
AWS
re:Invent
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How Commonwealth Bank simplified the compliance journey

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Agenda

- Operating at cloud scale
- Risk and compliance challenges
- Compliance and assurance in AWS
- Commonwealth Bank compliance journey in cloud
- Resources

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Why AWS Cloud Operations?



Return on Investment (ROI)

241% ROI over 3 years*



Staff productivity

62% more efficient IT infrastructure staff



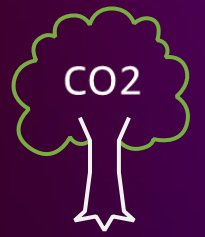
Operational resilience

57% decrease in downtime



Business agility

37% decrease in time to market



Carbon savings

88% reduction in carbon footprint of IT operations

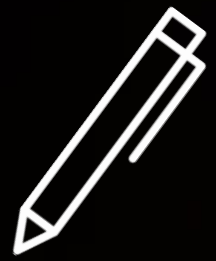
Based on independent research of 1,500 AWS enterprise customers
*Source: "The Total Economic Impact of AWS Cloud Operations: Cost Savings And Business Benefits Enabled By Operation on AWS. May 2022. A commissioned study conducted by Forrester Consulting on behalf of Amazon Web Services."

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Your journey to operating at cloud scale

Get started with AWS Cloud Operations

Set up



Establish a secure foundation for governance and compliance

Build & Migrate



Migrate applications to the cloud or build new applications

Operate



Simplify ops management with an integrated experience to manage and monitor resources and apps to detect and remediate risks quickly

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Risk and compliance challenges

In its shift to the cloud, the Financial Services industry is confronting a range of **unique risk and compliance challenges**



Constantly evolving regulatory requirements



Requirements that vary significantly across regions



Highly dynamic security threat landscape



Stringent reporting and documentation requirements



Limited cloud security & compliance specialists

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State of the threat landscape



Ransomware Attacks

35% increase in ransomware attacks targeting FSI



Phishing Attacks

Phishing attacks up **77%** from Q2 2022



Data Disclosure

27% of security incidents had confirmed data disclosure



Denial of Service Attacks

DoS attacks involved in **58%** of security incidents in the FSI sector

Based on research performed by the Anti-Phishing Working Group and Verizon.
Sources:
Phishing Activity Trends Report, 1st Quarter 2022, APWG.
2022 Data Breach Investigations Report, Verizon.

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AWS enables cloud compliance and assurance

Manage Risk



AWS Config



AWS CloudTrail



AWS Control Tower



AWS Systems Manager



AWS License Manager

Oversee Risk



AWS Security Hub



Amazon CloudWatch

Assurance of Risk Management



AWS Audit Manager



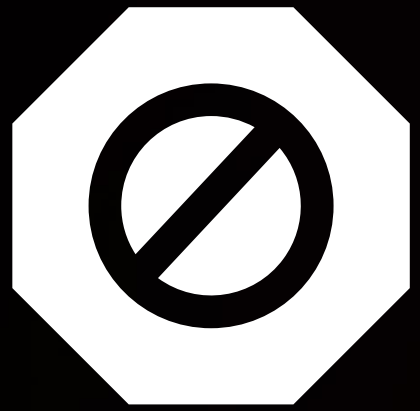
AWS Artifact



AWS Well-Architected Framework

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Manage risk – Define controls



Preventive controls



Detective controls

Risk Assessment

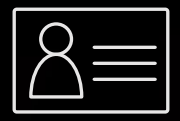
Protection / Prevention

Threat Detection

Response

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AWS security solutions



Identity & access management

AWS Identity and Access Management (IAM)

AWS IAM Identity Center

AWS Directory Service

Amazon Cognito

AWS Organizations

AWS Secrets Manager

AWS Resource Access Manager (AWS RAM)



Detective controls

AWS Audit Manager

AWS Security Hub

Amazon GuardDuty

AWS Config and conformance packs

AWS CloudTrail

Amazon CloudWatch

VPC Flow Logs



Infrastructure protection

AWS Systems Manager

AWS Shield

AWS WAF

AWS Firewall Manager

Amazon Inspector

Amazon Virtual Private Cloud (Amazon VPC)



Data protection

AWS Key Management Service (AWS KMS)

AWS CloudHSM

AWS Certificate Manager (ACM)

Amazon Macie

Server-side encryption



Incident response

AWS Config rules

AWS Lambda

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Native services

Adopt managed rules
Use native services!



