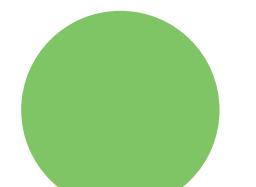


Anders Lundsgård

1ε³⁷

2021



Cloud Solutions Architect

Cloud Solutions & Security Architect

2015



Cloud & Delivery Engineer



Solution Architect



2008



Developer & Release Engineer



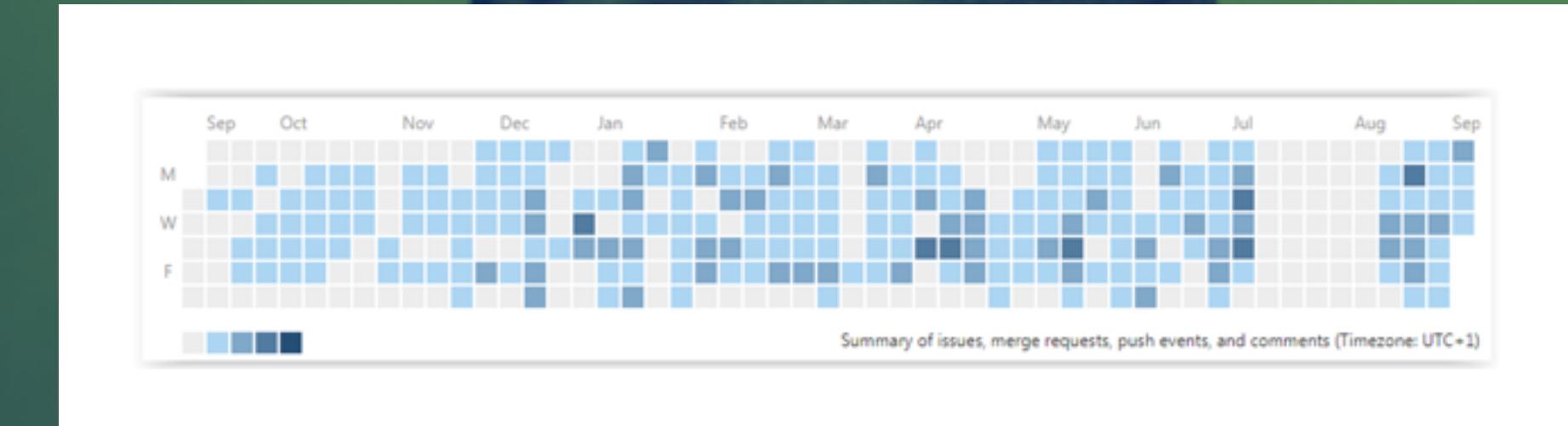
2004



Developer & Instructor

1ε³⁷

we've got this.



Anders Lundsgård



DEVELOPERS

Try to make engineers much more productive than I've ever been



DEV ❤️ OPS

Try to teach developers to operate
Try to teach operations how to code



CLOUD

The gift from above to achieve my first two goals

The background of the slide features a large white truck driving away from the viewer on a road. The truck is carrying what appears to be logs or timber. The scene is set outdoors with trees and foliage visible in the background.

