AT3

Scaling Agile Practices
Thursday, November 8th, 2018 10:00 AM

Scaling Agile in a Large Matrixed Organization

Presented by:

Jennifer Krieger

Red Hat

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Jennifer Krieger

Keynote speaker and doer of many things, Jen Krieger is Chief Agile Architect at Red Hat. Most of her more than twenty-year career has been in software development, with Jen holding many roles throughout the waterfall and agile lifecycles. At Red Hat, she led a department-wide adoption of DevOps methodologies, focusing on CI/CD best practices. Most recently, she worked with the Project Atomic & OpenShift teams, the company's two leading products, to help establish strong working relationships while the organization scaled rapidly. Now, Jen is guiding teams across the entire company into agility in a way that respects and supports Red Hat's commitment to open source.

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SCALING AGILE IN A LARGE MATRIXED ORGANIZATION

Jen Krieger
Chief Agile Architect
Products & Technologies

WHAT DOES IT MEAN TO "SCALE AGILE?"

For the sake of brevity, we'll focus on Scrum as the methodology

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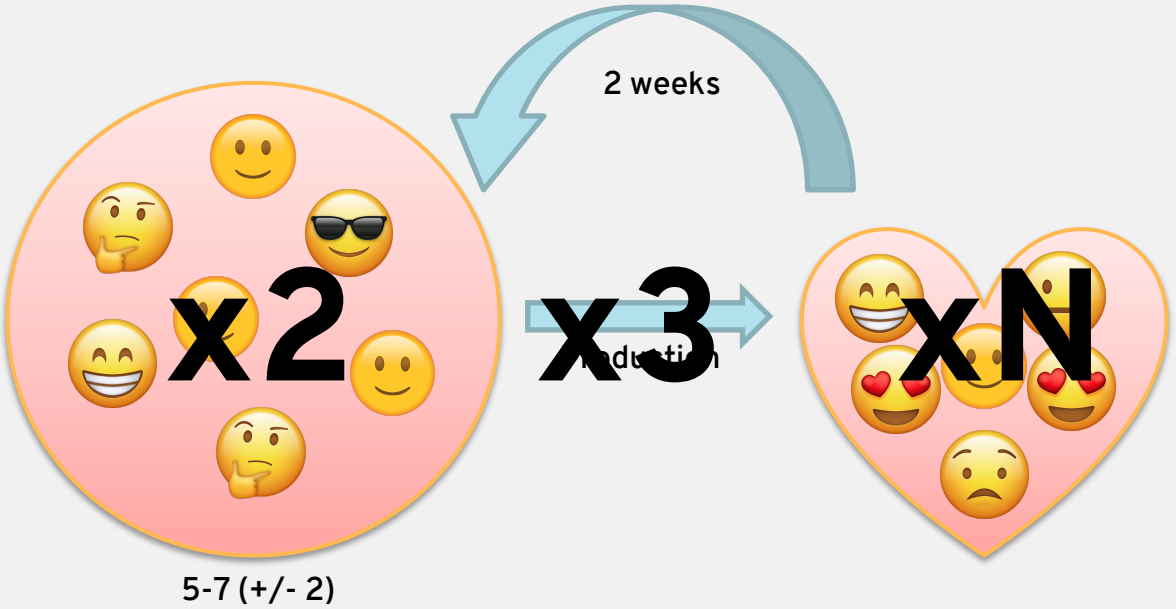

