

The background of the image features a dark blue gradient on the left, transitioning into a large, vibrant, abstract shape on the right. This shape is composed of overlapping curved segments in shades of orange, pink, and purple, creating a dynamic, modern aesthetic.

# AWS re:Invent

NOV. 27 – DEC. 1, 2023 | LAS VEGAS, NV

SEC229-S

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# Securely configure your AWS environments with CIS & Qualys

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# Agenda

- About CIS
- Why secure configurations are key
- CIS Benchmarks
- Key market trends in cloud security
- Challenges in cloud security
- Cloud misconfigurations
- Cloud security posture management

# About the Center for Internet Security

Creating confidence in the connected world



Independent  
and trusted



Proven and  
effective



Collaborative



Operational  
expertise



Sustainable

# Secure configurations are key



74% of breaches include the human element

- Either via error, privilege misuse, use of stolen credentials, or social engineering

Source: 2023 Verizon DBIR

Breaches caused by cloud misconfigurations

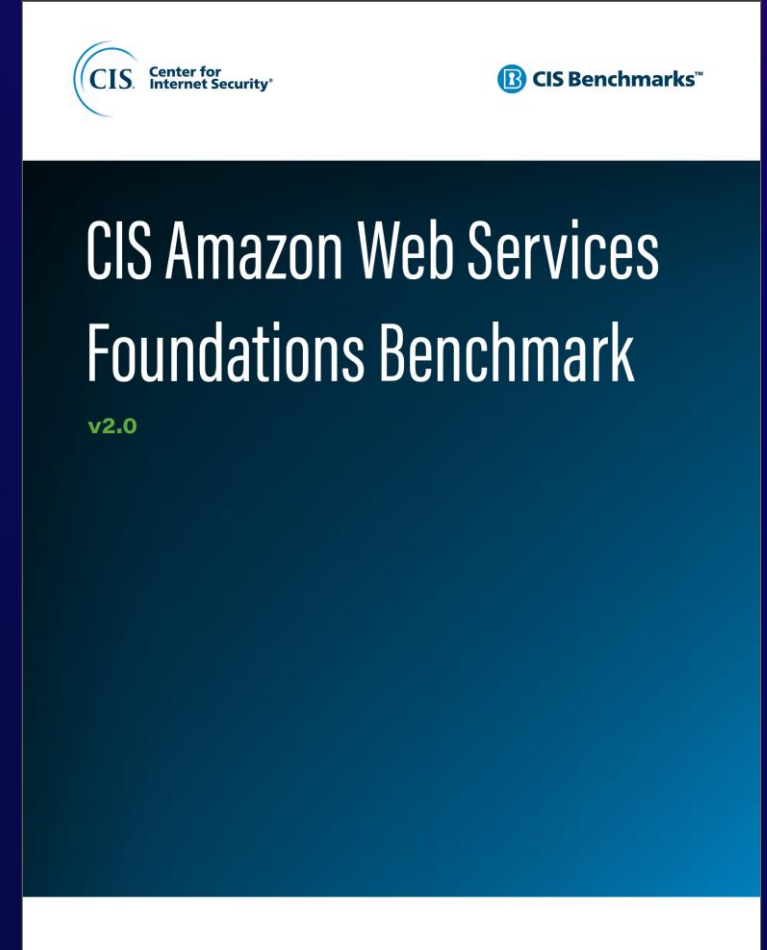
- Took 244 days to identify and contain
- Cost an average of \$4.14M

Source: 2022 IBM Security Cost of a Data Breach Report

# CIS Benchmarks

Consensus-developed secure configuration guidelines

- 100+ CIS Benchmarks
- Covering 25+ vendor product families
  - Operating systems, server software, cloud providers, network devices, desktop software
- Recognized by industry frameworks
  - FISMA, FedRAMP, PCI DSS
- Community developed
  - CIS members, subject matter experts, security community experts, and technology vendors
- Provide audit and remediation procedures



