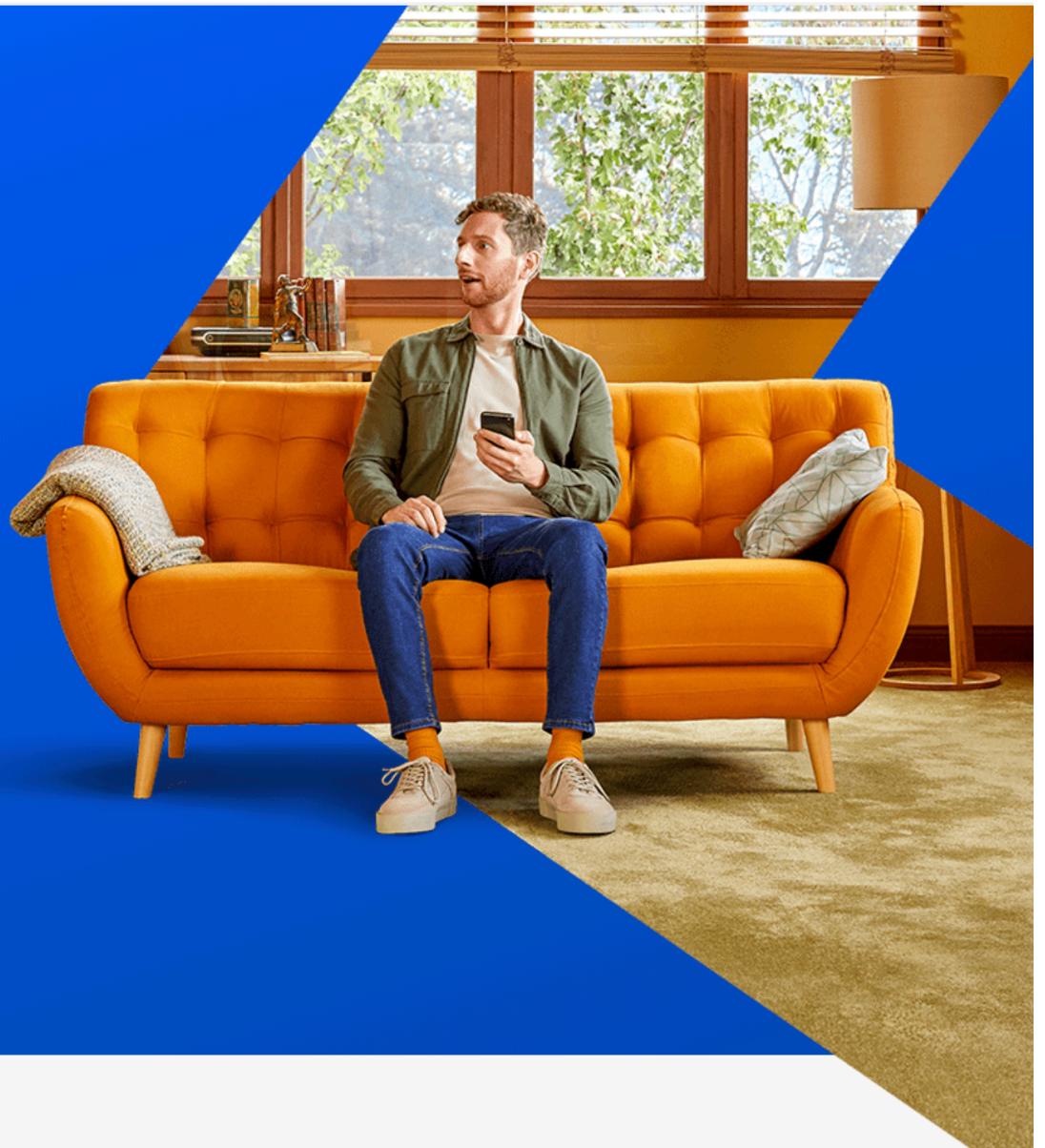


Accelerating Cloud & SRE Capability

Jonathan Gomez, Principal Engineer - Cloud & SRE, Latitude
Sumo Logic Melbourne User Group - 5 December 2019

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?

