

# Grafana is the the world's most popular operational dashboarding technology

**1.2M+ active installations**  
of Grafana, and growing

**20M users**  
of Grafana



**3K+ customers**  
Significant enterprise growth  
in the last year

**54K GitHub stars**  
Accelerating Grafana adoption  
and development



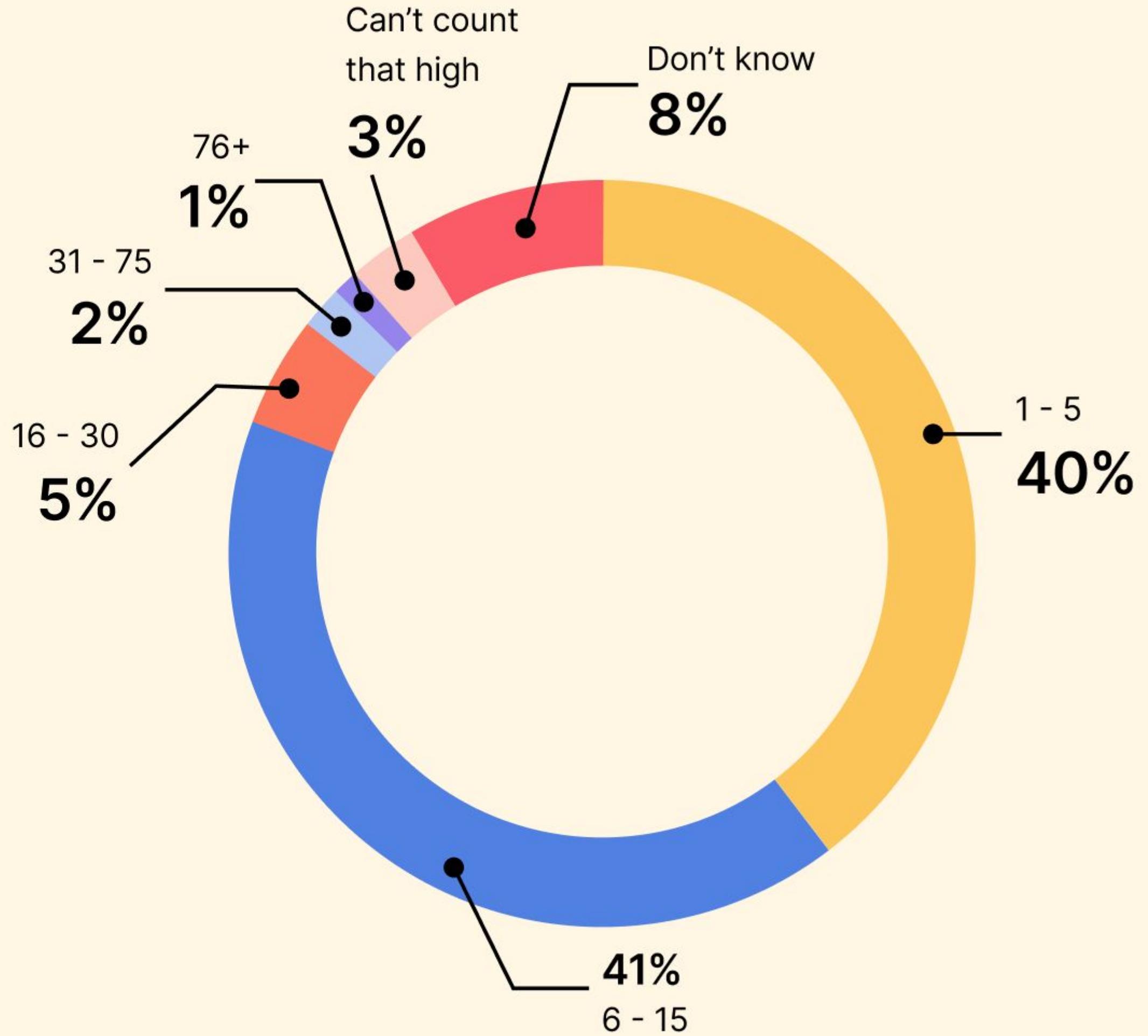


# Grafana Labs' big tent strategy

# Observability Survey

2023

How many different observability technologies does your entire company use?