Disclaimer

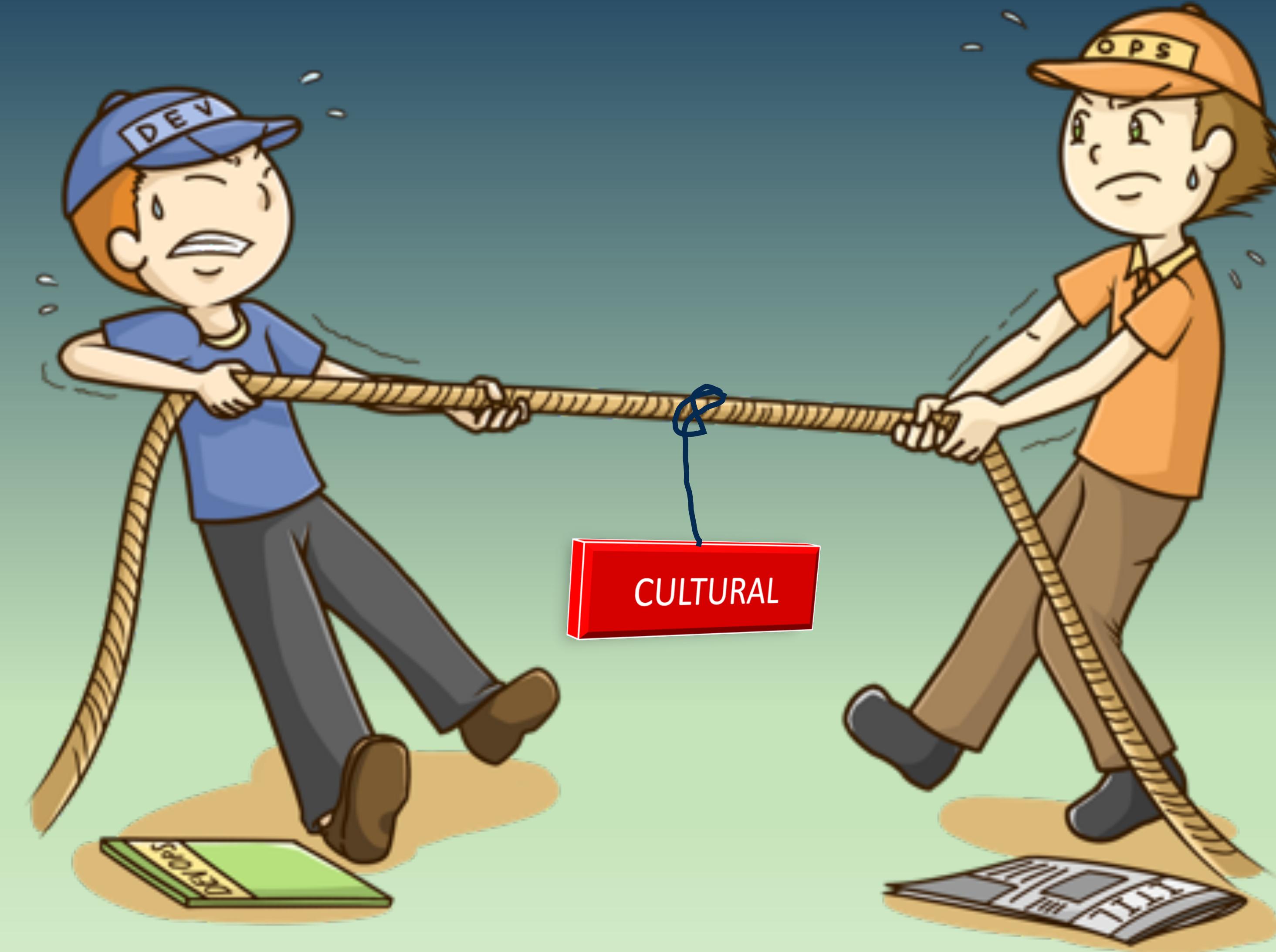
There is no official “DevOps manifest definition”.

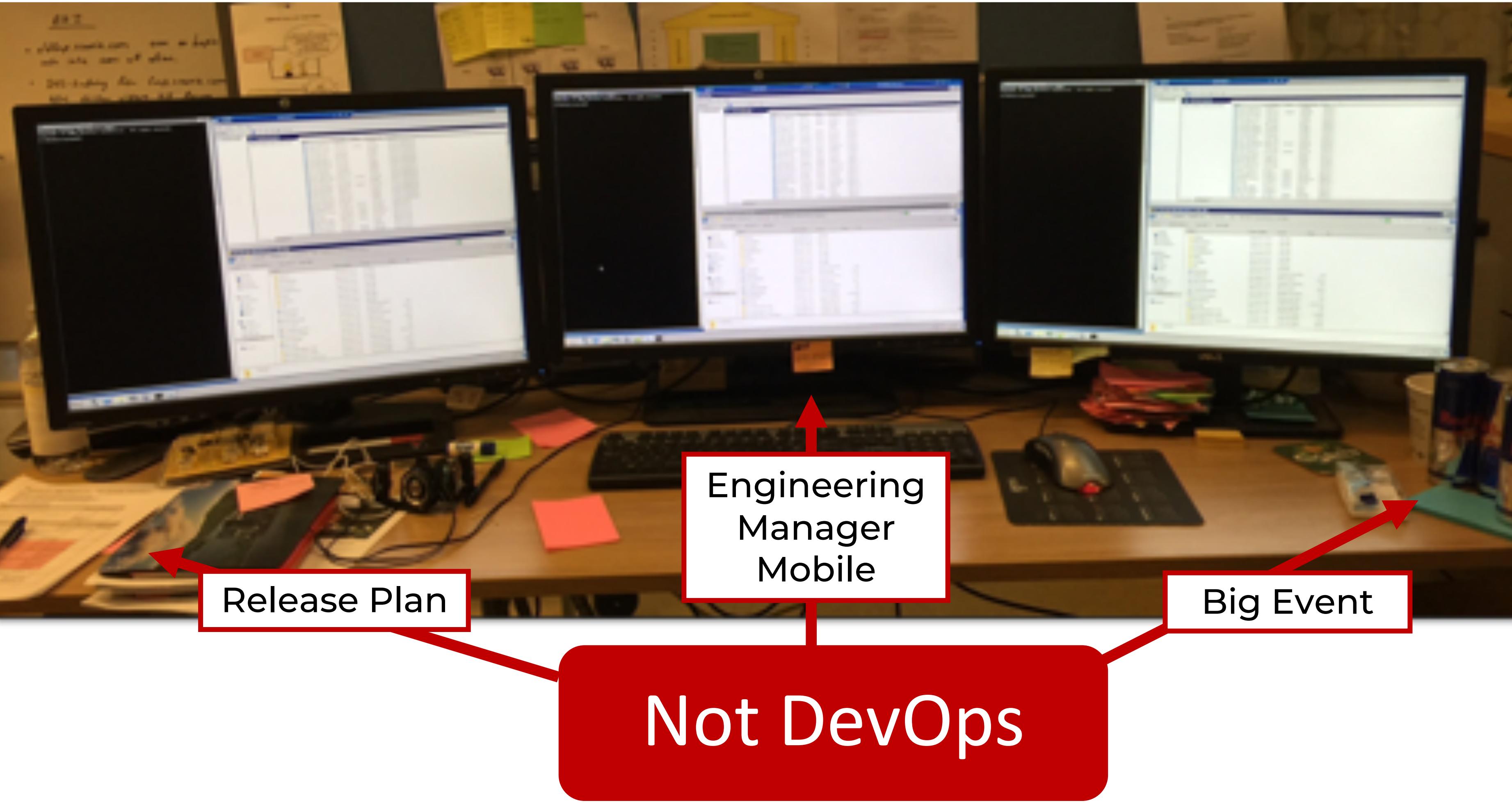
DevOps in this presentation is only one view of DevOps based on the presenters experience in building, deploying and operating software.



