

# ObservabilityCON

## ON THE ROAD



# Richard 'RichiH' Hartmann

Office of the CTO

Grafana Labs

# Welcome





The flagship observability conference



### ObservabilityCON ON THE ROAD

Bringing ObsCON  
content to your city

### Observability Sessions

Strategic coaching for  
observability leaders



Our biggest open source community event



### GrafanaCON Local

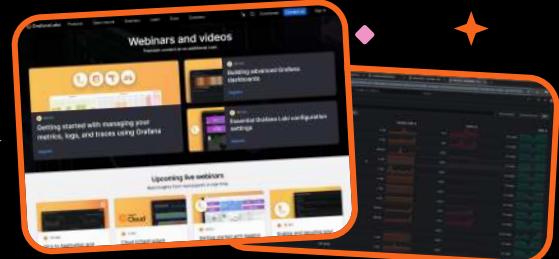
Bringing GrafanaCON  
content to your city

### Grafana & Friends MEETUPS

Community-led gatherings for  
sharing technical expertise

## Webinars

Online technical content,  
live or on demand



## Workshops

Hands-on technical instruction,  
in person or online





**25M+**

Grafana users



**5000+**

Customers



**\$250M+**

Annualized revenue

**Forbes**

**Cloud 100**

Ranked for the  
4th year in a row



Named #1  
monitoring tool  
of the year



Listed as a  
transformative  
company in cloud  
infrastructure



**Top 10**

coolest open source  
software tools in 2024  
(so far)



**Leader**

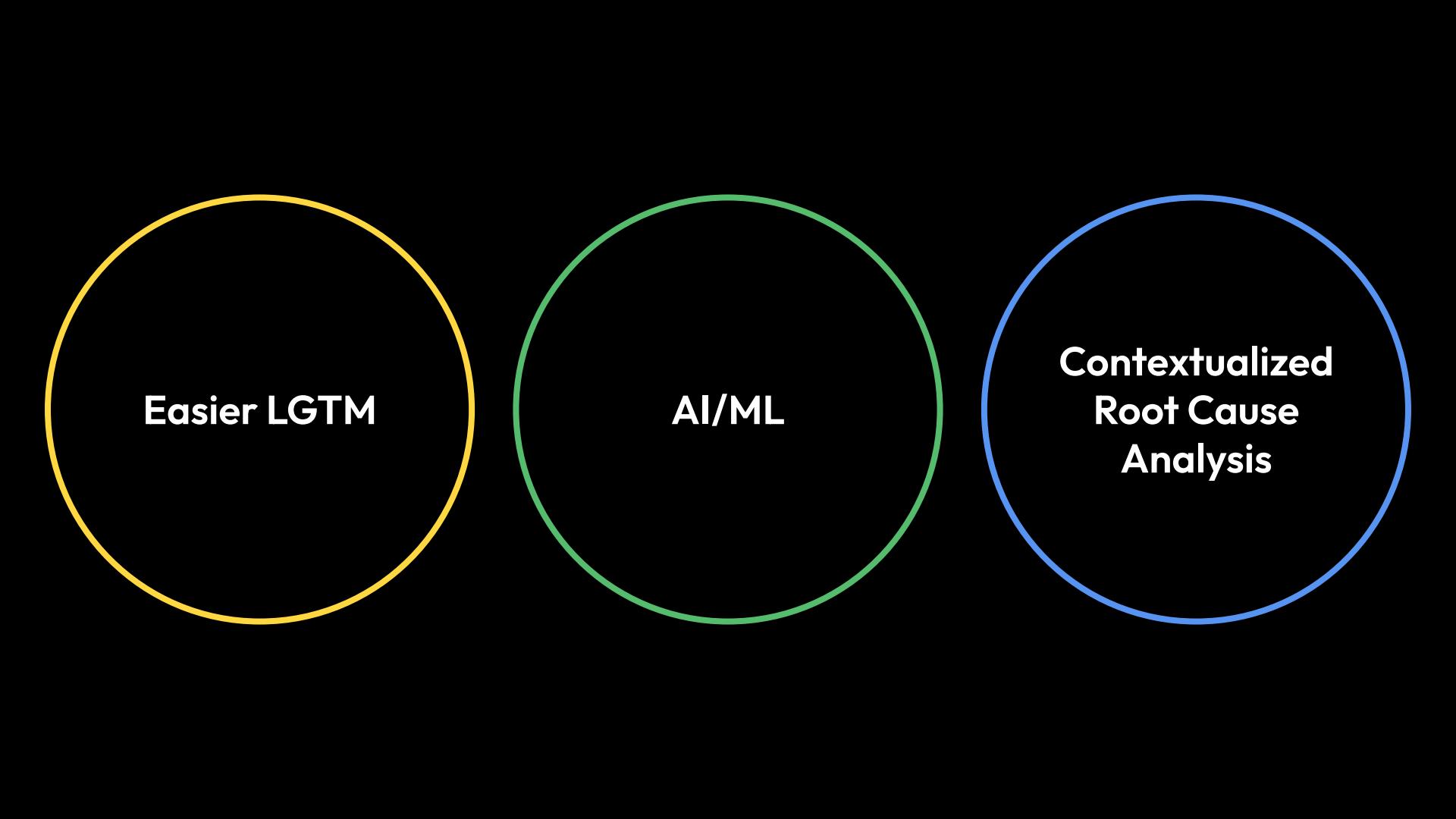
Gartner MQ for  
Observability  
Platforms