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AWS Config

DETECTIVE CONTROLS

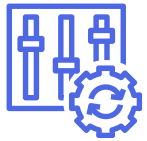


Identify

Identify control objectives across standards and regulations

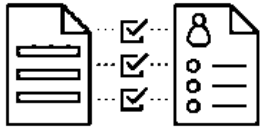


Configuration change occurs in your AWS resources



AWS Config

AWS Config records and normalizes the changes into a consistent format



AWS Config automatically evaluates the recorded configurations against the configurations you specify



AWS Config APIs & console



Amazon SNS



Amazon CloudWatch



Amazon S3

Access change history and compliance results using the console or APIs; Amazon CloudWatch Events or SNS alerts you when changes occur; deliver change history and snapshot files to your S3 bucket for analysis

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AWS Config: Conformance packs

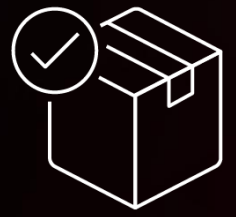
Advanced queries



Configure attribute-based **queries** against current state metadata

>50 sample queries are available

Conformance packs



Simplified organization-wide **deployment** and **reports** of compliance

>75 sample templates are available to get started

Automatic remediation with AWS Config rules



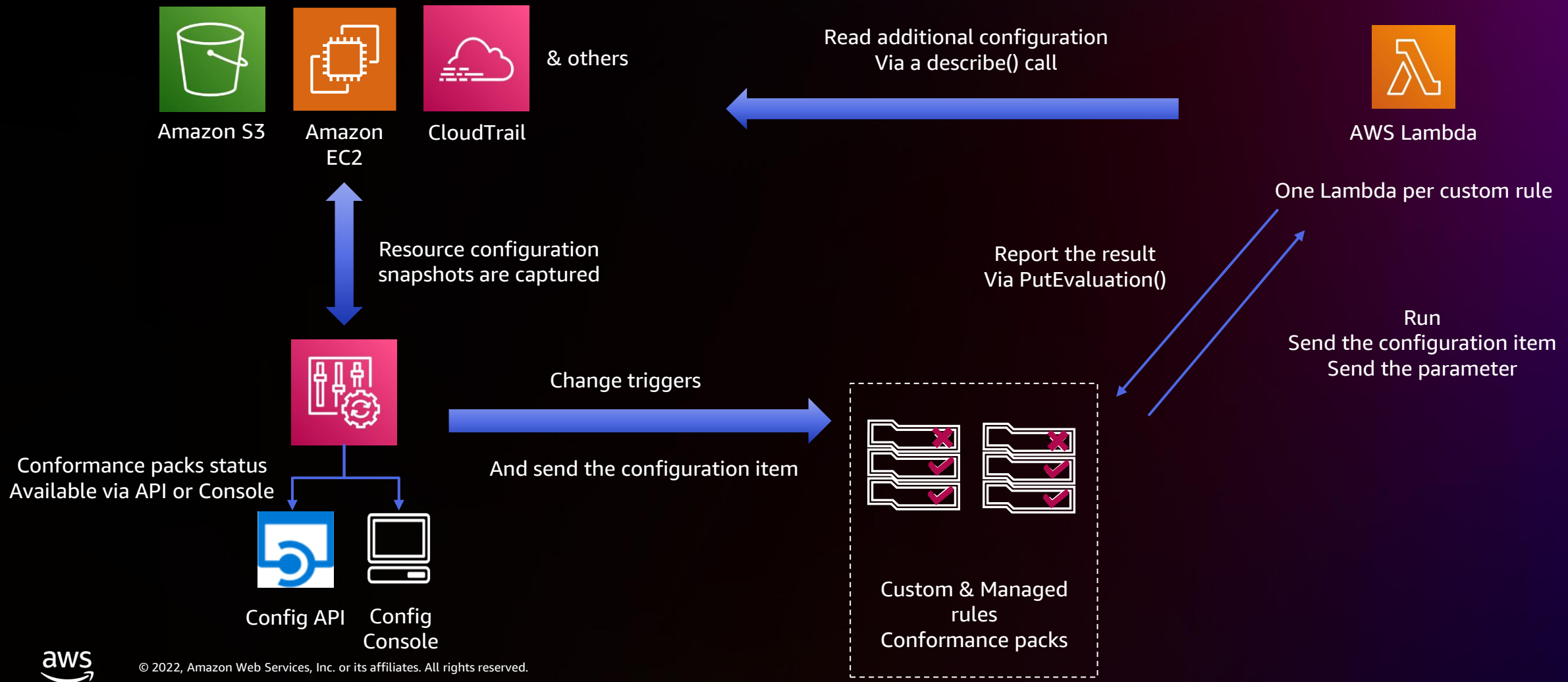
Enables you to **automatically** remediate noncompliant resources

