Kubernetes Deployment Strategies

Replacing, Rolling updates & Canary releases

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AGENDA

Classic delivery

Testing

Kubernetes background

Recreation

Rolling releases

Canary releases

Summary

Kubernetes Deployment Strategies

Delivering software with Canary releases

Production

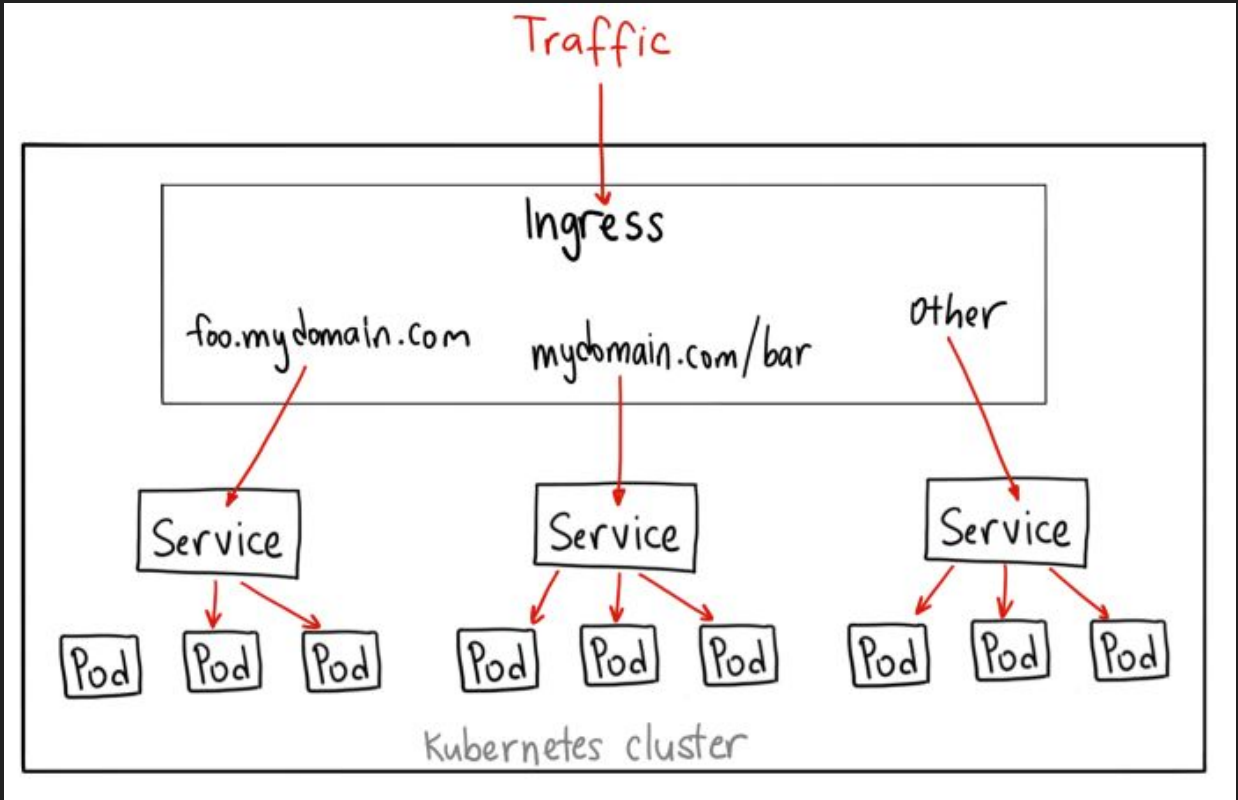
Production

Dev\QSU\Works-on-my-Laptop

Manual Testing is immoral. It's not just dumb - and it is dumb - it is immoral, because you are taking people and you are asking them to act like machines.