Responses from 250+ practitioners  
Not limited to users or customers  
Conducted between 9/2022 – 1/2023

# Key takeaways →

Read the report



Companies are juggling lots of tools and data sources



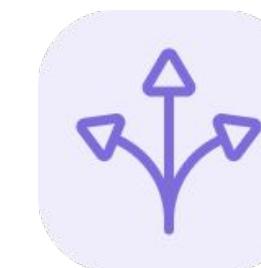
Organizations are at different stages in their observability journey



Consolidated observability saves time and money



Accountability and market maturity come to observability



Not all ROI is the same



>60 observability integrations



## Efficiency

### Overview

#### Cluster CPU Efficiency

4 clusters total

**50%**  
well utilized  
(2 clusters)

**50%**  
underutilized  
(2 clusters)

**0%**  
overutilized  
(0 clusters)

#### Node CPU Efficiency

15 nodes total

**47%**  
well utilized  
(7 nodes)

**47%**  
underutilized  
(7 nodes)

**7%**  
overutilized  
(1 node)

### Cluster resource usage

Filter Clusters

Filter Providers

Cluster	Provider	Nodes	Average CPU usage pa...	Max CPU usage (6h)	Average memory usage...	Max memory usag...
prod-api-svc	gce	3	51%	52.61%	25%	25.35%
se-demo-cluster	gce	9	45%	46.89%	22%	22.84%
opentelemetry-sedemo	gce	3	8%			
opentelemetry-demo	gce	3	7%			



## Kubernetes Monitoring

### Cluster navigation

Nodes

Dashboards

Alerts

Configuration

Search for workloads

Select workload type for more details

Only show workloads with unhealthy pods

Updated 7s ago

overview / se-demo-cluster - flux-testing

Namespace: flux-testing in se-demo-cluster

Copy namespace name  Explore pod status

Workload	Type	Namespace	Alerts	Pods
adservice	Deployment	flux-testing	2	0 / 1
cartservice	Deployment	flux-testing	None	1 / 1
checkoutservice	Deployment	flux-testing	None	1 / 1
currencyservice	Deployment	flux-testing	None	1 / 1
emailservice	Deployment	flux-testing	None	1 / 1
frontend	Deployment	flux-testing	None	1 / 1
loadgenerator	Deployment	flux-testing	None	1 / 1
paymentservice	Deployment	flux-testing	None	1 / 1
productcatalogservice	Deployment	flux-testing	None	1 / 1



LGTM  
Open



Big tent  
Composable



Grafana Cloud  
Easier



# Grafana Incident Response & Management (IRM)



Grafana  
**Alerting**



Grafana  
**OnCall**



Grafana  
**Incident**

**Alerting**  
Alert rules and notifications

Alert rules

Search by data source: All data sources

Search by label: Search, Firing, Normal, Pending, Alert, Recording

Rule type: List, Grouped, Starred

View as: Timeline, Grid

1082 rules: 254 normal, 793 recording

Grafana

- Alex D
- Energy
- General Alerting

**OnCall**  
Developer-friendly incident response (1.0.0)

Schedule Team 1

Daily timezones: Current timezone: Etc/Universal, local time: 11:52

Rotations: 17 Jul - 23 Jul

17 Jul: Michael, Vadim

18 Jul: Michael, Vadim

19 Jul: Michael, Vadim

20 Jul: Michael, Vadim

21 Jul: Michael, Vadim

22 Jul: Michael, Vadim

23 Jul: Michael, Vadim

LAYER 1: Michael, Vadim

LAYER 2: Michael, Vadim

**Incident**  
Smart incident management

Incidents

Grafana ML high CPU usage and latency in prod-us-central

Started 24 Jan 2022, 09:56  
Ended 24 Jan 2022, 12:48  
Unresolve Incident

COMMANDER: yas queried for data in time range

INVESTIGATOR:

Open Google Docs: pending  
Join Google Meet: pending

Machine Learning latency dashboard: GRAFANA

Grafana Labs Status - Machine Learning - increased latencies: STATUS.GRAFANA

Incident 772 dashboard: GRAFANA

Google Docs - create and edit documents online, for free!: DOCS.GOOGLE

gist.github.com: GITHUB

Grafana Cloud SLOs: GRAFANA

"What do you think about this?" Slack message

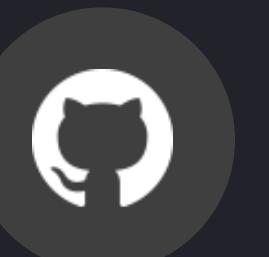




- ✓ Open Source tool
- ✓ For load *everything* testing!
- ✓ Programmatic
- ✓ Simple but extremely powerful
- ✓ Extensible(*Browser, chaos, cripto, etc*)
- ✓ Easy to use!