NEW



# Startup Program





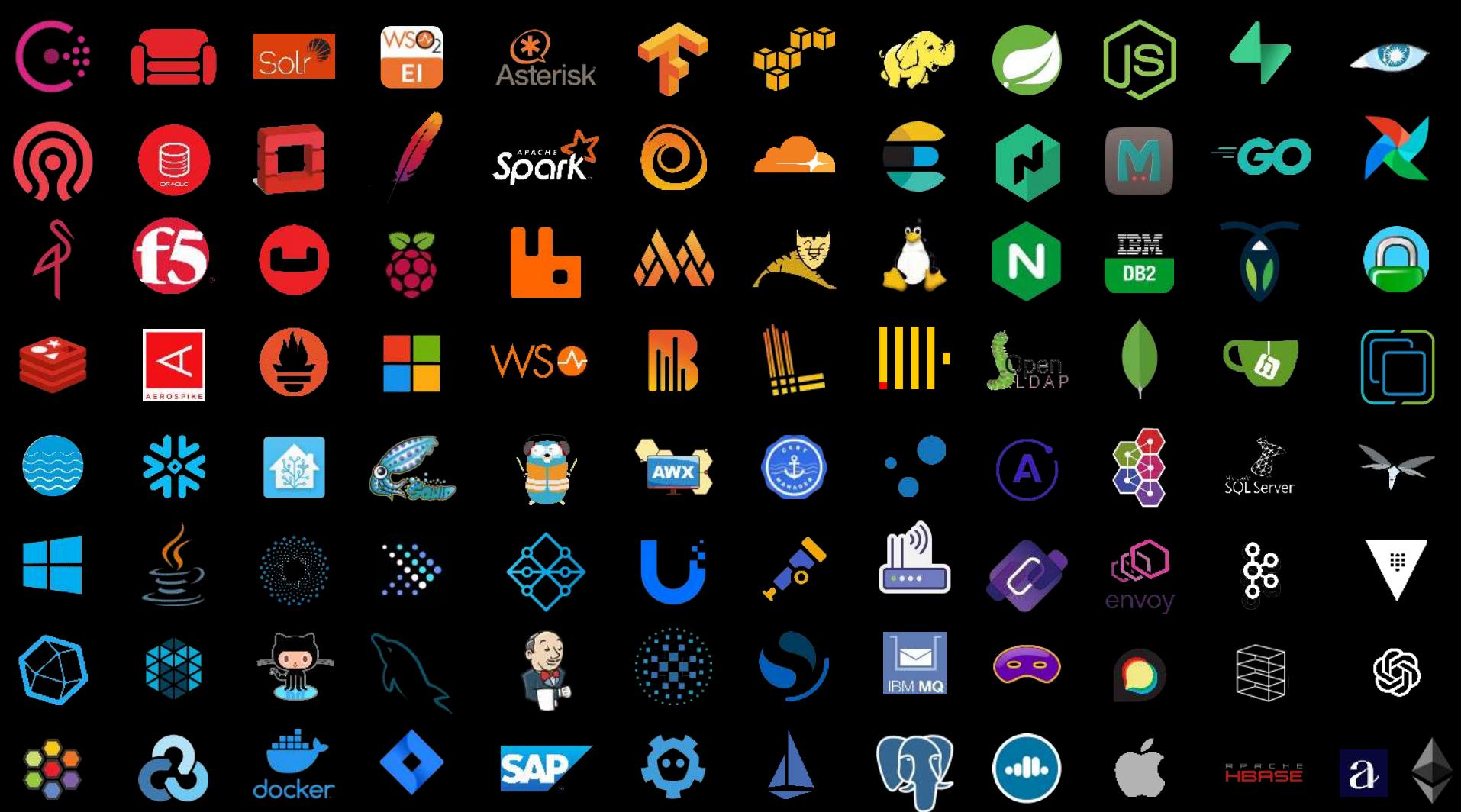
Easier LGTM

AI/ML

Contextualized  
Root Cause  
Analysis

Easier





Cloud

General Availability

# Cloud Provider Observability

Unified experience for managing multiple  
cloud environments



*“Is my site up  
in Asia?”*



Synthetic  
Monitoring



Performance  
Testing

*“Will my site  
survive Black  
Friday?”*

[Cloud](#)[Experimental](#)

# Studio

GUI-based, low-code test authoring tool

Recording - 2024-09-18\_15-03-23.har

Requests (17) Show static assets (35)

Default (8)

Messages (6)

Method	Status	Host	Path
GET	200	test.k6.io	/my_messages.php
GET	200	content-autofill-v1.google.com	/v1/pages/ChVDaHJvbWUvMTI4LjAuNjYxMy4xMTQSAkIR4O16iCZZxFDSh..
POST	302	test.k6.io	/login.php
GET	200	test.k6.io	/my_messages.php
POST	302	test.k6.io	/login.php
GET	200	test.k6.io	/my_messages.php
News (3)			
Method	Status	Host	Path
GET	200	test.k6.io	/
GET	200	test.k6.io	/news.php
GET	200	test.k6.io	/

Request Headers Payload Cookies

General

Request URL	https://test.k6.io/
Request Method	GET
Host	test.k6.io
Connection	keep-alive
sec-ch-ua	*"Chromium";v="128", "Not,A Brand";v="24", "Google Chrome";v="128.0.0.0"
sec-ch-ua-mobile	?0
sec-ch-ua-platform	*macOS*
Upgrade-Insecure-Requests	1
User-Agent	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/128.0.0.0 Safari/537.36
Accept	text/html,application/xhtml+xml,application/xml,application/javascript;q=0.7
Sec-Fetch-Site	Same-Origin

Response Headers Content Cookies

General

Status Code	200
Date	Wed, 18 Sep 2024 15:03:16 GMT
Content-Type	text/html; charset=UTF-8
Transfer-Encoding	chunked
Connection	keep-alive
X-Powered-By	PHP/8.6.40

