Hawai'i Cloud Innovation Summit 2023

Accelerate Security and Compliance in the Cloud

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Agenda

- Foundational Items
- Shared Responsibility Model
- How AWS can help
 - AWS Self Service Resources
 - AWS Services
 - Global Security and Compliance Acceleration Program (GSCA)









Unique risks and challenges

In its shift to the cloud, all industries are confronting a range of familiar and emerging issues



Constantly evolving regulatory requirements



Requirements that vary significantly across regions



Highly dynamic security threat landscape



Stringent board reporting and documentation requirements



Limited cloud security & compliance specialists









AWS offers customers tools and guidance to enable compliance

Terms & Conditions

Transparency





Agreements and third-party audit reports to support financial services compliance objectives

Compliance, Security Tools & Services Industry
Frameworks
and Assets



Services and assets to automate controls, collect evidence and manage audits demands

Deep Industry Expertise Regulatory Engagement





Mechanisms to advocate for and share best practices with customers

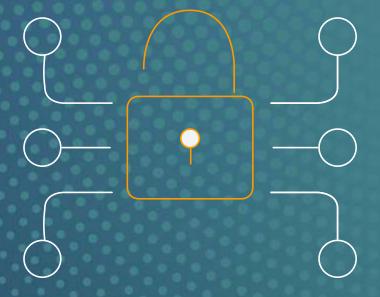








At AWS, security is the top priority!



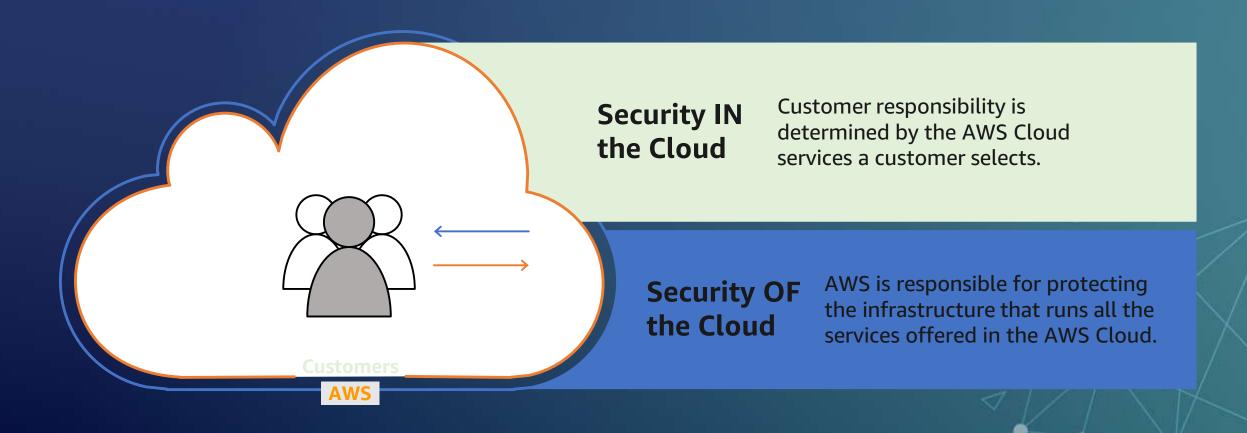








Shared responsibility model











Security & Compliance is a Shared Responsibility

AVAILABILITY ZONES

NETWORKING

EDGE LOCATIONS

CUSTOMER DATA CUSTOMER PLATFORM, APPLICATIONS, IDENTITY & ACCESS MANAGEMENT RESPONSIBILITY FOR **OPERATING SYSTEM, NETWORK & FIREWALL CONFIGURATION** SECURITY 'IN' THE CLOUD CLIENT-SIDE DATA **NETWORKING TRAFFIC** SERVER-SIDE ENCRYPTION **ENCRYPTION & DATA INTEGRITY** PROTECTION (ENCRYPTION, (FILE SYSTEM AND/OR DATA) **AUTHENTICATION** INTEGRITY, IDENTITY) **SOFTWARE AWS** COMPUTE DATABASE STORAGE HARDWARE/AWS GLOBAL INFRASTRUCTURE RESPONSIBILITY FOR

Customers are responsible for their security and compliance IN the Cloud

AWS is responsible for the security OF the Cloud





SECURITY 'OF' THE CLOUD





The Line Varies ...



