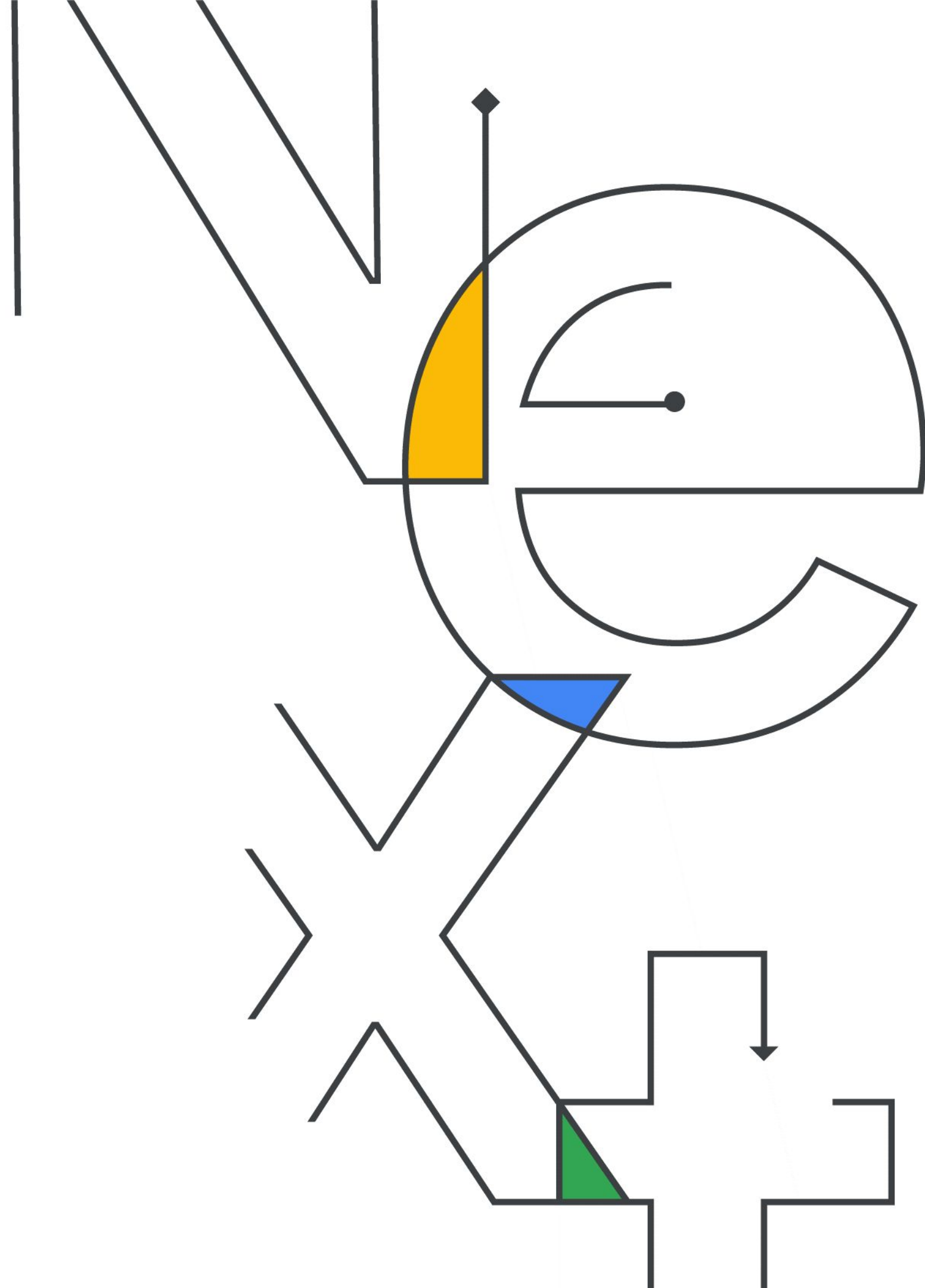


Google Cloud

Next '22

How The Home Depot scaled monitoring globally with Managed Service for Prometheus