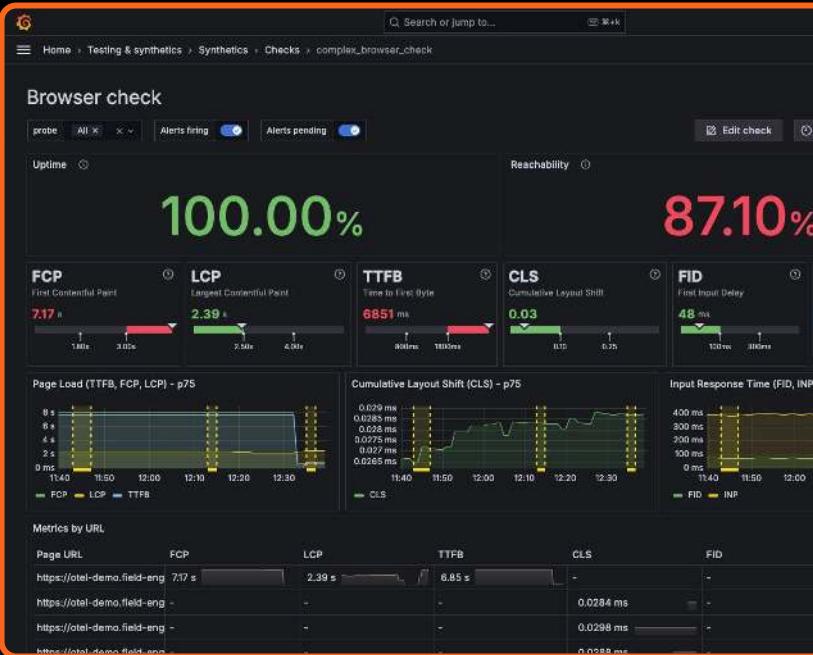
v0.0.8  
alpha  
Report  
Issues

Cloud

Private Preview

# Browser-based synthetics

Comprehensive real-browser synthetic monitoring, with Web Vital

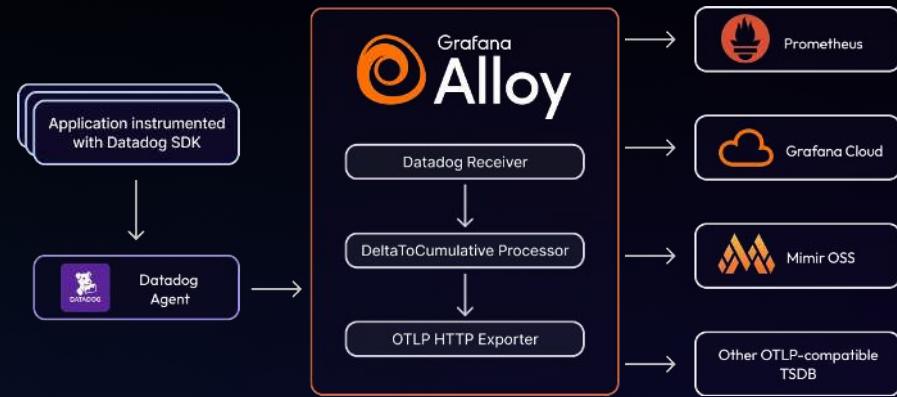


OSS

General Availability

# OpenTelemetry Datadog Receiver

Migrate from Datadog to any OTEL-compatible  
backend, including Prometheus





## Explore Metrics

A screenshot of a log exploration interface. At the top, there's a chart titled "Log volume" showing a fluctuating signal over time. Below it is a table titled "Logs" with columns for Time, spend\_id, thread\_name, service\_name, shippingCountry, service\_interceptor, and tx\_type. The table lists several log entries, each with a timestamp, a unique ID, a thread name, a service name, a country, an interceptor, and a transaction type. In the bottom right corner of the main panel, there is an orange rounded square containing a stylized 'L' icon.

Time	spend_id	thread_name	service_name	shippingCountry	service_interceptor	tx_type
2024-09-23 11:04:45	83e276e037e7c7	http://10.0.0.1:8081	fraud-detection	FR	ecommerce	down
2024-09-23 11:04:55	1600fbf0405702	http://10.0.0.1:8081	fraud-detection	FR	ecommerce	down
2024-09-23 11:04:55	176cf1fb780d752	http://10.0.0.1:8081	fraud-detection	FR	ecommerce	down
2024-09-23 11:04:55	198304651920cd	http://10.0.0.1:8081	fraud-detection	FR	ecommerce	down
2024-09-23 11:04:55	2085319ef592cd	http://10.0.0.1:8081	fraud-detection	FR	ecommerce	down
2024-09-23 11:04:55	2285319ef592cd	http://10.0.0.1:8081	fraud-detection	FR	ecommerce	down
2024-09-23 11:04:55	332348129cc30884	http://10.0.0.1:8081	fraud-detection	FR	ecommerce	down
2024-09-23 11:04:55	432081079ec100f1	http://10.0.0.1:8081	fraud-detection	FR	ecommerce	down
2024-09-23 11:04:55	79f64c2480cc203	http://10.0.0.1:8081	fraud-detection	FR	ecommerce	down

