



Spring Boot Apps on Kubernetes

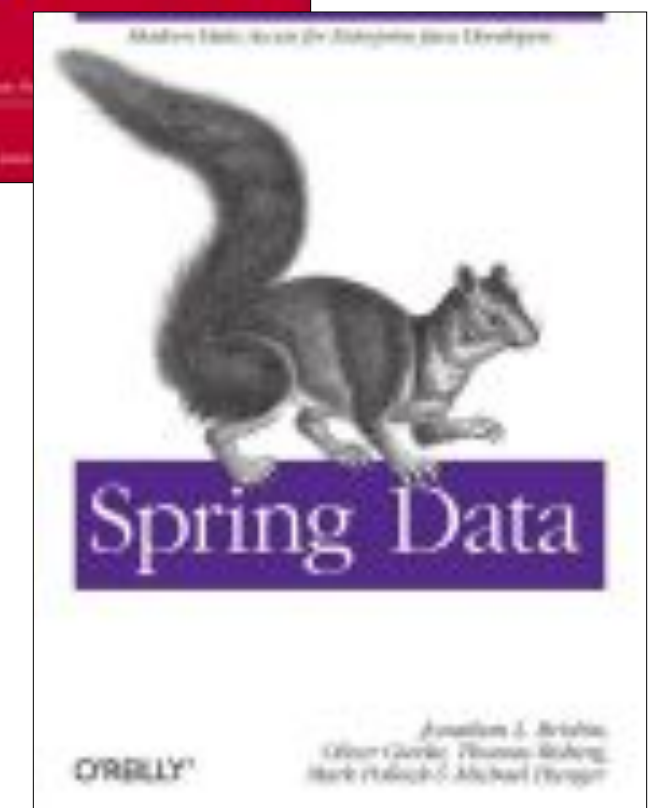


Thomas Risberg
Pivotal
@trisberg

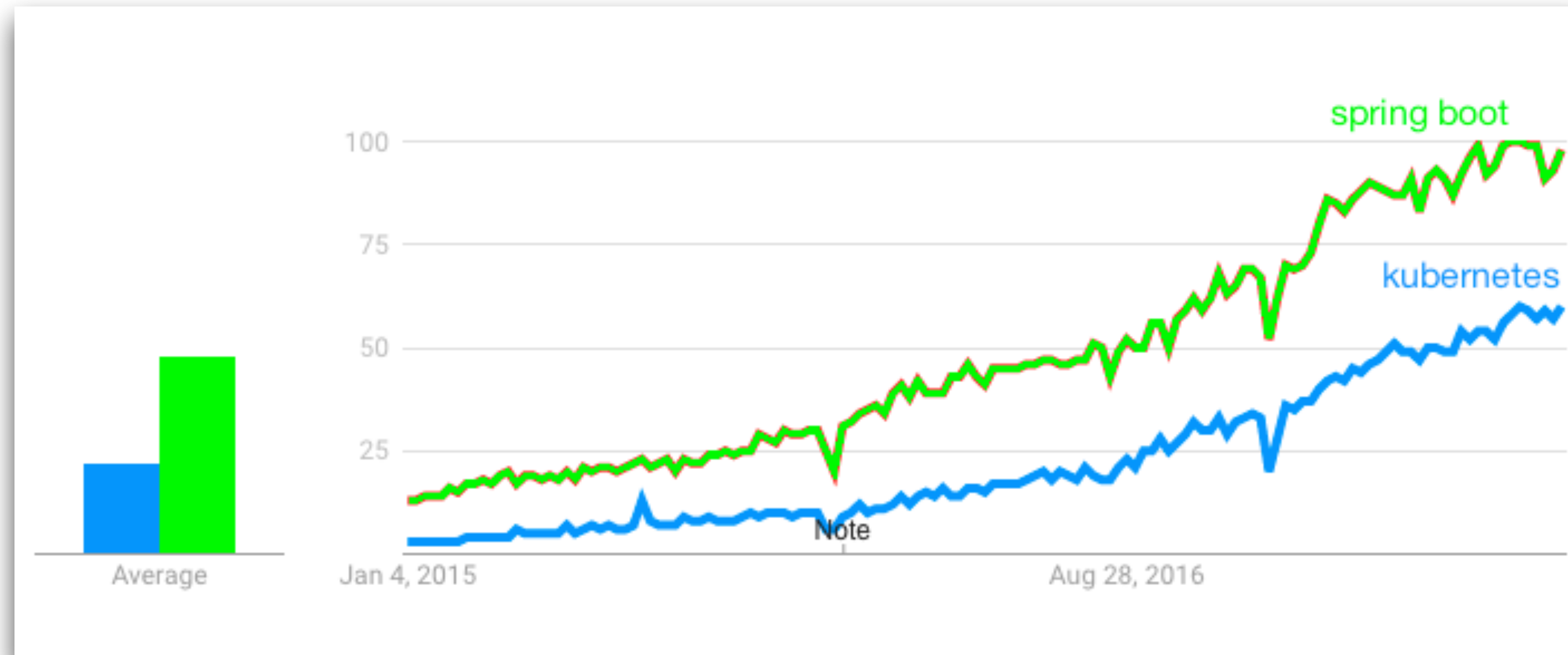
About me

Thomas Risberg (@trisberg)

- Member of the Spring engineering team at Pivotal
- Lead for the *Spring Cloud Data Flow for Kubernetes* sub-project
- Joined the Spring Framework open source project in 2003 working on JDBC support
- co-author of “Professional Java Development with Spring Framework” from Wrox 2005 and “Spring Data” book from O'Reilly 2012



