AWS Open-Source Observability

Monitor Modern Application - The Managed Open Source Way

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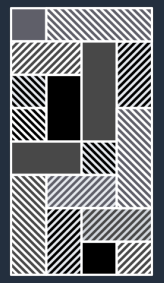
Agenda

What is open-source observability and why managed by AWS?

Managed open-source services overview

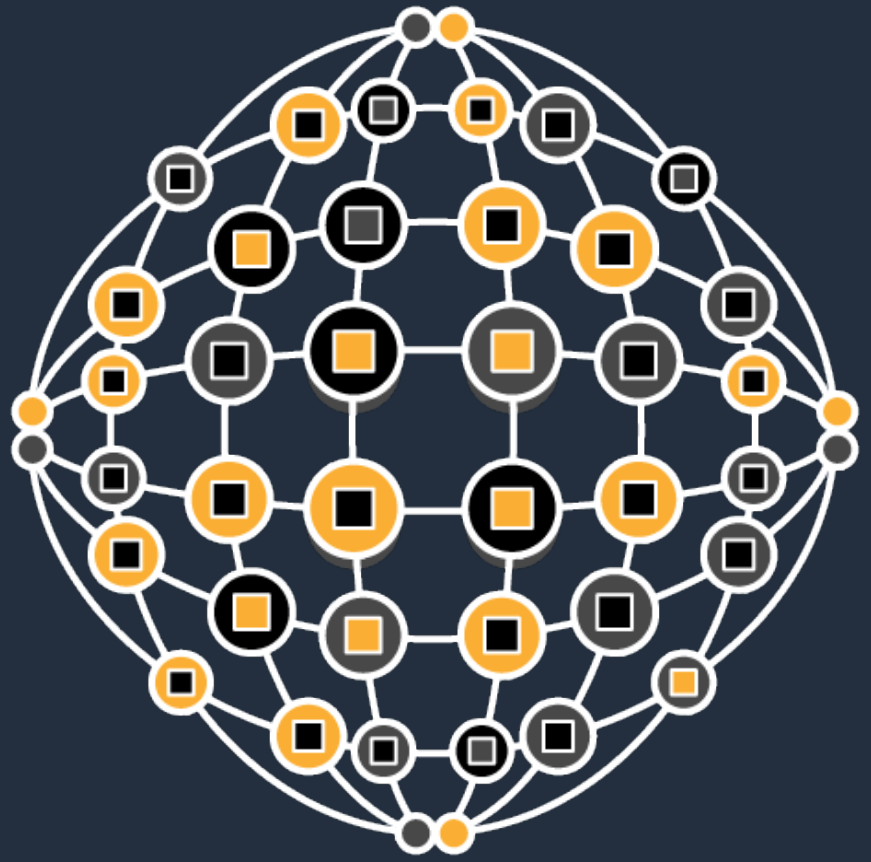
Latest updates for our open-source services