## Explore Logs

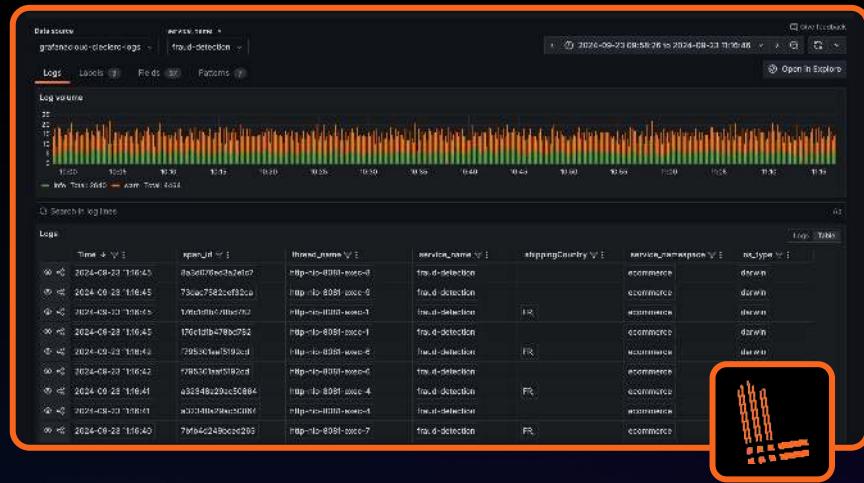


## Explore Metrics

General Availability

OSS

Cloud



## Explore Logs

General Availability

OSS

Cloud

OSS

Cloud

# Explore Apps

## Metrics

General Availability

## Logs

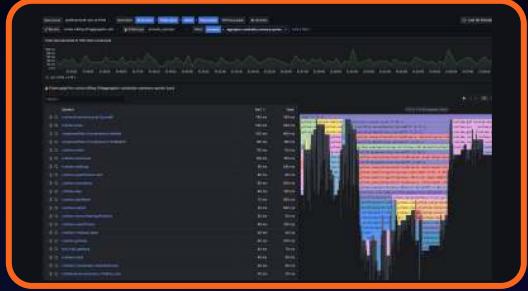
General Availability

## Traces

Public Preview

## Profiles

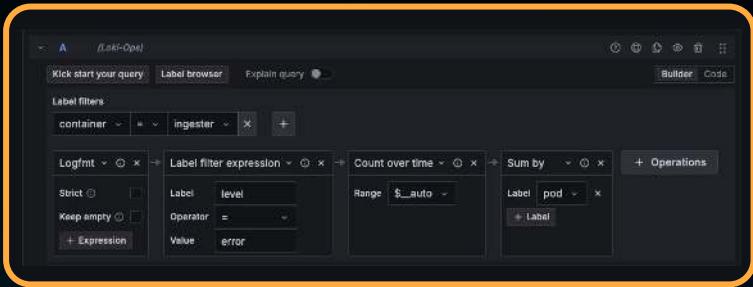
Public Preview





# Code

Action: Type out queries



# Low code

Action: Assisted query building



# No code

Action: Queryless navigation





# AI/ML

Give every engineer  
observability super powers

Cloud

General Availability

# Adaptive Metrics

Average savings

20-50%

Stacks adopted

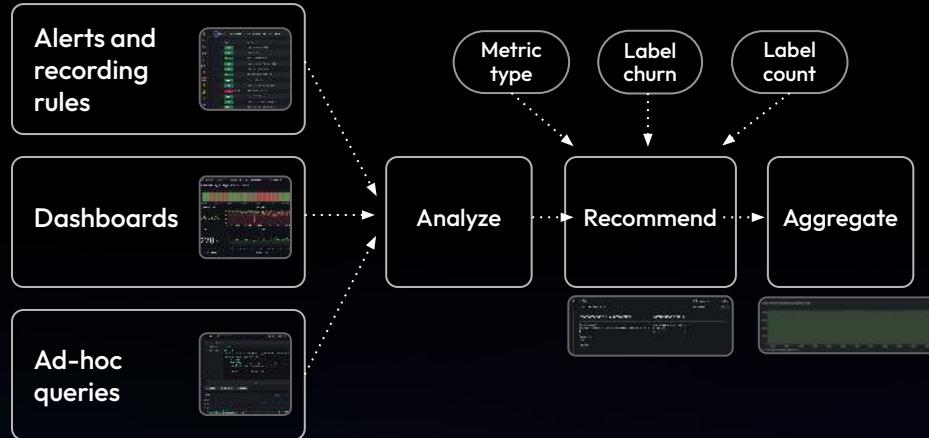
1.95k

Time series saved

640M

Aggregations applied

140k



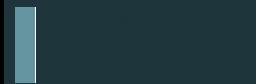
Cloud

General Availability

# Adaptive Logs

Expected savings

40-60%

Patterns	Recommended Sample Rate
<code>level=info ts=* msg="flushing stream"</code>	
<code>database * failed to connect from *</code>	
<code>query * executed with latency *</code>	
<code>level=error ts=* msg="failed to decode"</code>	
<code>org_id=* msg="push request parsed"</code>	
<code>org_id=* * * msg="Setting next state"</code>	

# Adaptive Telemetry

## Adaptive Metrics

General Availability

## Adaptive Logs

General Availability

## Adaptive Traces

Research

## Adaptive Profiles

Research

 **Grafana Labs**      welcomes      **TailCtrl**

# Large Language Model Observability

(LLM O11y)



