AWS re:Invent

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Cloud compliance and auditing best practices on AWS

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Discussion topics

Cloud compliance and audit challenges

AWS capabilities for configuration, compliance, and auditing

Common use cases and case studies

Open discussion

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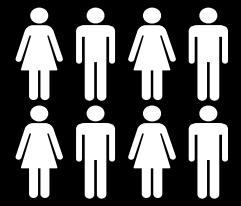
Cloud compliance and audit challenges



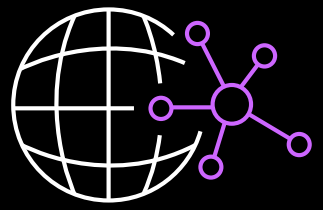
Dynamic landscape



Volume, variety, and velocity



Manual nature of the audit



Global/ geographic



Different compliance and security needs



Familiarity with the cloud

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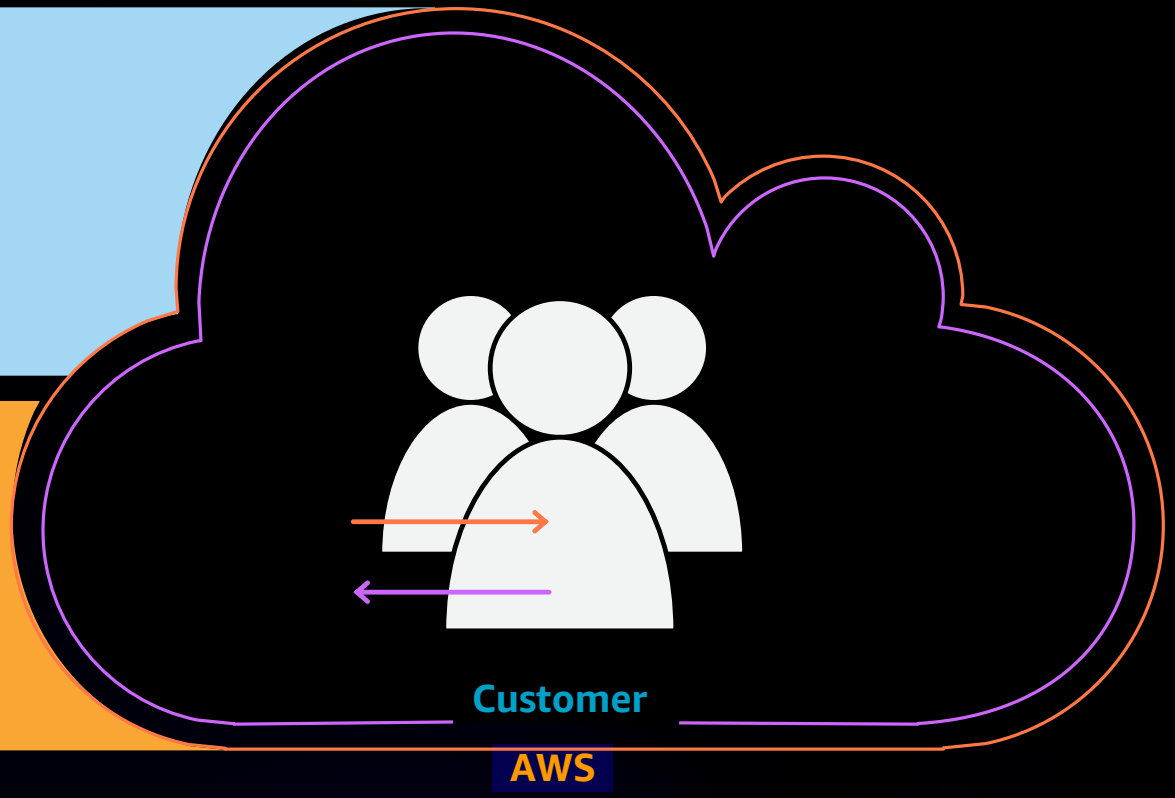
AWS Shared Responsibility Model

Security in the cloud

Customer responsibility will be determined by the AWS Cloud services that a customer selects

Security of the cloud

AWS is responsible for protecting the infrastructure that runs all of the services offered in the AWS Cloud



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AWS capabilities for compliance