Startup

ENTERPRISE





Manual Deployments

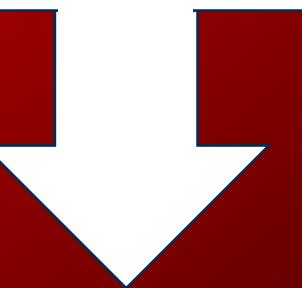
Prior to 2015, me and other engineers went into the office for quarterly/monthly manual releases.

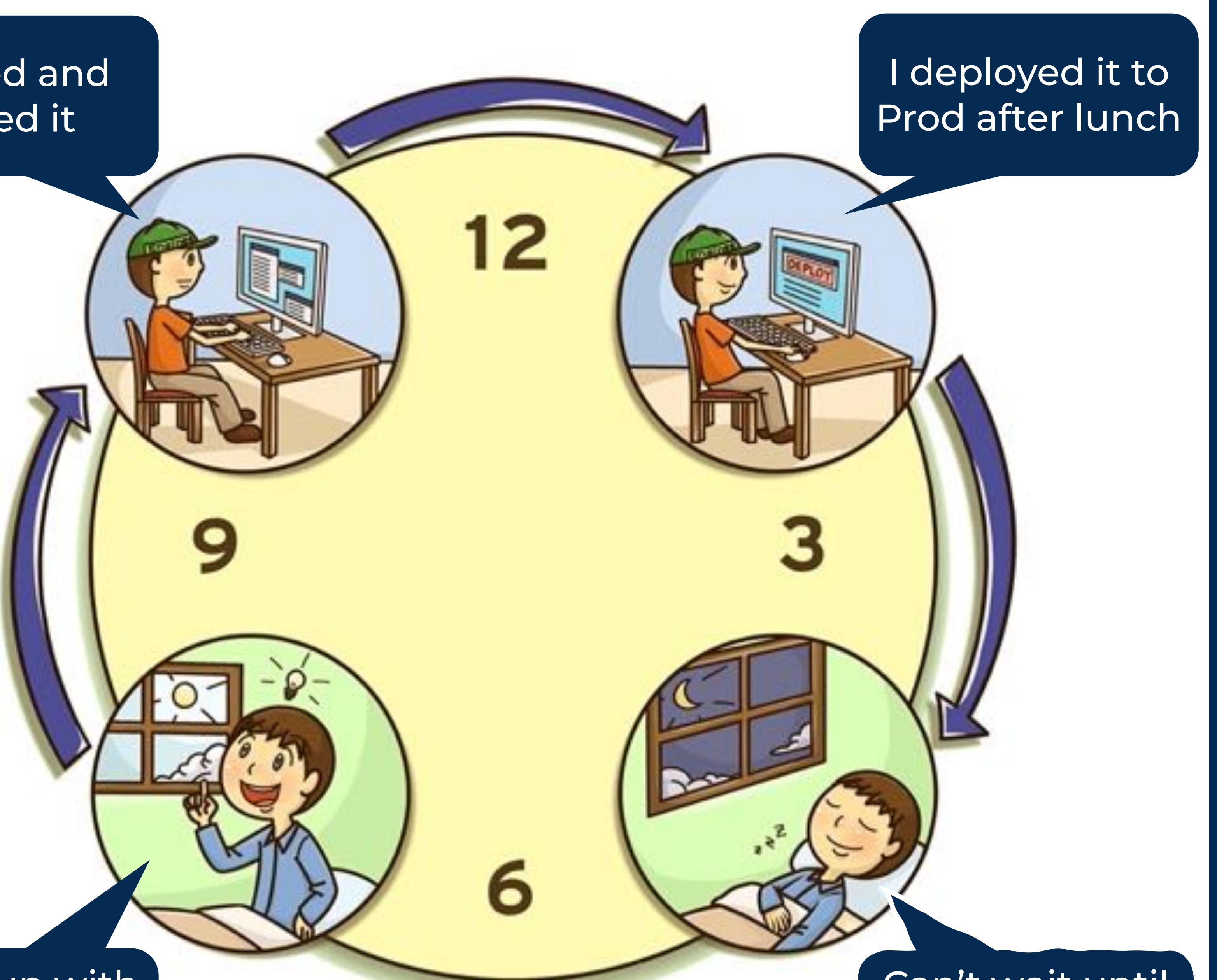
Not DevOps

A non-DevOps situation where Dev blame Ops for being slow and Ops blame Dev for being stupid