>275 managed rules (and growing)
+ create custom rules

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Compliance-as-code framework

AWS CONFIG CONFORMANCE PACKS



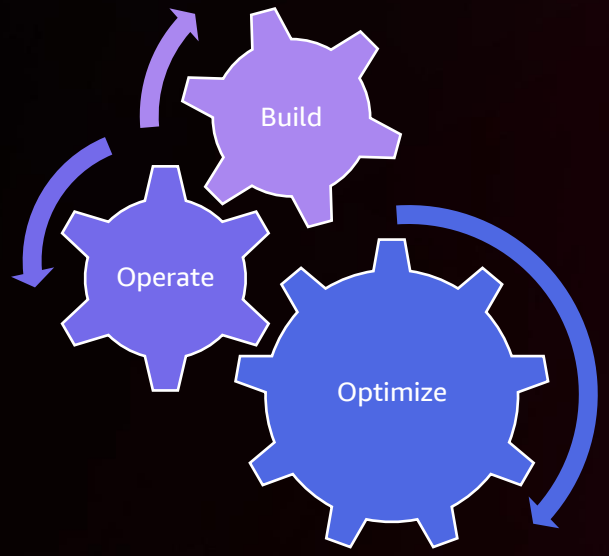
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PFRs and optimization

AWS CONFIG & CONFORMANCE PACKS

Integrate AWS Config with AWS Security Hub

Ability to create custom rules (Conformance packs)