# How are CIS Benchmarks available?

- CIS Benchmarks PDFs are available for free, noncommercial use
  - <https://www.cisecurity.org/cis-benchmarks>
- CIS SecureSuite Membership
  - Machine-readable formats of CIS Benchmarks
  - CIS Configuration Assessment Tool, CIS-CAT Pro
  - Multiple tiers including End User and Commercial Tier (Product Vendor)
    - **Qualys** is one of the CIS SecureSuite Product Vendor Members

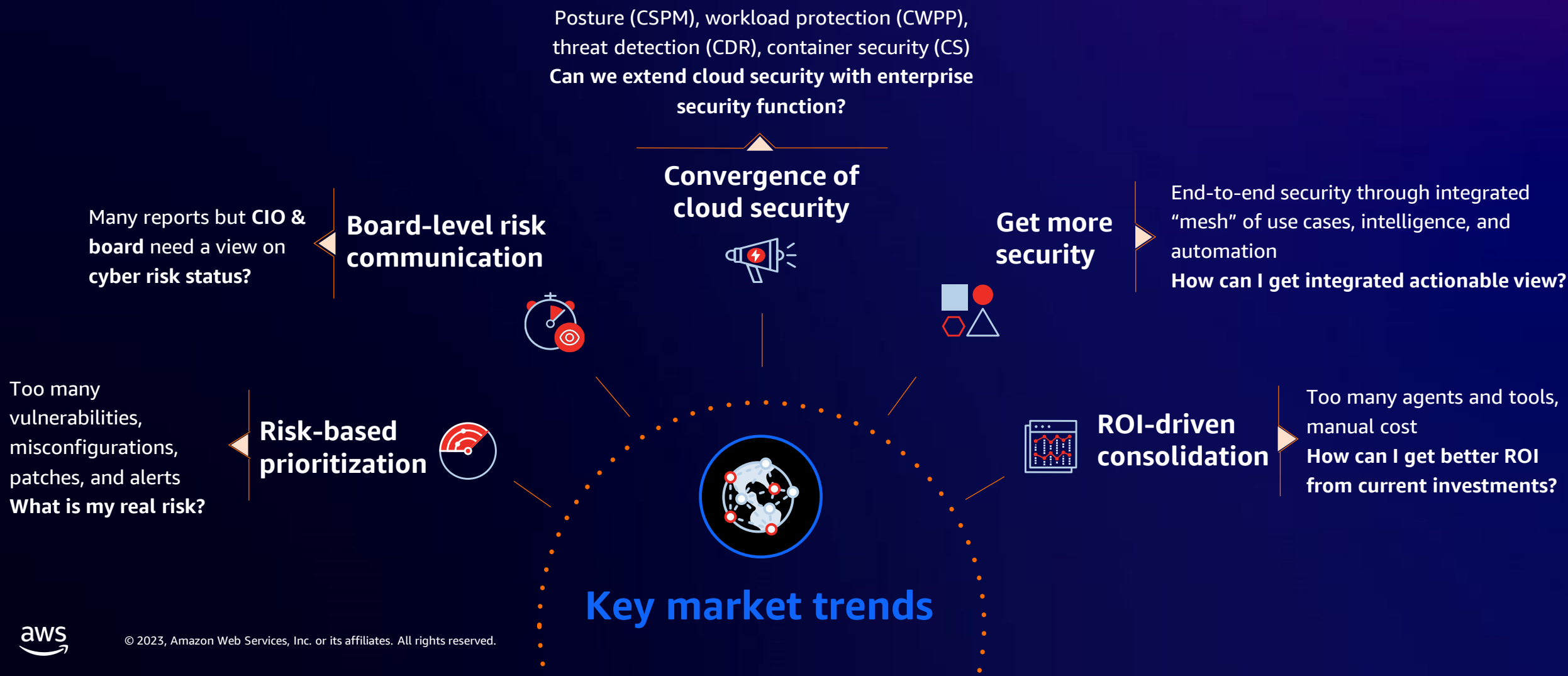
# Qualys TotalCloud (CNAPP)

Reducing risk through unified vulnerability, threat, and posture management, from development to runtime



# What we see as key market trends

## Looking ahead



# What we see as key market trends

Looking ahead

Posture (CSPM), workload protection (CWPP),  
threat detection (CDR), container security (CS)  
**Can we extend cloud security with enterprise  
security function?**