Oct/
11-13





Ashish Kumar

Senior Manager, Cloud
Reliability and Production
Engineering
The Home Depot



Lee Yanco

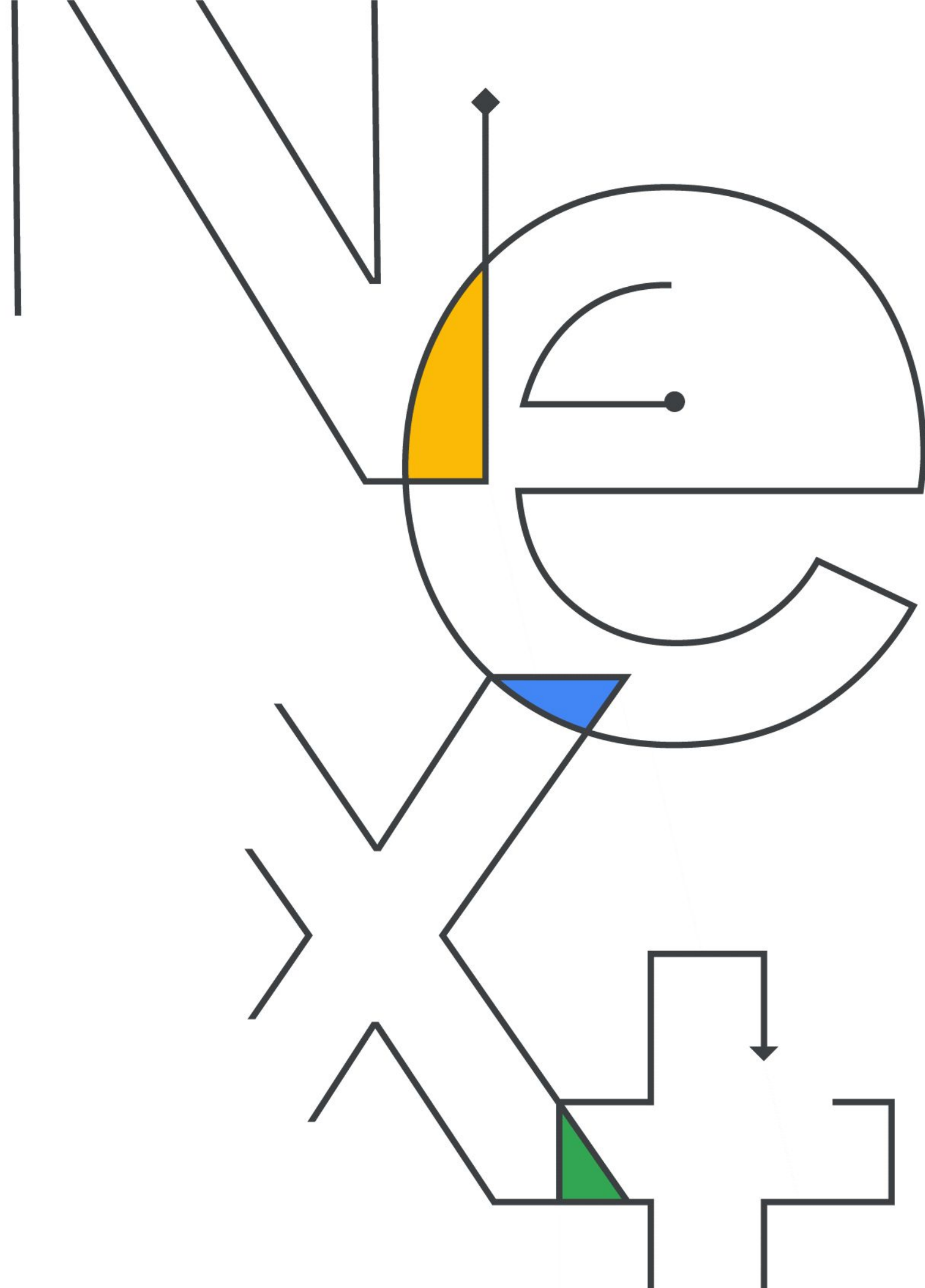
Product Manager
Google Cloud

Google Cloud

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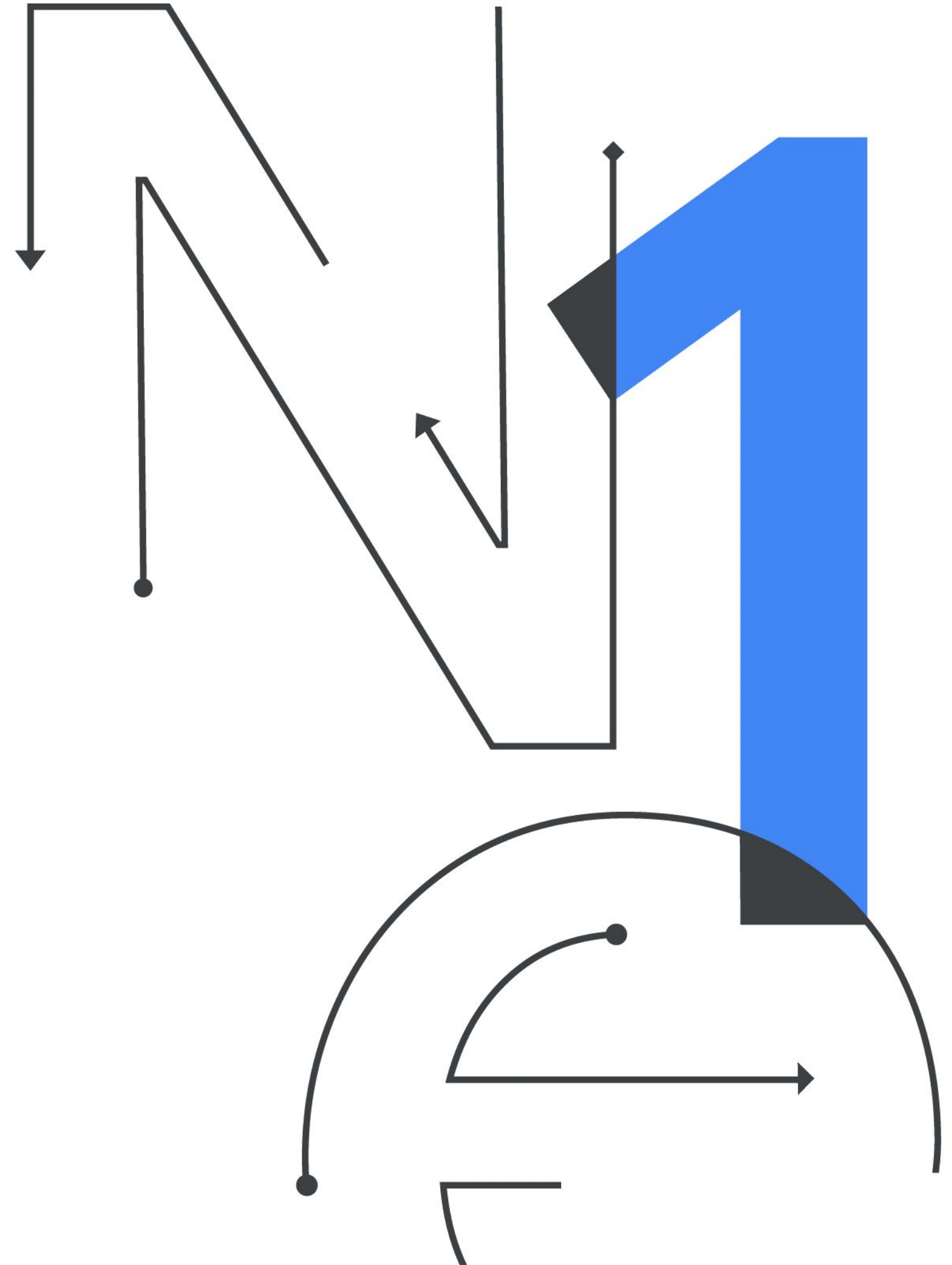
Contents

- 01 Why Prometheus, and why Managed Service for Prometheus?

- 02 Getting a single pane of glass across 2,300 stores

- 03 What's next for Managed Service for Prometheus

Why Prometheus,
and why Managed
Service for
Prometheus?

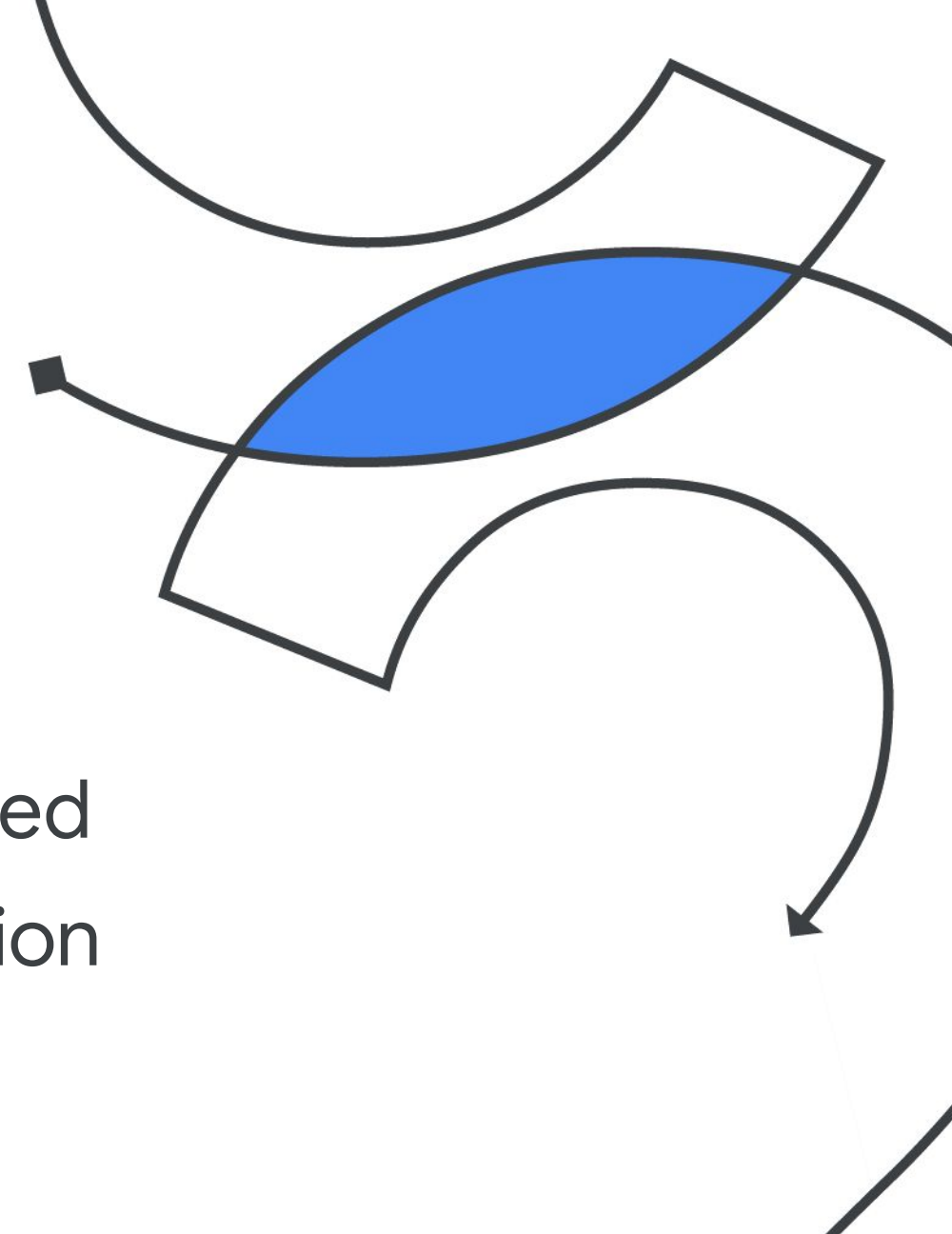




What is Prometheus?

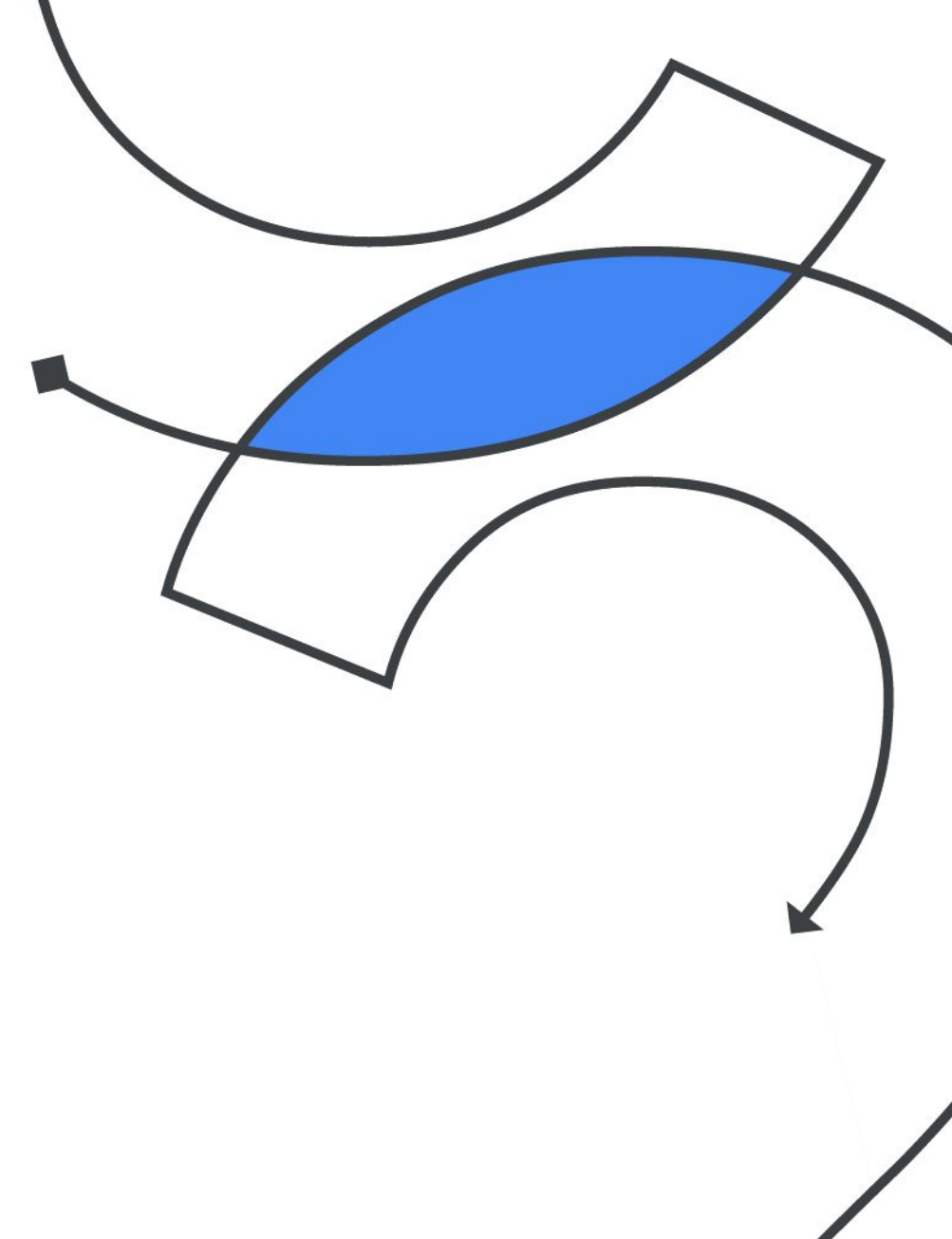
A popular monitoring tool backed by CNCF, widely considered to be the de-facto standard solution for Kubernetes workloads.