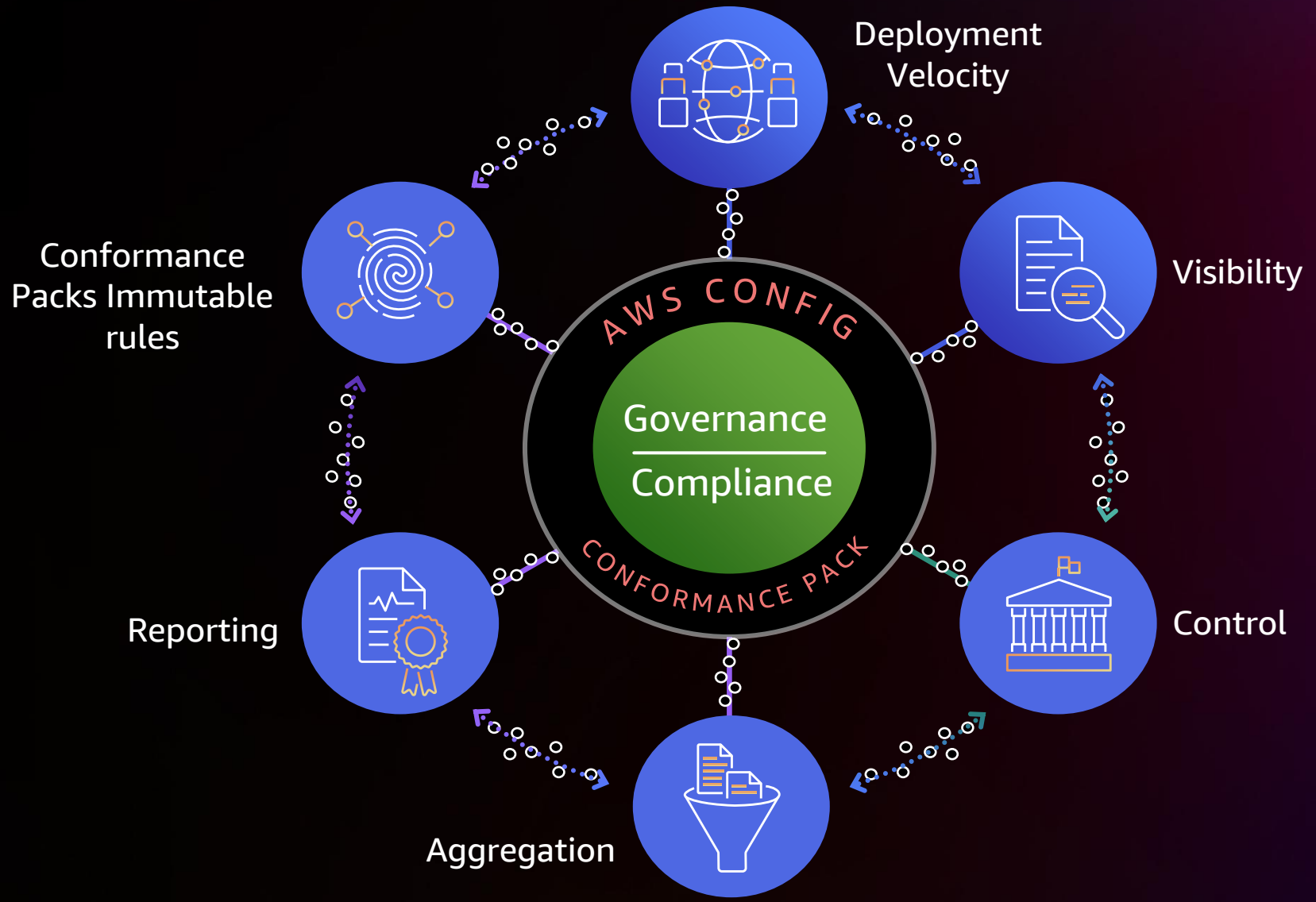
Number of rules per account

Cost

AWS announced price reduction up to 58% for conformance packs!

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Benefits of AWS Config & Conformance Packs



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Detective controls

Gain the visibility you need to spot issues before they impact the business; improve your security posture and reduce the risk profile of your environment

AWS Security Hub

Centrally view & manage security alerts & automate compliance checks

Amazon GuardDuty

Intelligent threat detection and continuous monitoring to protect your AWS accounts and workloads

AWS Config

Record and evaluate configurations of your AWS resources to enable compliance auditing, resource change tracking & security analysis

AWS CloudTrail

Track user activity and API usage to enable governance, compliance, and operational/risk auditing of your AWS account

Amazon CloudWatch

Complete visibility of your cloud resources and applications to collect metrics, monitor log files, set alarms, and automatically react to changes

VPC Flow Logs

Capture info about the IP traffic going to and from network interfaces in your VPC; flow log data is stored using Amazon CloudWatch Logs