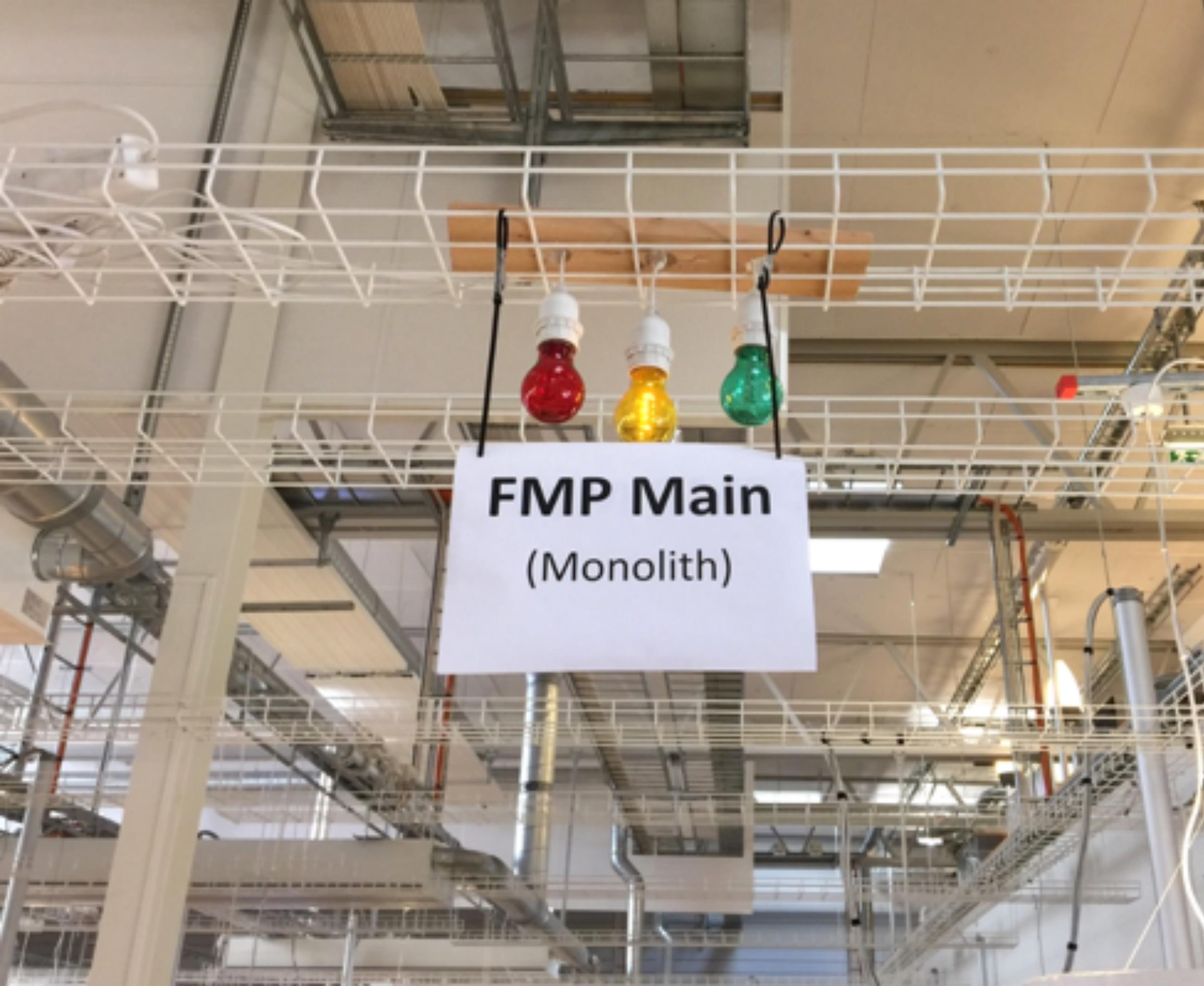
Me Today





Vision

Idea to Prod the same day



Continuous Integration

- ✓ Version Everything*
- ✓ Automation
- ✓ Trunk based development
- ✓ Claim over Blame

