



AWS Monitoring & Observability

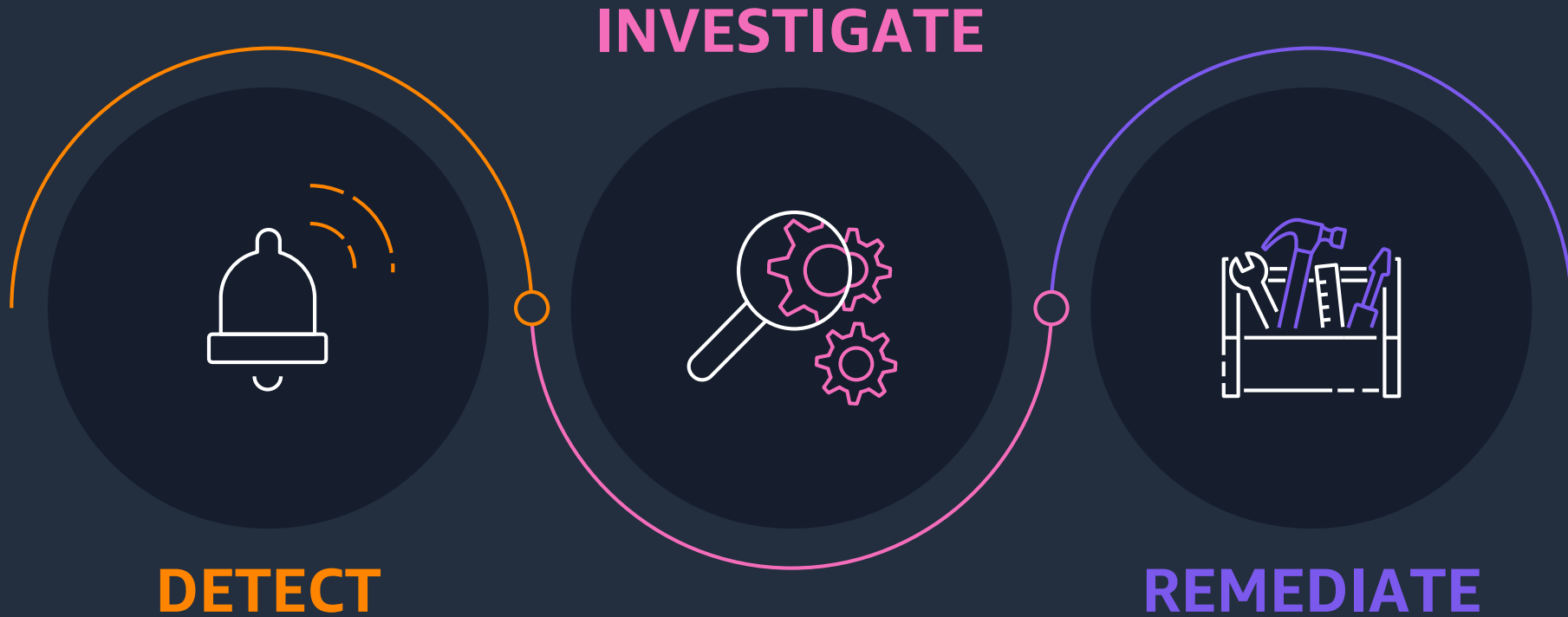
Monitor Modern Applications –
The Cloud Native Way

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Customer experiences and digital experiences.



What is observability?



Modern applications & architectures ...

