minella
for some slides and theme**

MONOLITHS



MULTIPLE ENDPOINTS & APPLICATIONS





LARGE COMPLEX ARTIFACTS



**DIFFICULT
TO TEST**



**HARD TO GET
TO PRODUCTION**

MICROSERVICES





CLOUD NATIVE



**DEVELOPED AND TESTED
IN ISOLATION**

INDEPENDANTLY SCALABLE



FAMILIAR DEVELOPMENT MODEL



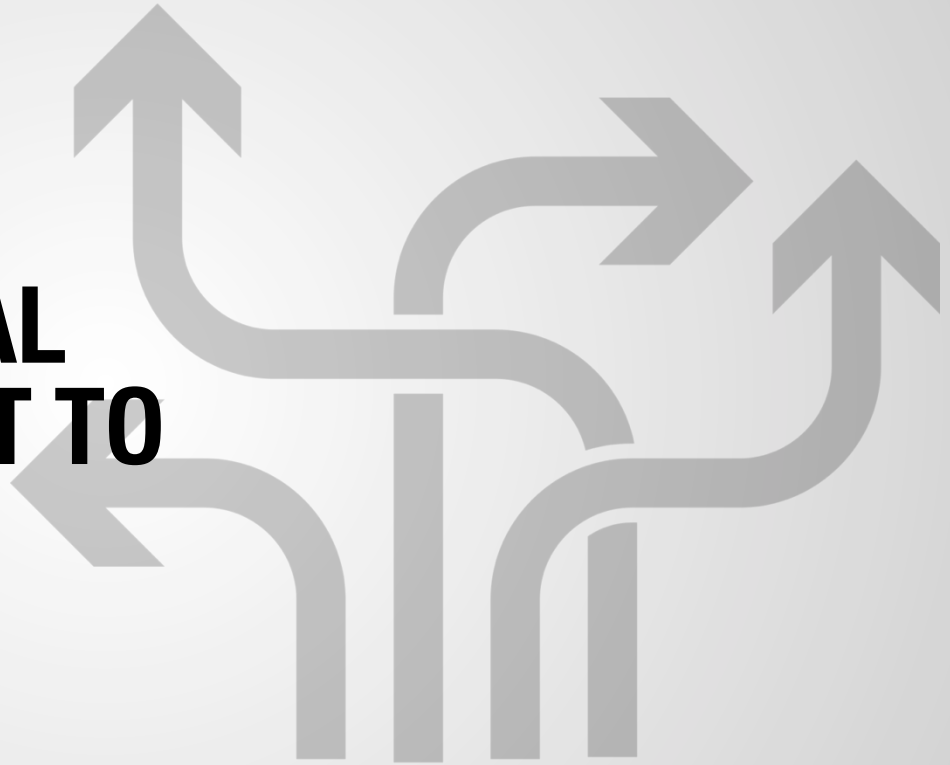
SMALL AND SIMPLE TO TEST





OPERATIONALLY EASY TO
GOVERN

HOW DO EXTERNAL CLIENTS CONNECT TO MICROSERVICES?