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IS THAT PRACTICAL?
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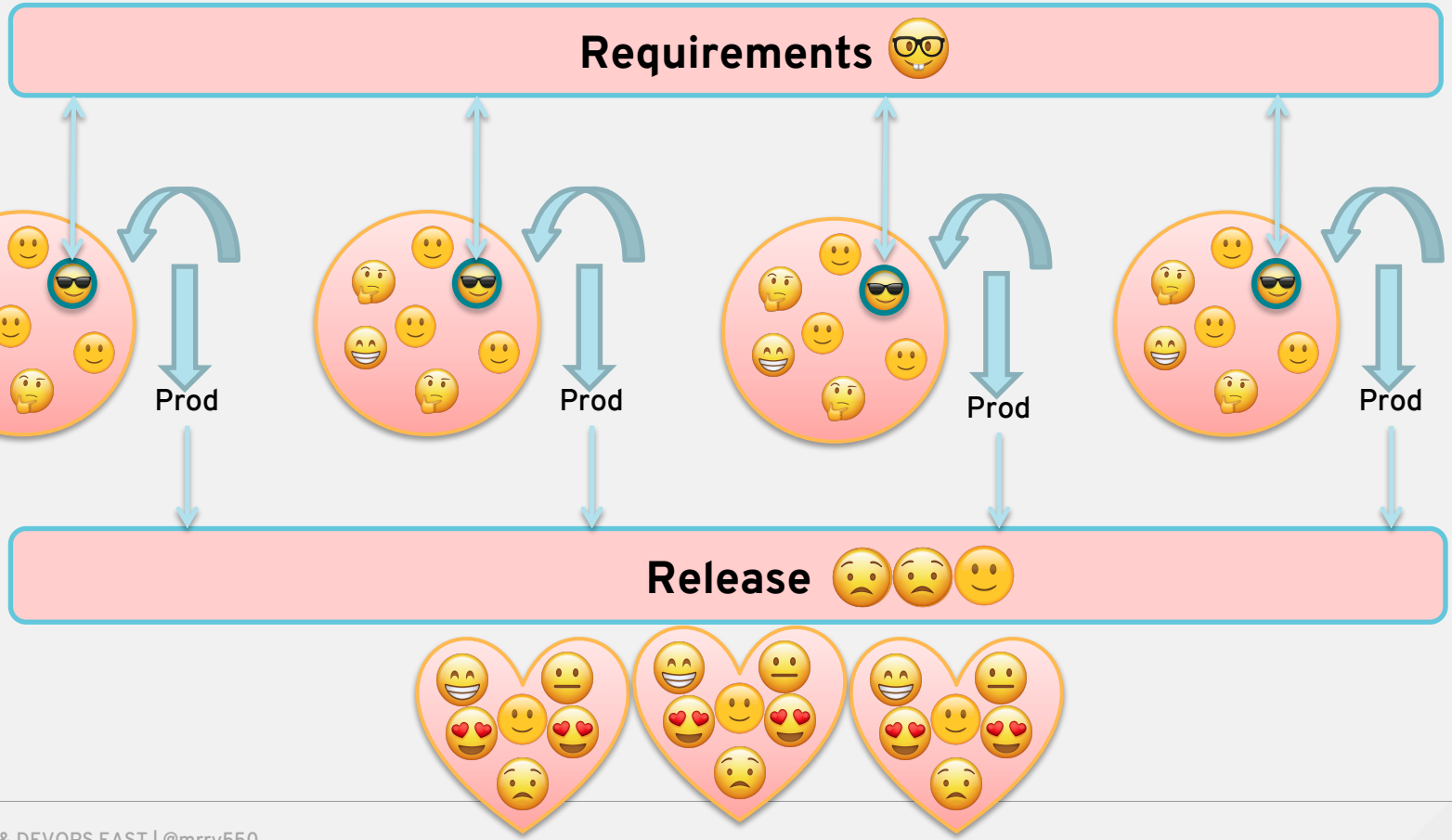