Are increasingly utilizing **containers, serverless, scalable compute ...**

With compute becoming more **ephemeral and dynamic** in nature

Are generating increasing **volumes of telemetry**

Often utilizing **multiple AWS accounts**

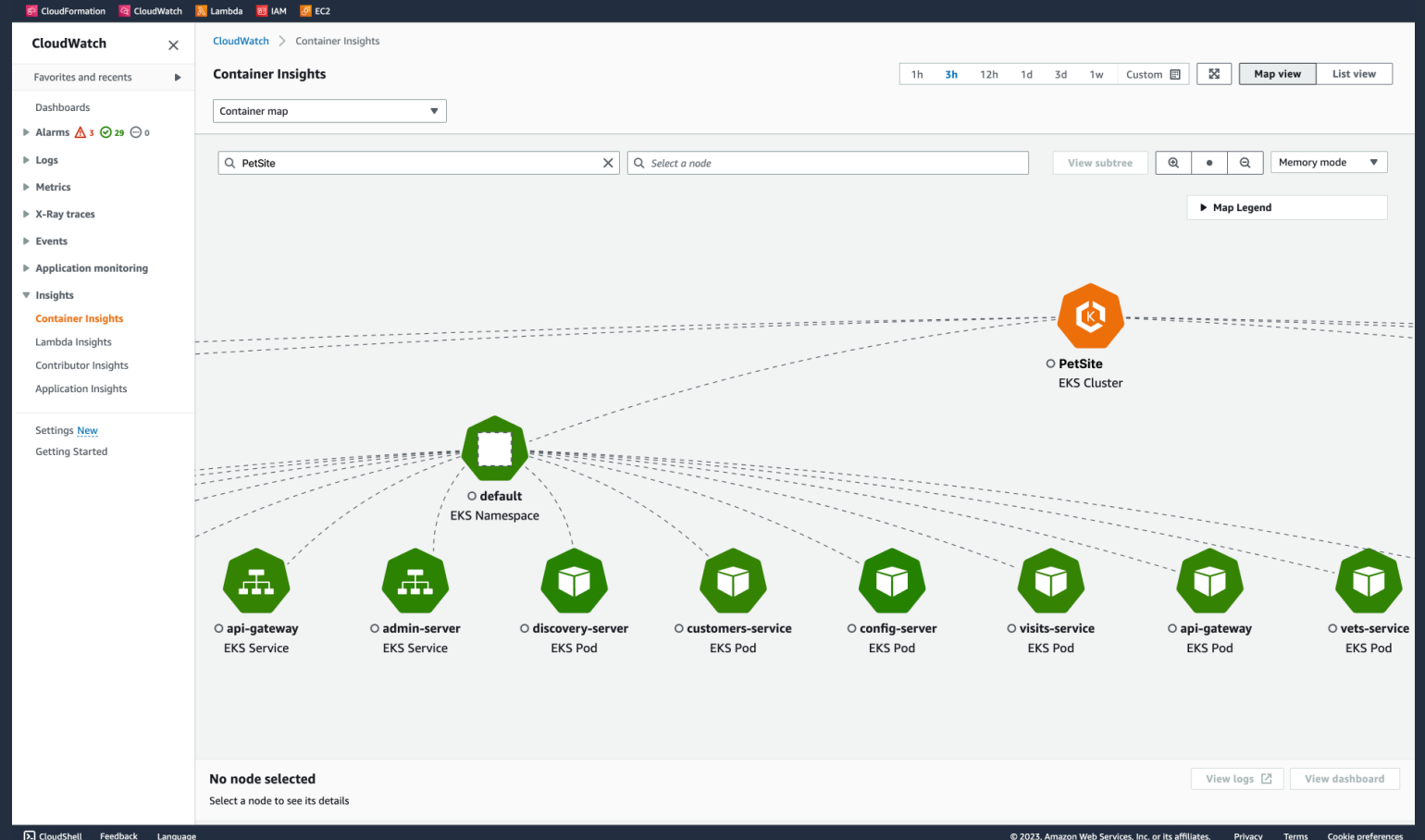


Modern applications & architectures ...

Are increasingly utilizing **containers** ...