Use eBPF to automatically instrument CUDA calls



OpenLit integration &  
app for inference oLLy



Grafana-native app  
for training oLLy

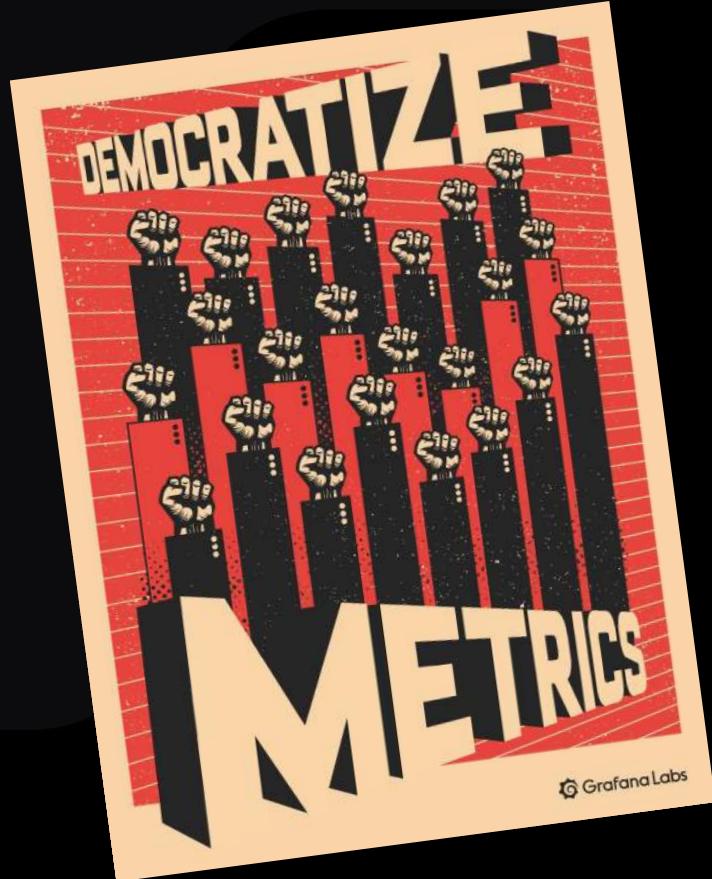
# Incident Rooms

Stop, collaborate, and listen:  
AI bot for incidents



Grafana Labs

HACKATHON



# Democratizing troubleshooting

# Why is troubleshooting so hard?

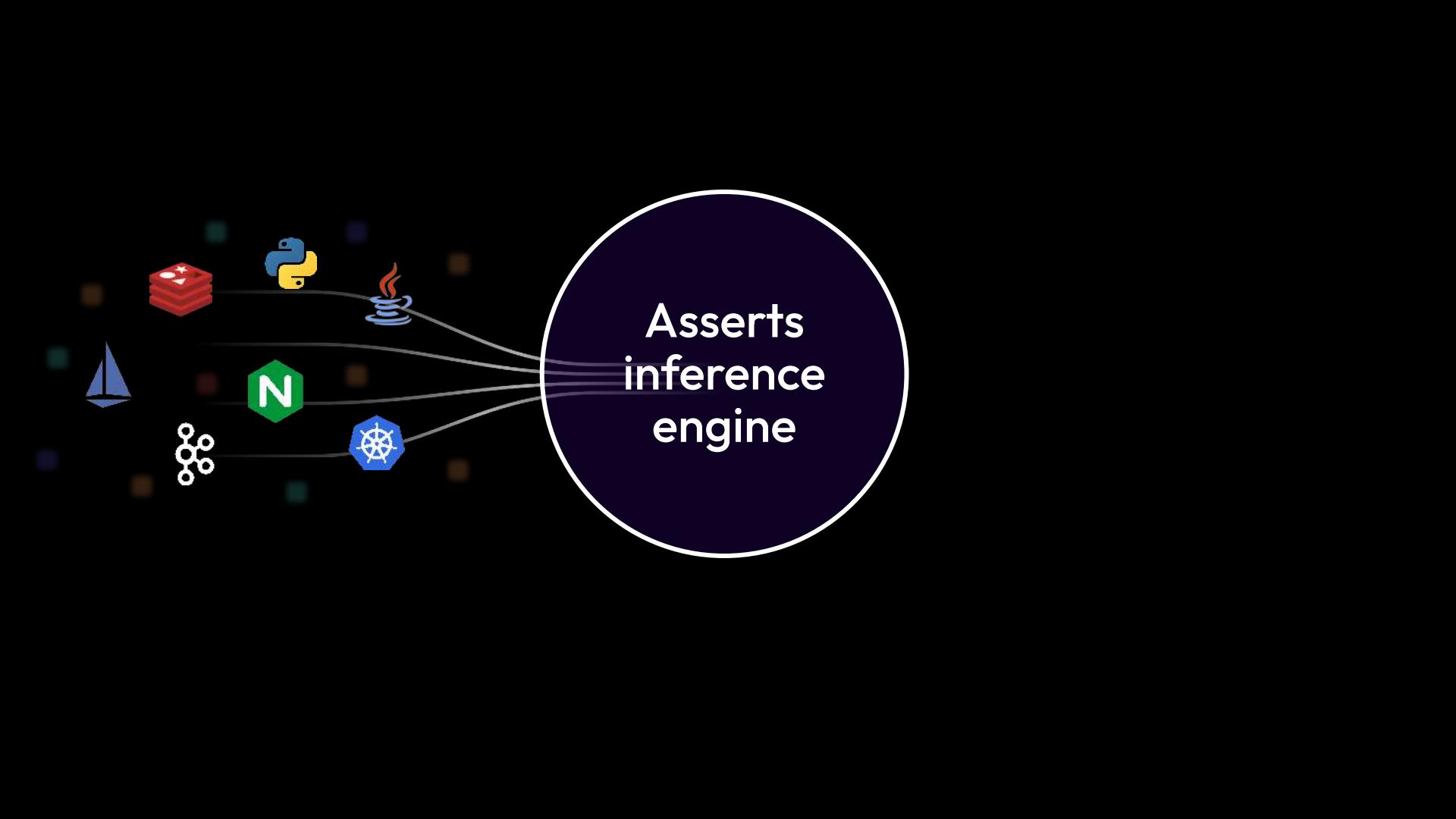
Disjointed  
visualization

Inconsistent  
labels

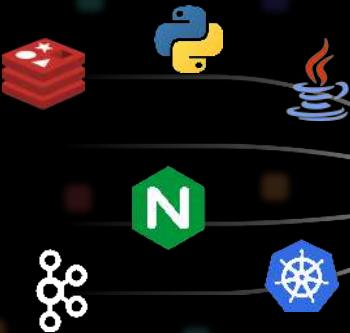