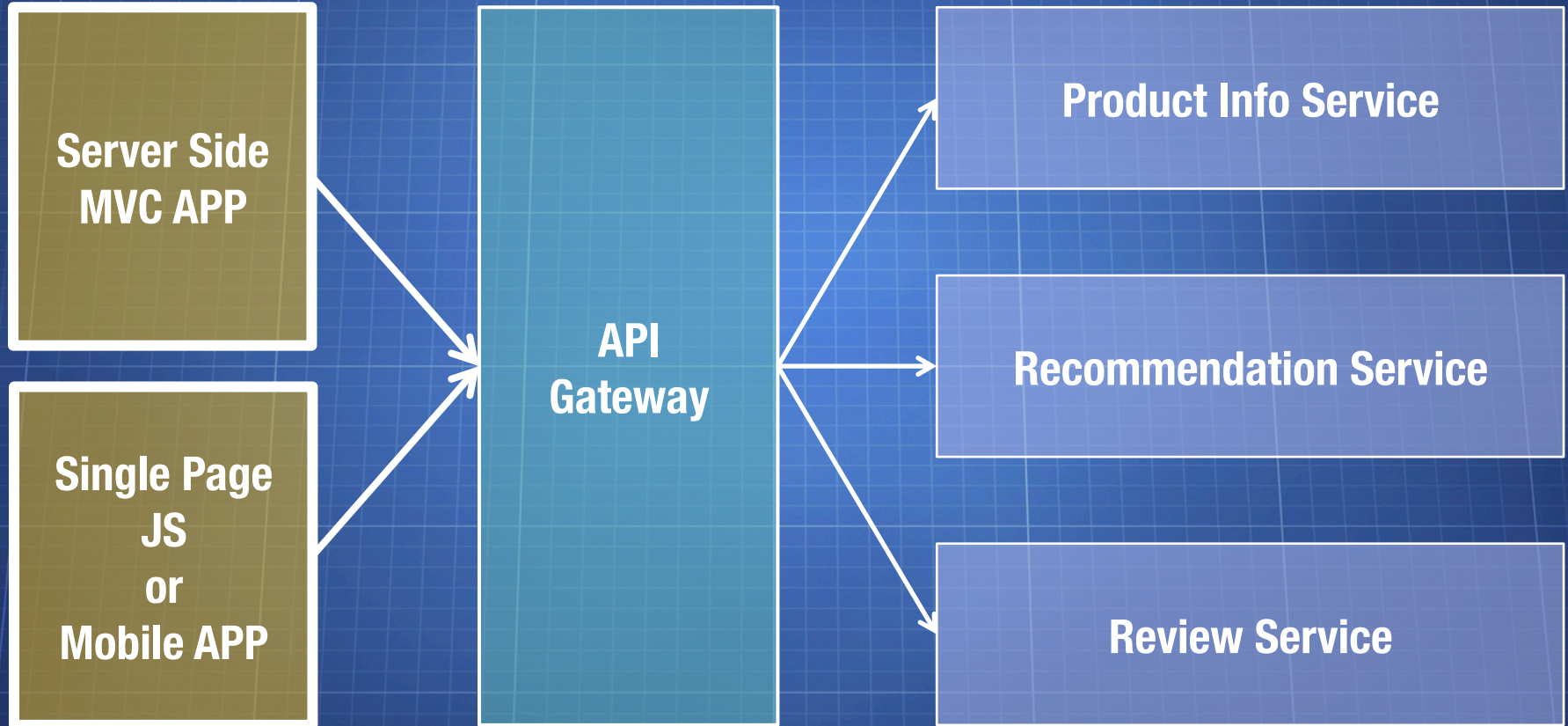


You shall not pass!

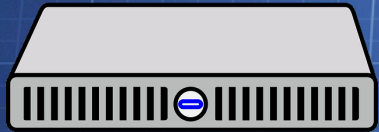


Unless I know you...