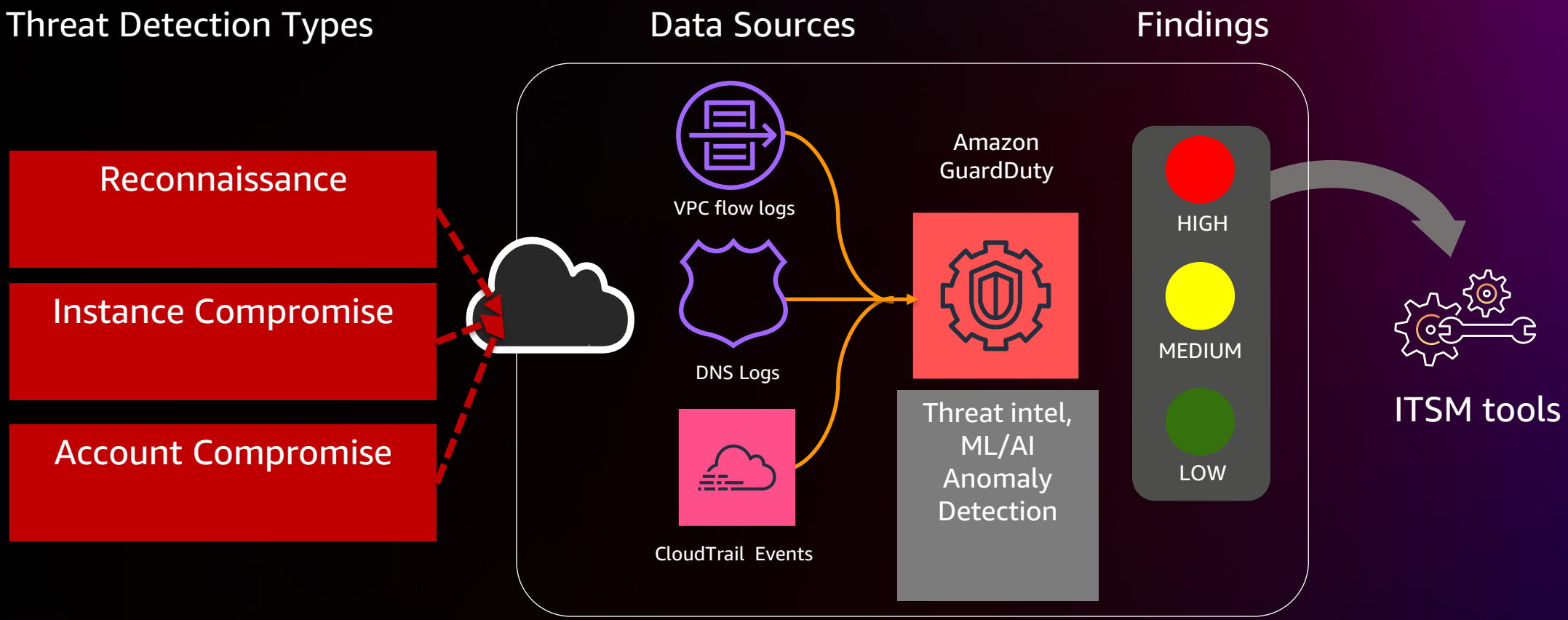
AWS Audit Manager

Continuously audit your AWS usage to simplify how you assess risk and compliance

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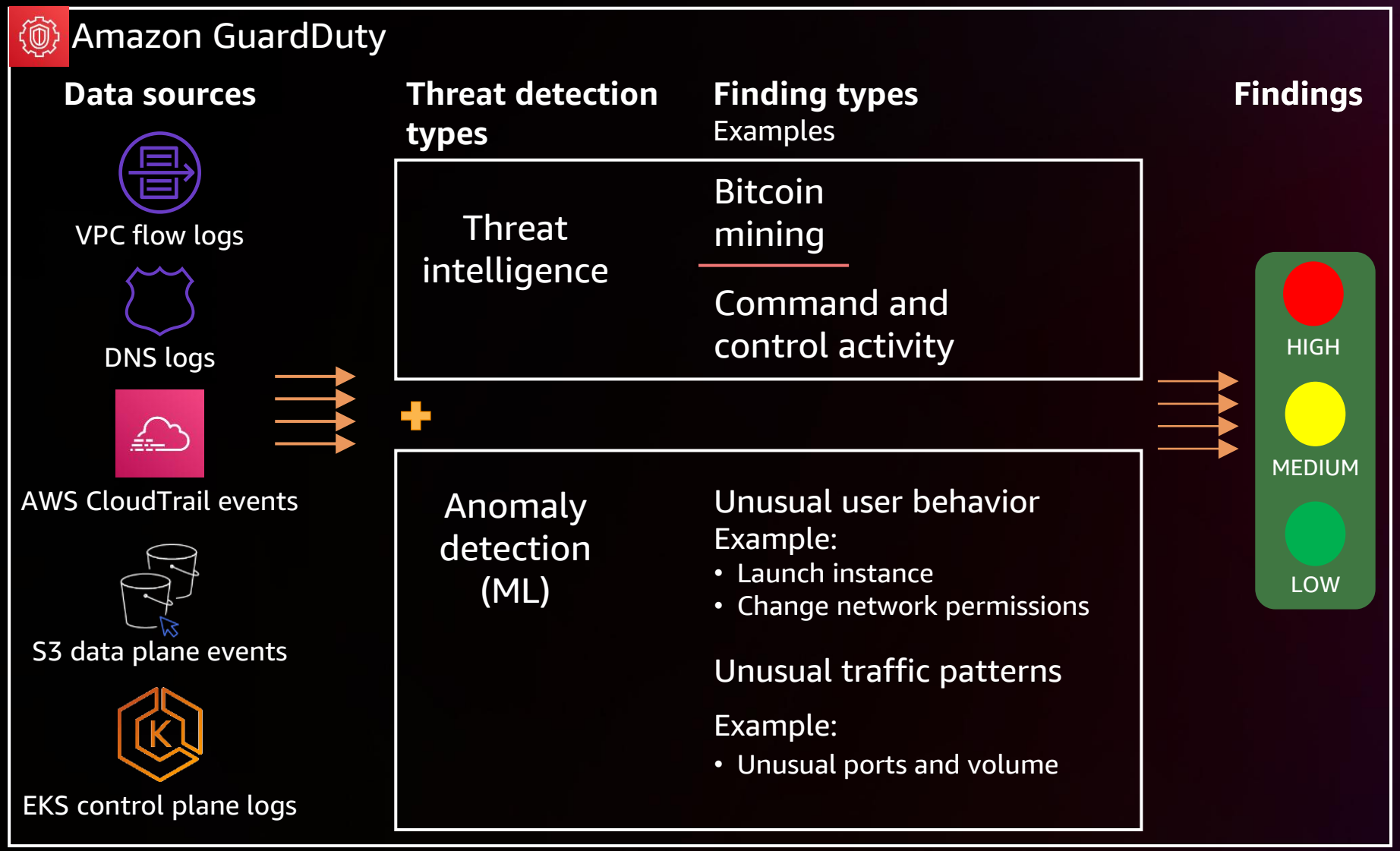
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Amazon GuardDuty