Amazon EC2

CUSTOMER DATA

PLATFORM & APPLICATION MANAGEMENT

More Customizable

More Customer

Responsibility

OS, NETWORK, FIREWALL CONFIGURATION

> **NETWORK TRAFFIC PROTECTION**

CUSTOMER IAM

IΑM

SERVER-SIDE ENCRYPTION

CLIENT-SIDE DATA ENCRYPTION / INTEGRITY

COMPUTE / STORAGE / DATABASE / NETWORK

HARDWARE/AWS GLOBAL **INFRASTRUCTURE**

> Infrastructure Services

Amazon RDS

CUSTOMER DATA

NETWORK TRAFFIC PROTECTION

CLIENT-SIDE DATA ENCRYPTION

CUSTOMER IAM

FIREWALL CONFIGURATION

PLATFORM & APPLICATION

OS, NETWORK, FIREWALL **CONFIGURATION**

COMPUTE / STORAGE / DATABASE / NETWORK

INFRASTRUCTURE

Container Services



AWS S3



AWS KMS

DynamoDB

CUSTOMER DATA

CLIENT-SIDE DATA ENCRYPTION

SERVER-SIDE ENCRYPTION

NETWORK TRAFFIC PROTECTION

PLATFORM & APPLICATION MANAGEMENT

OS, NETWORK, FIREWALL **CONFIGURATION**

COMPUTE / STORAGE / DATABASE / NETWORK

HARDWARE/AWS GLOBAL **INFRASTRUCTURE**

CUSTOMER IAM Less Customizable

> Less Customer Responsibility

More Best Practices built-in

AWS IAM

MANAGEMENT

HARDWARE/AWS GLOBAL

<u>Abstracted</u> Services

The Goal: Reaching Compliance









Inherit global security and compliance controls



























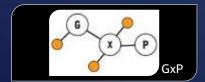






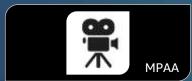
















































Customer applications & Compliance

Customer Applications

Your own accreditation

Your own certifications

Your own external audits

Applications built on top of AWS services, are not implicitly compliant to security controls (that AWS services are complaint with).



Customers need to **certify applications separately** by
engaging with external
auditors.









Highest standards for privacy and data security



Meet data
residency requirements
Choose an AWS Region,
and AWS will not replicate
it elsewhere unless you
choose to do so



Encryption at scale
with keys managed by
AWS Key Management
Service or manage your
own encryption keys with
AWS CloudHSM using
FIPS 140-2 Level 3
validated HSMs



Comply with local data privacy laws by controlling who can access content, its lifecycle, and its disposal



Access services and tools that enable you to build compliant infrastructure on top of AWS









AWS Self Service Resources

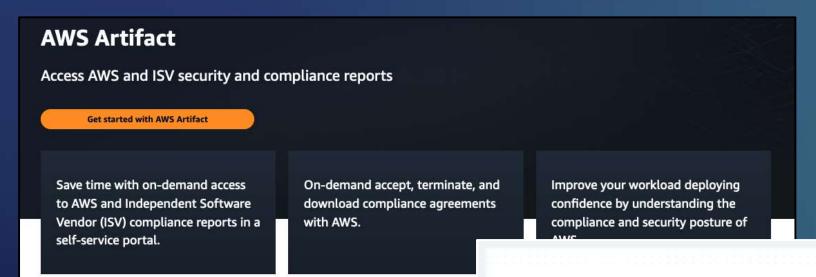








AWS Artifact – Access Security and Compliance Reports













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Customer Compliance Guides

AWS Compliance Solutions Guide

Repository of frequently used resources and processes needed to perform compliance responsibilities on AWS.

Move Regulated Workloads to the Cloud »

More AWS Compliance Resources



The Services in Scope Page will detail which services are currently in scope, and which are in progress. You can also contact your AWS Sales Account Manager and SA about any specific needs for a certain service.



The AWS Security Blog is a great way to keep track of all the newest updates to the AWS security programs.



For information on some of AWS current customer experiences please visit our customer testimonial page which lists case studies from our customers across all industries.



If you need more information on a specific compliance regime, please refer to the following pages for FAQs:

- · PCI
- HIPAA
- 5OC
- FedRAMP



The AWS Auditor Learning Path is a resource designed specifically for those in auditor, compliance, and legal roles who want to learn how their internal operations can demonstrate compliance using AWS' platform.









AWS Services









AWS security, identity, and compliance solutions



Identity and access management

AWS Identity and Access Management (IAM)

AWS IAM Identity
Center

AWS Organizations

AWS Directory Service

Amazon Cognito

AWS Resource Access
Manager

Amazon Verified Permissions



Detective controls

AWS Security Hub

Amazon GuardDuty

Amazon Security Lake

Amazon Inspector

Amazon CloudWatch

AWS Config

AWS CloudTrail

VPC Flow Logs

AWS IoT Device Defender



Infrastructure protection

AWS Firewall Manager

AWS Network Firewall

AWS Shield

AWS WAF

Amazon VPC

AWS PrivateLink

AWS Systems
Manager

AWS Verified Access



Data protection

Amazon Macie

AWS Key Management Service (KMS)