AWS Audit Manager

Amazon GuardDuty

AWS License Manager

Amazon Inspector

AWS Config

Amazon CloudWatch

AWS Systems Manager

AWS CloudTrail

AWS Control Tower

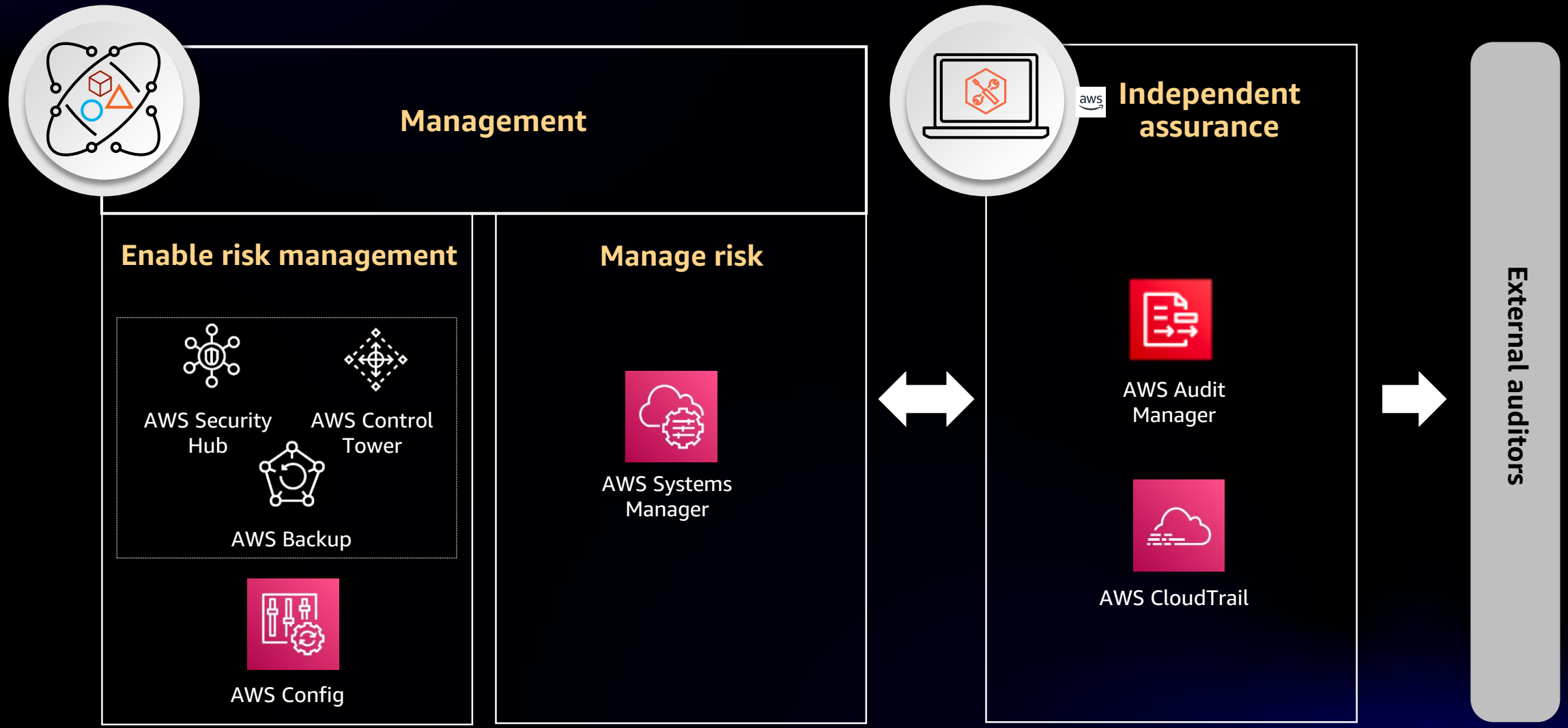
Amazon Macie

AWS Artifact

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AWS supports cloud compliance and assurance

THE IIA'S 3 LINES MODEL



IIA = Institute of Internal Auditors

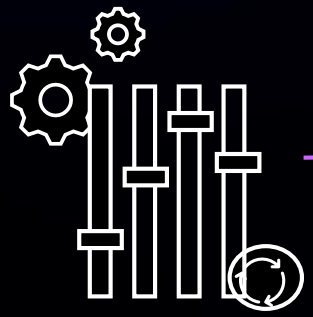
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Manage risk with AWS Config

ACCESS, AUDIT, AND EVALUATE



Access, audit, and evaluate



Configuration change occurs in your AWS resources

AWS Config

AWS Config records and normalizes the changes into a consistent format

Rules and conformance packs evaluate compliance

Sample conformance packs to get started: CIS, CMMC, FedRAMP, NIST, PCI, HIPAA, and more