Modern application complexity



Monolithic application

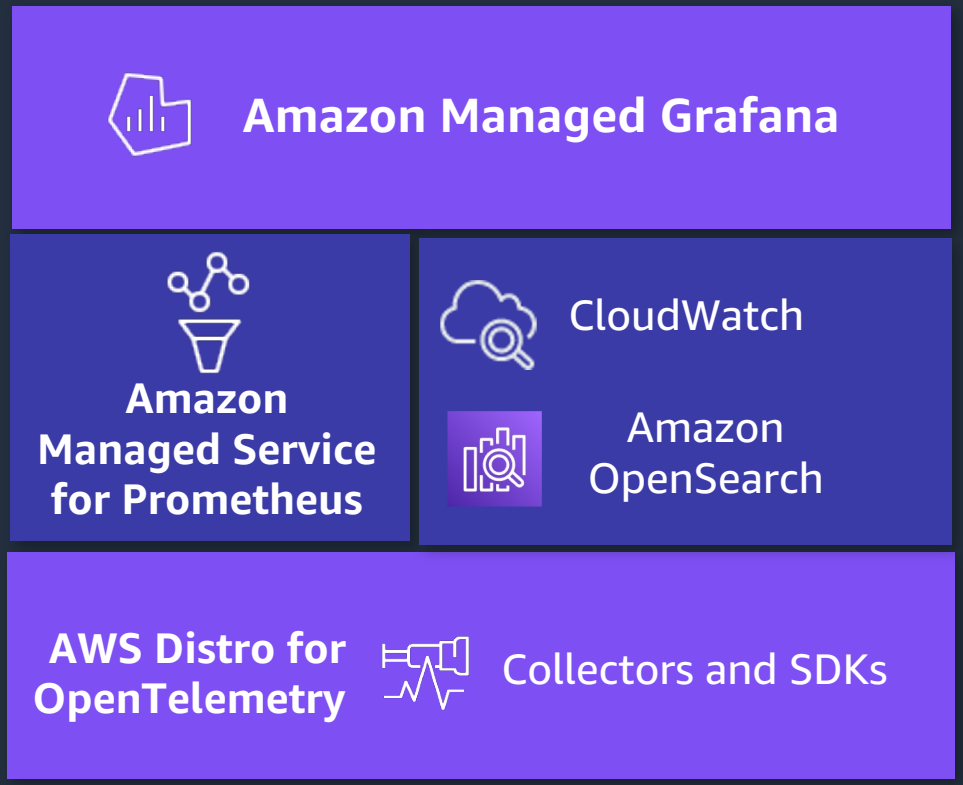
Services



Microservices

“Everything fails, all the time.”, *Dr. Werner Vogels, AWS CTO*

OPEN-SOURCE OBSERVABILITY



Security first

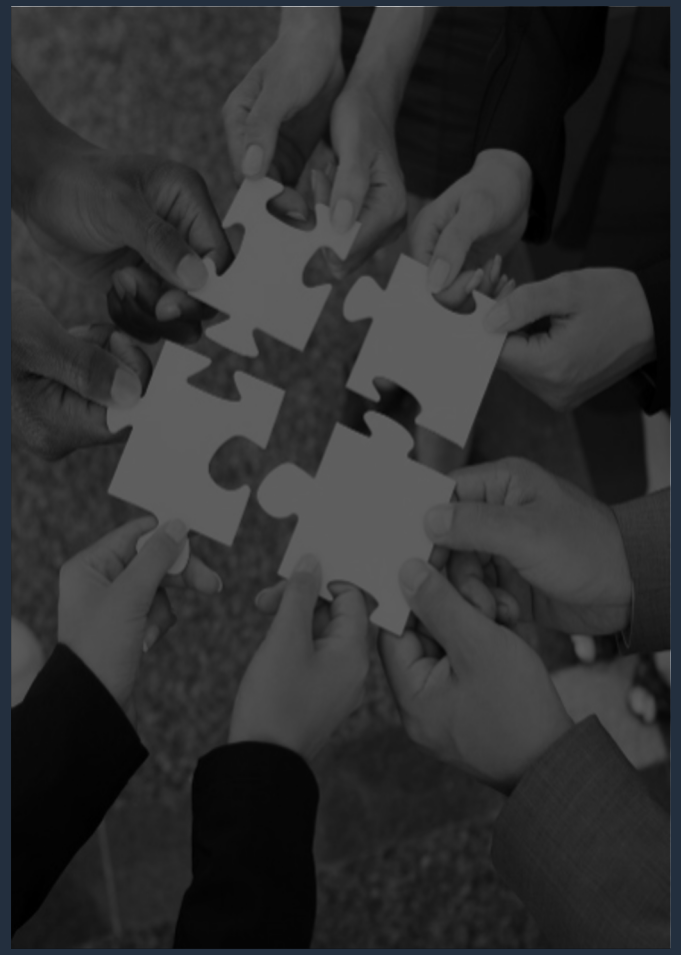
Production workloads

aws

Seamless integrations

Open-source contribution

Working with the open-source community



CLOUD NATIVE COMPUTING FOUNDATION