k6.io/slack



grafana/k6



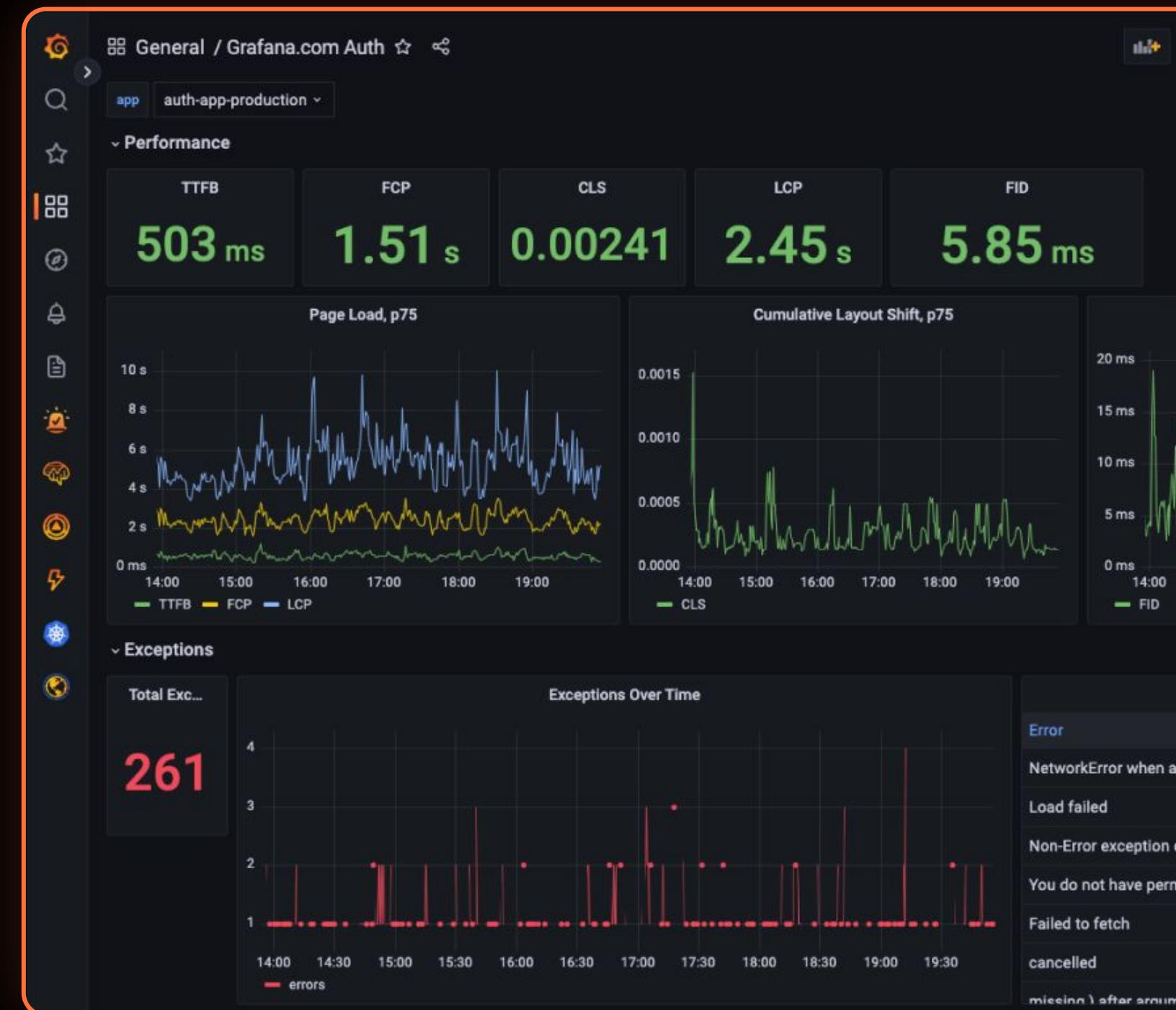
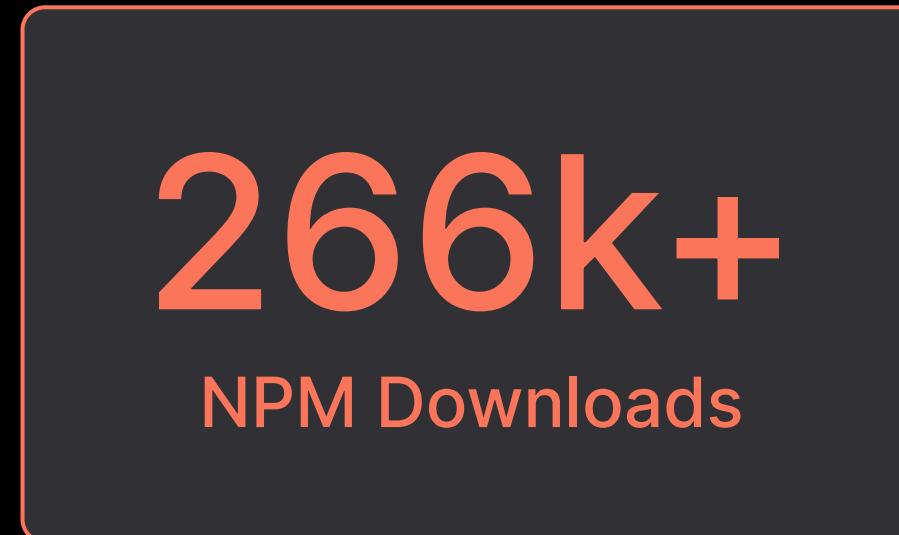
community.k6.io