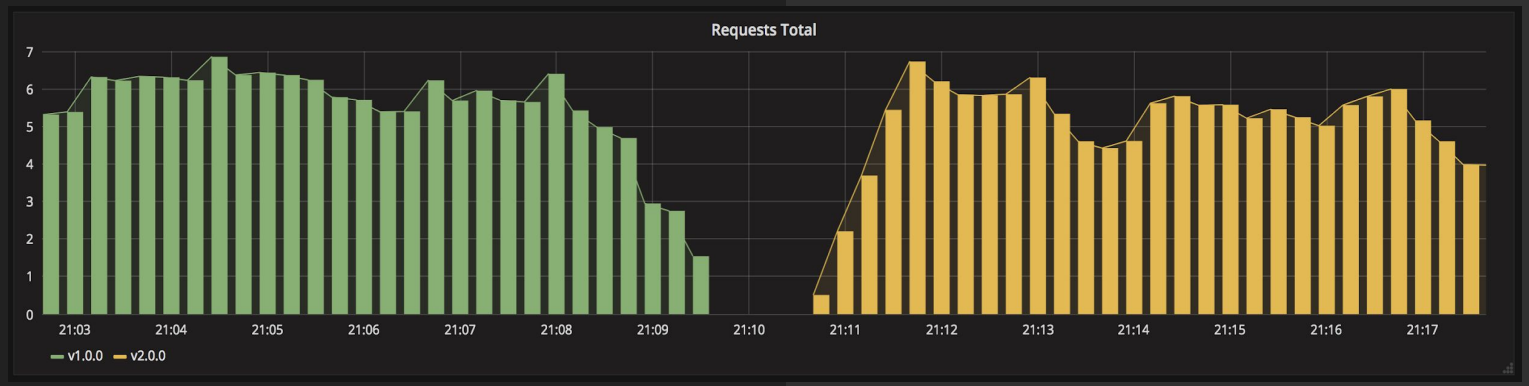
Bob Martin, The land that scrum forgot.

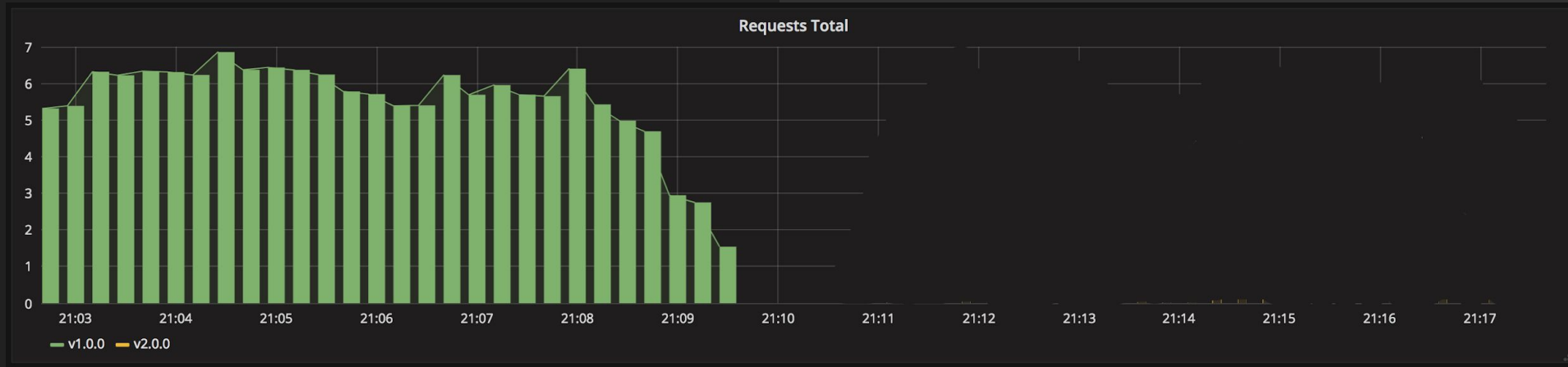
Kubernetes Background



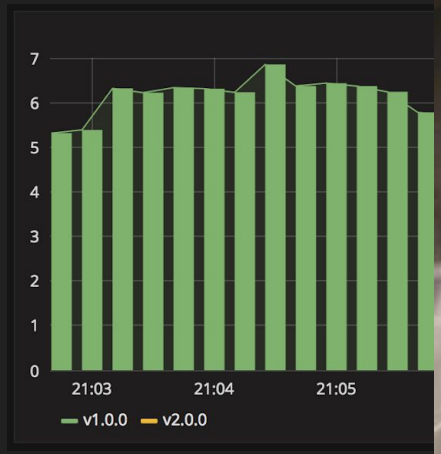
Recreation

a.k.a “we still have QSU and Production”