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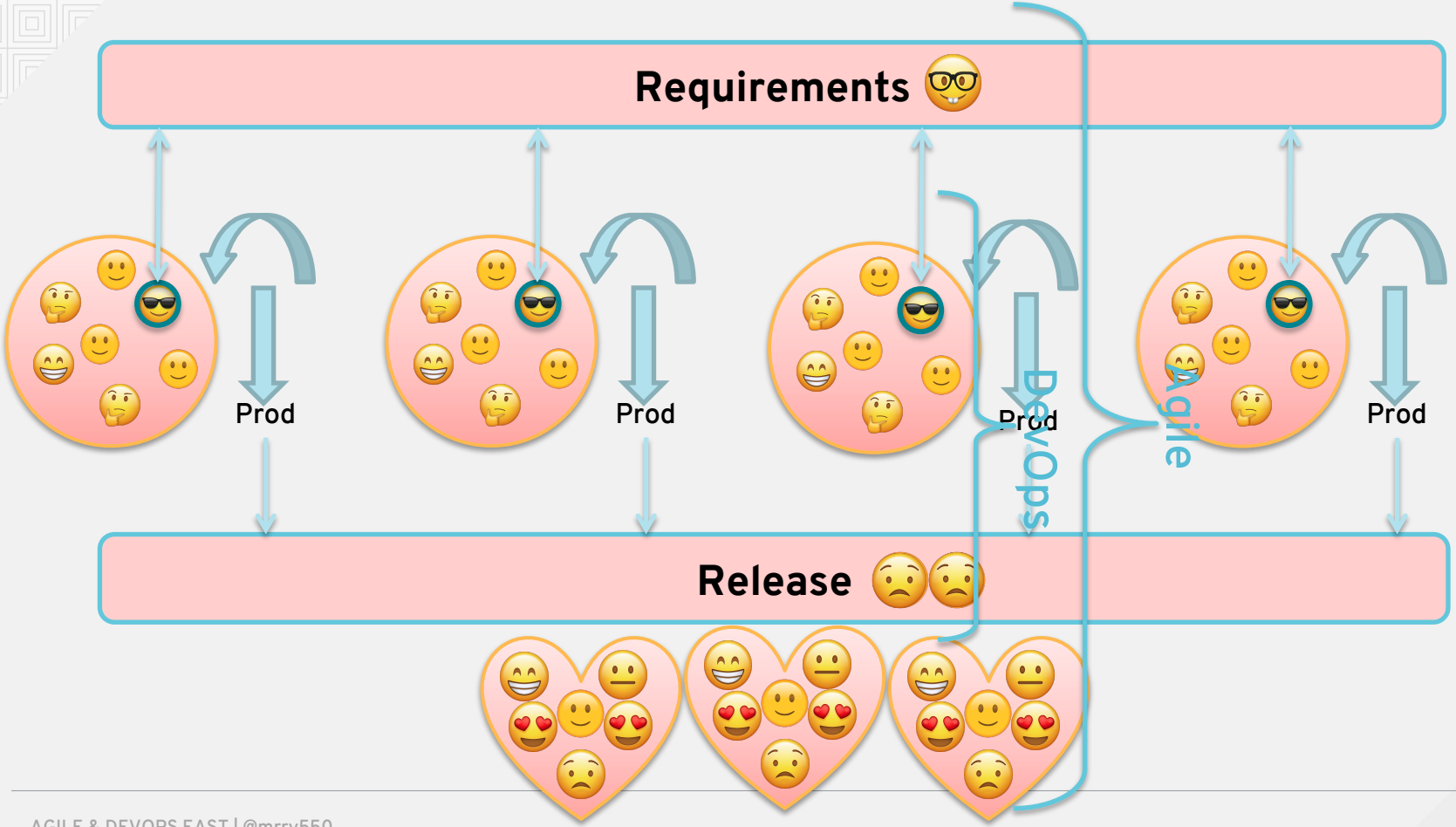

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WHAT DOES THAT LOOK
LIKE IN PRACTICE?
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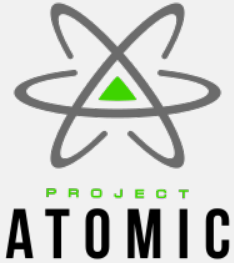
CASE STUDY #1

Growing pains...

By Jean Beaufort | CC0 Public Domain

EARLY TEAM CHARACTERISTICS – CIRCA ‘14



- 8 Hybrid Scrum Teams
- 2 Week Sprints
- 6 Week Releases
- 60 Engineers
- 5 QE Engineers
- 1 Release Engineer
- 1 Architect
- 2 Agile Coaches
- 1 Product Manager

- 5 Hybrid Scrum Teams
- 3 Week Sprints
- ~6 Month Releases
- 40 Engineers
- 12 QE Engineers
- 1 Release Engineer
- 1 Architect
- 4 Product Managers