Two Hot Technologies



Based on: <https://trends.google.com/trends/explore?q=kubernetes,spring%20boot>

Press/Analysts

RedMonk
the developer-focus

Videos Research Events

CHARTING STACKS

Language Framework Popularity: A Look at Java, June 2017

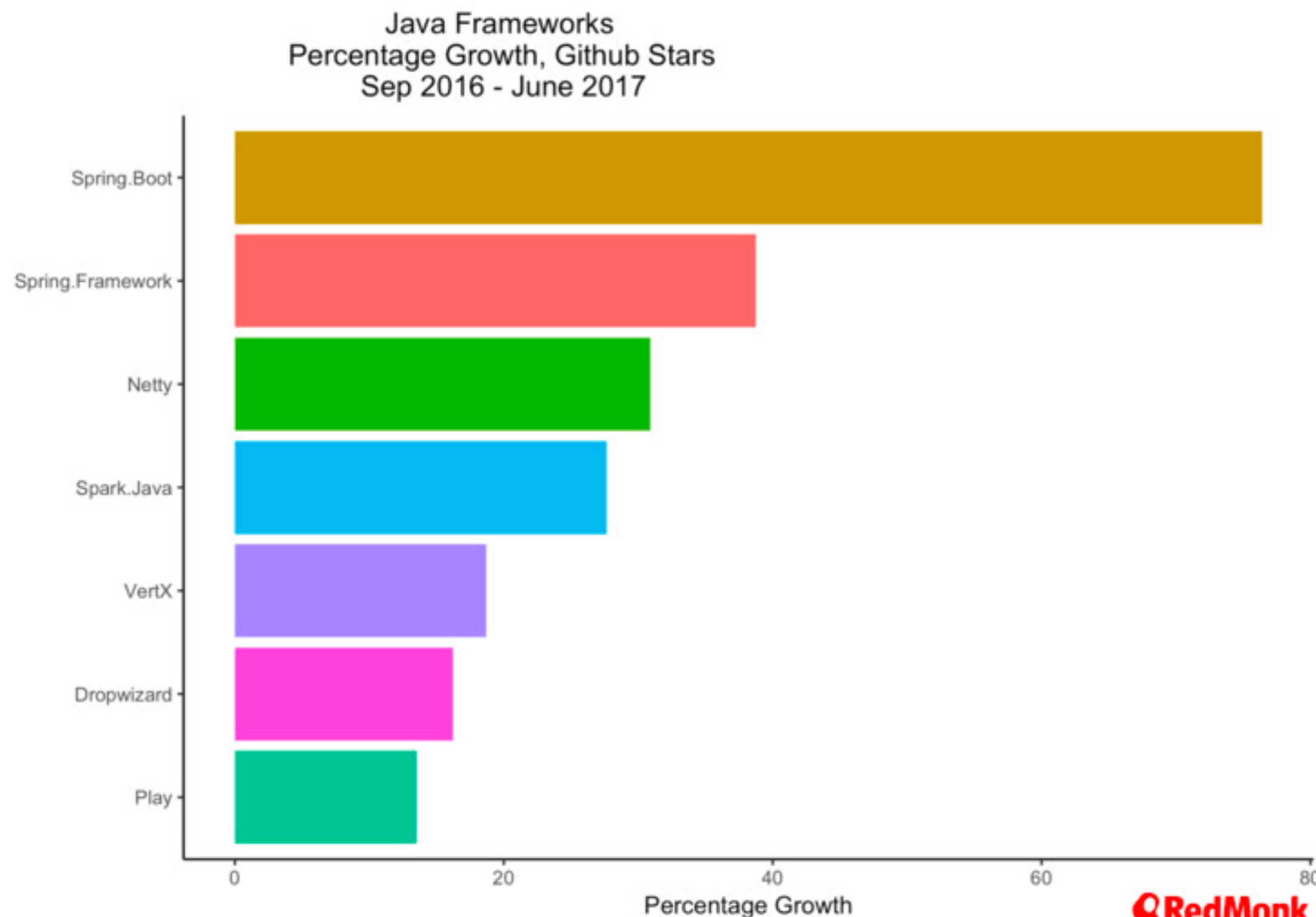
By [fryan](#) | June 22, 2017



TL; DR: Spring Boot is growing at an exponential rate and is set to become the most popular Java Framework soon. Spring Framework and Netty continue to grow strongly

Framework: 'a basic structure'

TL; DR: Spring Boot is growing at an exponential rate and is set to become the most popular Java Framework soon. Spring Framework and Netty continue to grow strongly



techcrunch.com

Kubernetes gains momentum as big-name vendors flock to Cloud Native Computing Foundation

Ron Miller

3-4 minutes



Like a train gaining speed as it leaves the station, the [Cloud Native Computing Foundation](#) is quickly gathering momentum, attracting some of the biggest names in tech. In the last month and a half alone [AWS](#), [Oracle](#), [Microsoft](#), [VMware](#) and [Pivotal](#) have all joined.

Running Apps on Kubernetes

- Using `kubectl` command line - deploy app

```
kubectl run hello --image trisberg/hello --port=8080
```