cortex

Prometheus

OpenTelemetry

Fluent Bit

OpenSearch

Grafana data source plugins

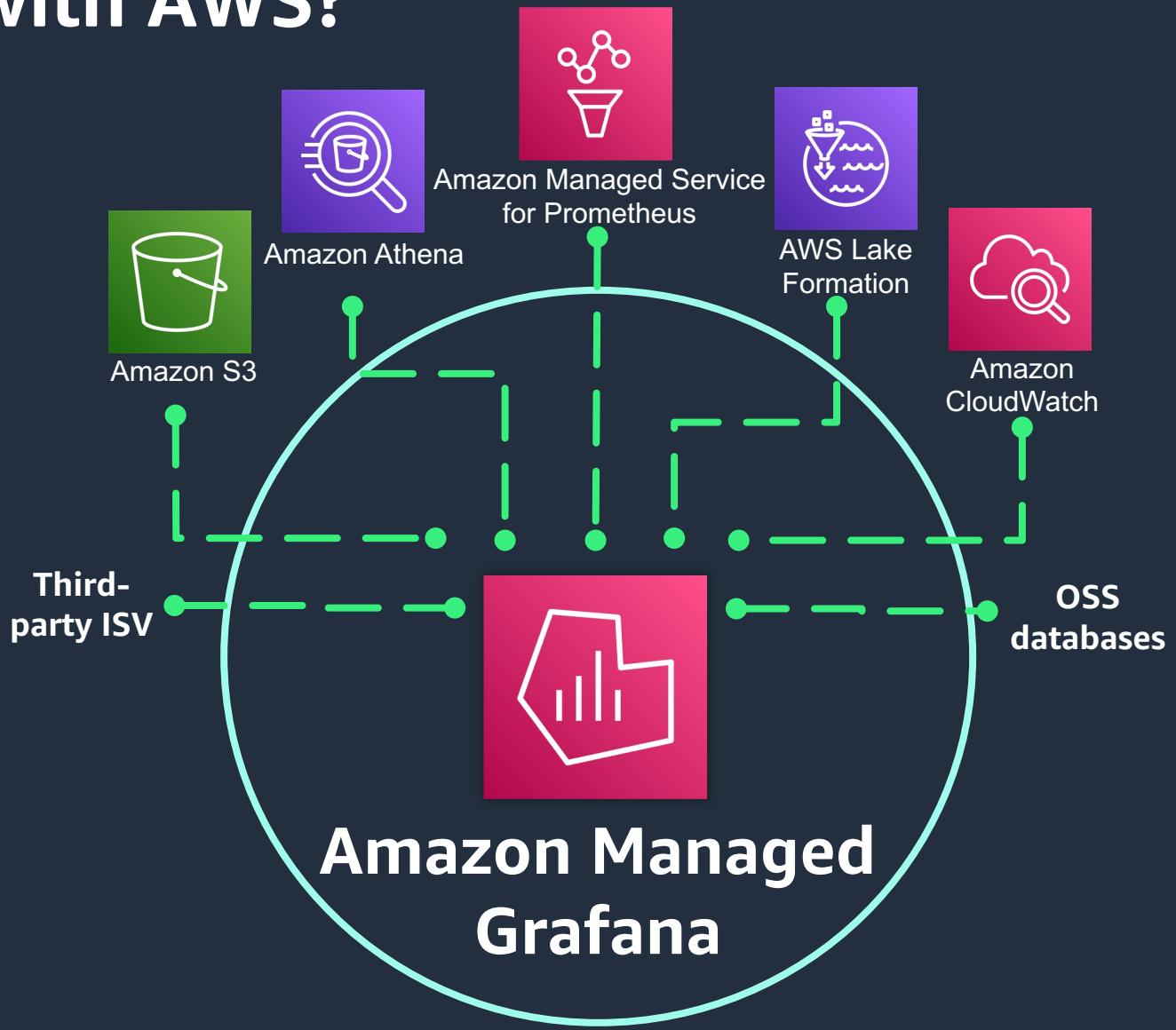
Amazon Athena
Amazon CloudWatch
Amazon Redshift
Amazon Timestream
AWS X-Ray
AWS IoT SiteWise

Amazon top contribution for cortex in last year (3500+)
Amazon top contributor for OpenTelemetry (4300+)

A dashboard is worth a million words

How can you achieve this with AWS?