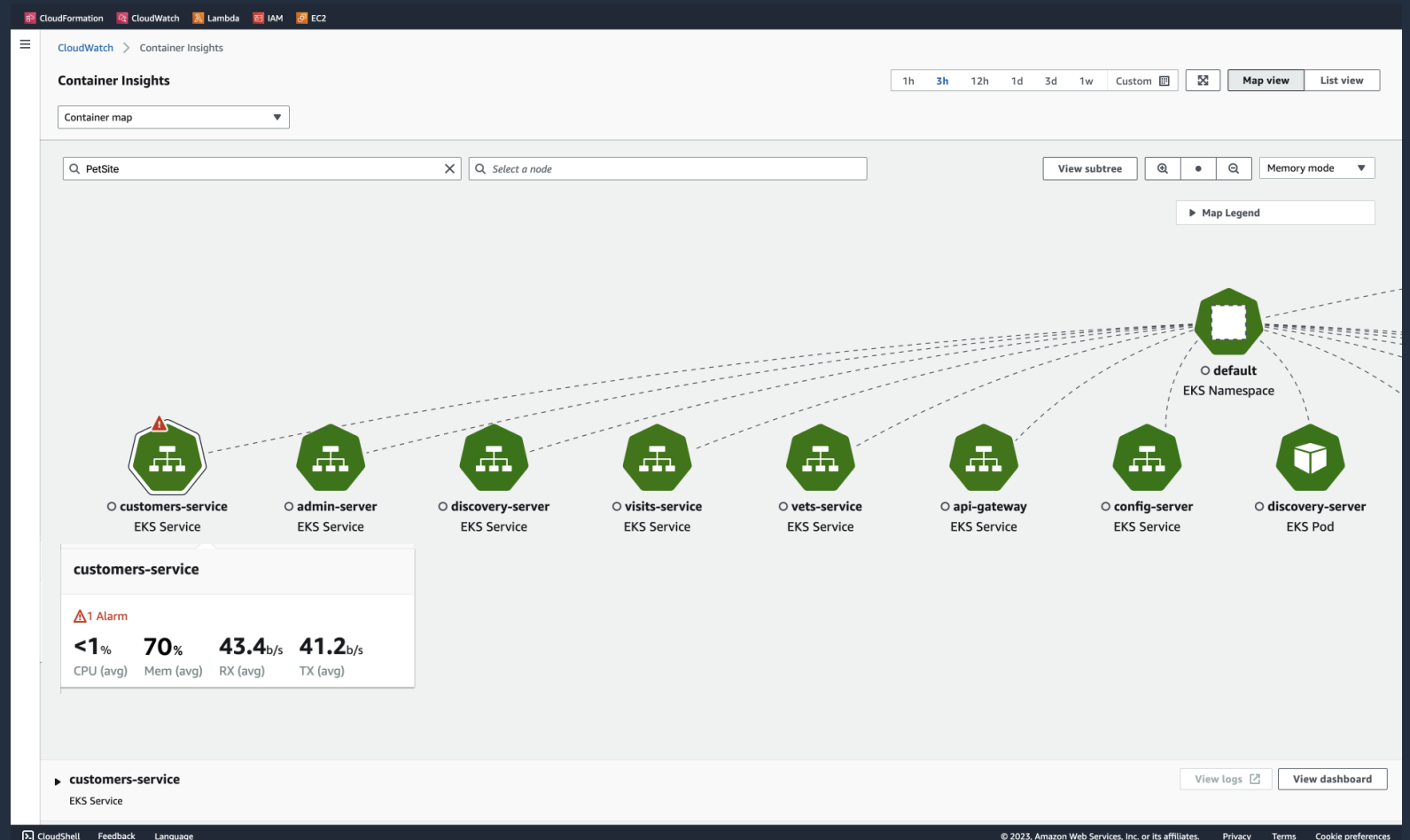
CloudWatch Container Insights

- > Out of the box, curated experience for containers
- > Observability across metrics, logs, and traces
- > Amazon ECS, Amazon EKS, Kubernetes on Amazon EC2 ...



