

Building Platforms and Product Ecosystems

Jonathan Gomez, Principal Engineer - Cloud & SRE, Latitude Infracoders - 12 November 2019

INTERNAL PLATFORMS:

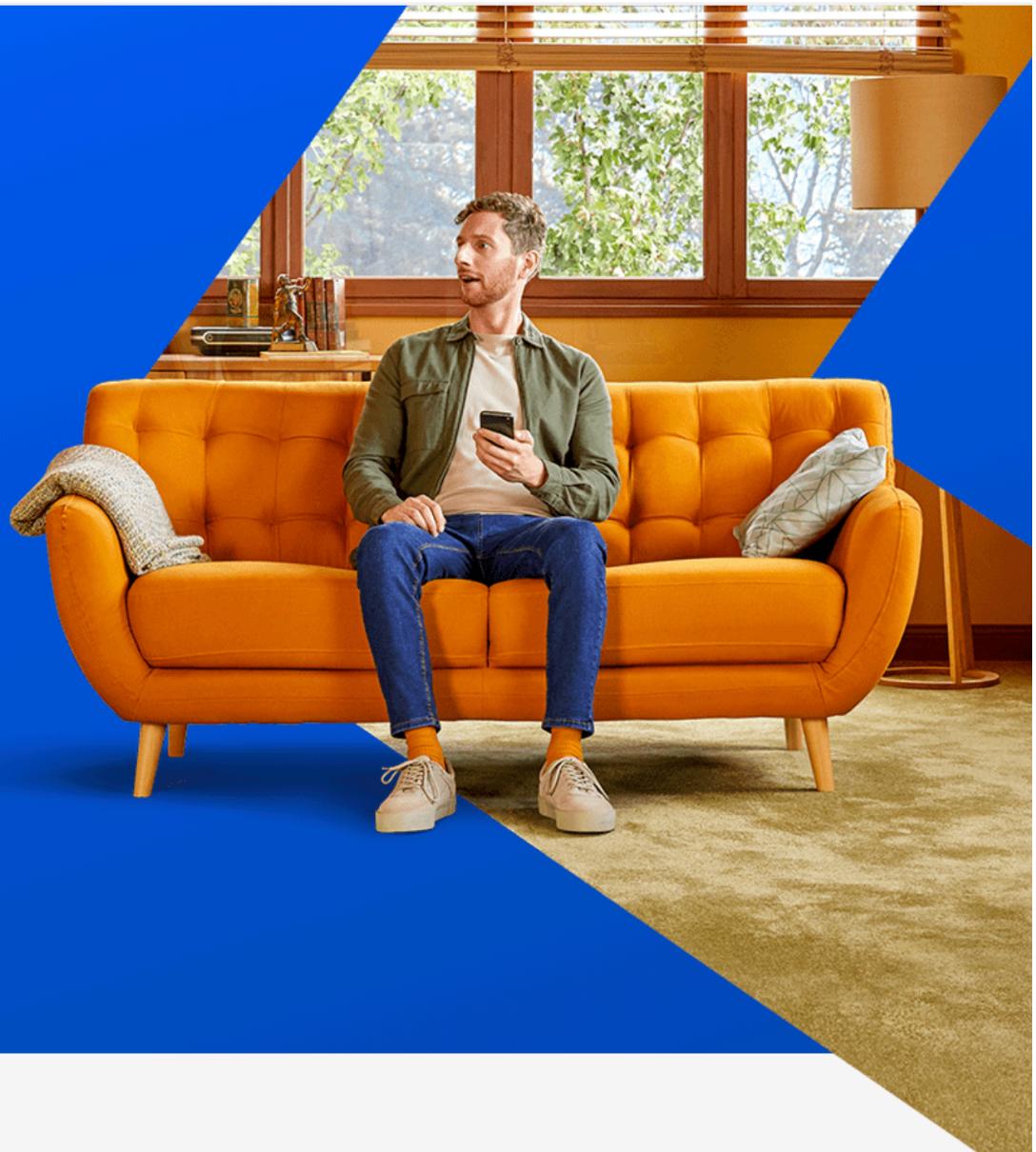
WHY?

WHAT?

HOW?

Let's help you find a way

Life's great when you can make things happen. At Latitude, our attitude is to be responsible, fast and always ready to help. So, what are you looking for today?