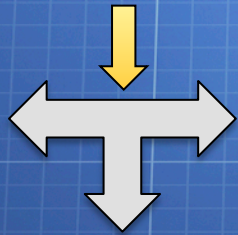
What is an API Gateway



Spectrum of API Gateways



SASS

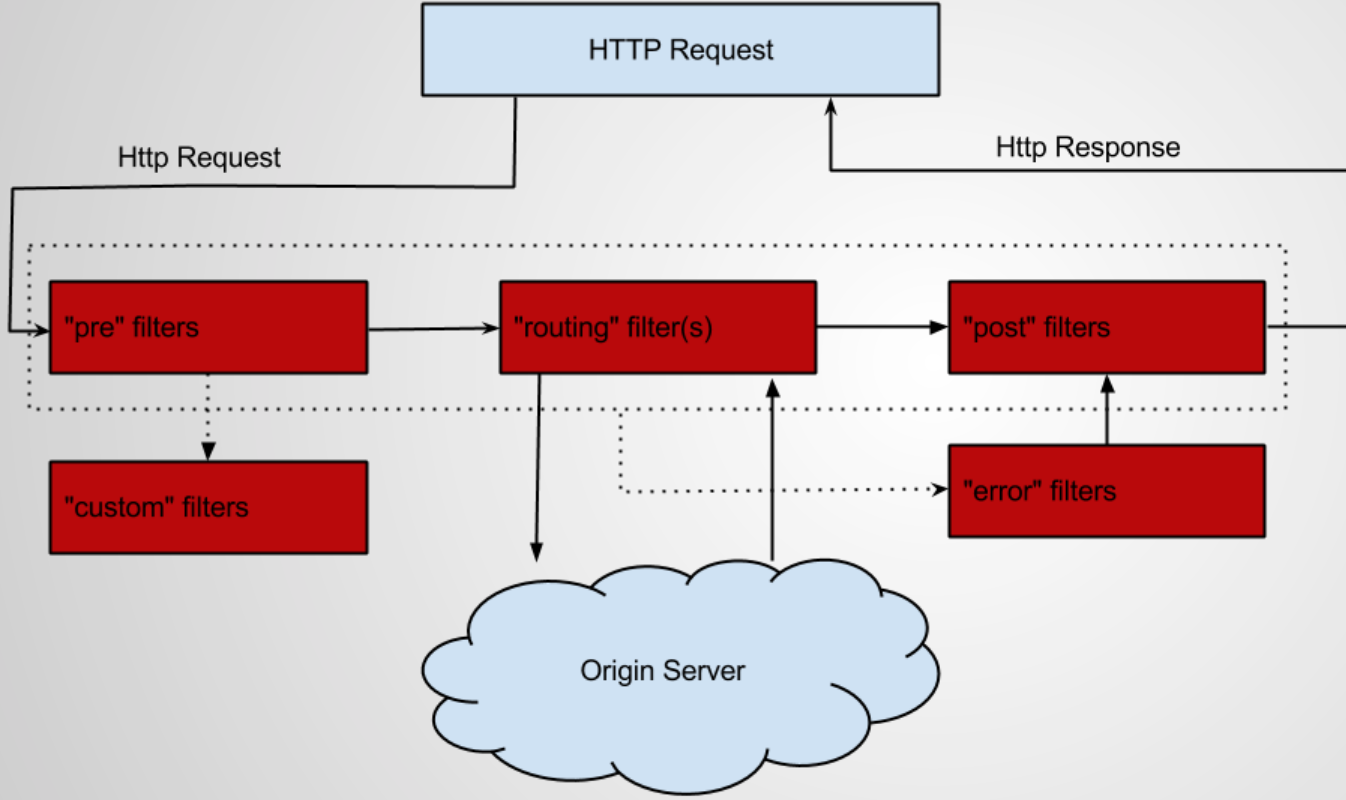


There is no Dana, only Zuul!