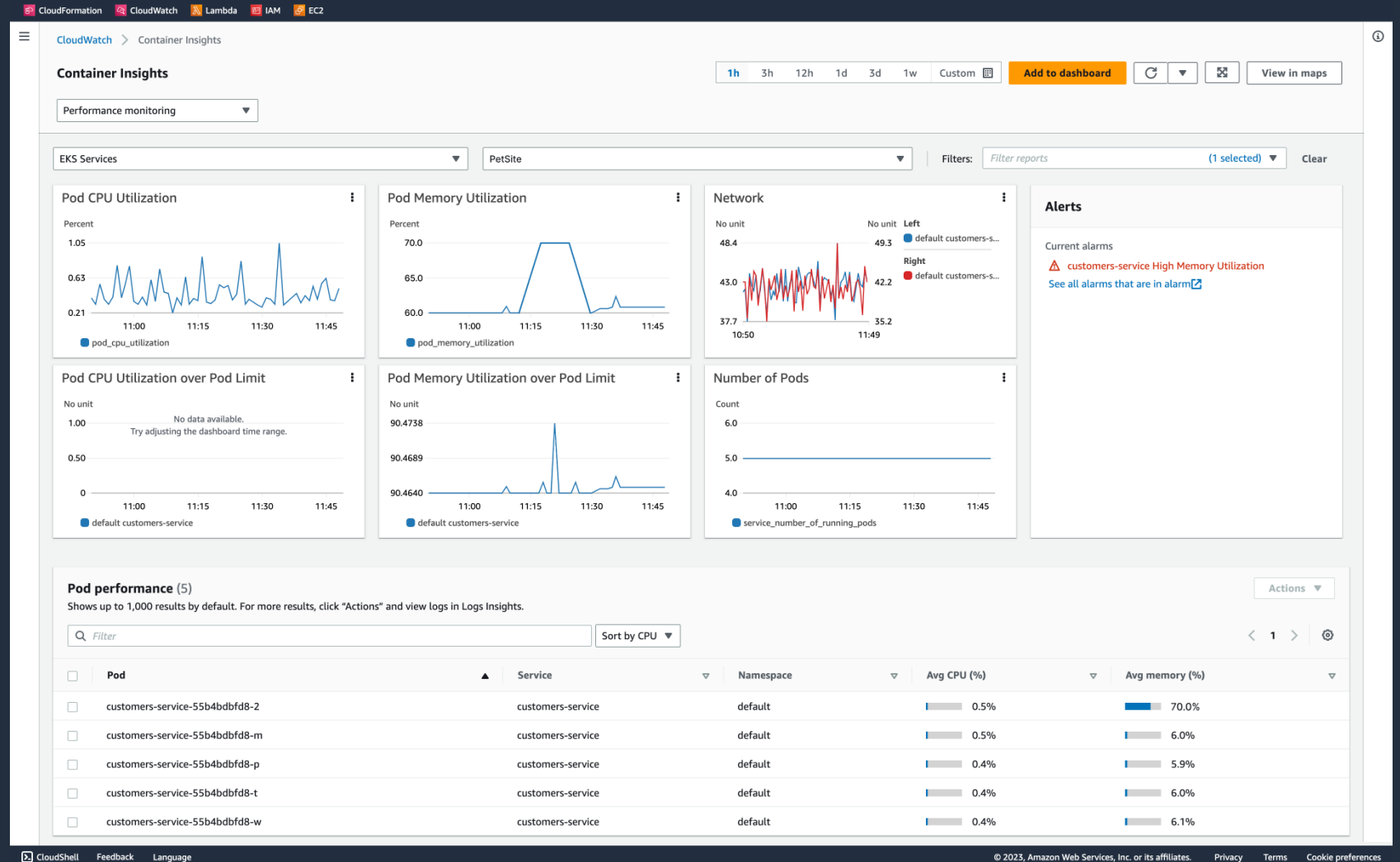
Monitor Containers

- > Graphical view -cluster, namespace, pods ...
- > Filters, sorts, tabular views, and tooltips ...
- > Create alarms on container metrics



Monitor Containers

- > Key metrics and pre-built visualizations
- > Go deeper in Metric Insights, Log Insights ...
- > Extendable and customizable



Modern applications & architectures ...