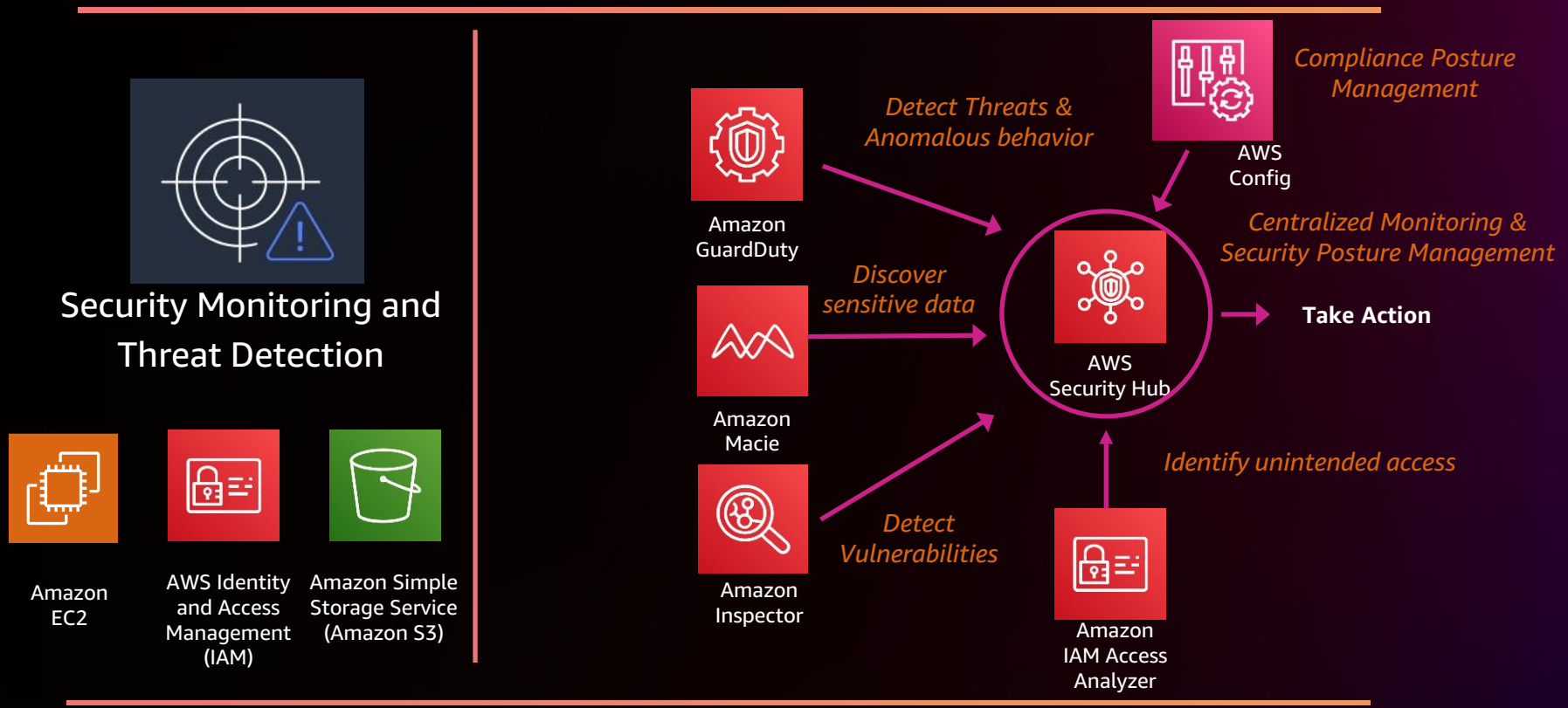
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GuardDuty workflow