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DETAILED VIEW

PROJECT ATOMIC

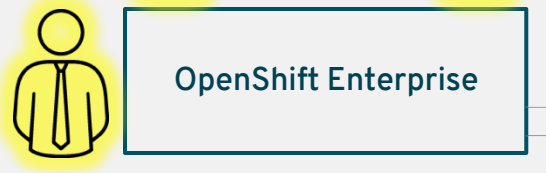
- Containers
- Atomic Host
- Kubernetes
- Storage
- End-to-End Integration
- Scale & Performance
- Usability
- Internal Tooling

Red Hat Enterprise Atomic Host

TWO SEPARATE PROGRAMS – DIFFERING RELEASE CYCLES

OPENSHIFT

- Developer Experience
- Integration Services
- Platform Management
- User Interface
- Productization



OpenShift Enterprise

Online

OpenShift Online

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POST-MERGE TEAM STRUCTURE – CIRCA ‘15

ATOMIC OPENSHIFT 😁

Group 1 Building Blocks	🤔	Group 2 Origin	🤔	Group 3 Product
Cluster Infrastructure		Developer Experience		Online
Containers		Integration Services		Productization
Networking		Platform Management		e2e Product Integration
Platform Infrastructure		User Interface		Scale & Performance
Storage				Internal Tooling
Usability				

Red Hat Enterprise Atomic Host | OpenShift Enterprise | OpenShift Online | OpenShift Dedicated

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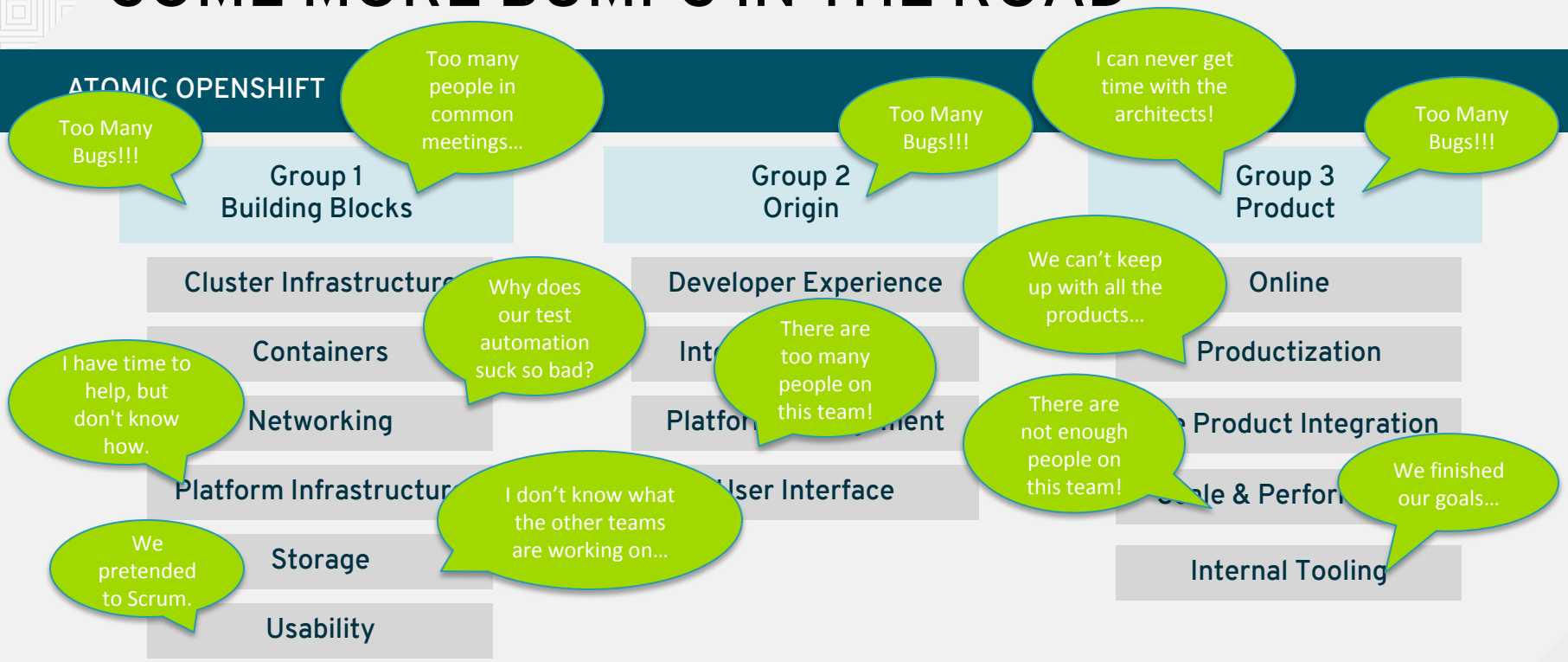
CASE STUDY #2