**Convergence of  
cloud security**

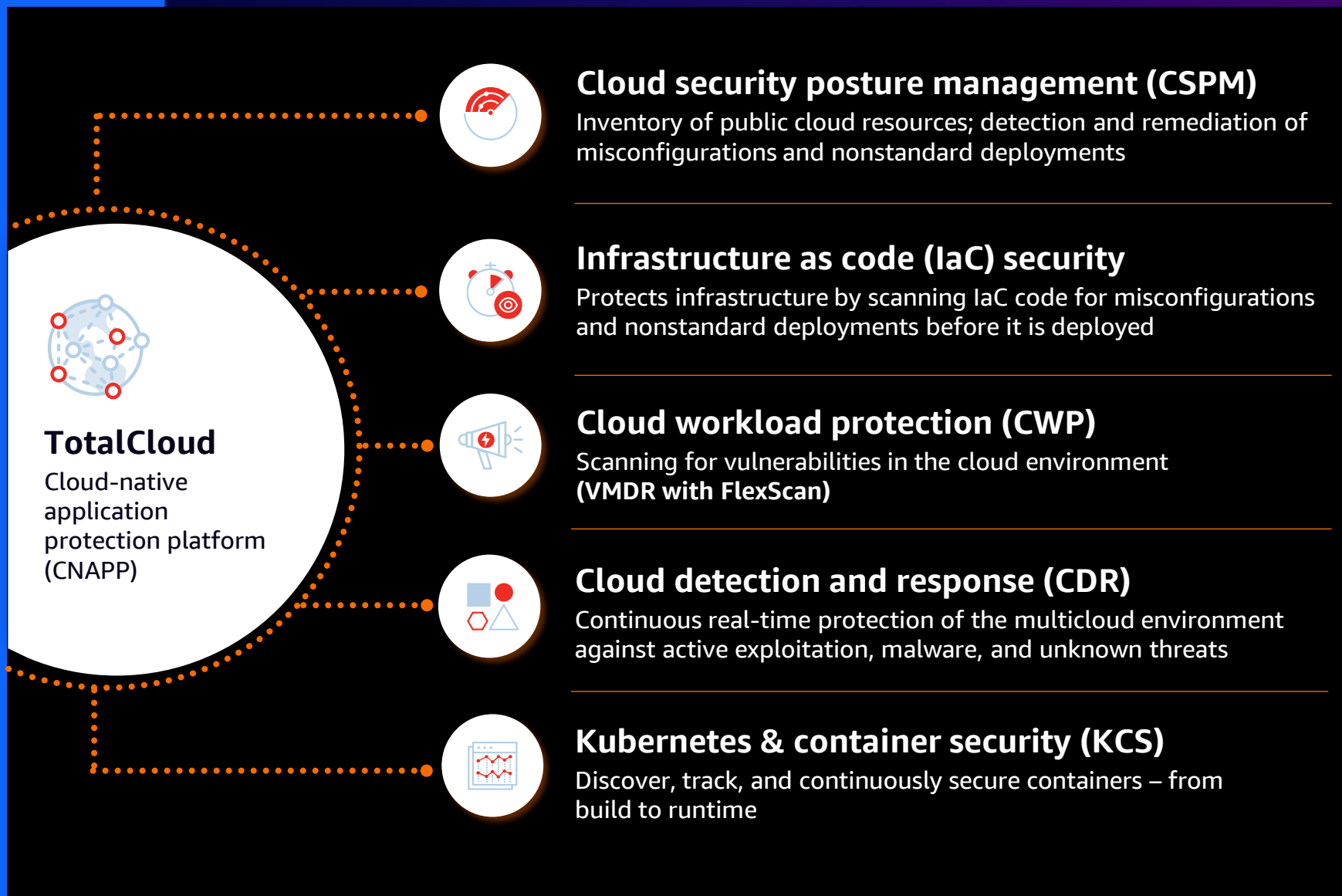


**Key market trends**

# Qualys TotalCloud

A comprehensive  
CNAPP solution