Used by 86% of the cloud native community, according to a recent CNCF survey.

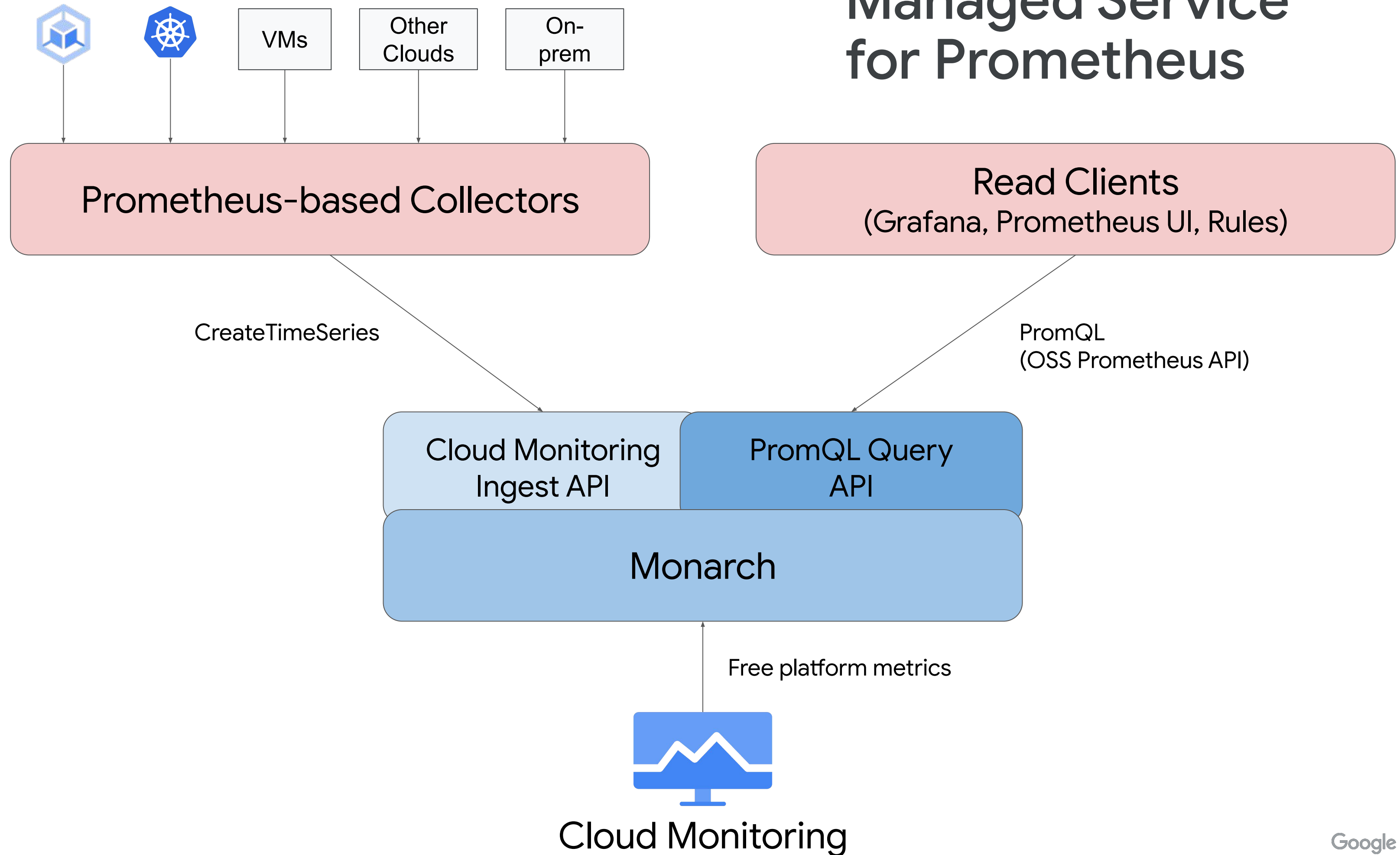


Why use Prometheus?

- Works great with k8s
- Runaway community effect
- Easy to extend
- Deployable by developers
- Universal and open source

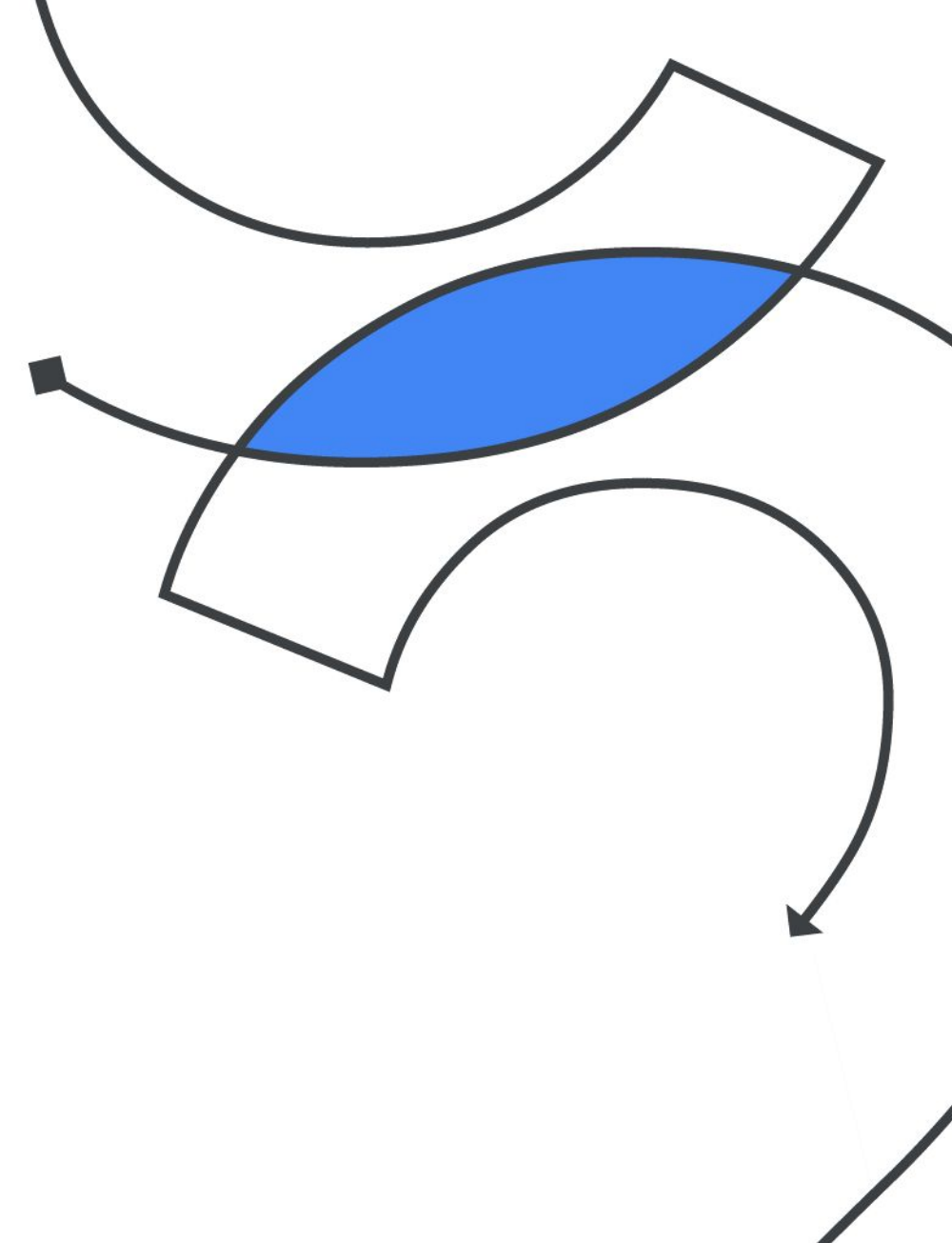


Managed Service for Prometheus



Why Managed Service for Prometheus?