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#transformation
questions related to
Time to Value...

A photograph of a roller coaster track, likely the Kingda Ka at Six Flags New Jersey, showing teal and orange support structures against a backdrop of palm trees and a cloudy sky.

#transformation
How many people
required to deliver a
product/feature?

A photograph of a roller coaster track. The track is primarily teal with orange support beams. It winds through a landscape with several palm trees. In the foreground, a train of roller coaster cars is visible, with passengers looking up in excitement. The sky is overcast.

#transformation

Is it easy to release
to production?



#transformation

When something
goes wrong, what
happens?

**INTERNAL PLATFORMS CAN
BE EFFECTIVE IN
ACCELERATING CHANGE**

INTERNAL PLATFORMS:

WHY?

WHAT?

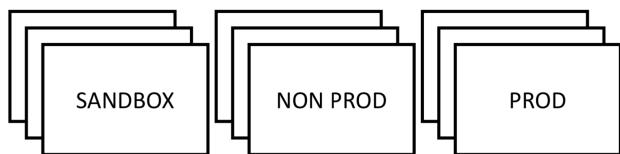
HOW?

CLOUD NATIVE PLATFORM (CNP)

KEY COMPONENTS

Tenancies

Isolated environments



Service Catalogue

Common Building Blocks



Secure Pipeline

Pipeline Generation Framework



Cloud provider



SaaS Tooling Ecosystem



Buildkite



PagerDuty sumo logic

CLOUD NATIVE PLATFORM (CNP)

PURPOSE

Establish market leading real-time resilience, security and compliance

Support scale and speed

Empower development teams

TENANCIES

Give teams their own patch enabling them to move fast and not worry about breaking another team's stuff

**Standardise guardrails:
security scans, audit logging etc**

Shared ownership model

SERVICE CATALOGUE

Common building blocks to run secure & resilient workload

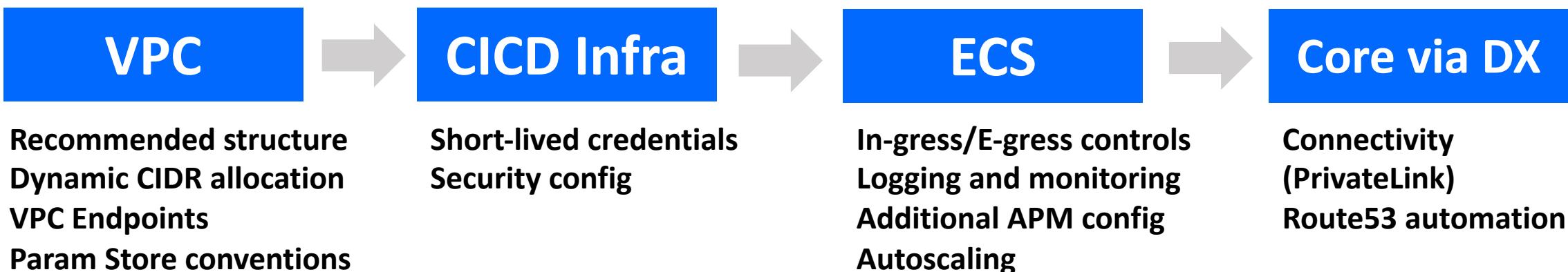
Re-use and sharing works better with:

- **Versions**
- **Clear interfaces**
- **Backward compatibility**
- **Testing**
- **Mechanisms to encourage upgrades & avoid version drift**

SERVICE CATALOGUE

WHAT'S IN THE CATALOGUE?

(1) Common building blocks to run workload



(2) Opt-in account features



SECURE PIPELINE

Framework to ease building and maintenance of pipelines

Encourage sharing of pipelines / common steps without constraining ability to customise

Parity between local dev and CI

SECURE PIPELINE

Latitude Financial / customer-events-s...