By eliminating one bottleneck, we exposed some more.

By Jean Beaufort | CC0 Public Domain

SOME MORE BUMPS IN THE ROAD



All this while working on 6 minor and 4 major releases across the product line.

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TEAM STRUCTURE – CIRCA ‘16

ATOMIC OPENSHIFT 😁😁😁😁

Group 0 Infrastructure 🤔	Group 1 Kubernetes 🤔	Group 2 Origin 🤔	Group 3 Product 🤔
Container Core	Cluster Infra	Developer Experience	e2e Product Integration
Container Security	Networking	Integration Services	Online
Continuous Infra	Storage	Platform Management	Productization
Platform Infra	Storage UXP	User Interface	Scale & Performance
Usability			

Red Hat Enterprise Atomic Host	OpenShift Enterprise	OpenShift Online	OpenShift Dedicated

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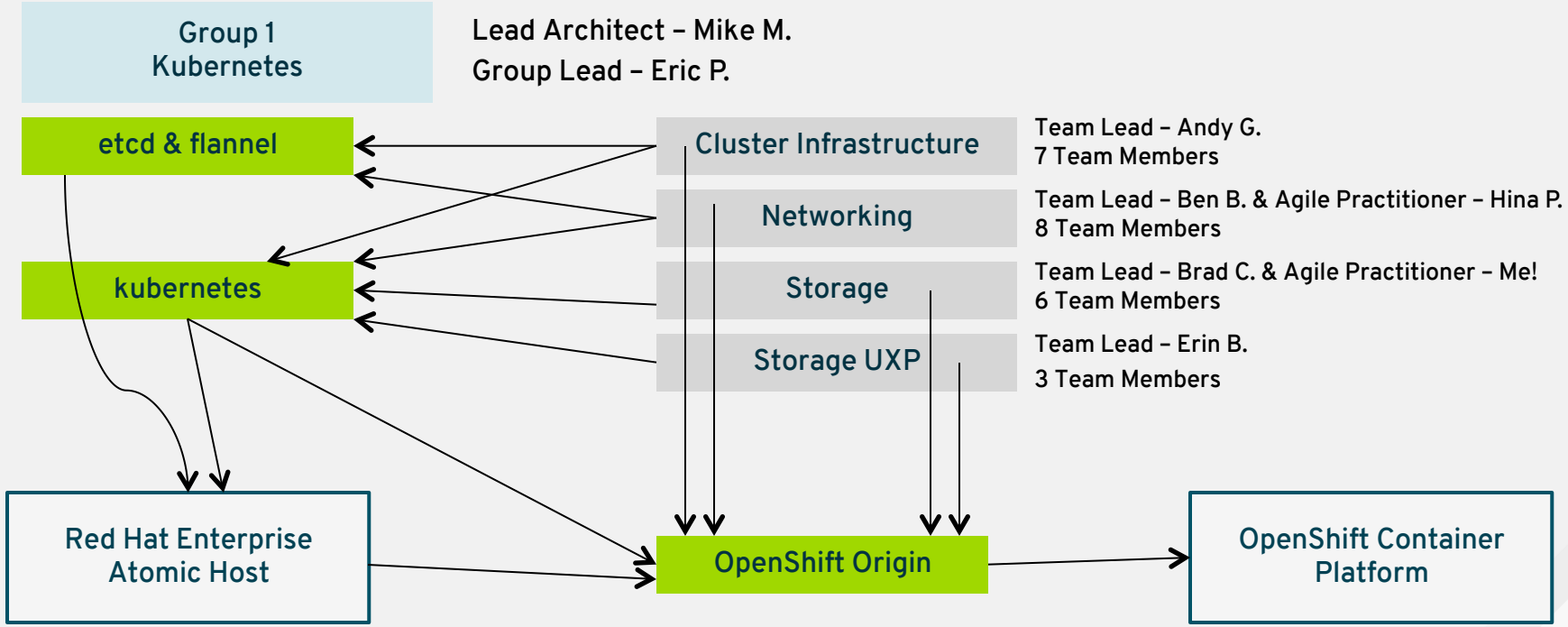
DETAILED LOOK AT A GROUP