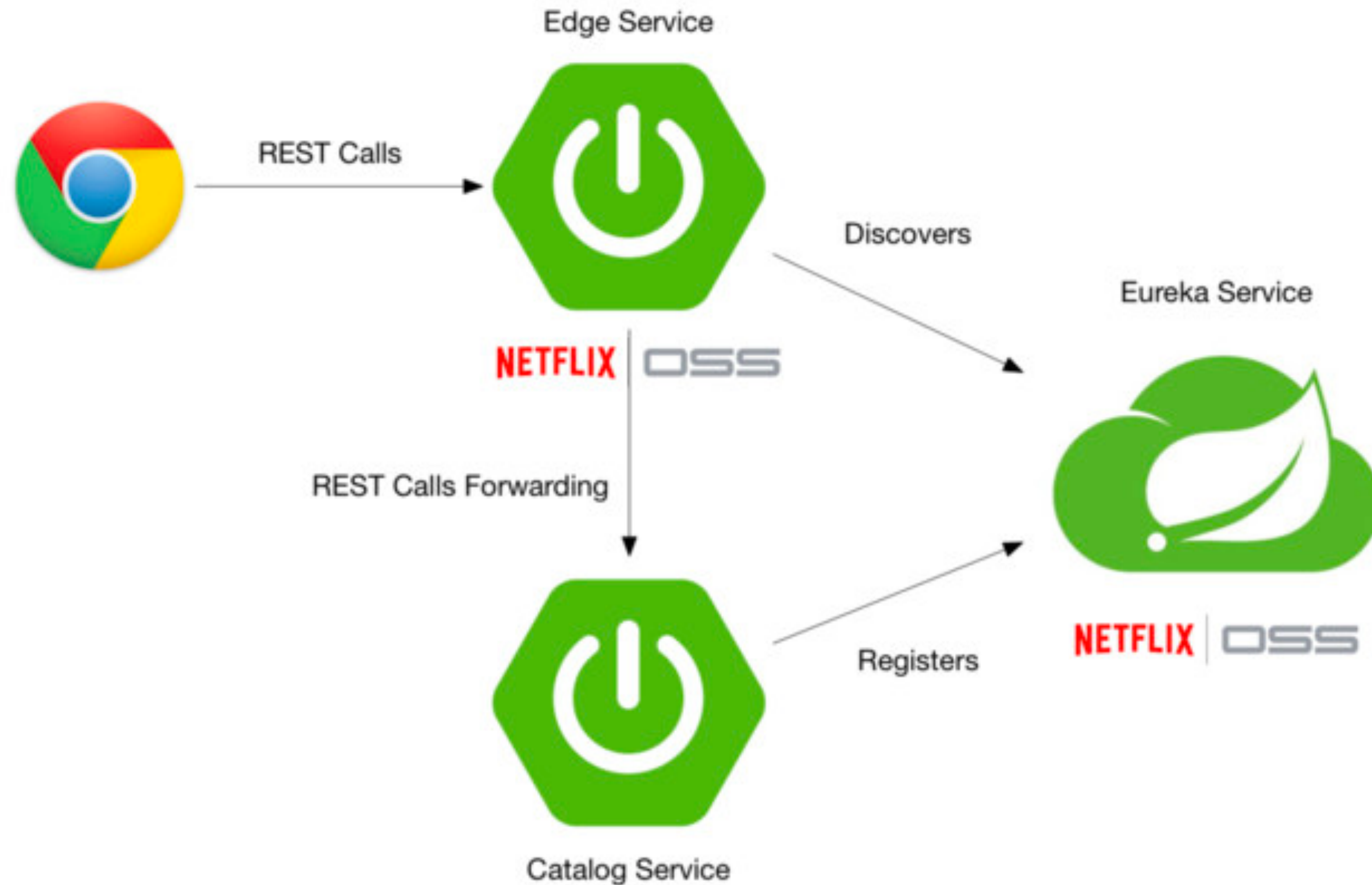
- Expose the app port

```
kubectl expose deployment hello --type=NodePort
```