*except secrets

Deploy frequency

Scania Connected Services

2011

Software projects

- 2-3 in parallel
- 3 deploys per year

2015

Agile teams

- 12 deploys per year

Continuous Integration

2016

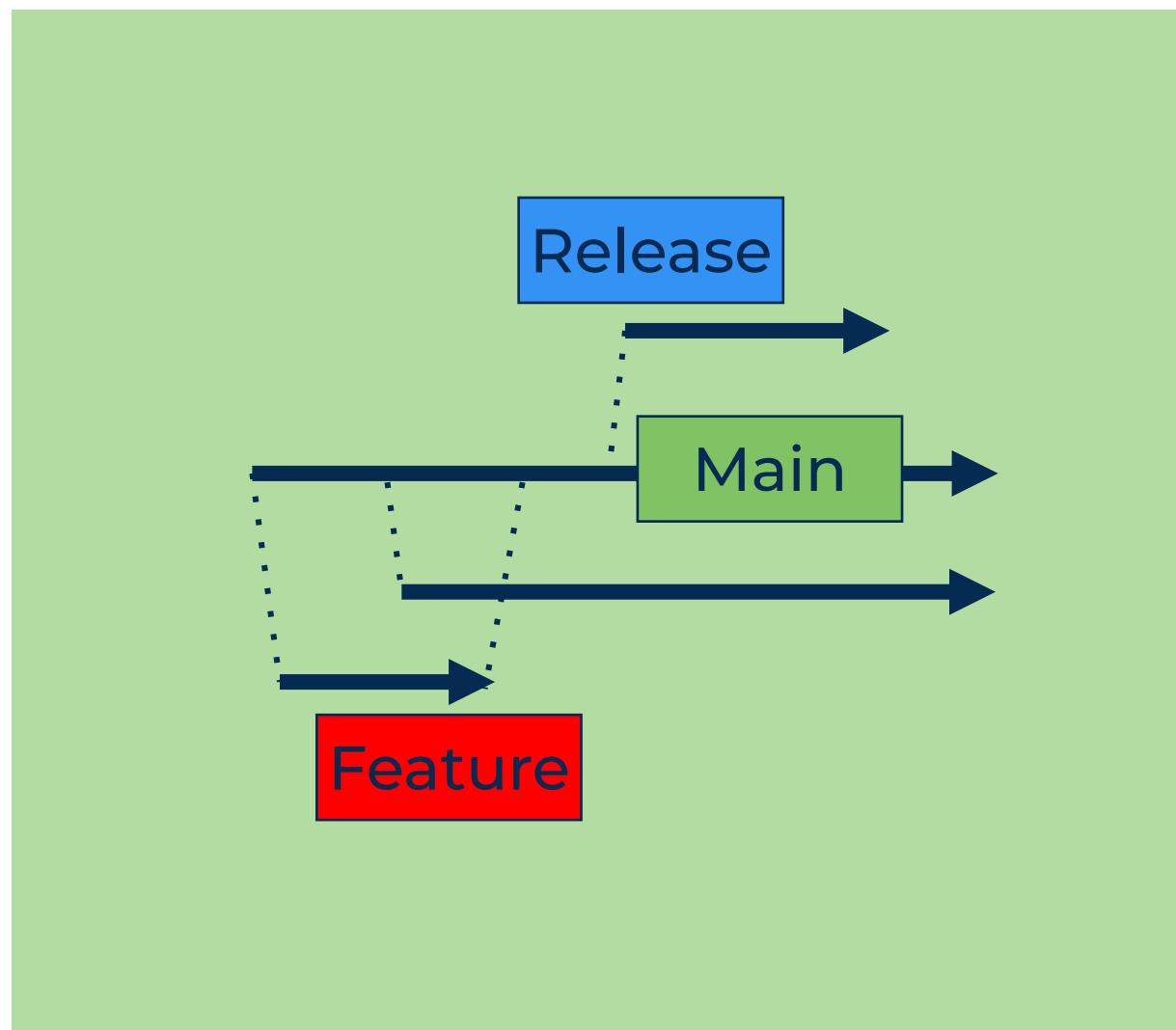
Autonomous Teams

- Continuous Delivery
- **30+ deploys per day**

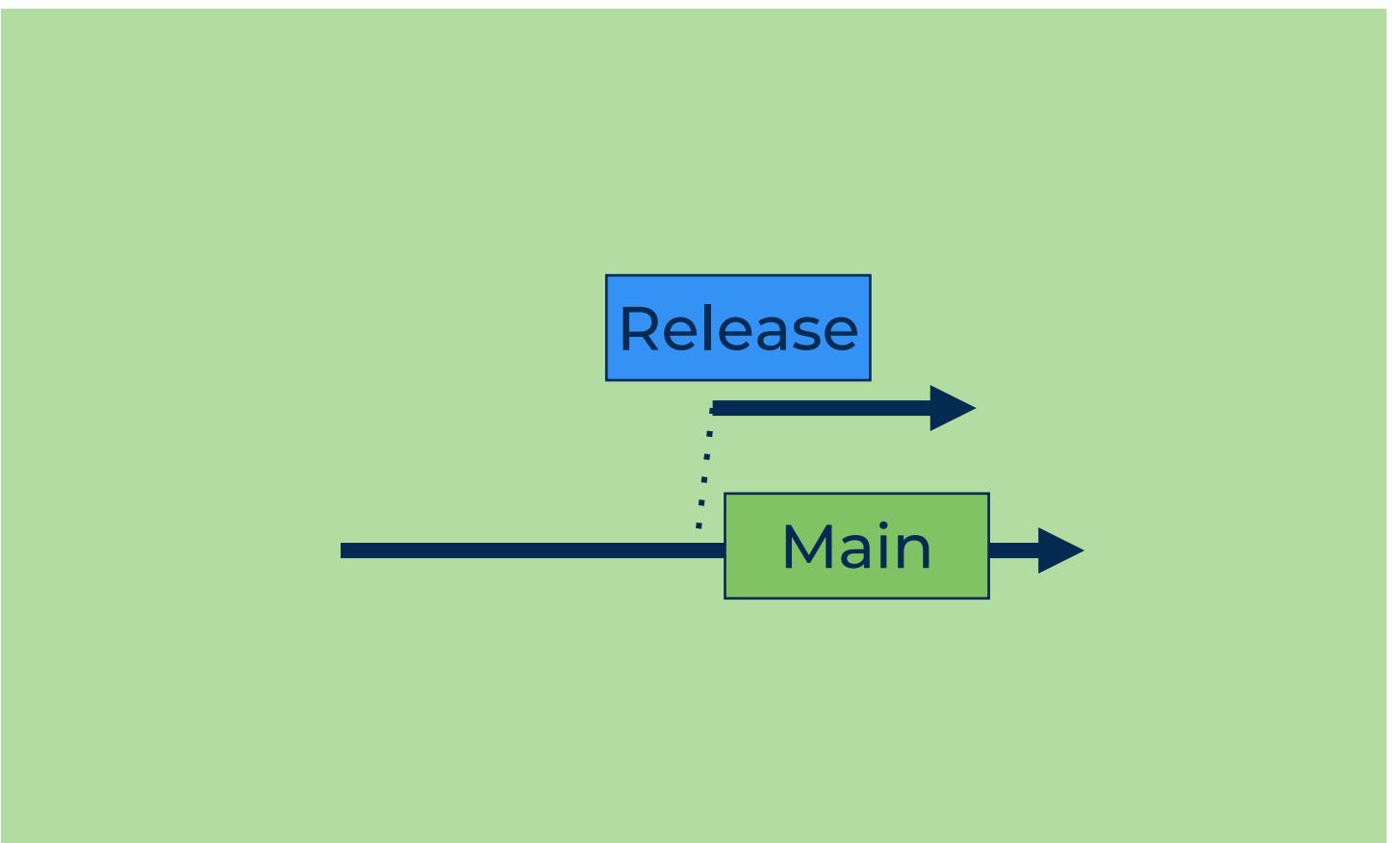
1. Microservice Architecture
2. Challenged and improved infra related processes
3. Trust and courage from management