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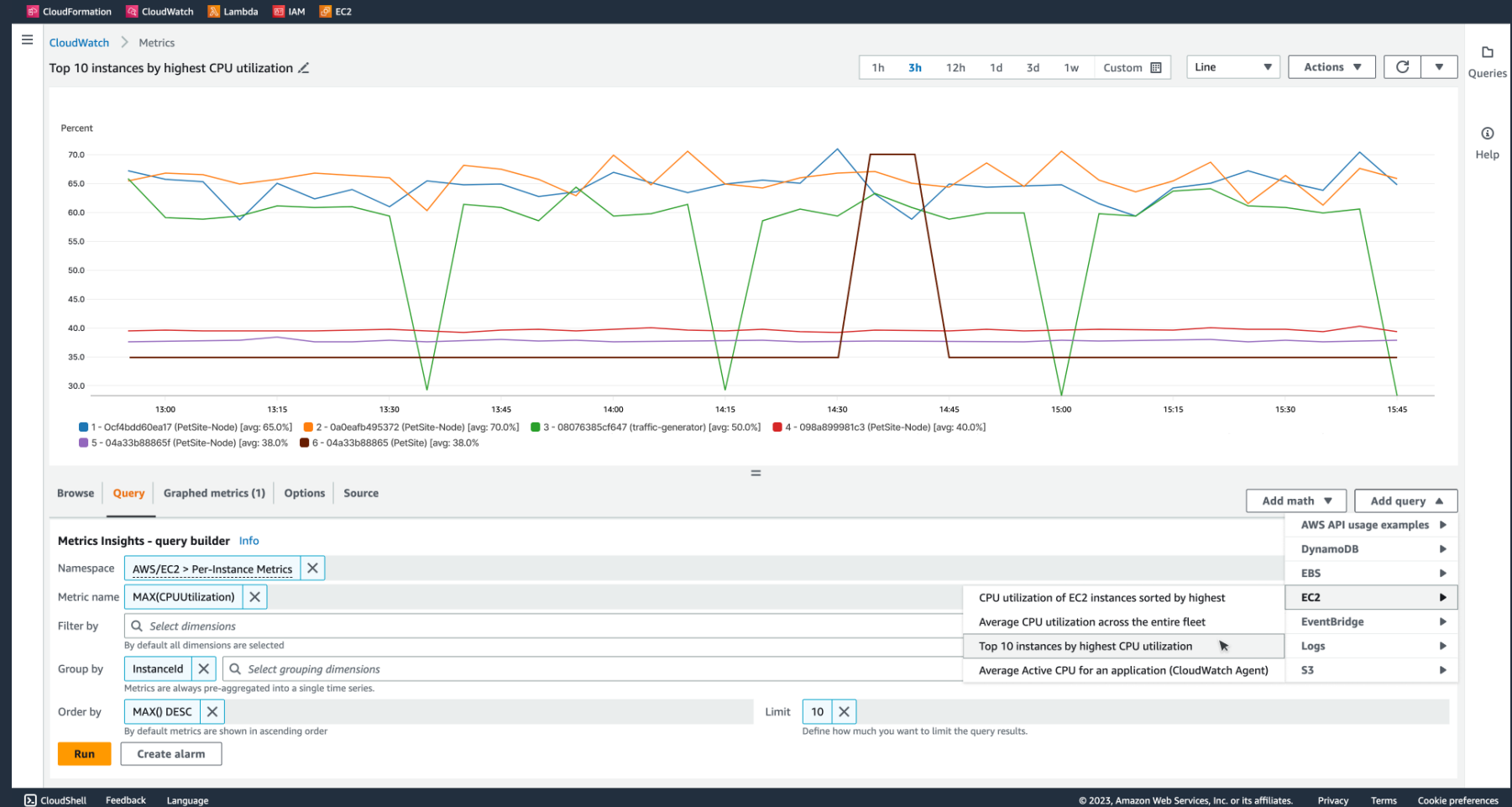
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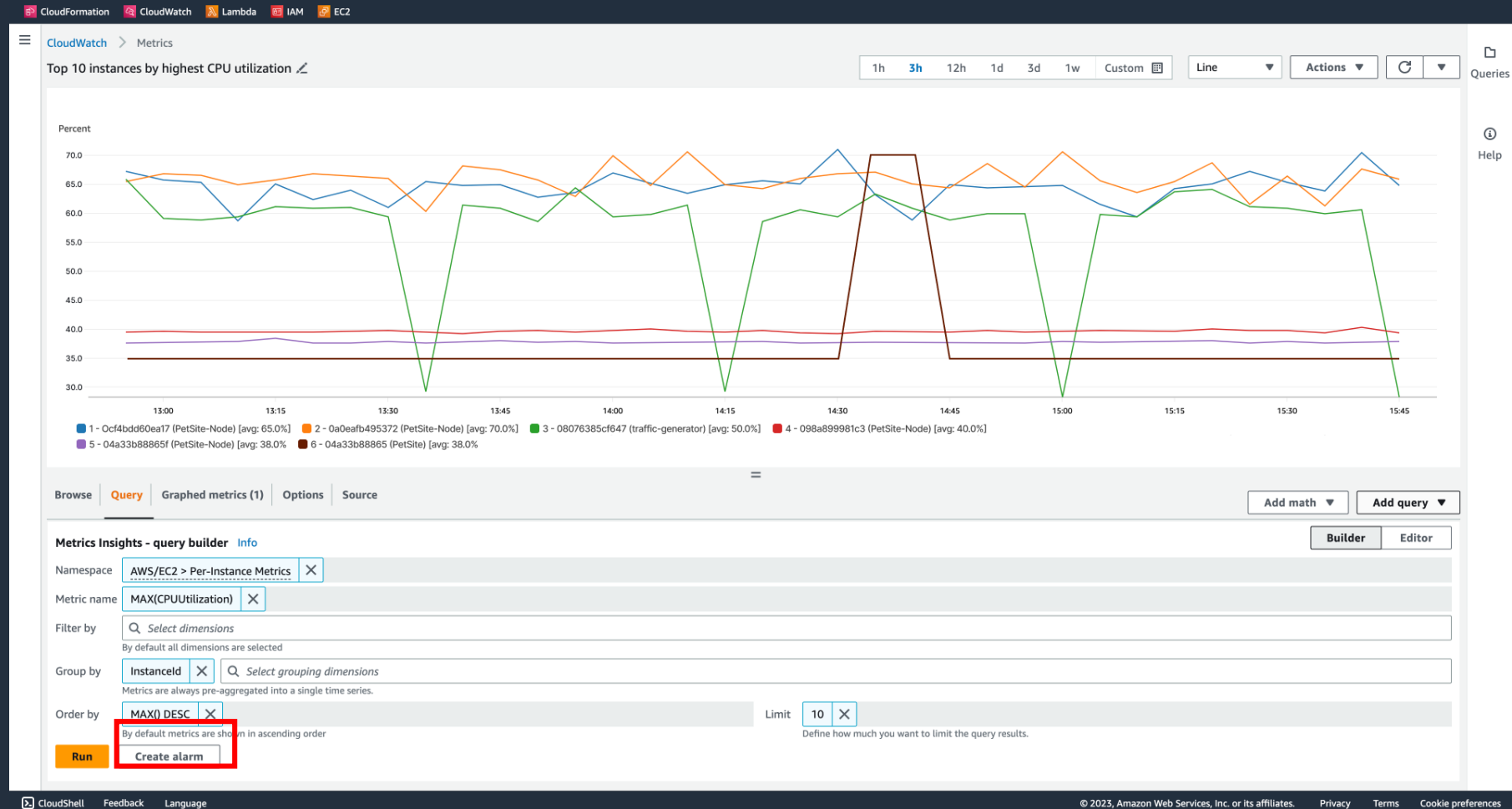
CloudWatch Metric Insights