296 Builds

0 Running

0 Scheduled

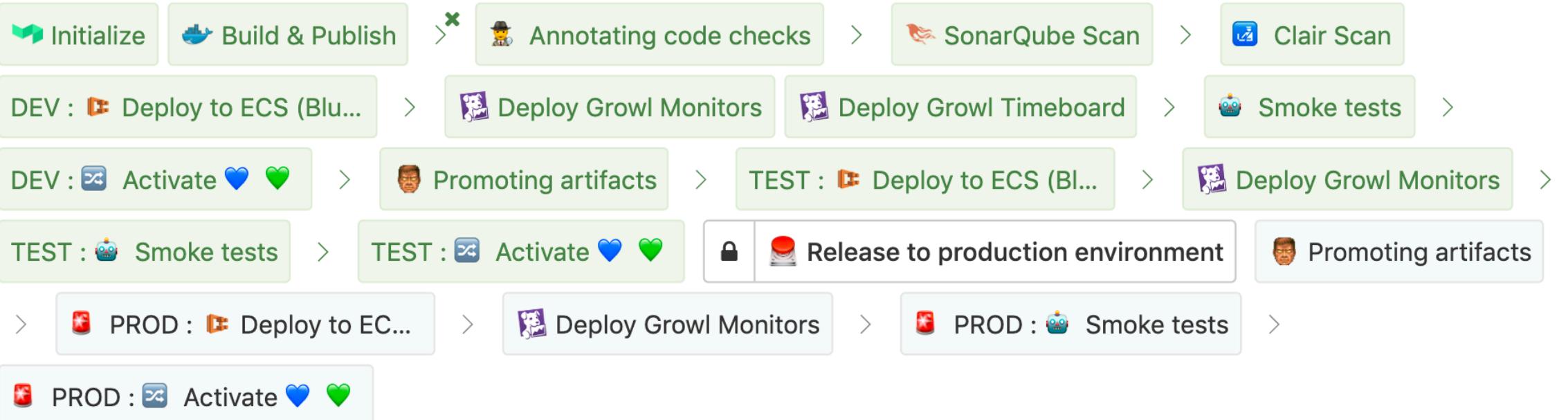
New Build

Pipeline Settings

Add spectral.mk which is used by the o10s-golang pipeline for swagger linting (#60)

Build #295 | master | dded0ec

Passed in 17m 19s and blocked



INTERNAL PLATFORMS:

WHY?

WHAT?

HOW?

CLOUD NATIVE PLATFORM (CNP)

PRINCIPLES

Internal open source. Everything-as-code and build engineering culture. View source → Collaborate.

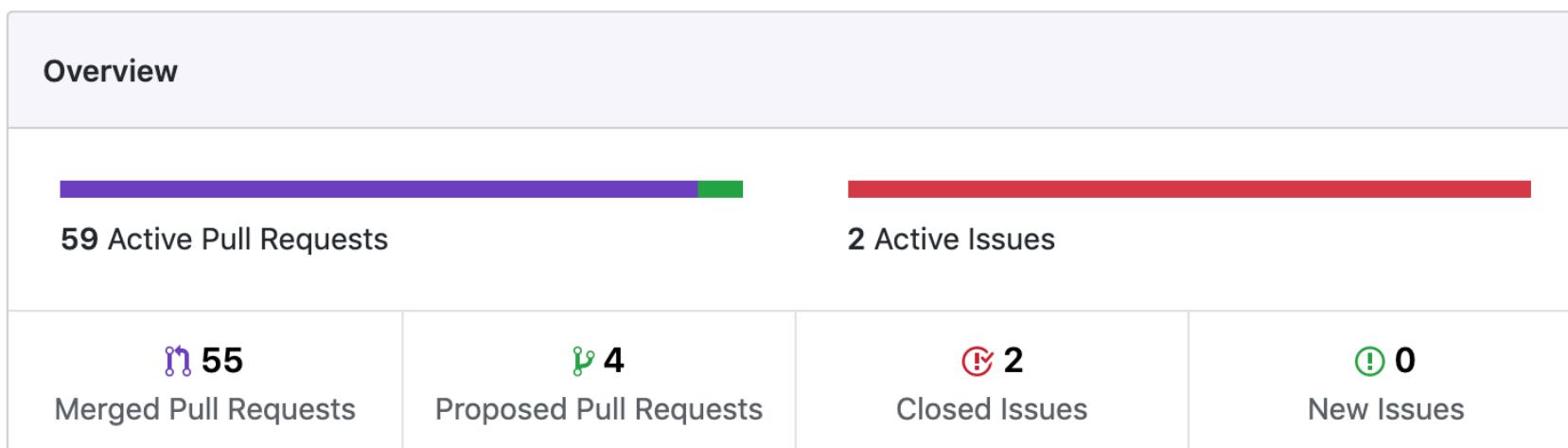
Stability and blast radius. Teams shouldn't depend on things that are weak or fragile. PIRs. SLIs/SLOs.