[Personal Loans >](#)[New and Used Car Loans >](#)[LatitudePay >](#)[Credit Cards >](#)[Insurance >](#)

A photograph of a roller coaster track, likely the Kraken at SeaWorld Orlando, featuring teal and orange structural elements. The track curves through a landscape dotted with palm trees under a clear sky.

#time-to-value

How many people are required to deliver a product/feature?

Is it easy to release to production?

When something goes wrong, what happens?

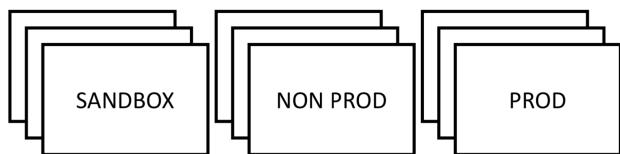
**INTERNAL PLATFORMS CAN
BE EFFECTIVE IN
ACCELERATING CHANGE**

CLOUD NATIVE PLATFORM (CNP)

PLATFORM PRODUCTS

Tenancies

Isolated environments



Service Catalogue

Common Building Blocks



Secure Pipeline

Pipeline Generation Framework



Cloud provider



SaaS Tooling Ecosystem

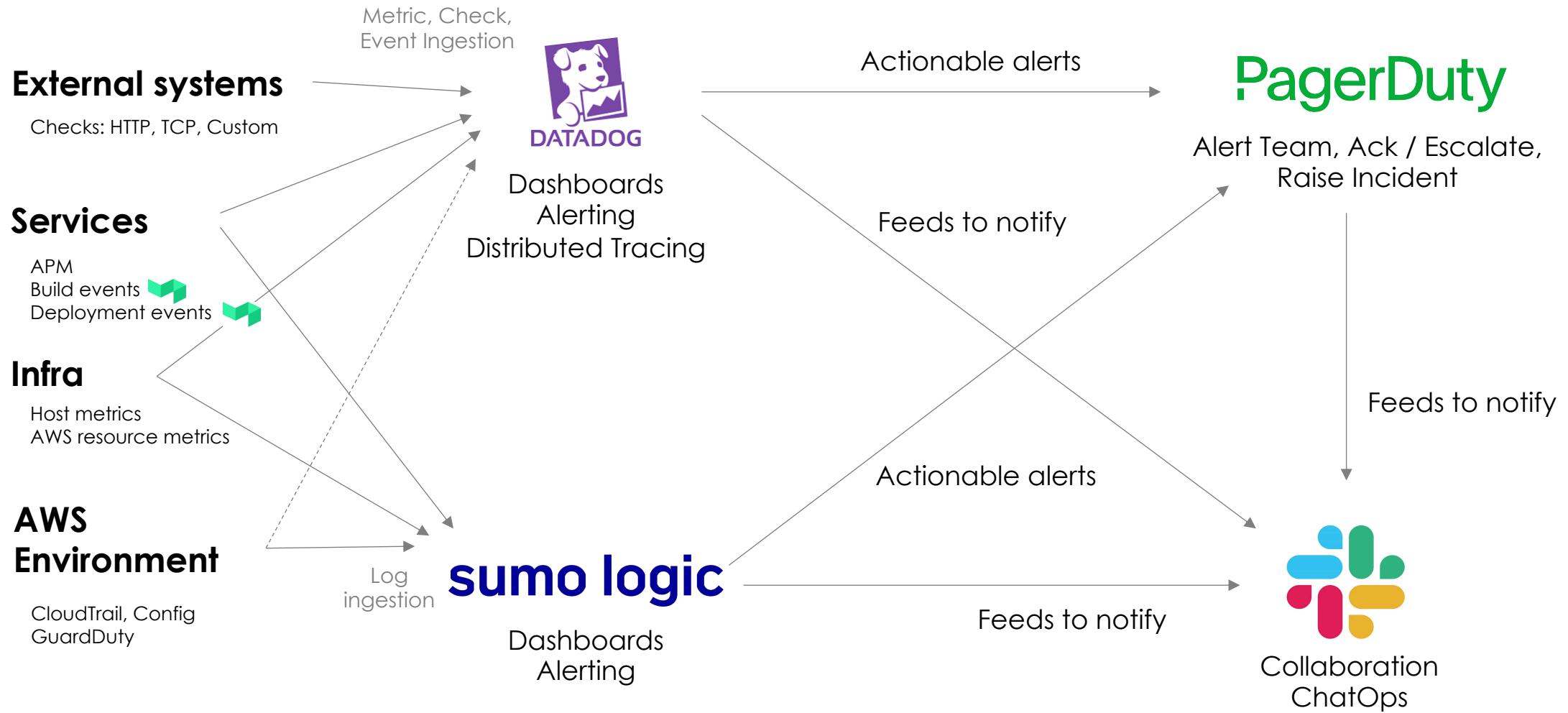


Buildkite



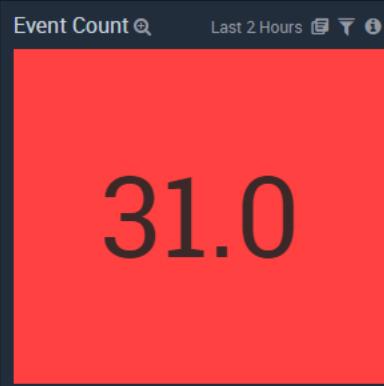
PagerDuty sumo logic

MONITORING & ALERTING WORKFLOWS



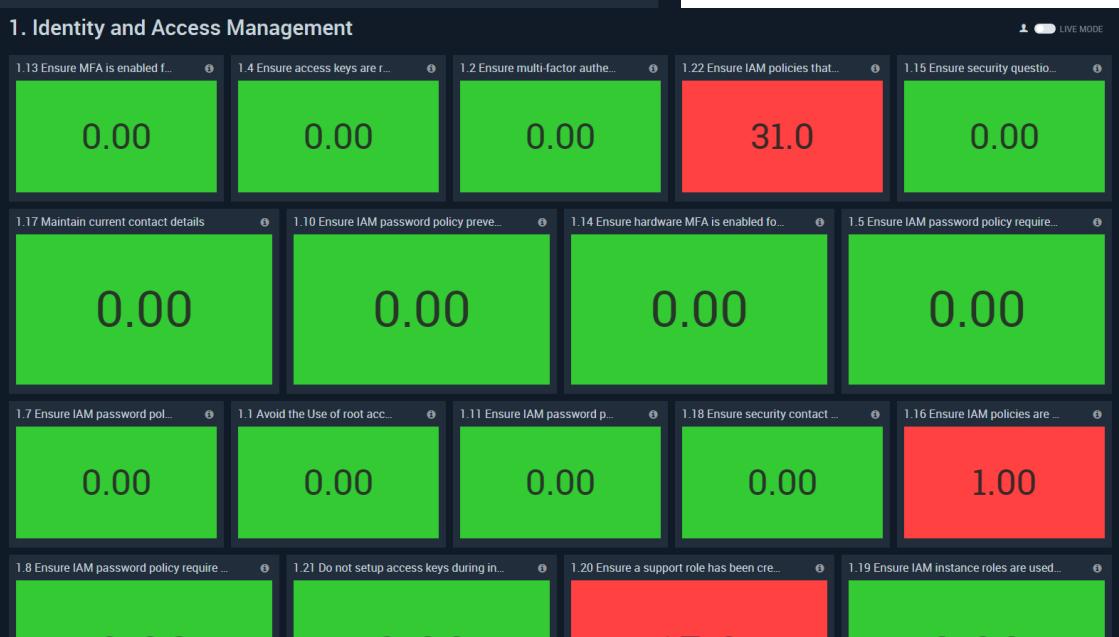
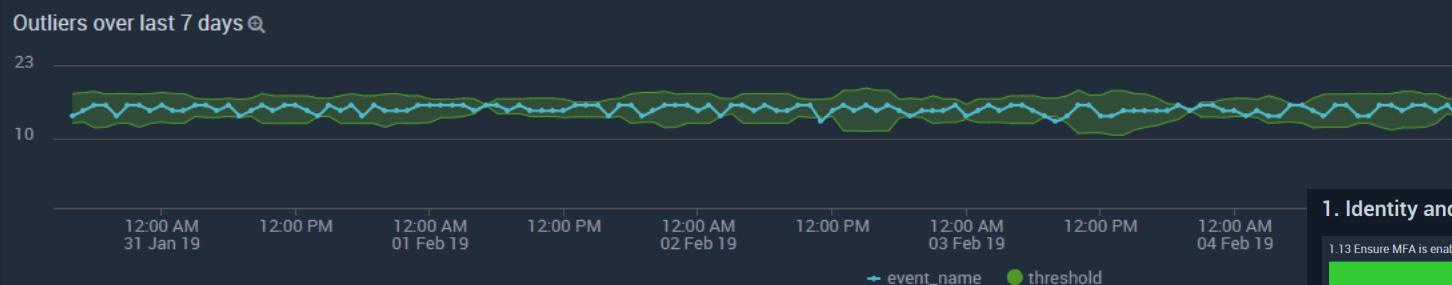
1.22 Ensure IAM policies that allow full admin privileges are not created