- › Query metrics at scale fast
- › Out of the box queries



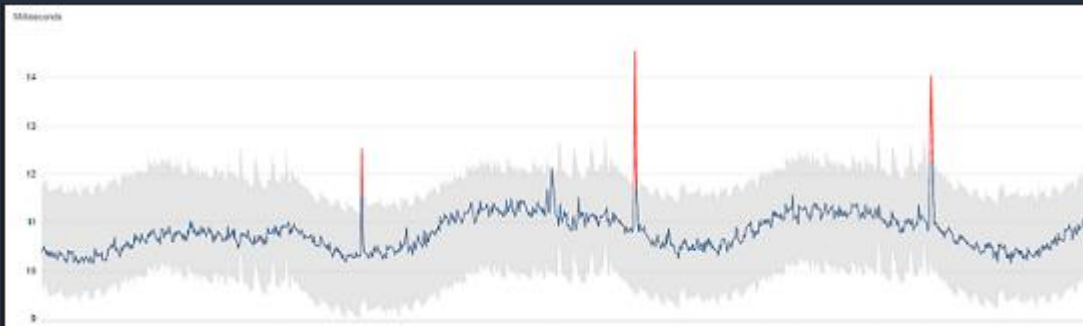
CloudWatch Metric Insights

- › Powerful, slice and dice
- › Graphical editor
- › SQL based
- › Create alarm



Alarms never sleep ...

- > Metric Insight Alarm
- > Metric Alarm
- > Alarms on Anomaly Detection Band
- > Composite Alarm



Graph
This alarm will trigger when the blue line goes above the band for 1 datapoints within 5 minutes.

Percent

9.0
5.5
2.0

17:00 18:00 19:00

● CPUUtilization ● CPUUtilization (expected)

Namespace
AWS/EC2

Metric name
CPUUtilization

InstanceId
i-0714a3f2

Instance name
No name specified

Statistic
Average

Period
5 minutes

Prediction band preview
This is a preview of the anomaly detection band. The anomaly detection model will be created after you finish creating this alarm.

Conditions

Threshold type

☐ Static
Use a value as a threshold

☒ Anomaly detection
Use a band as a threshold

Whenever CPUUtilization is...

Define the alarm condition

☐ Outside of the band
> or < threshold

☒ Greater than the band
> threshold

☐ Lower than the band
< threshold

Anomaly detection threshold
Based on a standard deviation. Higher number means thicker band, lower number means thinner band.