Adopt product-thinking. Continuously improve through small iterations. Gather data/metrics.

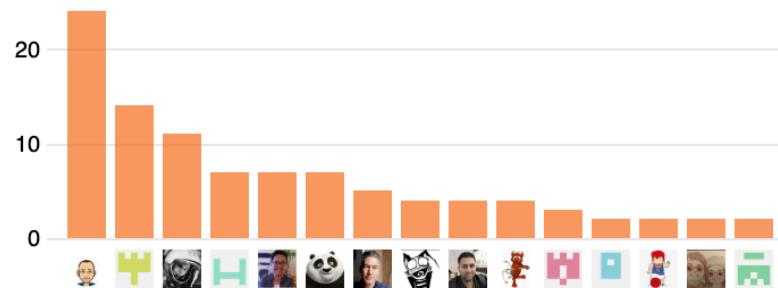
SERVICE CATALOGUE

October 11, 2019 – November 11, 2019

Period: 1 month ▾



Excluding merges, **20 authors** have pushed **55 commits** to master and **103 commits** to all branches. On master, **56 files** have changed and there have been **1,759 additions** and **538 deletions**.

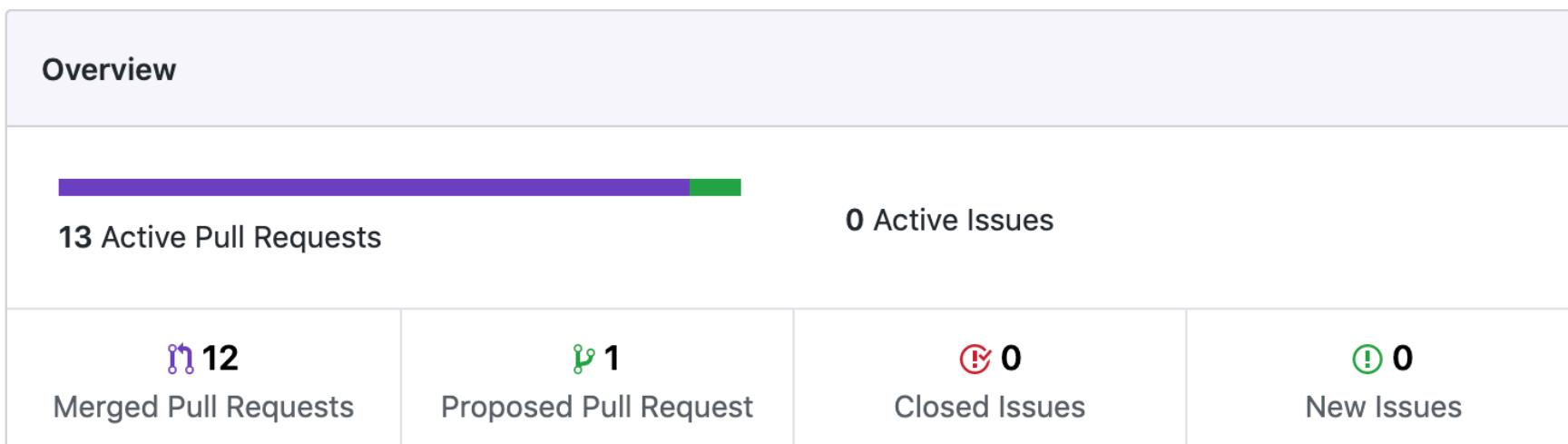


 55 Pull requests merged by 16 people

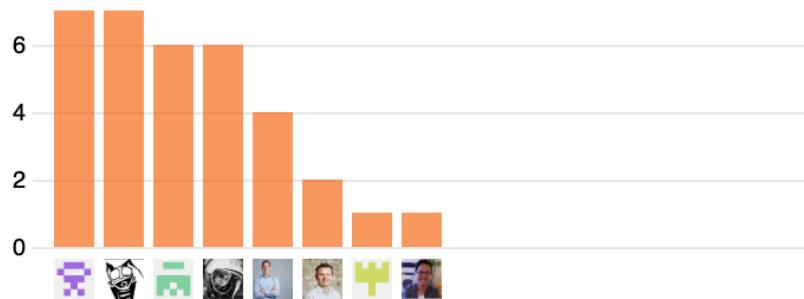
SECURE PIPELINE

October 11, 2019 – November 11, 2019

Period: 1 month ▾



Excluding merges, **8 authors** have pushed **19 commits** to develop and **34 commits** to all branches. On develop, **17 files** have changed and there have been **1,778 additions** and **25 deletions**.