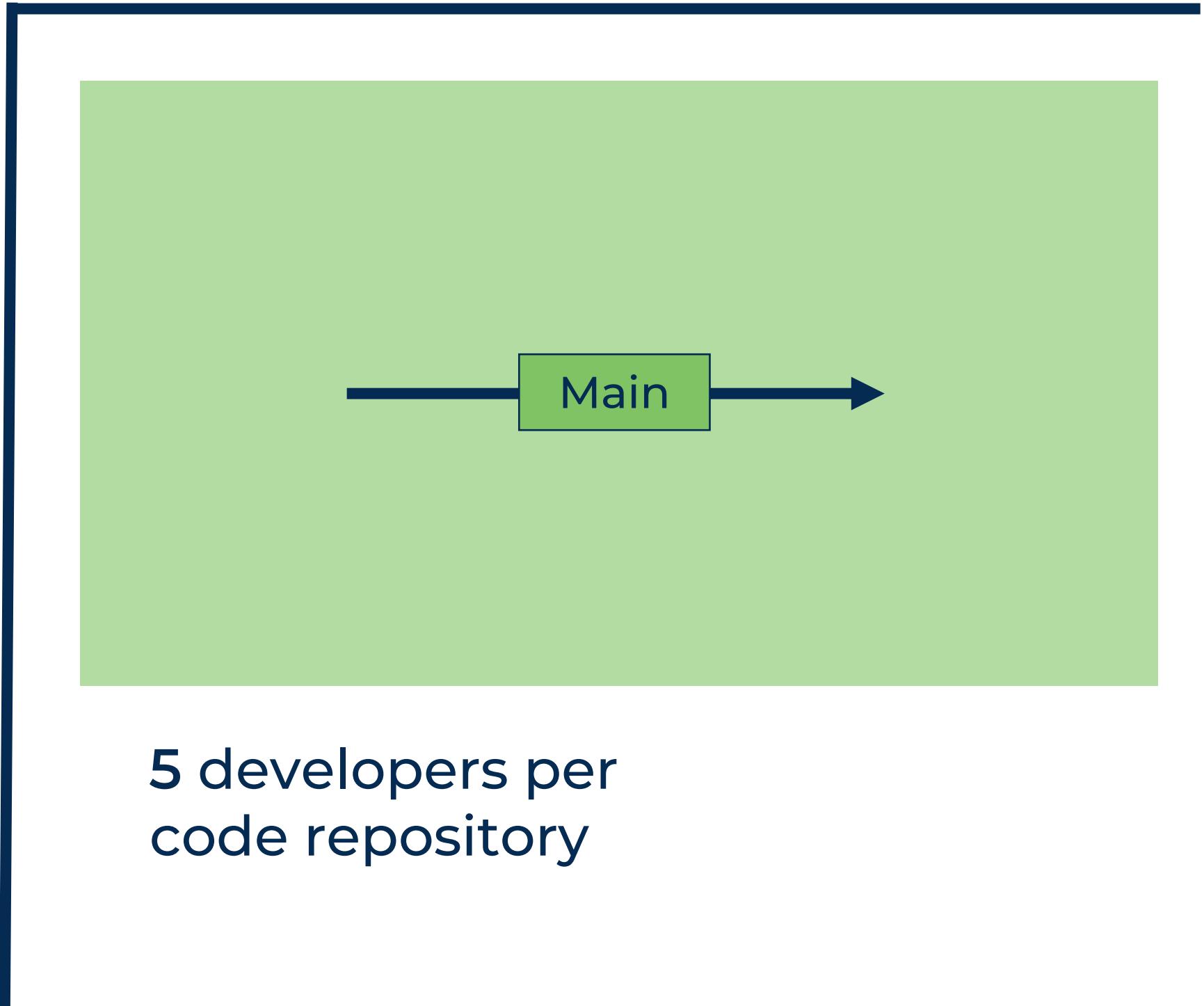
Branch strategies



50+ developers per
code repository



50+ developers per
code repository



5 developers per
code repository



Autonomous teams

Autonomous teams can have their own pace without affecting other.





Autonomous teams

With independent teams, all teams are not affected if one team experience problems.



Zero Downtime

Enables engineers to be present when their code goes live



Immutable Production