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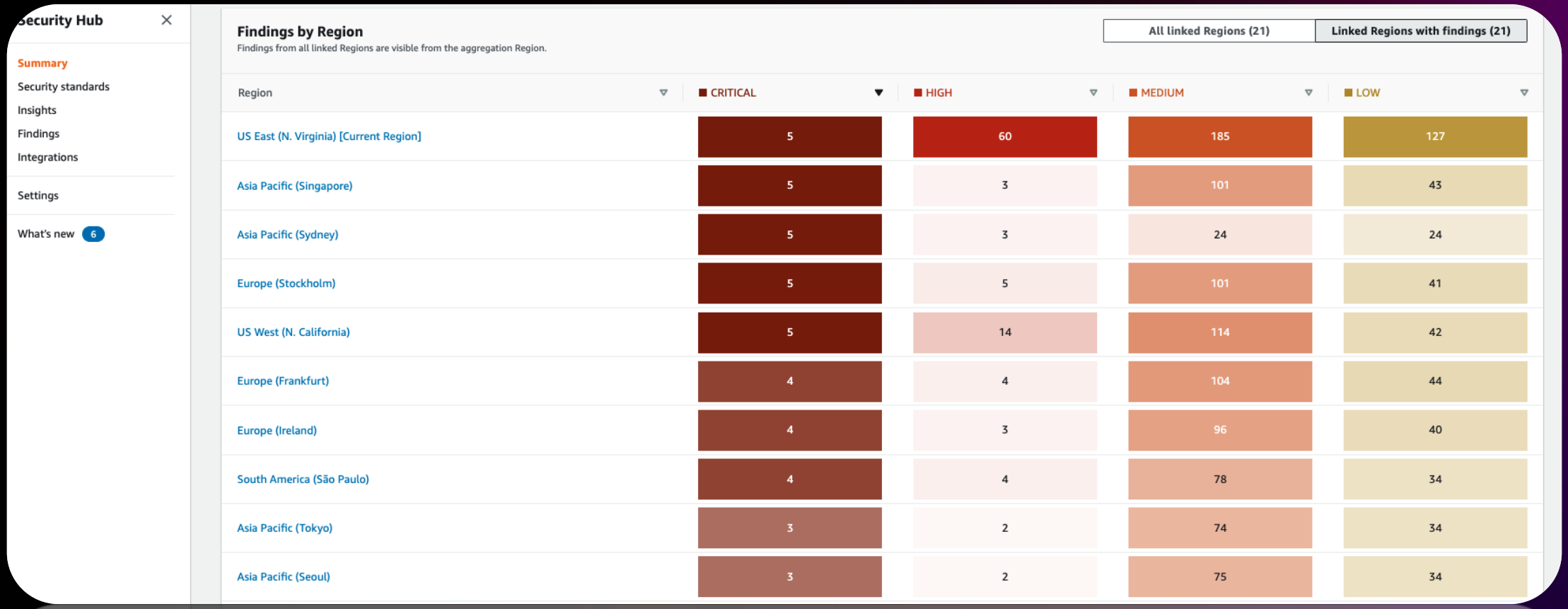
AWS Security Hub Security findings & remediation flows