ATOMIC OPENSHIFT



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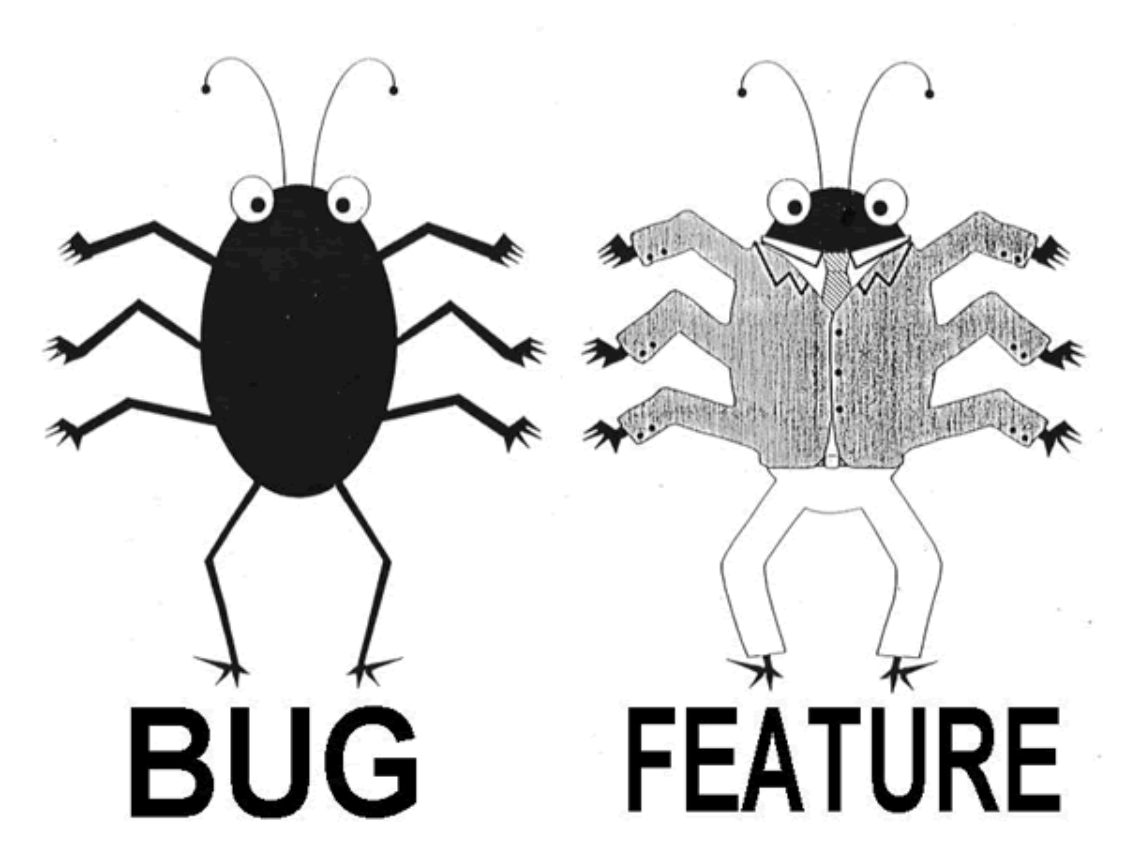
CASE STUDY #3

Some more bumps...