- Uses Monarch, the same exact planet-scale system used to monitor Google and Google Cloud
- Single pane of glass for your entire footprint: Hybrid and multi cloud, k8s and VMs
- Open-source compatible but also works great with GKE, Cloud Monitoring, and Google Cloud



Why Managed Service for Prometheus?

Choose a fully managed experience or a fully Prom-compatible experience, or mix as needed

Self-deployed

Deploy using prom-operator,
configured using Prom configs

Full prom functionality, all prom options

You manage it

Managed

Deployed using a k8s operator,
configured using lightweight CRs

Restricted options but hands off
scalability

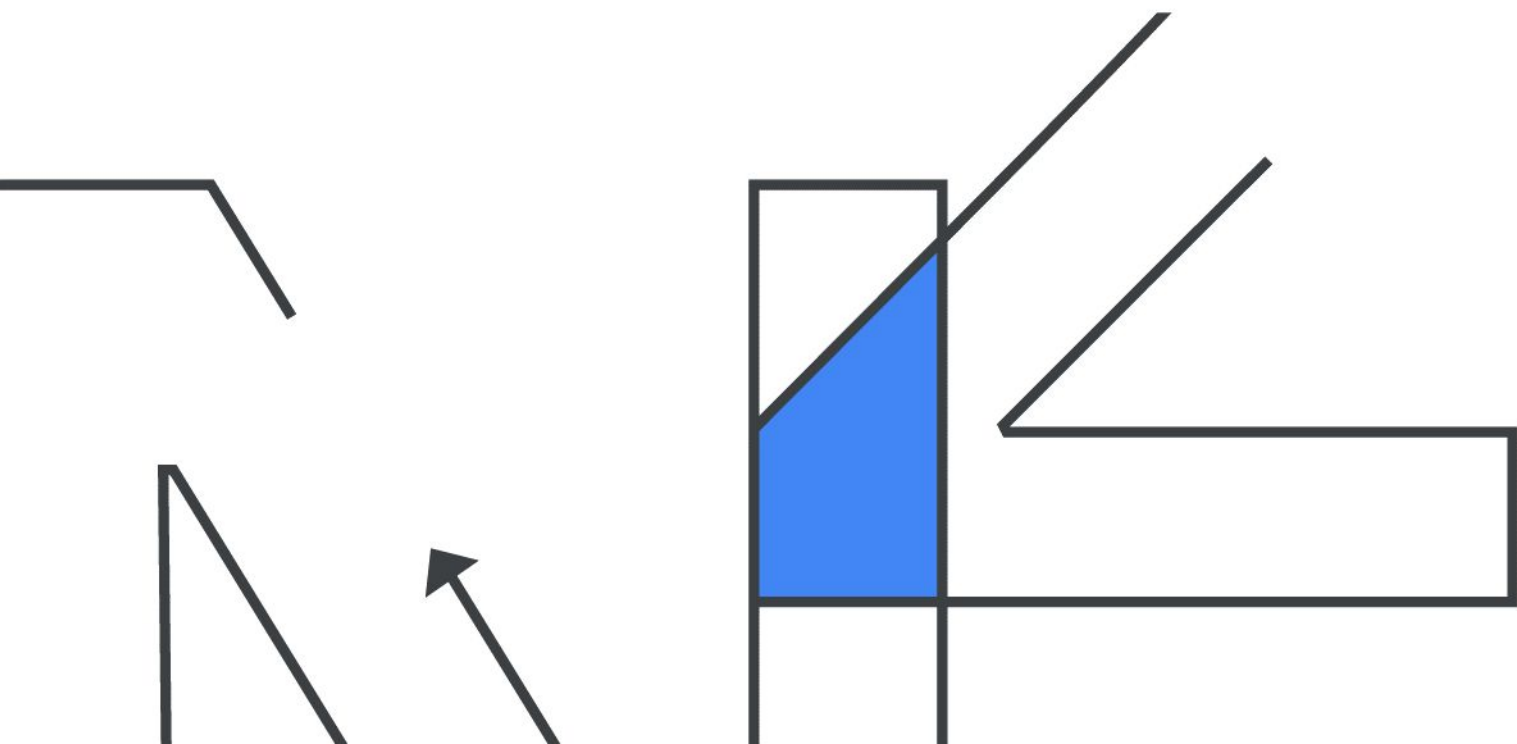
Google manages it

Managed + Best Practices

On by default in Autopilot

Customizable, but includes Google's
recommendations, including Cloud
Monitoring features

Google manages everything





Getting a
single pane
of glass
across 2,300
stores



COMPANY OVERVIEW

OUR COMPANY

FOUNDED:
1978

HEADQUARTERS: **ATLANTA**

PUBLICLY TRADED: **NYSE: HD**
Sept. 22, 1981

INCLUDED IN **THE DOW JONES INDEX**

OUR STORES

FIRST STORE:
JUNE 22, 1979

INDOOR:
~104K SQ. FT.

AVG. STORE SIZE:
~128K SQ. FT.

GARDEN:
~24K SQ. FT.