AWS CloudHSM

AWS Certificate
Manager

AWS Private CA

AWS Secrets
Manager

AWS VPN

Server-Side Encryption



Incident response

Amazon Detective

Amazon EventBridge

AWS Backup

AWS Security Hub

AWS Elastic
Disaster Recovery

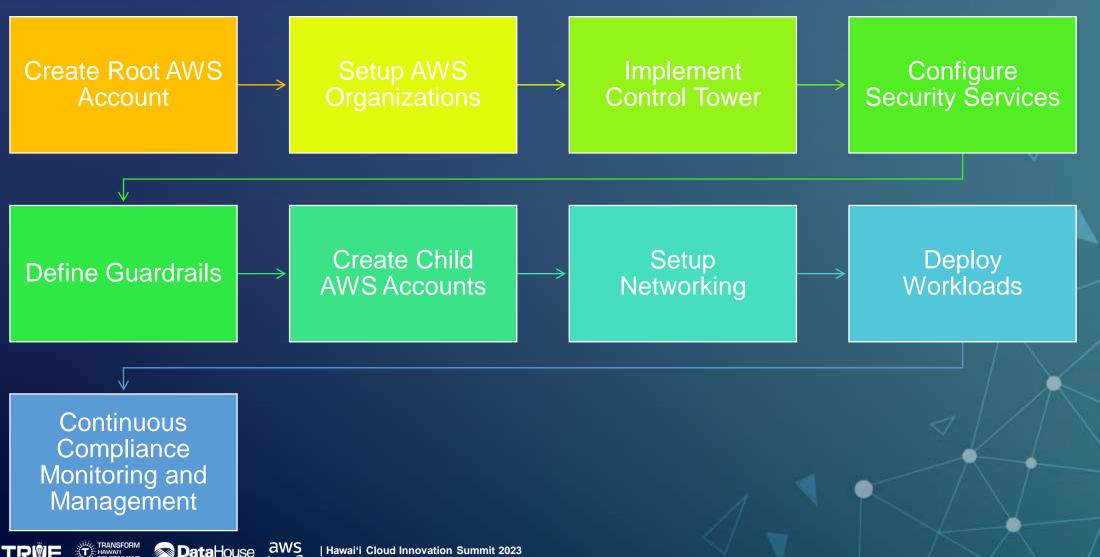


Compliance

AWS Artifact

AWS Audit Manager

Compliance in AWS – Customer Journey









AWS Audit Manager

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



Enables internal audit & governance, risk, and compliance (GRC) teams

Offers pre-built, customizable frameworks to map usage to controls

Automates collection & organization of evidence across accounts

Enables control status updates and notifications to help collaborate across teams delegation, comments,

Produces assessment reports with evidence integrity checks









What is AWS Cloud Audit Academy?

The Cloud Audit Academy educates customers on cloud-specific verification techniques in the cloud through interactive learning

Courses:

- 1. Foundational
- 2. AWS Specific Course
- 3. Industry Specific Auditing
 - o PCI DSS
 - o NIST SP 800/CMMC











Global Security and Compliance Acceleration Program









GSCA Program

- AWS Partner Program
- Support, enhance and accelerate customer and partner journey to meet differing regulatory, security and compliance requirements globally
- Partner with country and regional partners to provide localized customer support and engagement









GSCA Partners and Team

GSCA Program Partners

- Independent Software Vendors (ISV)
 - SaaS Providers
 - 3rd Party Software Vendors
- Systems Integrators (SI)
 - Automated Security Solutions
 - Managed Security Service Providers (MSSP)
- Consultants/3rd Party Assessment Organizations (3PAO)
 - Advisors
 - Consultants

GSCA Security & Compliance Team

- Provides Informal Advisory
 - Security Partner Strategists
 - Security/Compliance Solutions Architects
- Compliance and architecture workshops
 - Half-day sessions with customers
 - Review architectures, data flows, services, etc.
- Partner engagement
 - Partners vetted by AWS security and compliance SME prior to joining program
 - Trusted advisors and technical resources
 - Partners to scale and support our customers









Helping Customers and Partners by:

- Accelerating security and compliance authorization processes
- Reducing cost, time and effort to achieve certifications/authorizations
- Providing reusable artifacts including guidance, templates, tools, and pre-built templates from AWS and AWS Partner Solutions
- Collaborating in Joint Partner Programs supported by AWS to develop and deliver unique capabilities and solutions
- Working with Qualified Partners to support the security & compliance journey









GSCA frameworks covered



























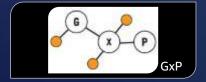






















































Links and Resources











Please submit your feedback. Thank you!



https://www.pulse.aws/survey/HW4QRQ8C

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Thank you!