LIVE MODE [From Panel]



Aggregate List of events Last 2 Hours

#	event_name	account_id	account_env	account_name	_count
1	non-prod-iam-no-used-all-all-policy	504087344563	TEST	Ifscnptest-assurance	8
2	non-prod-iam-no-used-all-all-policy	344212904289	TEST	Ifscnptest-auth	8
3	prod-iam-no-used-all-all-policy	344212904289	TEST	Ifscnptest-auth	7
4	prod-iam-no-used-all-all-policy	504087344563	TEST	Ifscnptest-assurance	8



MAINTAINABILITY VIA DASHBOARDS AS CODE

```
dashboard:
  panels:
    panel1:
      name: "Event Count"
      query: |
        | count
      viewerType: svv
    panel2:
      name: "Aggregate List of events"
      query: |
        | lookup account_name, account_env from shared/accounts/csv on account_id=account_no
        | count by event_name, account_id, account_env, account_name, request
      viewerType: table
    panel3:
      name: "Events over last 7 days"
      query: |
        | lookup account_name, account_env from shared/accounts/csv on account_id=account_no
        | timeslice 1h
        | count by _timeslice, event_name
        | transpose row _timeslice column event_name
      viewerType: line
    panel4:
      name: "Outliers over last 7 days"
      query: |
        | lookup account_name, account_env from shared/accounts/csv on account_id=account_no
        | timeslice 1h
        | count(event_name) as event_name by _timeslice
        | outlier event_name window=5,threshold=3,consecutive=2,direction=+
      viewerType: line
```

MAKING STATS VISIBLE OUTSIDE SUMO

Saturday, 19 Oct 2019: 3071 system errors reported

Known Issues: 8

2769 errors: [OBS-284](#): 500 - INC1112110 - application stuck at task...

151 errors: [ODDS-13532](#): accounts-worker: exception calling [REDACTED]

5 errors: [ODDS-11729](#): INC1125375 - [REDACTED] responding with...

2 errors: [ODDS-14837](#): logs: messages throws "createHangUpError"...

2 errors: [ODDS-13531](#): odds-notification: Outer catch ServerError:...