OUR OPERATIONS

TOTAL #
OF RETAIL STORES
AT THE END OF Q2:
2,316

CANADA:
182

UNITED STATES
& TERRITORIES:
2,005

MEXICO:
129

STORE SUPPORT
CENTER:
ATLANTA

APPROXIMATELY
500K
ASSOCIATES



OUR FY 2021 PERFORMANCE

TOTAL SALES:
\$151.2 BILLION



SALES FROM
DIGITAL PLATFORMS
**+100% ON A
2-YEAR BASIS**

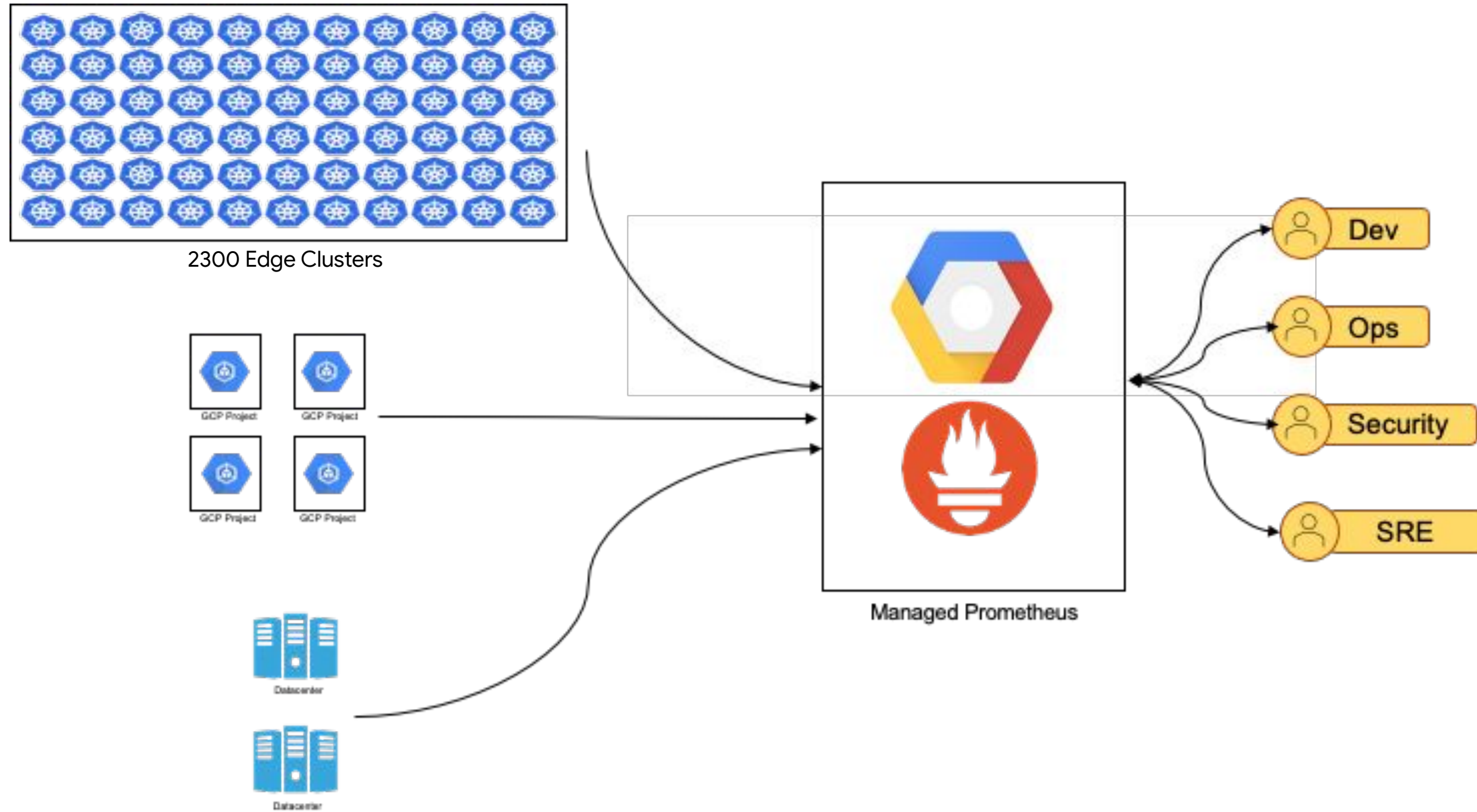


**~55% OF
ONLINE ORDERS**
FULFILLED THROUGH
A STORE



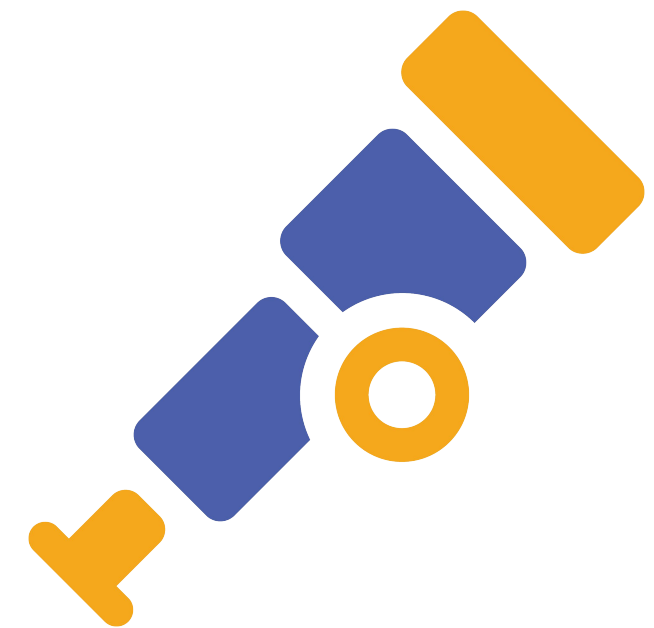
**OVER
\$40 BILLION**
IN SALES GROWTH
IN TWO YEARS

Footprint

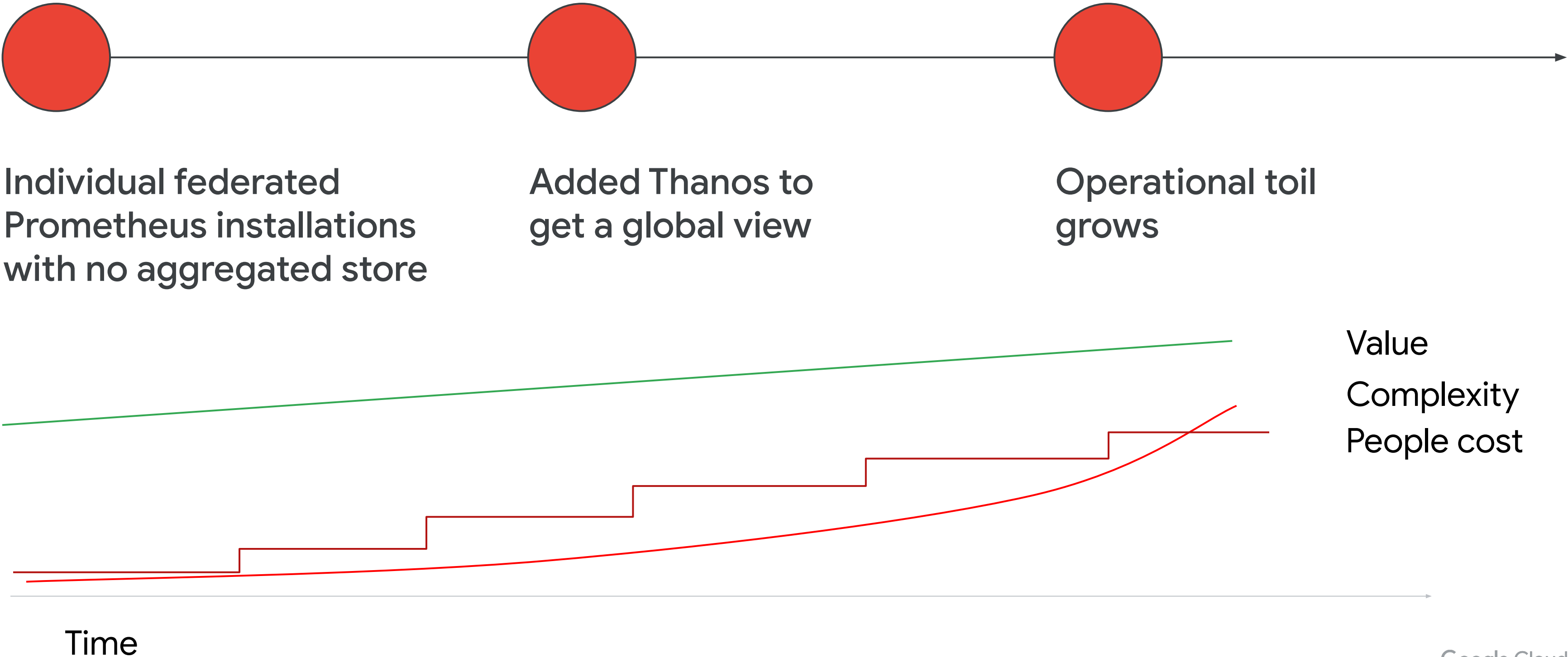


Current observability stack

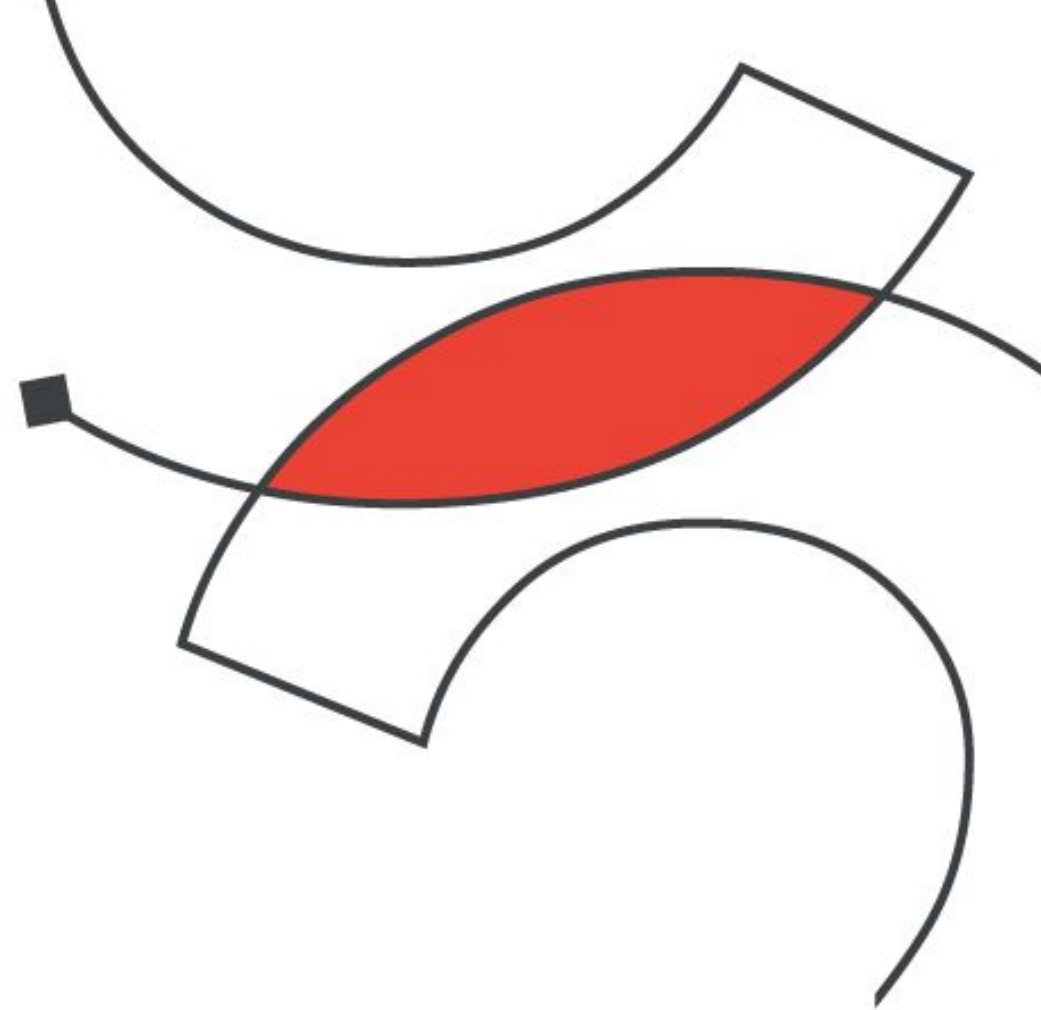
- Prometheus with exemplars for metrics
- BigQuery for Logs
- Open Tracing / Open Telemetry to emit traces

