DevOps vs SRE

Continuous Delivery Pipelines
Bridging the Gap

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Agenda

- DevOps and/or vs SRE?
- Action favors the bold or prepared?
- Eventually you must pull the trigger...

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Ravi Lachhman is an evangelist at Harness. Prior to Harness, Ravi was an evangelist at AppDynamics. Ravi has held various sales and engineering roles at Mesosphere, Red Hat, and IBM helping commercial and federal clients build the next generation of distributed systems. Ravi enjoys traveling the world with his stomach and is obsessed with Korean BBQ.
Enabling Efficiency and Resiliency
Conway’s Law
Two Different Goals

ONE DOES NOT SIMPLY WORK WITHOUT GOALS
Two Different Problem Sets

I HAD A PROBLEM SO I USED REGULAR EXPRESSIONS

NOW I HAVE TWO PROBLEMS.
Comparisons, in a 6 Round Battle

SRE

DevOps
Round I, tl;dr

SRE
- Resilience,
- Scaling,
- Uptime,
- Robustness

DevOps
- Development Pipelines
Round II, Does the App Cluster?

SRE
- RAFT based leader with Zookeeper and Mesos

DevOps
- Yes, we need three nodes
Round III, Can We Have Monitoring?

SRE

BlackBox vs WhiteBox

DevOps

Yes, Prometheus, ELK, FluentD
Round IV, Our Deployment Failed

SRE

Did it cause an incident?

DevOps

Re-run the pipeline and we can up the logging.
Round V, Typical Metrics

**SRE**
- Error budgets, SLOs, SLIs

**DevOps**
- Deployment frequency, deployment failure rate
Round VI, War Chant

SRE
No Root Cause!

DevOps
People, Process, Technology!
Eventually You Have to do Something

YOU CAN DO IT
I BELIEVE IN YOU
Dimensions of an App

- Compute
- Storage
- Networking
- App Infra
How do you Deploy?

#!/bin/sh
#!/bin/bash
#!/usr/bin/env python3
Pipelines, in Good and in Incident

Deploying During an Incident

Deploying New Feature
Confidence is Always Needed

People

Technology

Process
Being Prepared to Take Action
What is Normal?

YOU DON'T HAVE TO CHANGE THE BASELINE

IF YOU HAVE NO BASELINE
Continuous Delivery Pipelines
How much should you Deploy?

After moving to its own cloud, Amazon engineers deploy code every 11.7 seconds, on average—reducing both the number and duration of outages at the same time. Netflix engineers deploy code thousands of times per day. Feb 4, 2015
THANK YOU!

Meet me in the Network Chat Lounge for questions