Build a **single** view across infrastructure, application, organizational, and business health



Amazon Managed Service for Prometheus

HIGHLY AVAILABLE, SECURE, AND MANAGED MONITORING

A serverless Prometheus-compatible monitoring service for metrics to securely monitor container environments at scale

Fully managed, secure, and highly available using Multi-AZ deployments

Use the same open-source Prometheus data model and query language as they do today to monitor the performance of their containerized workloads

No up-front investments required to use the service, and customers only pay for the number of metrics ingested

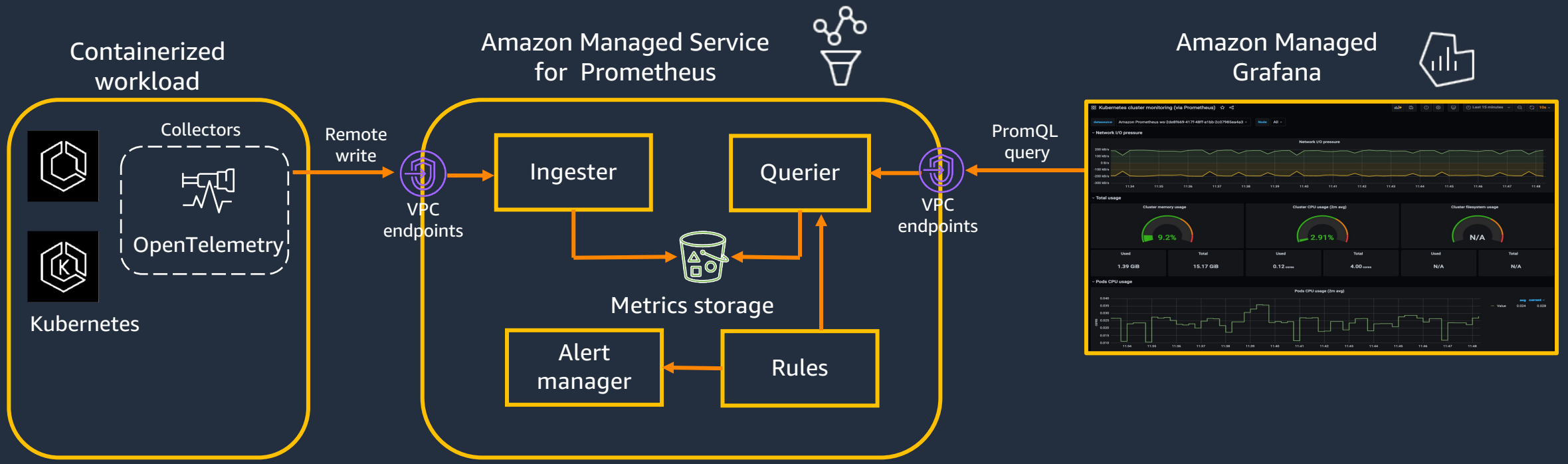
Highly available and scaled Prometheus-compatible alert manager and ruler

AWS Distro for OpenTelemetry (ADOT)

- Secure, production-ready open source distribution supported by AWS
- All code contributions from AWS are in OpenTelemetry
- Certified by AWS for security and predictability

Observability – The Managed Open Source Way

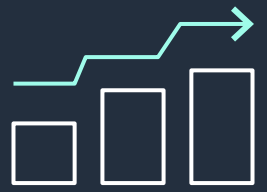
EXAMPLE USE CASE: UNIFIED CONTAINER MONITORING



Managed Open-Source Services – What's New?