2

Must be a positive number

► Additional configuration

Cancel Next

Dashboards – write the story

Visual signals to contextualize what is happening



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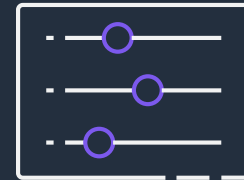
Often utilizing **multiple AWS accounts**



Cross-account observability

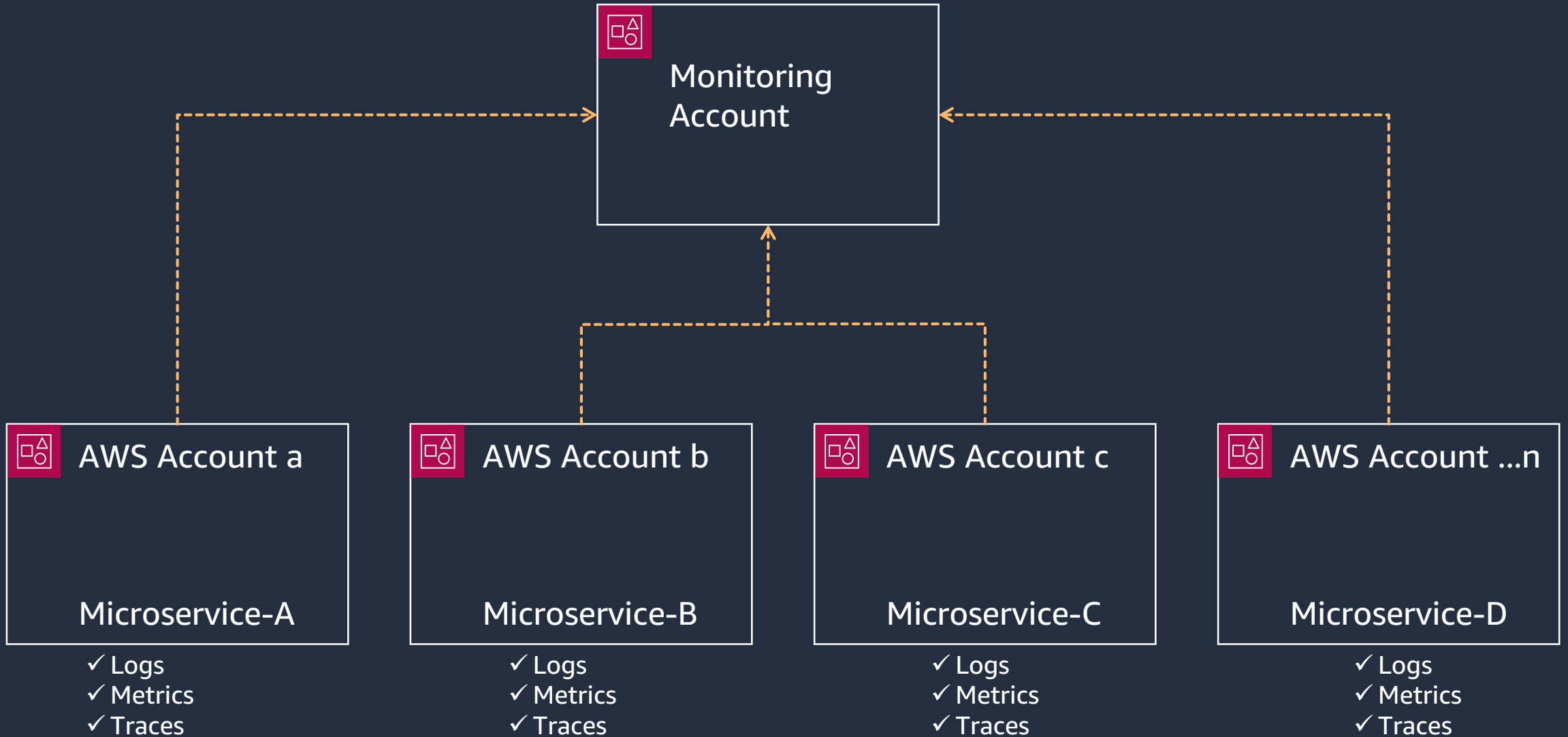


Birds-eye view across
multiple accounts



Easy to set up

Cross-account observability



Resources

One Observability
Workshop



AWS Observability
Best Practices



Amazon CloudWatch, <https://aws.amazon.com/cloudwatch/>



Thank you!