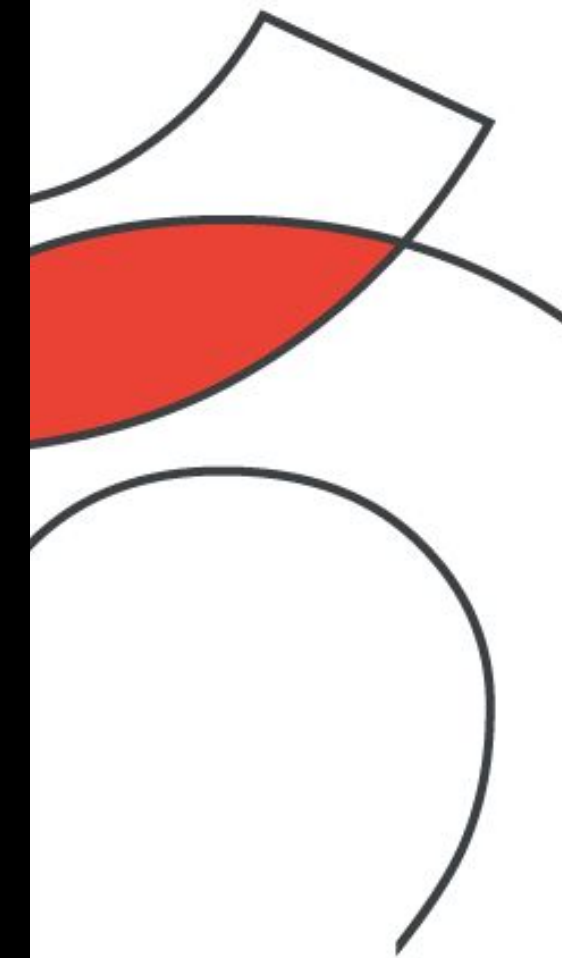


Growing pains with Prometheus, as experienced by The Home Depot



Demo



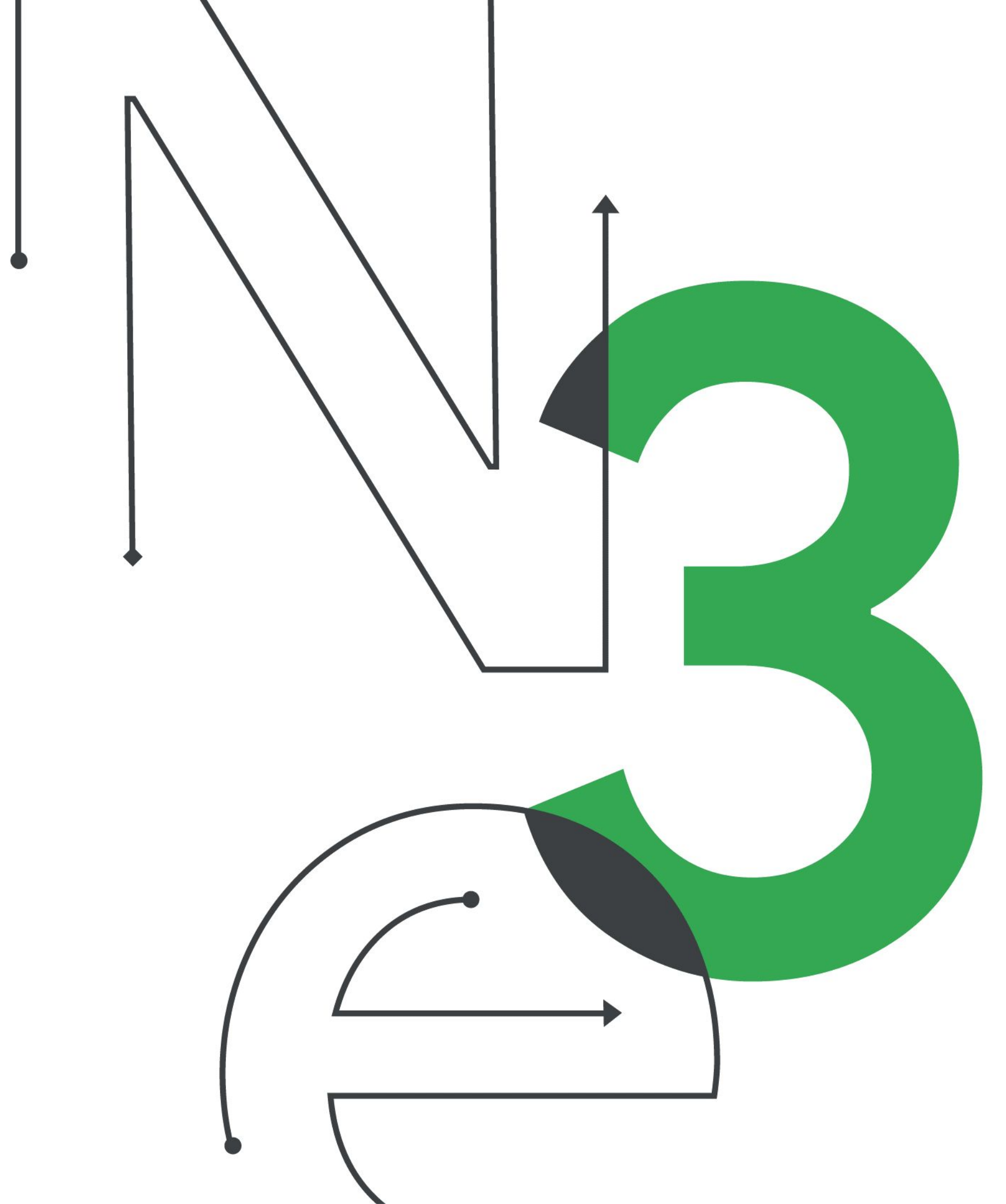


What's next for The Home Depot

- Link traces to Prometheus metrics to get better RCA and faster resolution of issues
- Eventually complete the observability circle by also linking logs stored in BigQuery



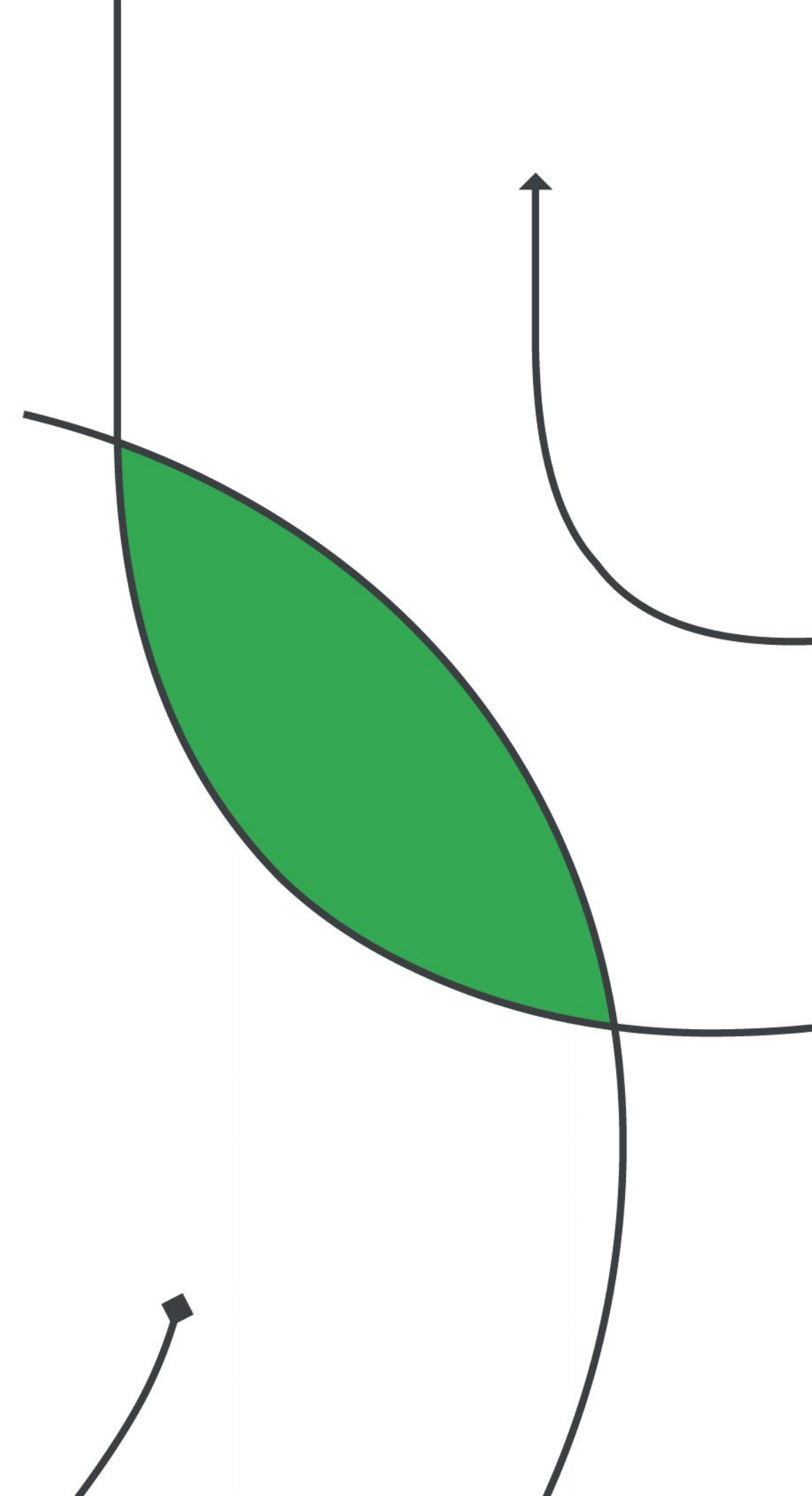
What's
next?