Developers should not log in to production servers!
Operations should not log in to production servers!

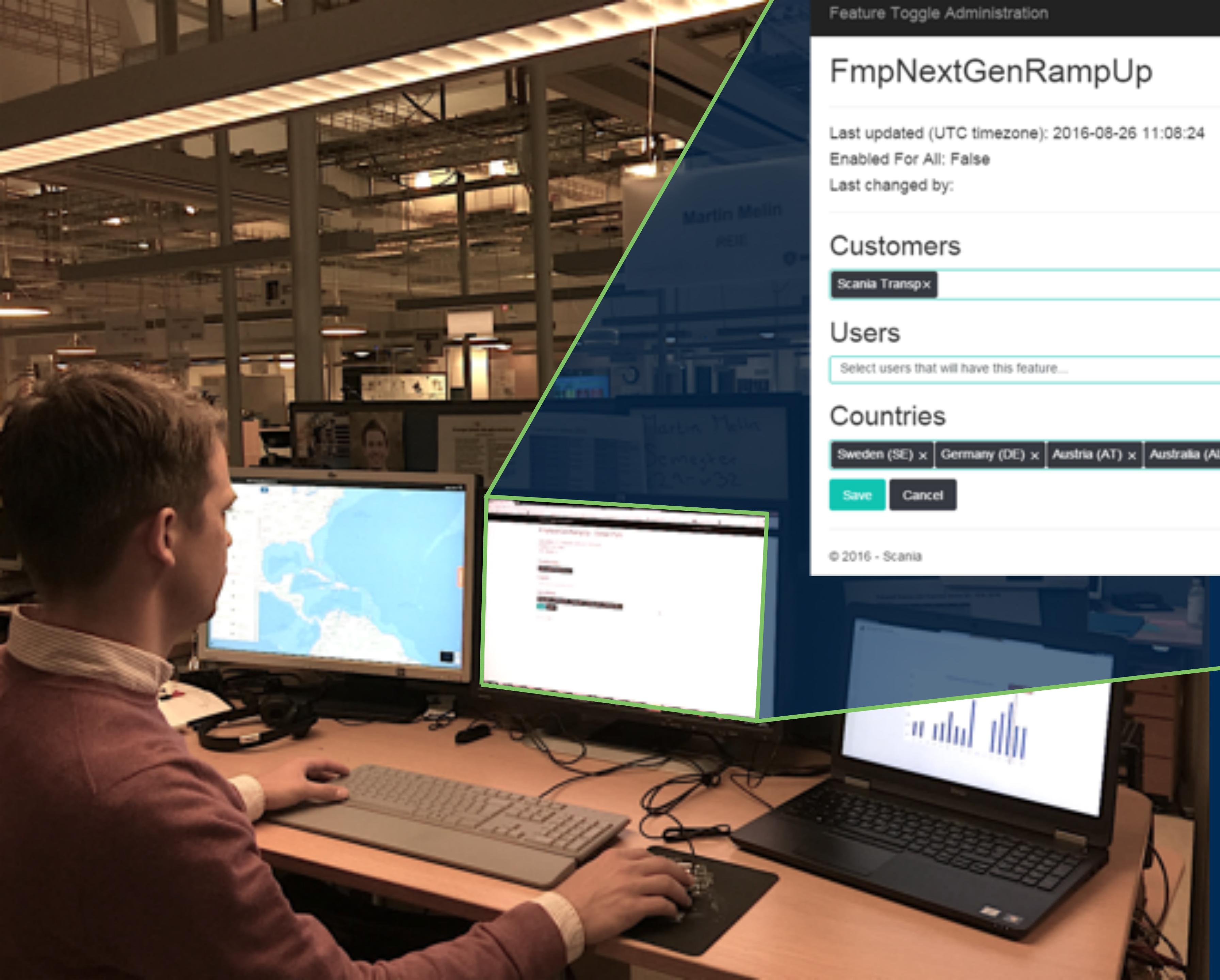
Remove Handovers

Avoid sub optimize in organizational silos

Deploy != Release

Development Team
Concern

Business
Decision



Feature Toggle Administration

FmpNextGenRampUp

Last updated (UTC timezone): 2016-08-26 11:08:24

Enabled For All: False

Last changed by:

Customers

Scania Transpx

Users

Select users that will have this feature...