[Show more](#)

Unrecognised System Errors: 138

[2019-10-19 23:20](#)

[2019-10-19 23:20](#)

[2019-10-19 23:10](#)

[2019-10-19 23:10](#)

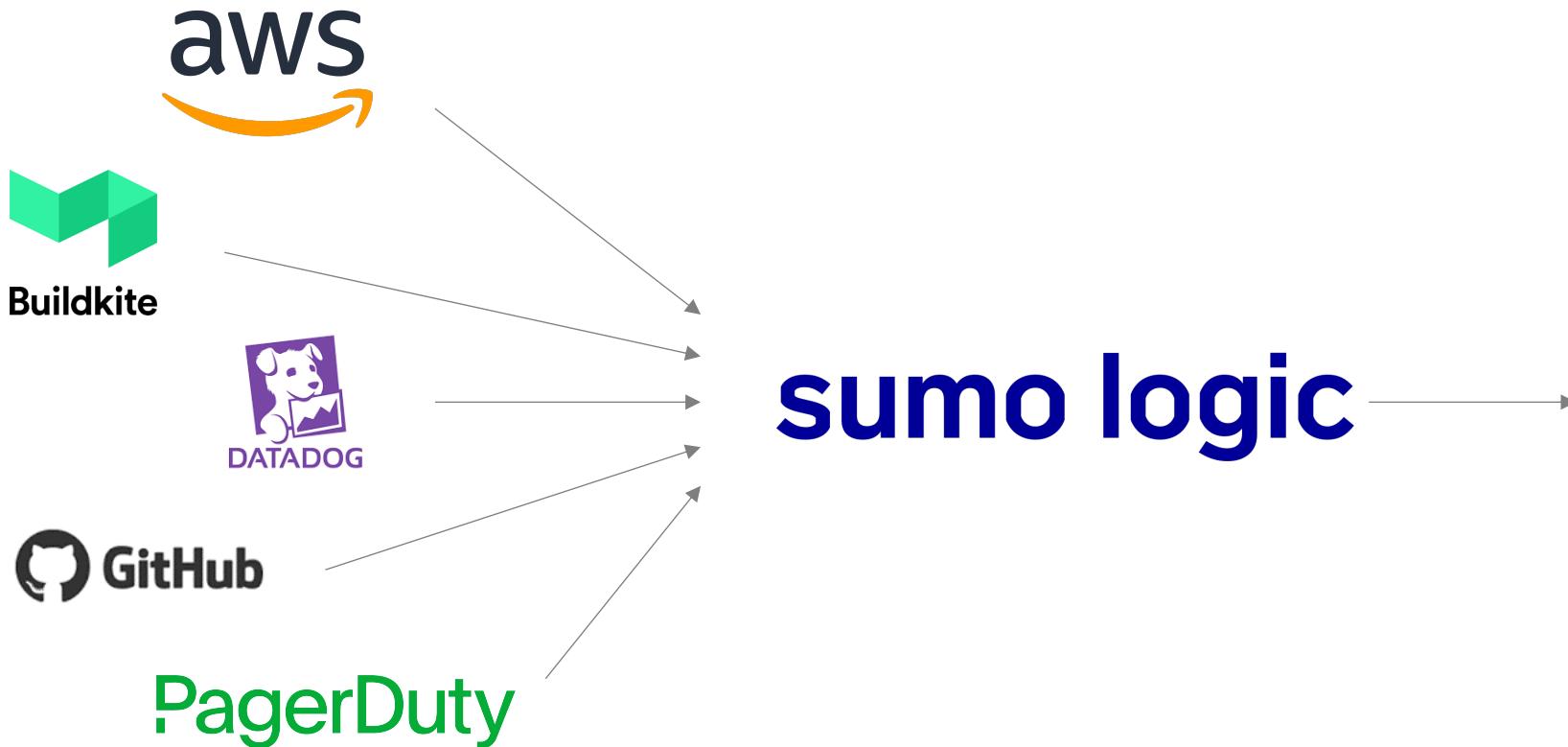
[2019-10-19 23:05](#)