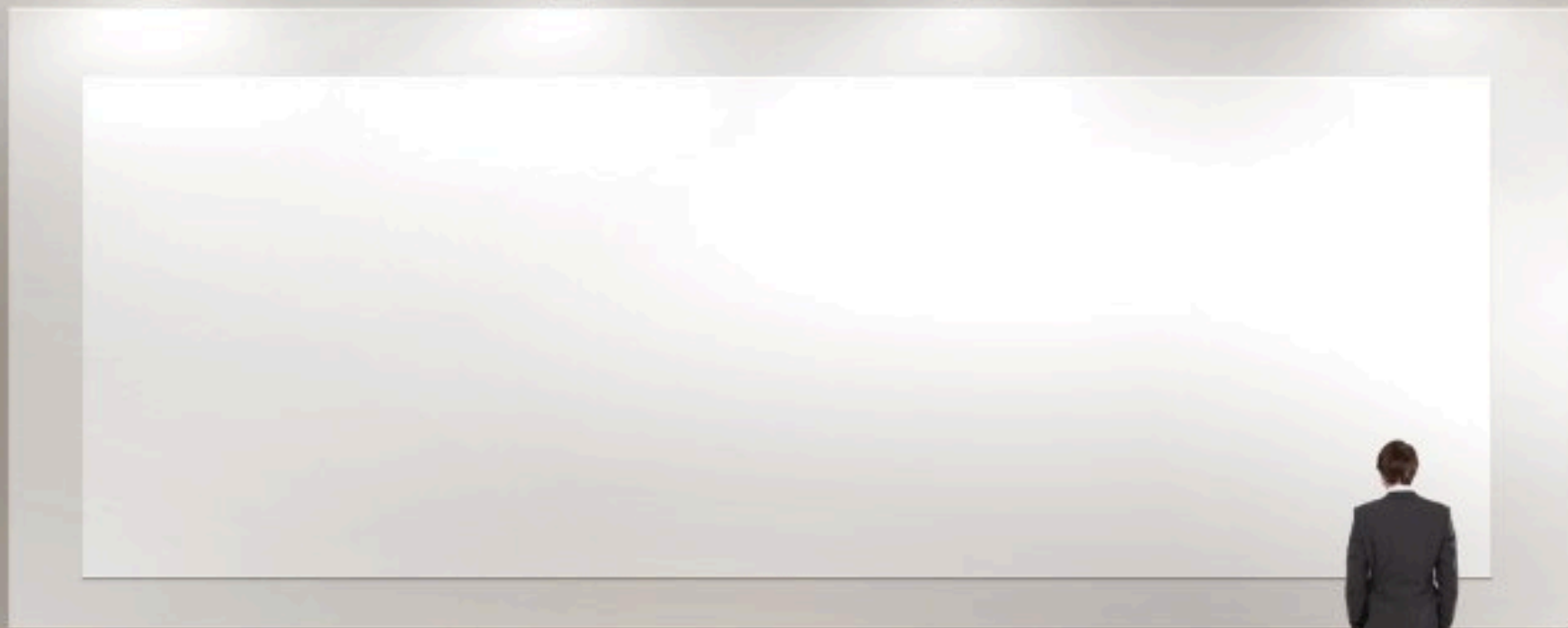




SPRING CLOUD NETFLIX



Zuul Design



@EnableZuulProxy

1 **PreDecorationFilter**

2 RibbonRoutingFilter

3 SendResponseFilter

```
zuul:  
  routes:  
    users: /users/**
```

DEMO



Pivotal

ZUUL 2

ANNOUNCED



<http://techblog.netflix.com/2016/09/zuul-2-netflix-journey-to-asynchronous.html>

Pivotal



MAJOR REWRITE

A meme featuring a man with a mustache, likely from the TV show 'The Mindy Project', looking slightly awkward. The text is overlaid on the image in a bold, white, sans-serif font with a black outline.

WELL THEN

**THIS JUST GOT A LITTLE
AWKWARD**

SPRING CLOUD GATEWAY





**SPRING BOOT
2.0 Q4 2017**

SPRING 5

**PROJECT
REACTOR**

**HTTP/2
WEBSOCKETS**

**SPRING
REUSE**

**API
DRIVEN**

SPRING CLOUD GATEWAY

1 ROUTE MGMT API

2 ROUTE: VIA CONFIG

2 ROUTE: VIA DISCOVERY

2 ROUTE: VIA DB

3 ROUTE SCOPED FILTERS

4 FLEXIBILE

5 SIMPLIFIED

```
spring.cloud.gateway.routes:  
  - id: users  
    uri: http://users-xyz:80  
    predicates:  
      - Host=**.example.org  
      - Path=/users/{segment}  
    filters:  
      - SetPath=/segment
```

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```

```
spring.cloud.gateway.routes:  
  filters:
```

- AddResponseHeader=X-Response-Foo, Bar
- RemoveResponseHeader=X-Foo
- SecureHeaders
- RewritePath=/foo/(?<part>.*), /\${part}
- Hystrix=foocmd

DEMO



SPRING CLOUD

GATEWAY

MILESTONE 1 END OF MAY

SPRING CLOUD
GATEWAY



RELEASE DECEMBER 2017

WHAT HAPPENS TO ZUUL 1?



Learn More. Stay Connected.



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Spring Cloud Zuul Samples

github.com/spring-cloud-samples/sample-zuul-filters

Spring Cloud Gateway

github.com/spring-cloud-incubator/spring-cloud-gateway

Pivotal: pivotal.io

Twitter: twitter.com/springcloud

YouTube: spring.io/video

LinkedIn: spring.io/linkedin

Google Plus: spring.io/gplus

QUESTIONS?



The End