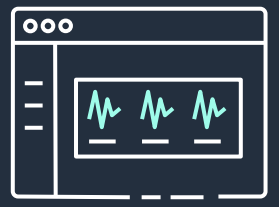
Security and Compliance

- SOC compliant
- ISO and PCI certified
- Network Access Control
- Secure connection to VPC data sources



Scale and Region Expansion

- Managed Prometheus: 500M active series metric / workspace
- Managed Grafana: 10K provisioned and 500 concurrent users per workspace
- +4 additional AWS regions - Mumbai, Paris, Seoul, and Sao Paulo

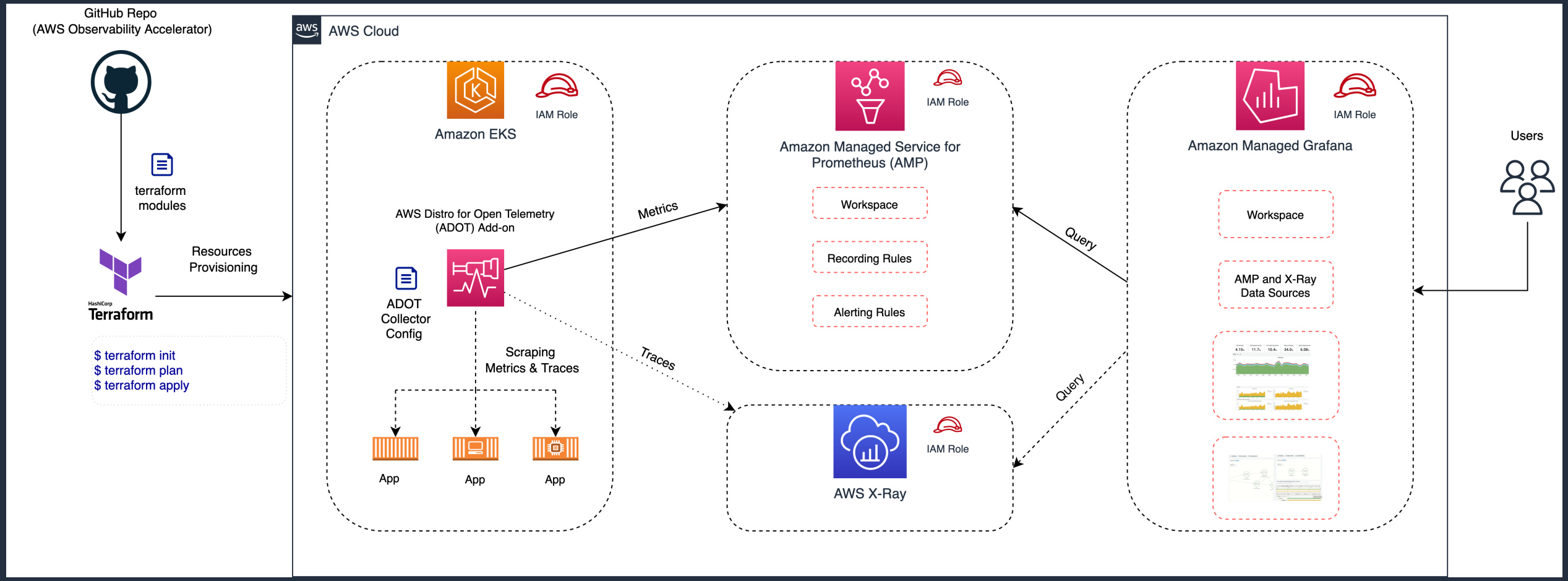


Single Pane of Glass / Unified Experience

- Centralize alert management
- Connect to self-managed data sources
- Plugins: OpenSearch Trace Analytics
- Multi-cluster cost monitoring

Demo - AWS Observability Accelerator

https://aws-observability.github.io/terraform-aws-observability-accelerator/



Call to Action

One Observability Workshop

Observability Best Practices

AWS Observability Accelerator

Skill Builder – AWS Observability

Managed Grafana, https://aws.amazon.com/grafana/

Managed Prometheus, https://aws.amazon.com/prometheus/

AWS Distro for OpenTelemetry, https://aws.amazon.com/otel/

Thank you!

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