[Show more](#)

**HOW CAN WE MEASURE
CLOUD & SRE CAPABILITY
PROGRESS & VALUE?**

PLATFORM INSIGHTS

CLOUD NATIVE PLATFORM
TOOLING ECOSYSTEM



LATITUDE

State of DevOps Report

December 05, 2019

Overview

Key DevOps Metrics

- Deployment Frequency in Production ([link](#))

02 - Deployment Frequency



LIVE MODE



[From Panel]

4 Key DevOps Metrics

Filter: PROD | NONPROD | *

Made possible by [cnp-buildkite-events](#) deployed via [Buildkite](#)Reference [4 Key DevOps Metrics](#)

Deployments

46.0

Average Daily Deploy...

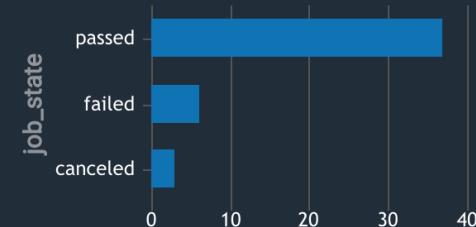
28.8

% Deployment



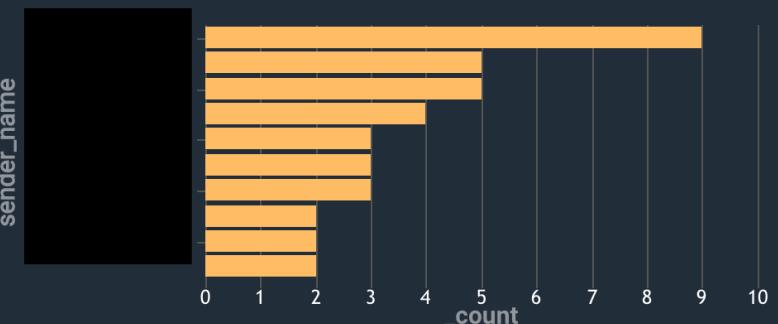
CNP Builds ● Tenancy Builds

Deployment Status



Top 10 - Per User

Last 24 Hours



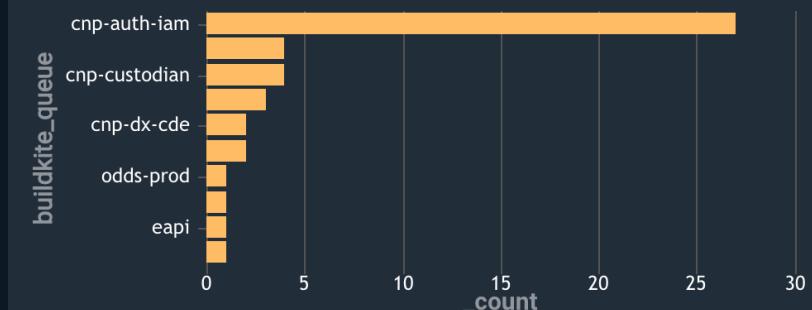
Top 10 - Per Pipeline

Last 24 Hours



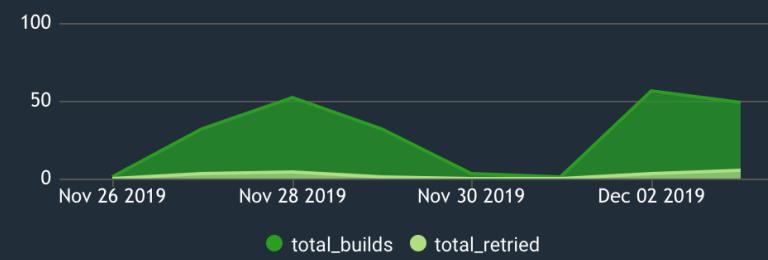
Top 10 - Per Account

Last 24 Hours



Invocations - Total vs Retries

Last 7 Days



Failures sorted by count

Last 24 Hours

1	cnp-access-manager	15	6.66667
2	cnp-access (cnp-iam user access)	6	16.66667
3	service-cards	2	100
4	appsec-defectdojo	2	50
5	service-ocr-worker	1	100