Countries

Sweden (SE) x | Germany (DE) x | Austria (AT) x | Australia (AU) x | Argentina (AR) x

Save Cancel

© 2016 - Scania

Release at Scania

Zero downtime using
Feature Toggles



Tilda 4 y/o releasing to production

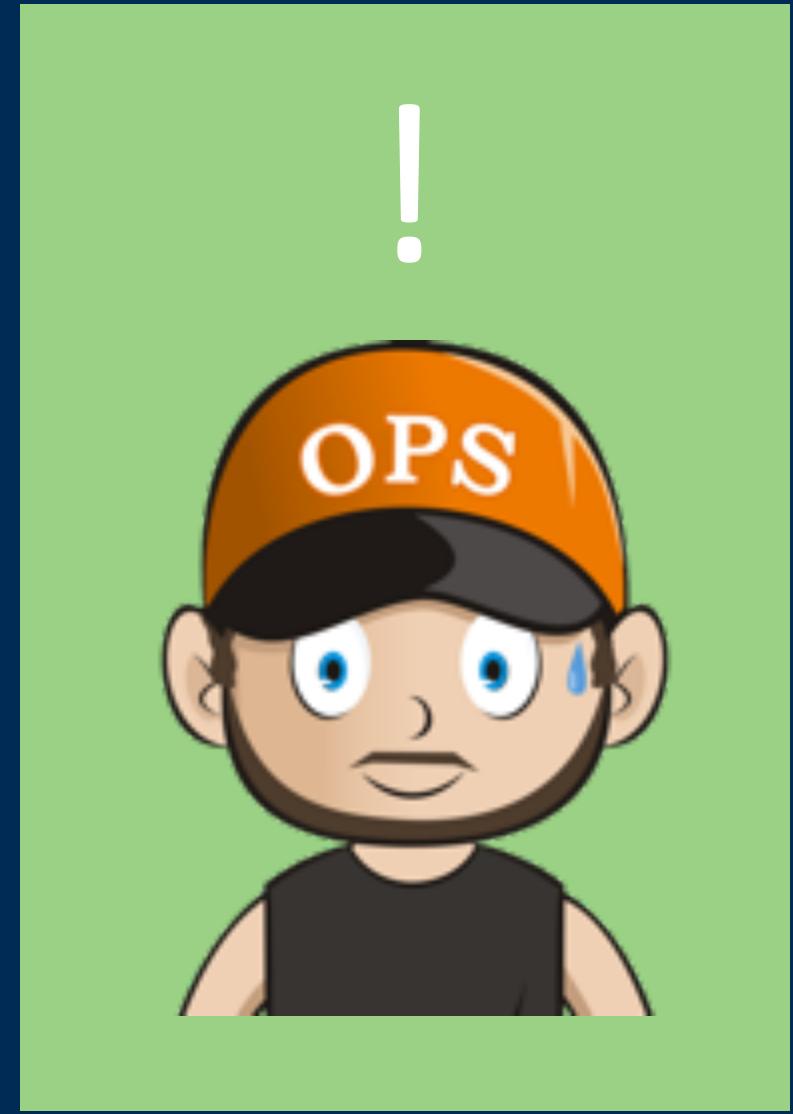
Tilda 4 releases the new Fleet Management Portal for Great Britain market (2016-09-01).



Affinity

Maintaining infrastructure is very complex





Affinity

Maintaining different state of code is very complex



The shift to Infrastructure as Code



Resources:

ElasticLoadBalancer:

Type: AWS::ElasticLoadBalancing::LoadBalancer

Properties:

SecurityGroups:

- !Ref LoadBalancerSecurityGroup

Subnets:

- !ImportValue: PublicSubnet1A
- !ImportValue: PublicSubnet1B

Listeners:

LoadBalancerPort: 443

InstancePort: 8080

Protocol: HTTPS

SSLCertificateId: !ImportValue CertificateId

HealthCheck:

Target: 'HTTP:80/'

HealtyThreshold: 2

UnhealtyThreshold: 3

Interval: 20

Timeout: 10

Cloud Security Team - Principles

Cloud Native Security



Share failures



Get out from the cave



Ubiquitous encryption



Don't just say "NO"



Gamifying Security





Here is how YOU can help...



Here is how YOU can help...



Anders Lundsgård

<https://devops.vision>
@anderslundsgard



we've got this.

trætton37