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Aggregated findings

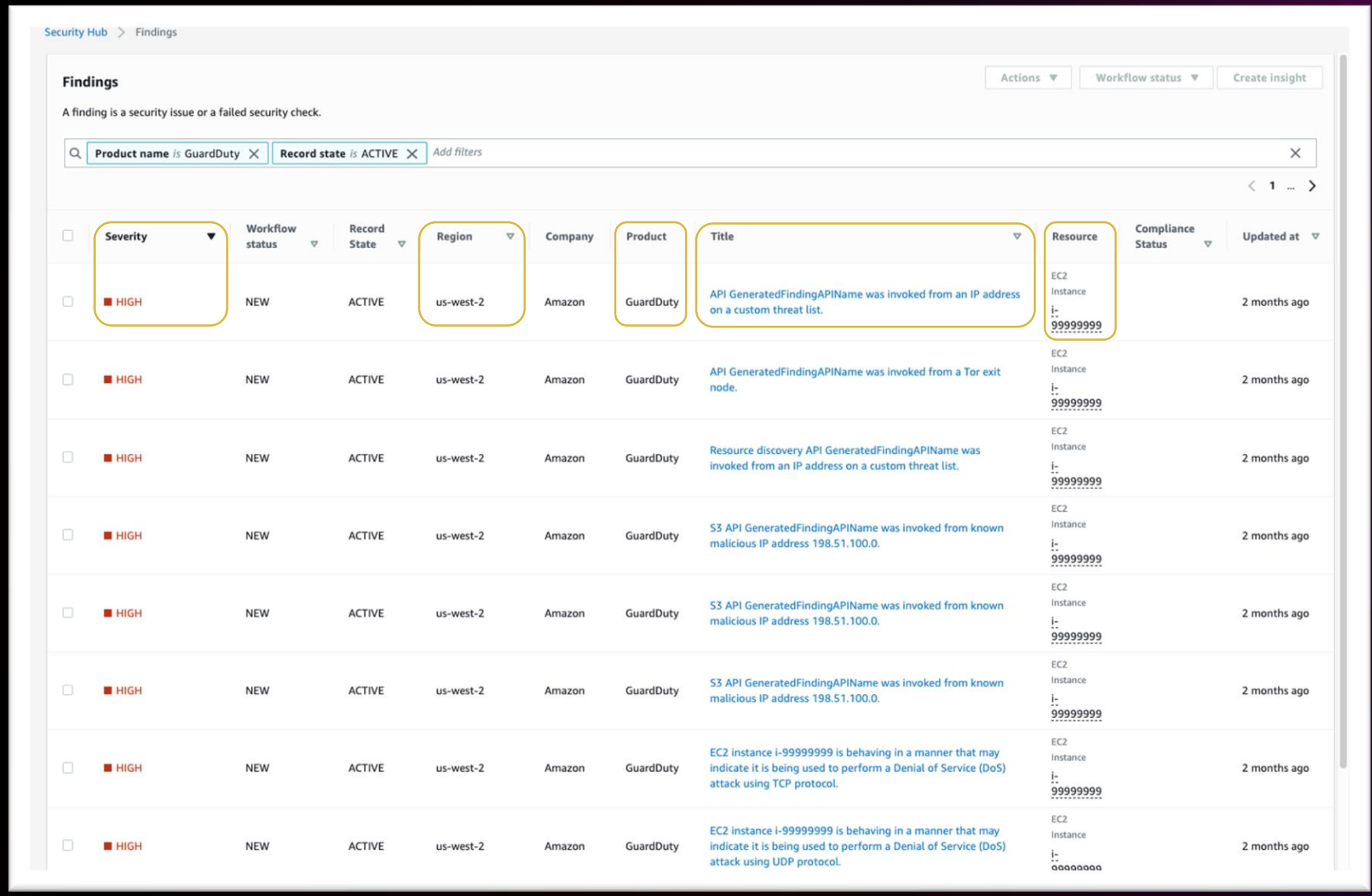
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Findings dashboard

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Evolving to compliance at scale



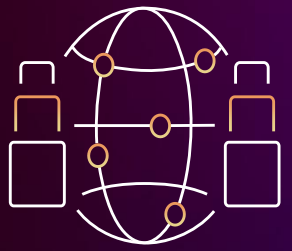
Minimize Friction



Immutability



Automate Remediation



Scale Governance

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Resources



Using AWS Config for security analysis and resource administration



Cloud compliance and assurance samples



Harness the power of control automation to reduce operational risk and improve compliance



Automate continuous compliance at scale in AWS

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Thank you!

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