AWS Config APIs and console

Amazon SNS

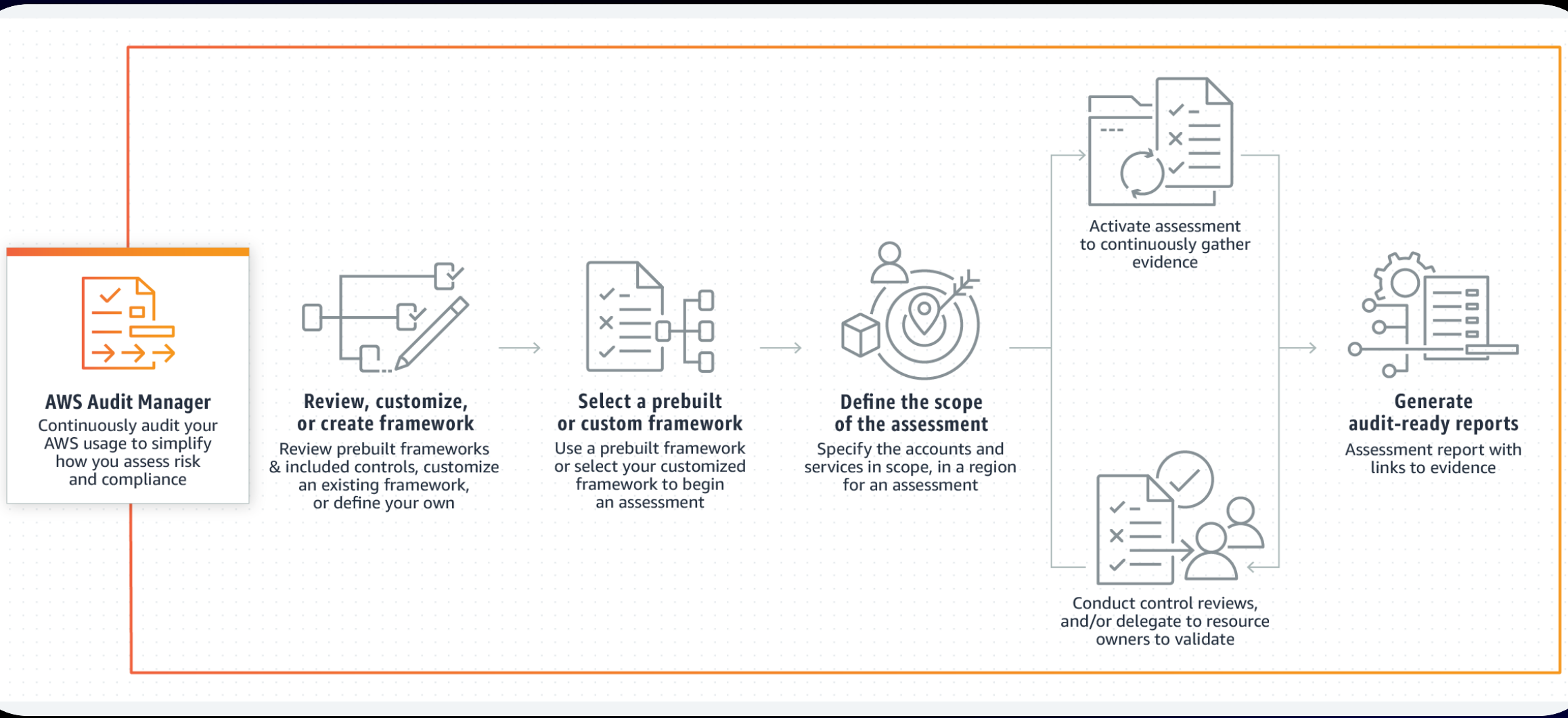
Amazon CloudWatch

Amazon S3

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

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AWS Audit Manager overview



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AWS Audit Manager frameworks

INCLUDES PREBUILT ASSESSMENT FRAMEWORKS FROM AWS AND AWS PARTNERS

- **NIST** (National Institute of Standards and Technology) **800.53 (Rev. 5)** (Low-Moderate-High), **800.171 (Rev. 2)**, and **Cybersecurity Framework**
- **CIS** (Center for Internet Security) **Benchmark v1.2.0**, Level 1 and Level 2, **v1.3.0**, Level 1 and Level 2, and **CIS Controls v7.1**
- **PCI DSS** (Payment Card Industry Data Security Standard) v3.2.1
- **GDPR** (General Data Protection Regulation)
- **GLBA** (Gramm-Leach-Bliley Act)
- **GxP** (good practice quality guidelines)
- **HIPAA** (Health Insurance Portability and Accountability Act)
- **FedRAMP** (Federal Risk and Authorization Management Program) Moderate
- **SOC 2** (System and Organization Controls)
- AWS Control Tower guardrails
- AWS Foundational Security Best Practices
- AWS License Manager
- AWS Operational Best Practices
- AWS Well-Architected Framework

You can also build custom controls and compliance frameworks

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3 common use cases

CLOUD COMPLIANCE AND ASSURANCE



How to automate compliance management and **manage risk**



How to implement continuous oversight and **oversee risk**



How to assess and independently gather evidence for **assurance of risk management**

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Thank you!

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