Demo

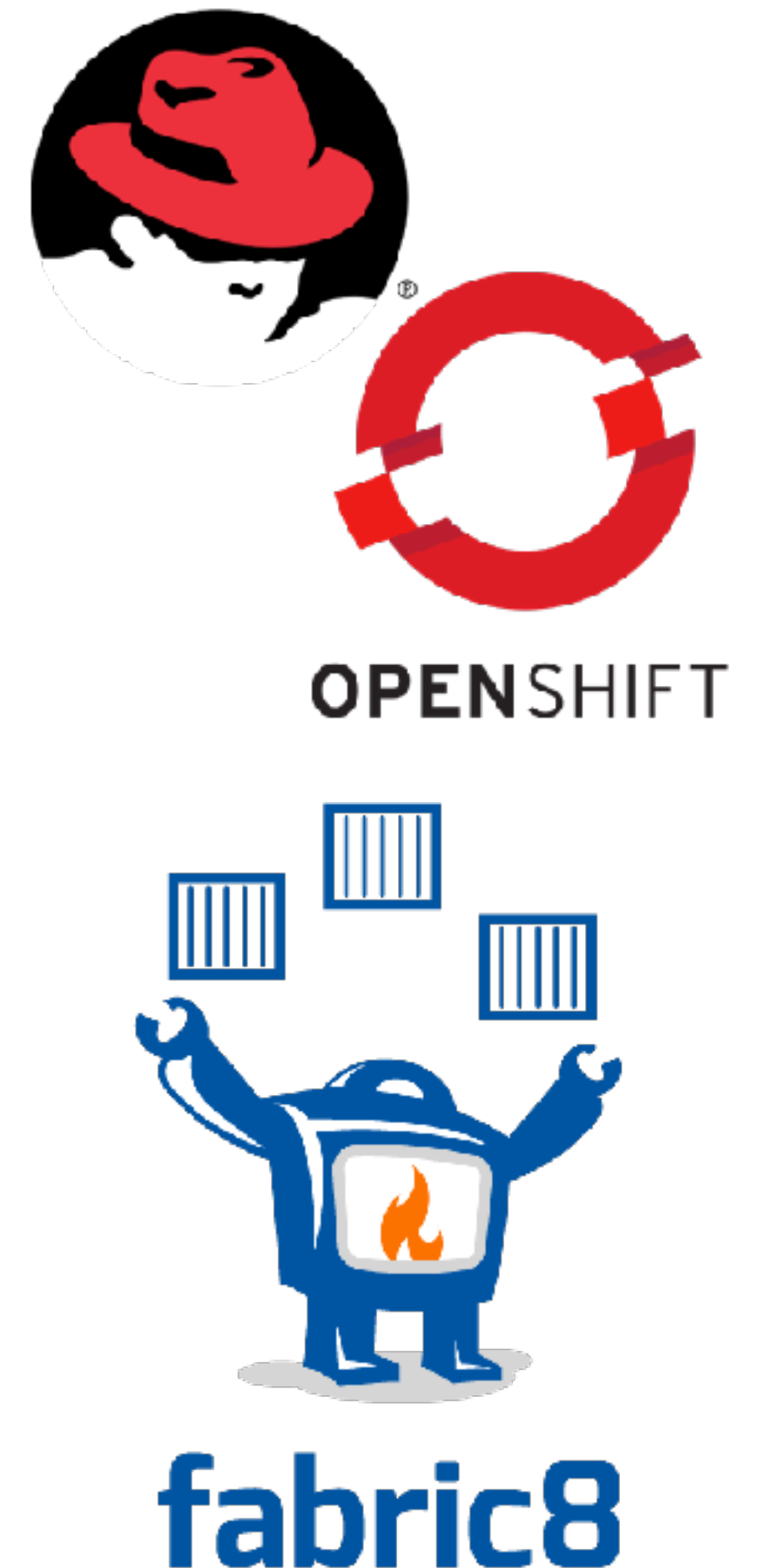
- Simple Hello Spring Boot/Kubernetes app deployment
- <https://github.com/trisberg/boot-k8s/blob/master/demo-hello.adoc>

Spring Cloud / Netflix OSS



Spring Cloud for Kubernetes

- Fabric8 team created some integration libs
spring-cloud-kubernetes
- Now available in spring-cloud-incubator on GitHub