By Maliz Ong | CC0 Public Domain


BUG
FEATURE

WORKED FINE IN DEV
OPS PROBLEM
NOW
quickmeme.com

TEAM STRUCTURE – CIRCA '17

ATOMIC OPENSHIFT

Group 0 Infrastructure	Group 1 Kubernetes	Group 2 Origin	Group 3 Product	Group 4 Integration
Container Core	Cluster Infrastructure	Developer Experience	Cluster Lifecycle	e2e Application Int
Container Security	Kube Origin	Integration Services	Continuous Delivery	e2e Provider Int
Continuous Infra	Networking	Platform Management	Customer Success	Scale & Performance
Platform Infra	Storage	User Interface	Online	
Usability	Storage UXP			

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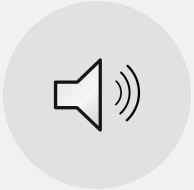
ALSO STILL WORKING ON…

COMMUNICATION BOTTLENECKS

ACTION: Every sprint meet with entire team. Every week meet with your group. Daily nudge emails when we get close to a release.

RESULT: The basic framework works for the teams, but we re-evaluate quarterly to optimize. Most importantly, we conduct meeting audits.



PRIDE, COMMITMENT AND PASSION = WE SOMETIMES CLASH

ACTION: Monthly “Deep Dive” sessions into specific technology areas.

RESULT: Helps build confidence. Has sparked lively technology conversations, but nothing negative.

PRODUCT DEPENDENCY CONFLICTS

ACTION: We don’t even know yet.

RESULT: Everything is on fire.

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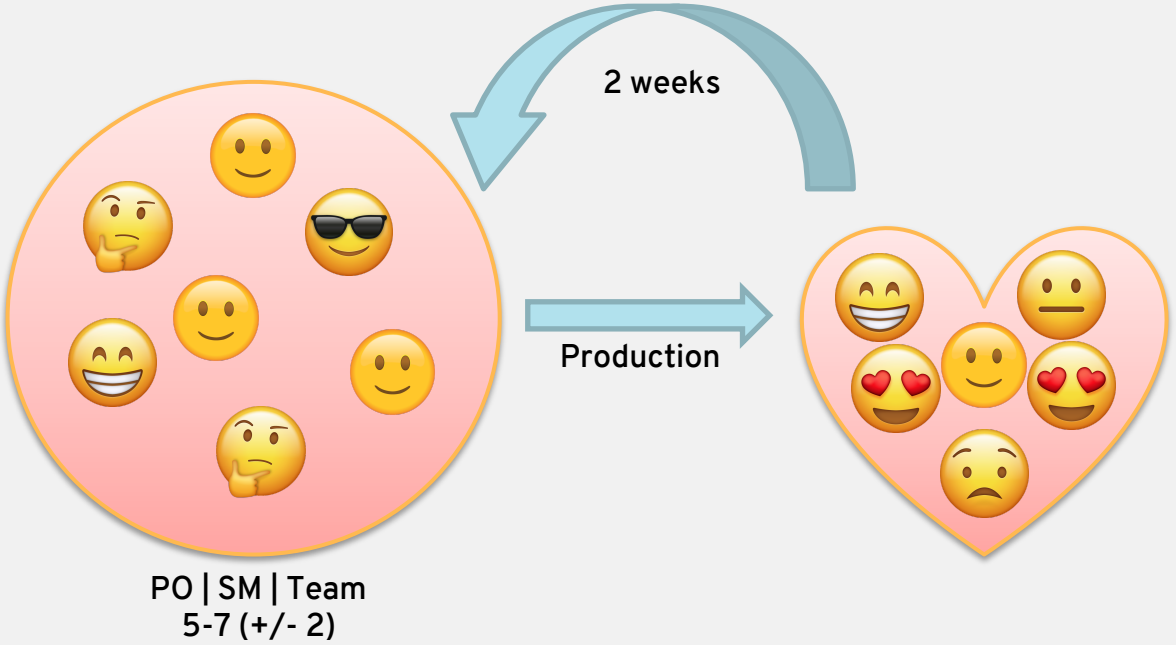
WHERE CAN I START?



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ANTI-PATTERNS FOR SCALING

Never add teams before you really need to.

Never optimize before it is time.

Never stop inspecting and adapting your process.

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LEARN TO RECOGNIZE...

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