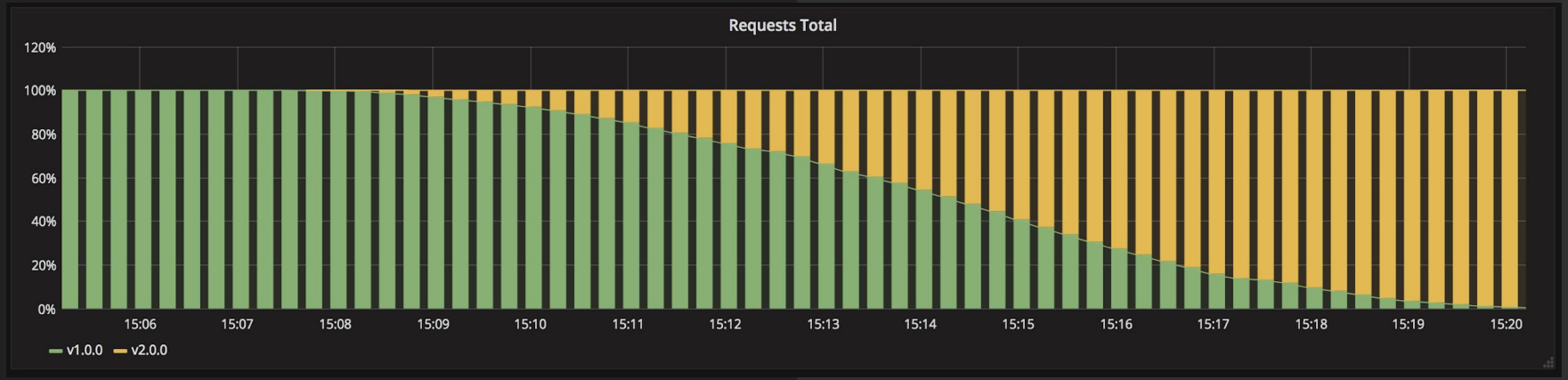

Requests Total
7
6
5
4
3
2
1
0
21:03
21:04
21:05
21:06
21:07
21:08
21:09
21:10
21:11
21:12
21:13
21:14
21:15
21:16
21:17
v1.0.0
v2.0.0

Release from QSU to Production



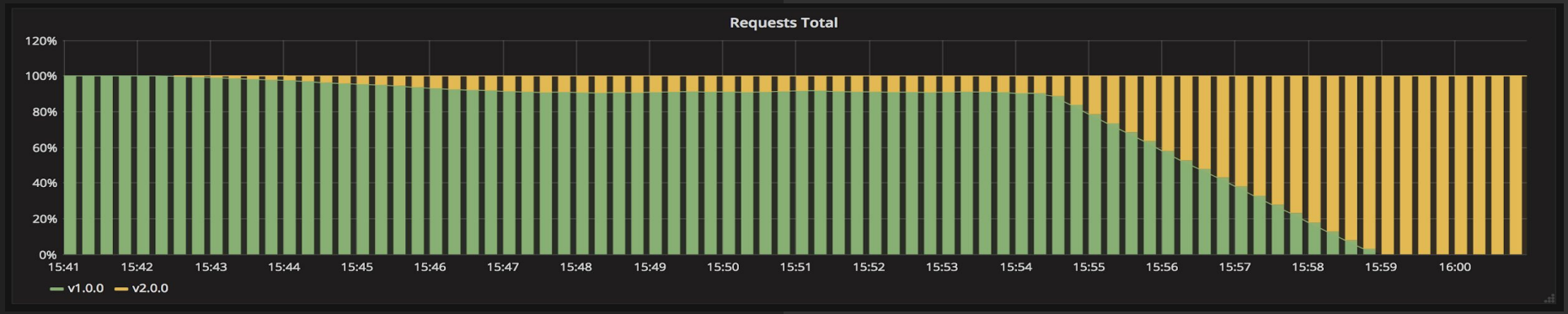
Rolling Release

a.k.a “ramp up”



Canary release

a.k.a Temporal and Spatial QSU
a.k.a “let’s do it like adults”



Demo time

Strategy Comparison

Strategy	Downtime	Real traffic testing	Targeting users	Rollback duration	Impact on users	Complexity
Recrate	Yes	No	No	Long	High	Low
Rolling	No	No	No	Long	Medium	Medium
Canary	No	Yes	Yes	Short	Low	Medium

Summary

- Kubernetes makes it easy to manage you application life cycle
- Remember Bob
- You can (carefully) test in production