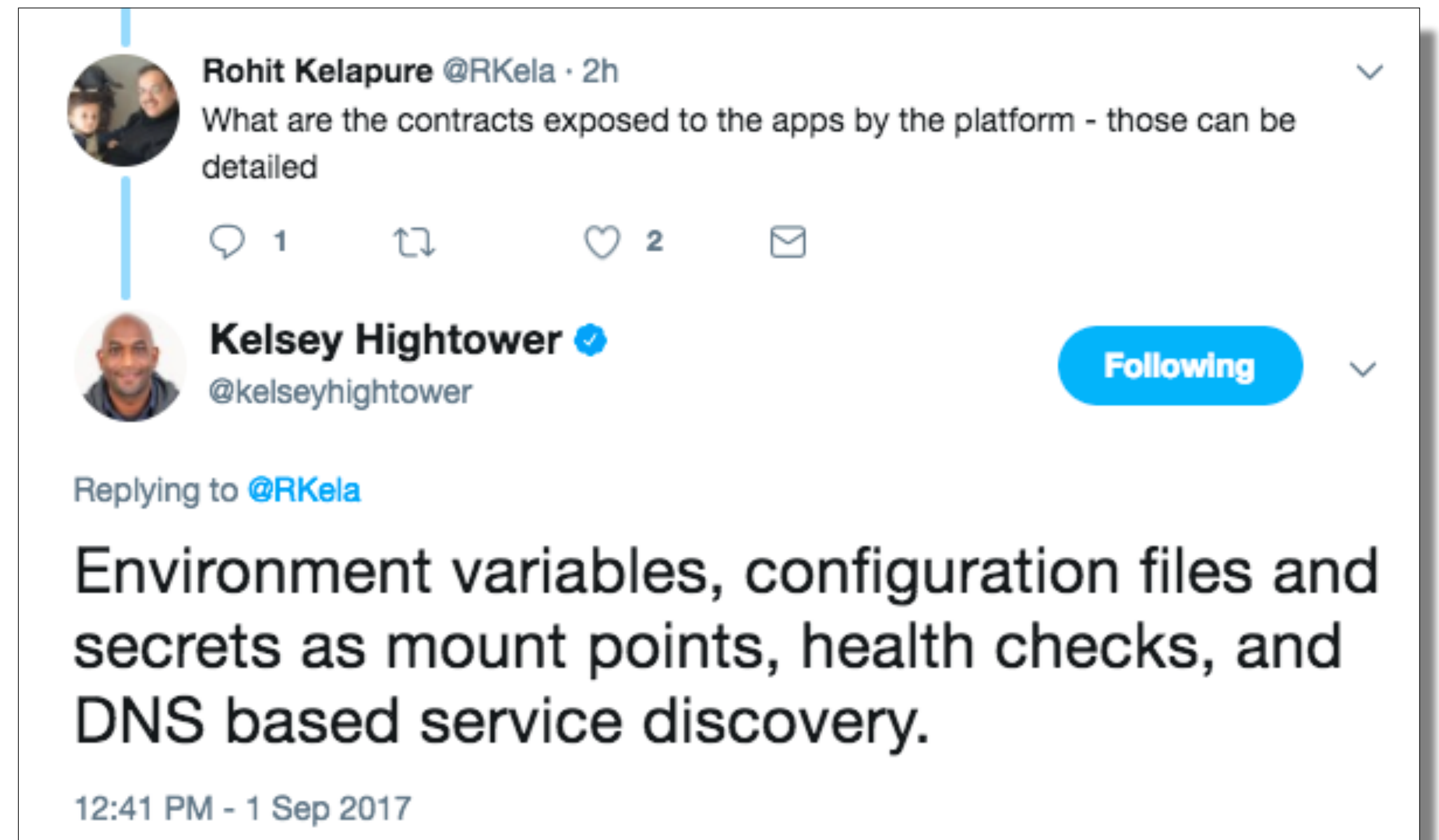
Building Apps for Kubernetes



<https://twitter.com/kelseyhightower/status/903640408613306369>

Contracts exposed to the apps by the platform

- Environment variables
- Configuration files
- Secrets as mount points
- Health checks
- DNS based service discovery



<https://twitter.com/kelseyhightower/status/903643916599046145>