Varied  
architectures



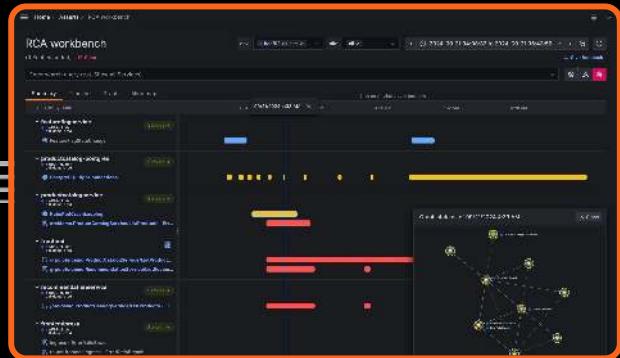
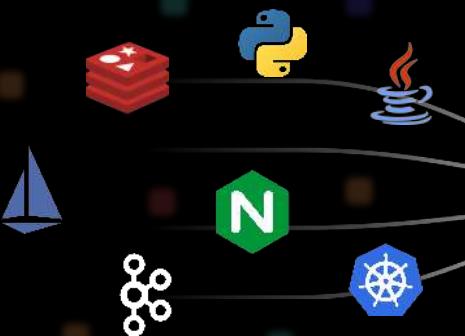




Asserts  
inference  
engine



# Asserts inference engine





“

We are asking for more insights from our existing investment in metrics, logs, traces. Asserts is about extracting more information, more connectivity, more value... for reducing MTTR, getting after incidents faster, and being able to power a healthier Aladdin platform.