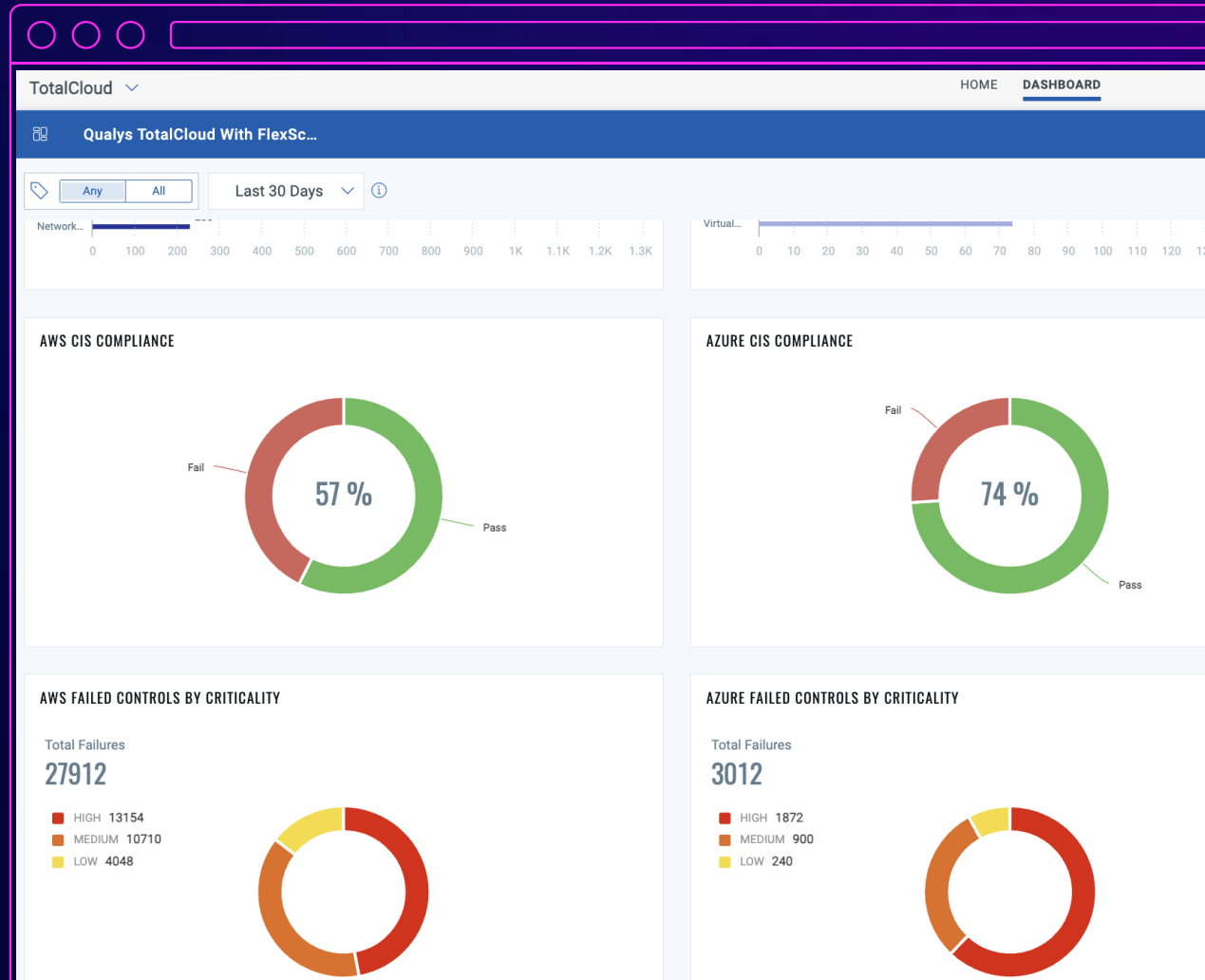
Reducing risk  
through unified  
vulnerability, threat,  
and posture  
management, from  
development to  
runtime