# Grafana Faro

An open source web SDK for frontend application observability



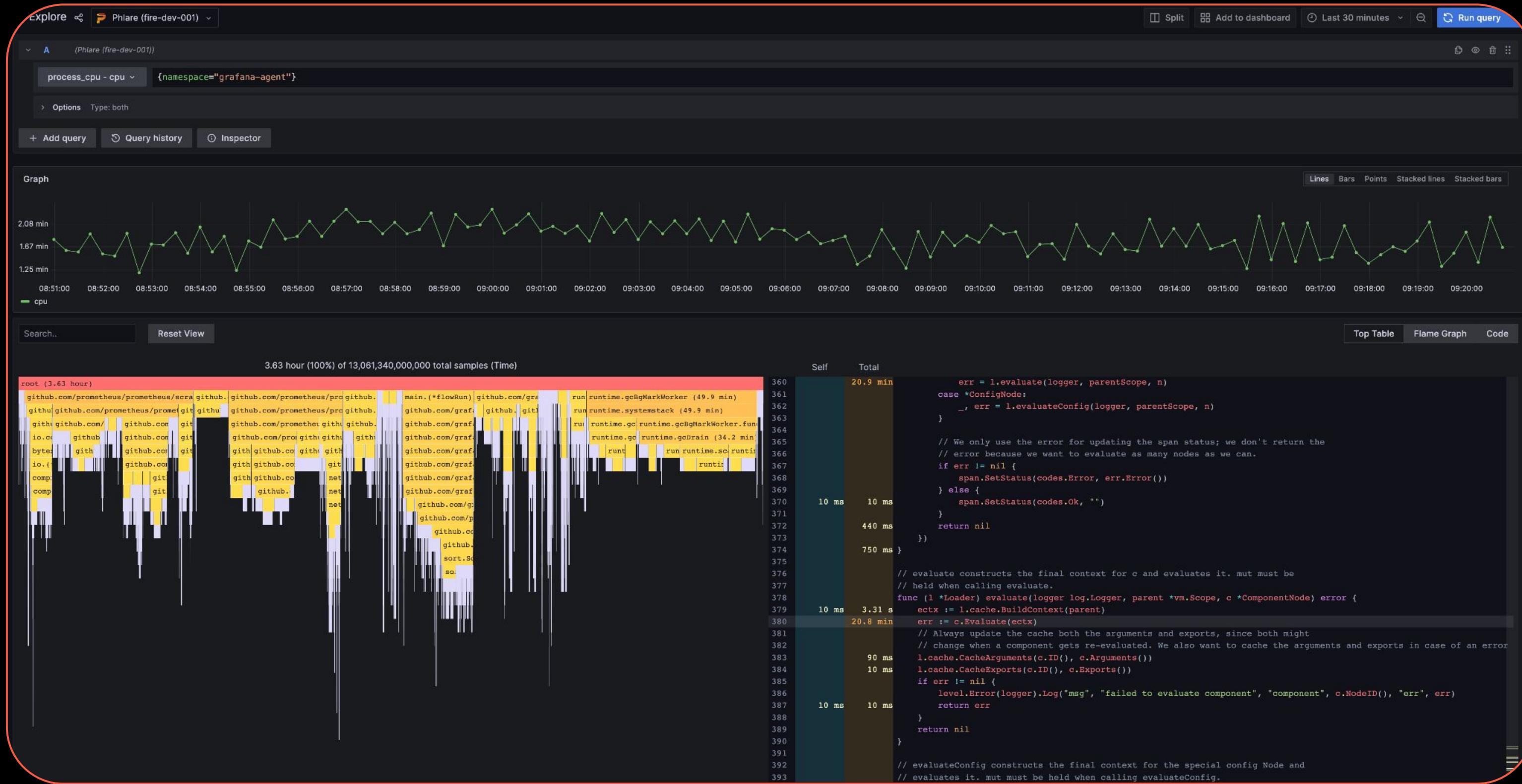


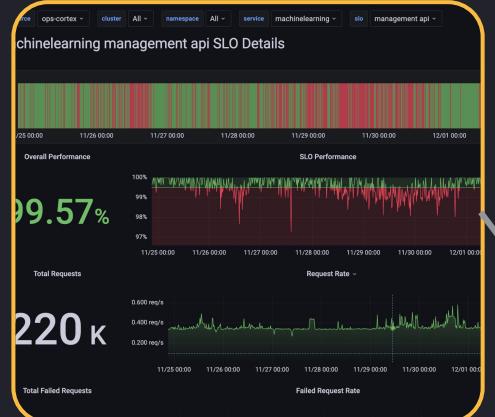
# Grafana **Pyroscope**



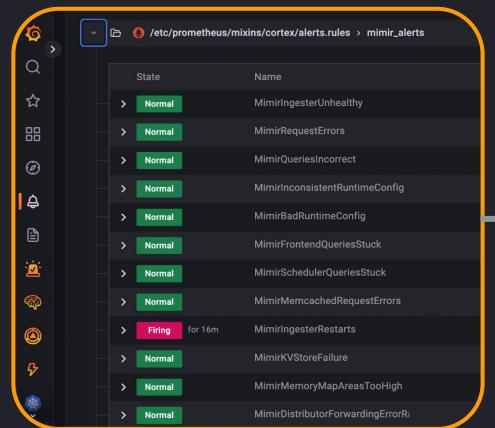
Grafana

Phlare +  Pyroscope

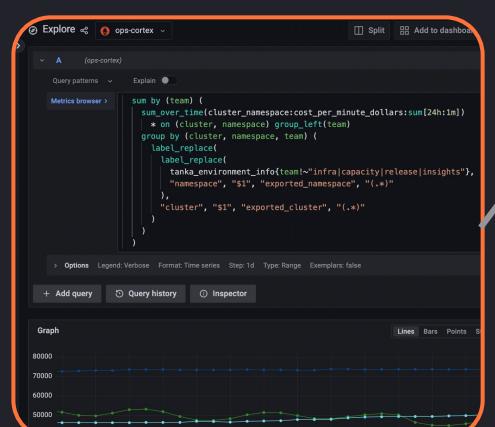




## Dashboards



## Alerts



## Ad hoc

```

sum(rate(loki_request_duration_seconds_count{cluster="ops-us-east-0",
          namespace="loki-ops", job=~"(loki-ops)/distributor"}[5m])) by (route)

topk(10,
      sum(rate(loki_distributor_bytes_received_total{cluster="ops-us-east-0",
          namespace="loki-ops"}[5m])) by (tenant))

sum(rate(promtail_sent_bytes_total{namespace="gcp-logs-ops"}[2m]))

sum by (namespace, pod, owner_name, cluster_id
          (kube_pod_owner{cluster="prod-ap-south-0", owner_kind="DaemonSet"}))

max by (user)
  ({__name__=~^(cortex_overrides|cortex_limits_overrides)$,
    limit_name="max_global_series_per_user"})

avg_over_time(kube_pod_labels{cluster="prod-eu-west-1"}[1h])

rate(kube_pod_container_status_restarts{cluster="hm-us-west2c"}[5m])

```

## Queries

user  
pod  
instance  
job  
cluster

## Unused labels

loki\_request\_duration\_seconds\_count  
kube\_apiblah

## Unused metrics





**110M**

Series

**50%**

Unused

**60%**

Reduction

in Grafana Ops environment



**Thank You!**