Olin Gay

Director - Head of Observability, BlackRock

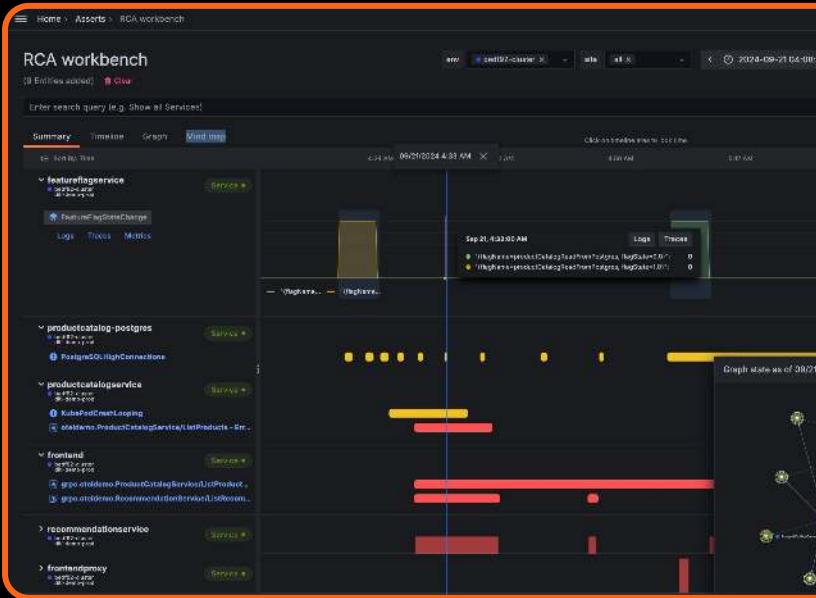
**BlackRock**<sup>®</sup>

Cloud

General Availability

# Contextualized RCA

Resolve issues faster in Grafana Cloud



Application  
Observability

Kubernetes  
Monitoring

Frontend  
Observability

SLO  
Management

## Easier LGTM

## AI/ML

## Contextualized Root Cause Analysis

**Explore Logs**

General Availability

**Explore Traces**

General Availability

**Explore Traces**

Public Preview

**Explore Profiles**

Public Preview

**OpenTelemetry Datadog Receiver**

General Availability

**k6 Studio**

Experimental

**Cloud Provider Observability**

General Availability

**Adaptive Metrics**

General Availability

**Adaptive Logs**

General Availability

**Adaptive Traces**

Research

**Browser-based Synthetics**

Private Preview

Asserts workflow with **Kubernetes Monitoring**

General Availability

Asserts workflow with **Application Observability**

General Availability

Asserts workflow with **Frontend Observability**

General Availability

Asserts workflow with **SLO Management**

General Availability

Thank you



# Q+A

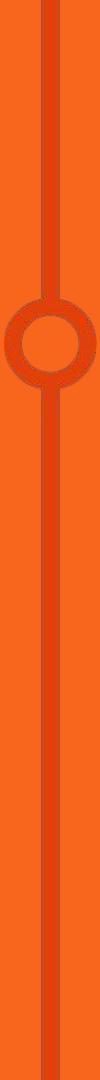
# ObservabilityCON

## ON THE ROAD



**Aaron Erickson**

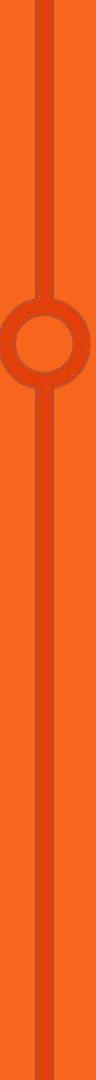
**Senior Engineering Manager**  
**NVIDIA**



# Manoj Acharya

VP Engineering  
Grafana Labs

# ObservabilityCON



**Olin Gay**

**Director - Head of Observability**  
**BlackRock**

**BlackRock** +  **Grafana Labs**

# ObservabilityCON

Q+A



# Adaptive Traces



1

## Anomaly-based policies

Capture more traces from services deviating from their historic RED metrics; scale back down after returning to normal behavior.

2

## Usage-based policies

Personalized policies based on your organization's query and usage patterns

3

## Foundational policies

Standard set of policies that preferentially select for erroring and slow traces. Allows for immediate TCO reduction.

# Adaptive Telemetry

Experiment tracking  
ala Weights and  
Biases

eBPF: extend Beyla  
for  
CUDA call  
instrumentation

OpenLit integration  
(dashboards  
for this, cloud  
integration)



Slurm Analyst

The query has successfully retrieved the count of job failures per day for the last week of March 2024. Here is the data:

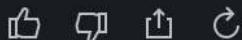


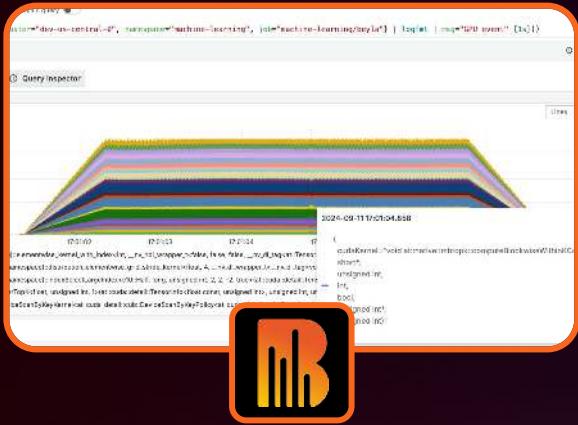
This data can now be used to plot a graph of Slurm job failures for the last week of March.



Supervisor

The query has successfully retrieved the required data, and the user's request has been fulfilled with the job failure counts for the last week of March.





Use eBPF to automatically instrument CUDA calls



OpenLit integration &  
app for inference oLLy



Grafana-native app  
for training oLLy