# Cloud security posture management

Comprehensive inventory of your public cloud workloads and infrastructure

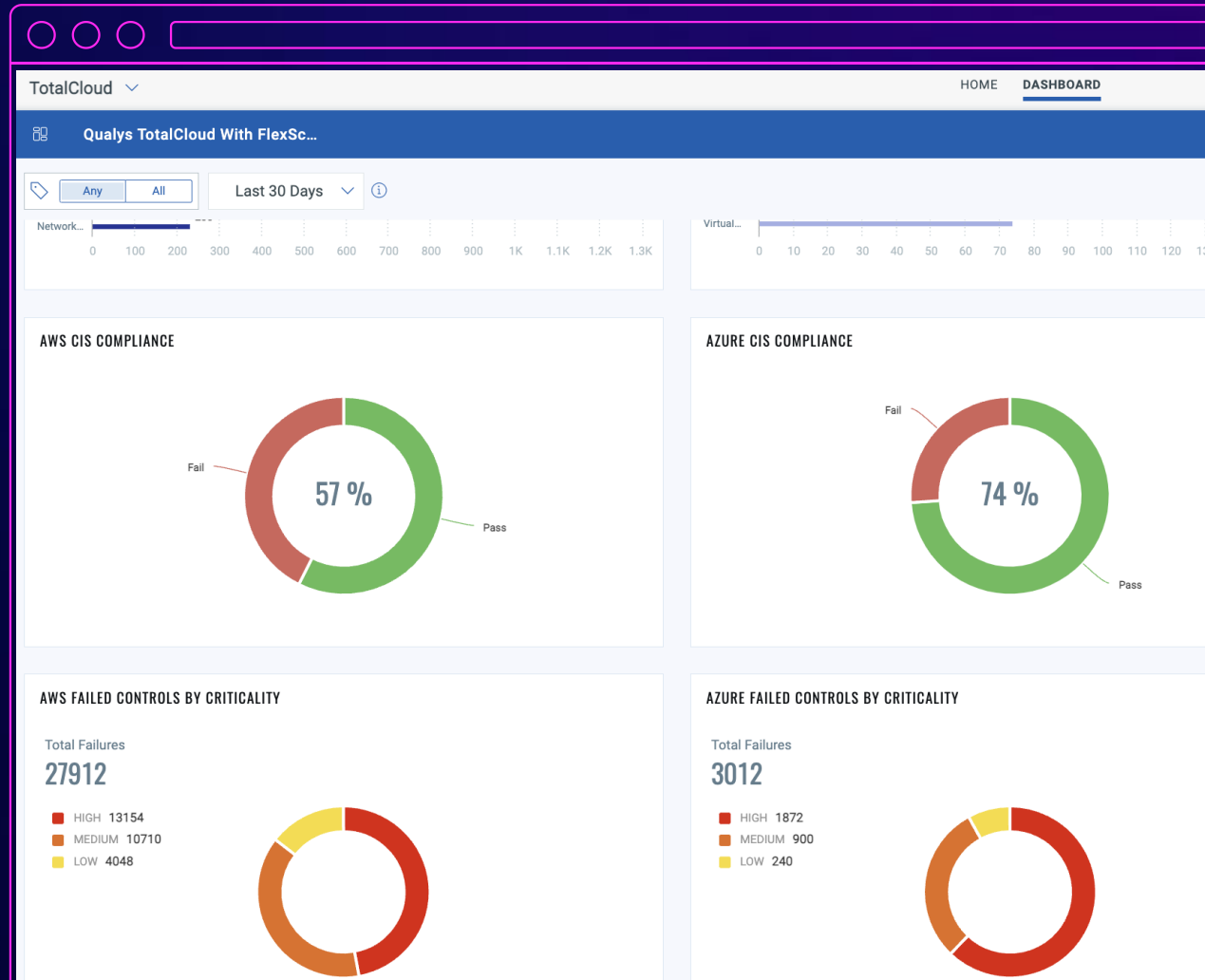
- Identify and remediate misconfiguration across 100% of your cloud assets
- 1000+ out-of-box controls, including Qualys best practices and CIS standards
- Supports 30+ compliance mandates such as PCI DSS and HIPAA and complete coverage of CIS benchmarks
- Automatically alert, ticket, or remediate misconfigurations
- One-click remediation for many high-visibility controls