 12 Pull requests merged by 6 people

METRICS & PRODUCT DEVELOPMENT

STABILITY METRICS

- SLIs/SLOs
- # Incidents
- PIRs

SERVICE CATALOG METRICS

- # Total Products
- # Deployments
- # Updates
- Version drift
- Adoption vs out-of-box

“State of DevOps” Report



sumo logic

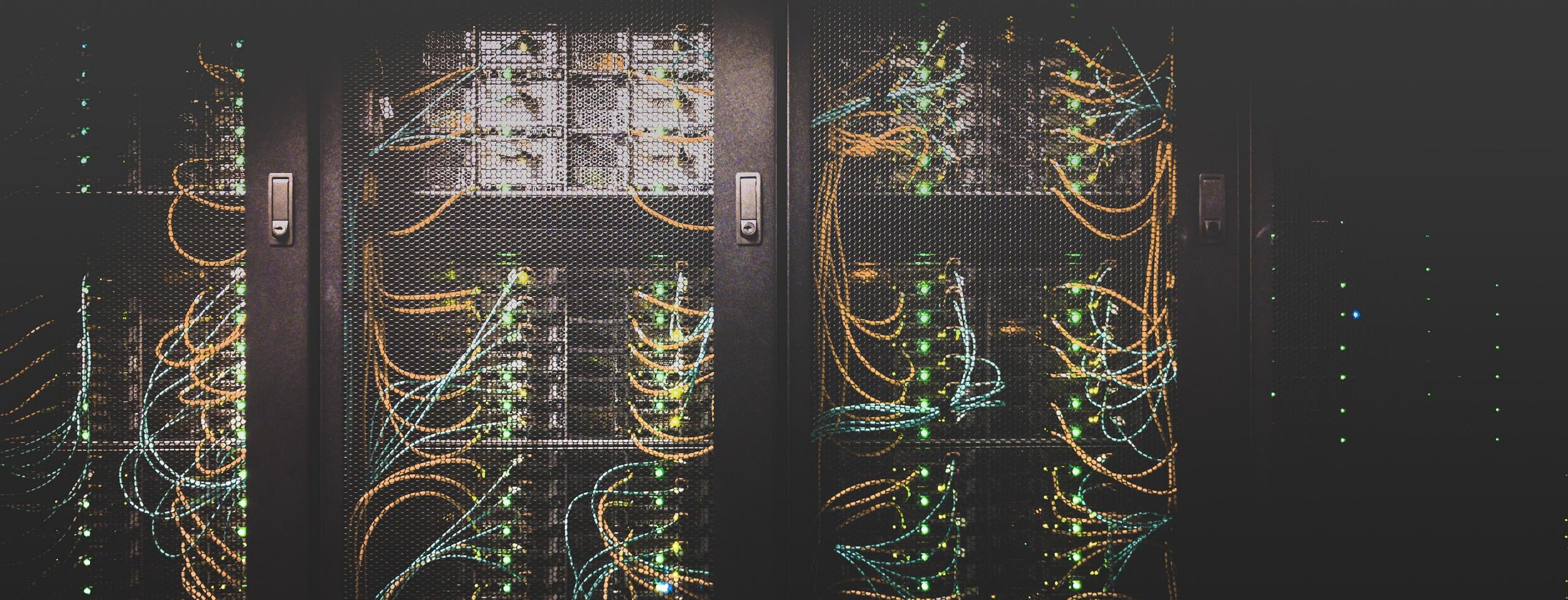
CLOUD & SRE ENABLEMENT

EVOLVING FROM DOING TO ENABLING

Internal training/workshops

User guides, reference examples

Community building



**Thank you!
We're hiring!**