Failures sorted by error rate

Last 24 Hours

#	pipeline_name	deployments	percentage_failed
1	service-cards	2	100
2	service-ocr-worker	1	100
3	appsec-defectdojo	2	50
4	cnp-access (cnp-iam user access)	6	16.66667

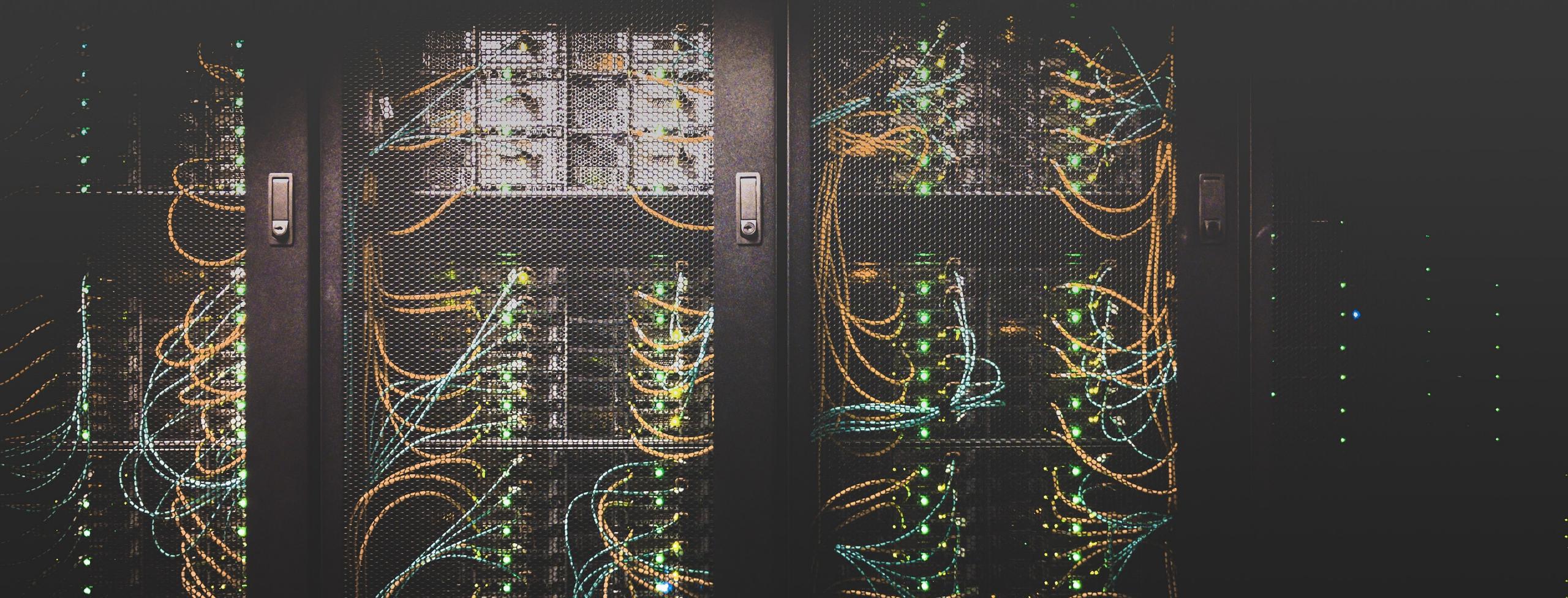
METRICS INFORM PLATFORM DEVELOPMENT

STABILITY METRICS

- SLIs/SLOs
- # Incidents
- PIRs

PRODUCT METRICS (e.g. Service Catalogue)

- # Total Products
- # Deployments
- # Updates
- Version drift



Thank you!