What's next

Prometheus compatibility in the Cloud
Operations suite

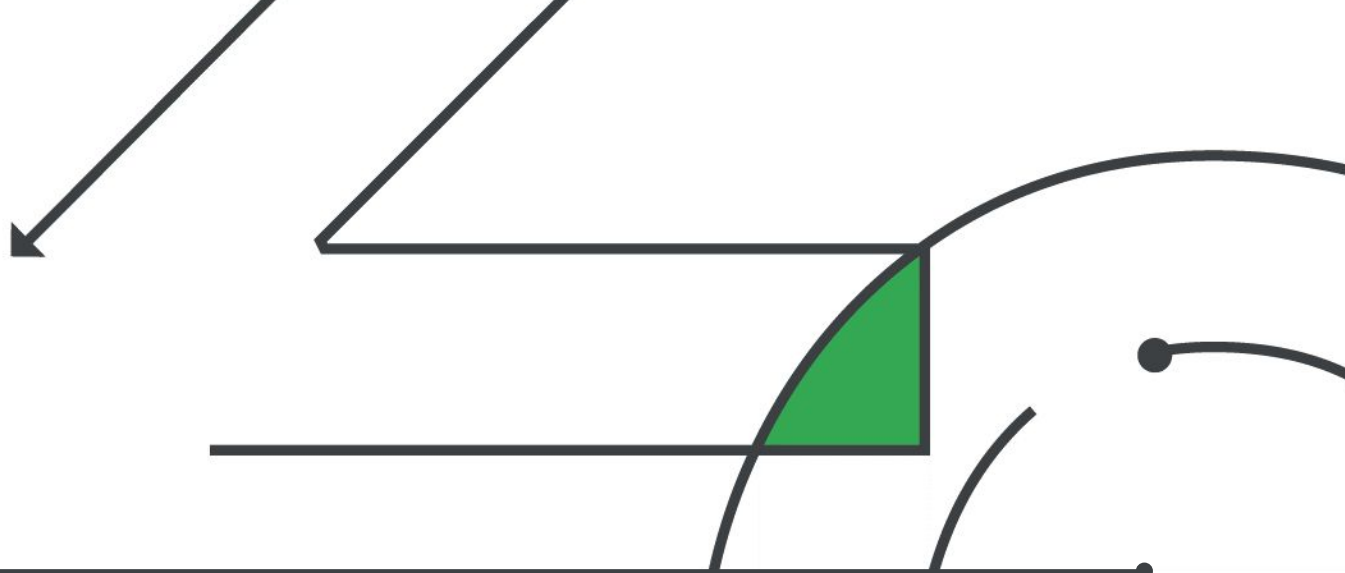
More smart defaults and best practices



Prometheus compatibility

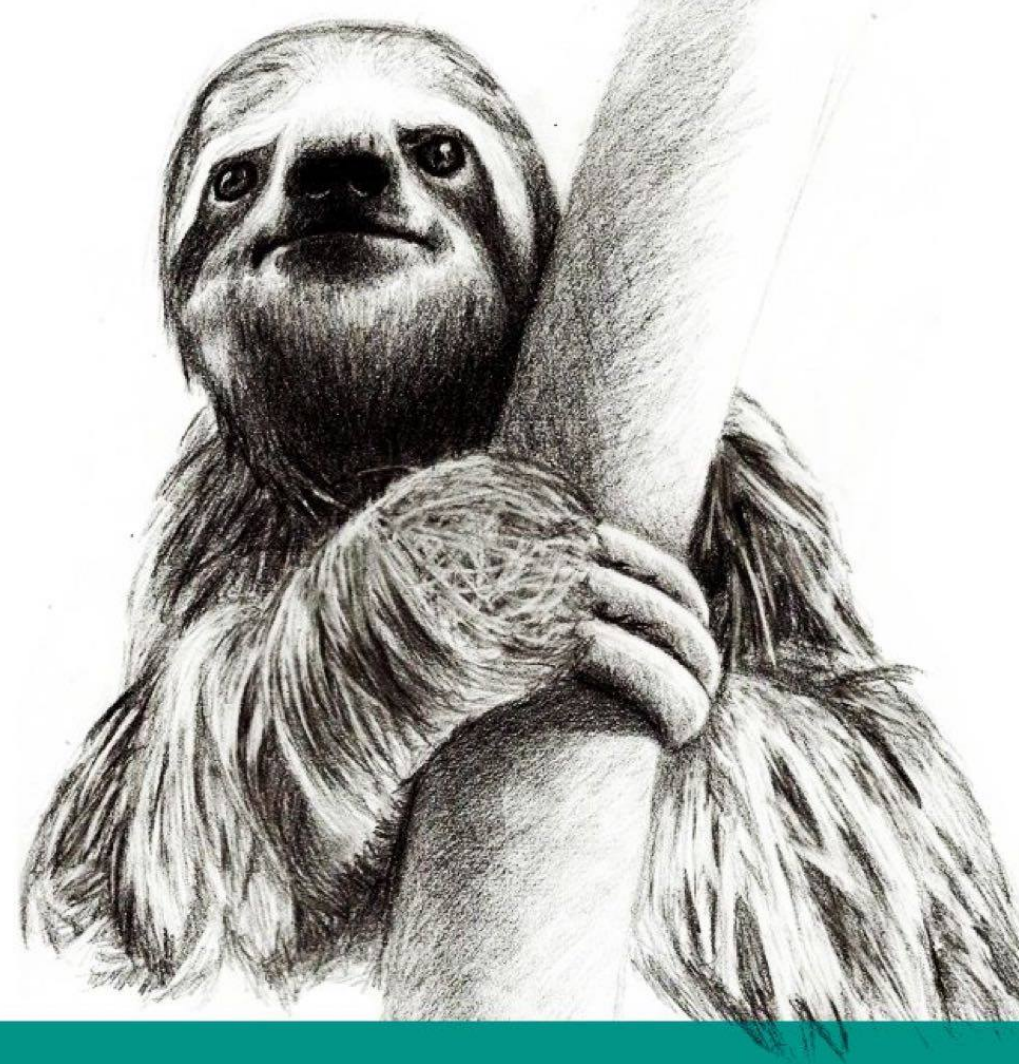


Prometheus compatibility in the Cloud Operations suite



	Today	Coming soon
PromQL and Dashboarding	PromQL Throughout ALL Cloud Monitoring <div>Just released!</div>	
Alerting	Managed Alertmanager	
Exemplars and tracing	No integration	
Logging	Log-based metrics in PromQL	

Somebody must know how to monitor this application...