# CIS Benchmarks

<https://www.cisecurity.org/partner/qualys>

- CIS Amazon Web Services Foundations Benchmark v1.5.0, Level 1
- CIS Amazon Web Services Foundations Benchmark v1.5.0, Level 2
- AWS Identity and Access Management (IAM), Amazon S3, Amazon EC2



# CIS Benchmarks

- Wide coverage of CIS policies and beyond
  - Amazon Linux 2
  - Amazon Linux 2023
  - Amazon Linux AMI
  - Amazon RDS
- RDS assessment via native data collection

The image shows two overlapping screenshots of the Qualys Cloud Platform interface. The top screenshot displays the 'Policy Compliance' dashboard for 'PCD\_Policy Compliance'. It features four donut charts showing overall compliance percentages: 60.01% for overall, 73.97% for database, 60.62% for OS, and 67.82% for middleware. Each chart includes a breakdown of 'PASS', 'FAIL', and 'ERROR' counts. The bottom screenshot shows the 'Create a New Policy' screen, which includes a 'Policy from Library' section with a list of policies. The 'Technologies' list on the left has 'Amazon Linux 2023' and 'Amazon Linux AMI' checked. The 'Policies (21)' list on the right includes 'CIS Benchmark for Microsoft SQL Server 2019, v1.2.0 [Automated and Manual, Level 1 and Level 2 - AWS RDS]' and 'CIS Benchmark for Amazon Linux 2, v2.0.0 [Automated and Manual, Level 1 and Level 2]'.

**Qualys Cloud Platform**

**Policy Compliance**

**PCD\_Policy Compliance**

Welcome to the enhanced Policy Compliance UI. Customize and view your PC posture. Return to Classic UI

Last 30 Days

**OVERALL COMPLIANCE**

Total Count 606K

60.01%

PASS 343K  
FAIL 232K  
ERROR 10.3K

**OVERALL COMPLIANCE FOR DATABASE**

Total Count 4.04K

73.97%

PASS 2.99K  
FAIL 1.02K  
ERROR 35

**OVERALL COMPLIANCE FOR OS**

Total Count 591K

60.62%

PASS 358K  
FAIL 223K  
ERROR 10.3K

**OVERALL COMPLIANCE FOR MIDDLEWARE**

Total Count 174

67.82%

PASS  
FAIL

**Create a New Policy**

**Policy from Library:** Choose from one of the policies in our library.

Find the policy that best suits your needs. Our Compliance Policy Library contains several sample policies based on popular compliance frameworks including SOX, HIPAA, CoBIT and more. Click on one of the policies below, and then click Next to import it.

**Labels**

All  
New  
Updated  
Mandate  
**CIS**  
Vendor  
Qualys  
DISA  
STIG  
OCA

**Technologies**

☐ AIX 6.x  
☐ AIX 7.x  
☐ Alibaba Cloud Linux 2.x  
☐ Alibaba Cloud Linux 3.x  
☐ AlmaLinux 8.x  
☐ AlmaLinux 9.x  
☒ Amazon Linux 2 AMI  
☒ Amazon Linux 2023  
☒ Amazon Linux AMI  
☐ Apache HTTP Server 2.2.x  
☐ Apache HTTP Server 2.4.x  
☐ Apache Tomcat 10.x  
☐ Apache Tomcat 6.x  
☐ Apache Tomcat 7.x

**Policies (21)**

**CIS Benchmark for Microsoft SQL Server 2019, v1.2.0 [Automated and Manual, Level 1 and Level 2 - AWS RDS]**

Version 2.0 03/30/2023 View Description | View Policy

**CIS Benchmark for Microsoft SQL Server 2019, v1.2.0 [Automated and Manual, Level 1 and Level 2 - AWS RDS]**

Version 2.0 03/30/2023 View Description | View Policy

**CIS Benchmark for Amazon Linux 2, v2.0.0 [Automated and Manual, Level 1 and Level 2]**

Version 6.0 09/29/2023 View Description | View Policy

**Back** Choose Source

# Thank you!

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Please complete the session  
survey in the mobile app