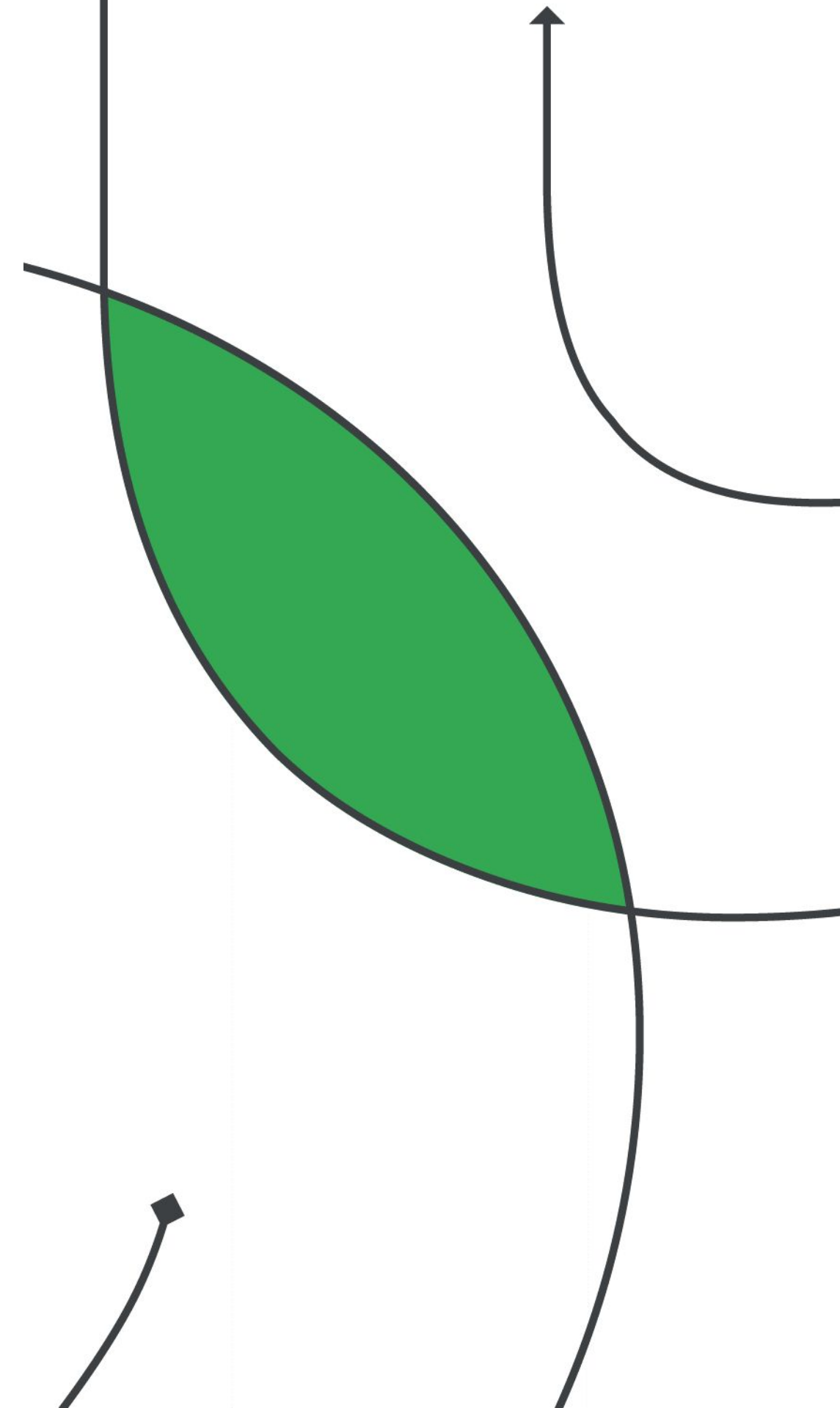


Essential

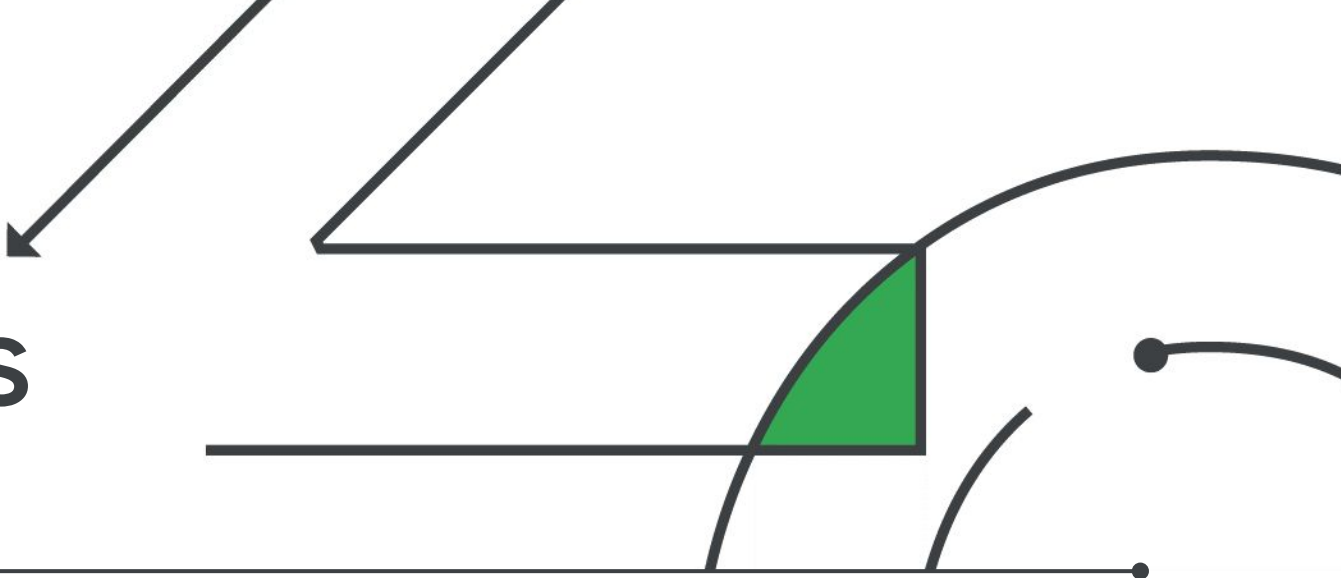
Copying and Pasting from Stack Overflow

O'REILLY®

*The Practical Developer
@ThePracticalDev*



More smart defaults and best practices



	Now	Coming soon	Eventually
Exporters	Copy-paste manifest library		
VM monitoring	Self-deployed collectors		
Cost controls	Metrics diagnostics		

Log Analytics in Cloud Logging

Powered by BigQuery



Powerful ad hoc log analysis

Scalable log aggregation

Seamless access in BigQuery ecosystem

Try it today by visiting the Cloud Logging page:

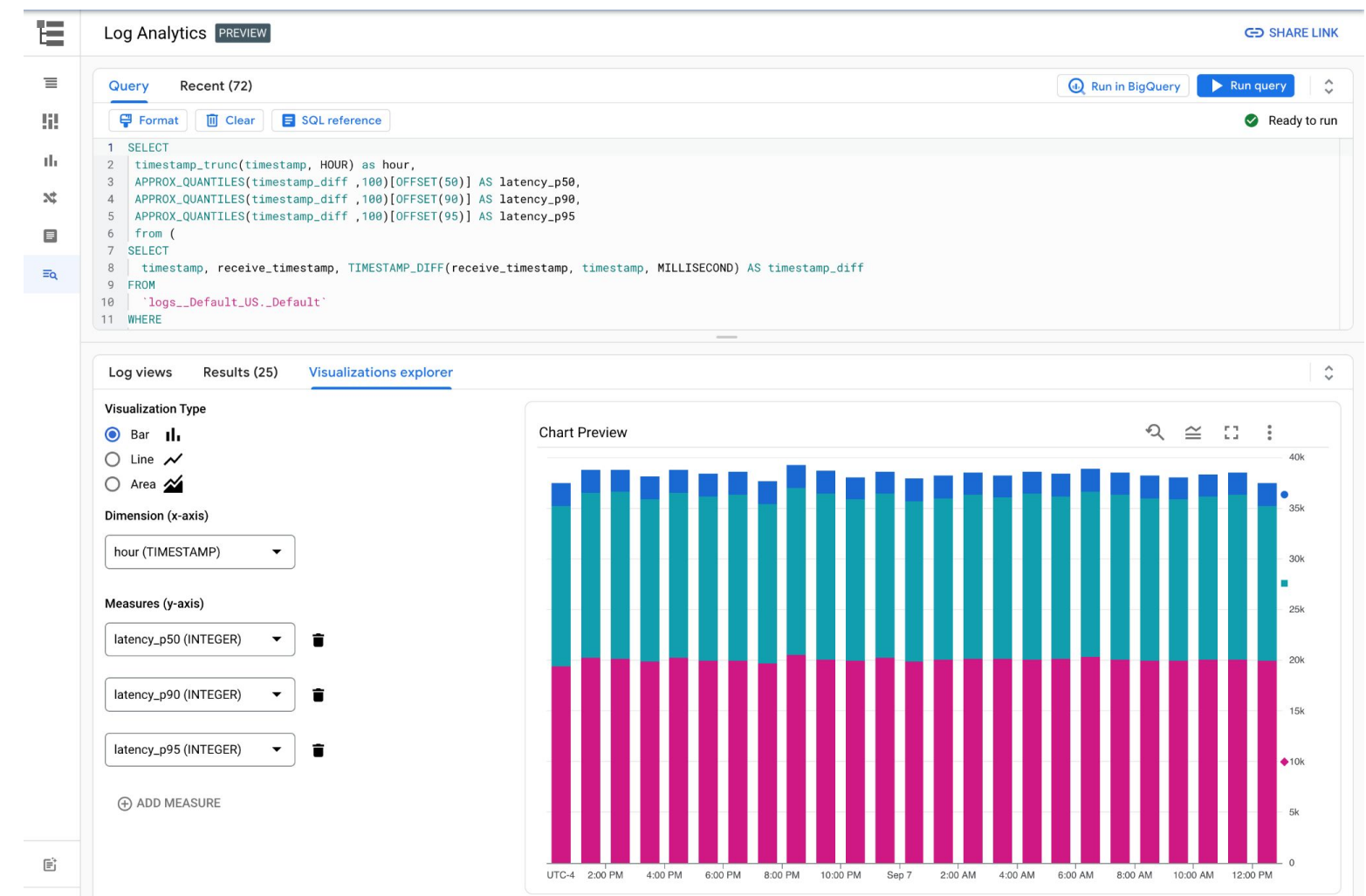
<https://console.cloud.google.com/logs/analytics>



Improve reliability with faster troubleshooting

Find important insights

Make business decisions faster



Get started today

<https://g.co/cloud/managedprometheus>



Thank you

Google Cloud
Next '22

