Agenda for Today

• Introduce Cloud and AWS terminology
• Overview of AWS Services
• Overview DoD Authorization process for Cloud
• Introduction to DoD Cloud Policy and Guidance
• Discuss Trends on the Use of Cloud
Today’s AWS Team

Ben Bailey
Sales Manager – Navy

Michael Alpaugh
Solutions Architect - DoD

Buzz Ryan
Manager Partner Development
What is Cloud Computing?

The on-demand delivery of:

- rapidly elastic, pooled IT resources
- over public or private networks
- no long-term contracts
- pay-as-you-go pricing
- easily managed with self service tools
- provides appropriate security
Traditional Infrastructure

Equipment

Resources and Administration

Contracts

Cost

AWS Cloud

Self-Service Infrastructure

Scale Up and Down

Improve Agility

No Up Front Expense
Pay for what you Use
Why AWS Cloud?

- Eliminate costly technical debt and reallocate resources
- Innovate faster and solidify your competitive advantage
- Reduce risk by focusing resources dedicated to security, compliance & availability

“It’s the best decision we’ve ever made. It’s the most innovative thing we’ve ever done, it’s having a material impact on both the CIA and the IC.”

John Edwards
CIO, CIA
## What sets AWS apart?

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experience</strong></td>
<td>Building and managing cloud since 2006</td>
</tr>
<tr>
<td><strong>Service Breadth &amp; Depth</strong></td>
<td>165+ services to support any cloud workload</td>
</tr>
<tr>
<td><strong>Pace of Innovation</strong></td>
<td>Over 2,000 customer-driven service/feature releases</td>
</tr>
<tr>
<td><strong>Global Footprint</strong></td>
<td>22 regions, 66 availability zones, 176 edge locations</td>
</tr>
<tr>
<td><strong>Pricing Philosophy</strong></td>
<td>739 proactive price reductions to date</td>
</tr>
<tr>
<td><strong>Ecosystem</strong></td>
<td>Tens of thousands of partners; 4,800+ Marketplace products</td>
</tr>
</tbody>
</table>
AWS Positioned as a Leader in the Gartner Magic Quadrant for Cloud Infrastructure as a Service, Worldwide*

AWS is positioned highest in execution and furthest in vision within the Leaders Quadrant

*Gartner, Magic Quadrant for Cloud Infrastructure as a Service, Worldwide, Smith, Dennis, Leong, Lydia, Bala, Raj, June 2018 G00336148. This graphic was published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request from AWS. G00336148. Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designations. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

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Using Cloud for DoD: Why now?

- Federal, DoD & Agency Cloud Strategy
- Lower Cost
- New funding model
- Large & growing feature set
- Performance & Reliability
- Security
- SPEED & AGILITY

AWS New Services & Features
Cloud Adoption Drivers

Directive

Financial

Mission

capabilities

performance
reliability

security

DevSecOps CI/CD - microservices

automate innovate experiment

agility / speed / responsiveness

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How does Cloud Computing work in AWS?

“Isn’t the Cloud just someone else’s computer?”

No, it is much more than that!

Managed Large Scale Infrastructure

- Data Centers / Security / Facilities
- Networks / Compute / Storage / Databases
- Integrated Management Tools & Services

Remotely accessible & manageable by the customer

Elastic & Scalable (automated, dynamic, responsive)

Extensive visibility and transparency capabilities

Security & Compliance built-in
AWS Global Infrastructure … it's really really BIG

22 Regions
66 Availability Zones
176 Edge Locations

Millions of Active Customers
190+ Countries
5000+ Government Agencies
10,000+ Educational Institutions

Announced Regions Bahrain, Cape Town, Milan, Jakarta

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AWS Region

AWS Region

Transit Center 1

Transit Center 2

Availability Zone

Availability Zone

Availability Zone

datacenter
datacenter
datacenter
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datacenter
datacenter
datacenter
datacenter
datacenter
- Regions = metropolitan area
- Fully Isolated (security boundary)
- Customer chooses Region.
- Data Stays within Region.
- Regions comprised of multiple Availability Zones
- AZ’s connected through redundant low-latency links
- Discrete UPS & Onsite backup
- Redundant connections to multiple tier-1 ISP’s
- Built for Continuous Availability
- PB’s of Logs daily
Architected for Government Security Requirements

And many more…

https://aws.amazon.com/compliance/

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AWS Service Breadth
How do we get approval to use Cloud?

We know the basics of how to get an ATO
But what about an ATO in the Cloud?
We can look at these sources for guidance:

- **FedRAMP**
- **Agency-specific Guidance**
  - (e.g. DoD CC SRG)

First let’s look at FedRAMP

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What is FedRAMP?

Federal Risk & Authorization Management Program (FedRAMP) is government-wide

- **Standardized approach for Cloud Products & Services for:**
  - Security assessment
  - Authorization
  - Continuous monitoring

- **Developed in collaboration with:**
  - GSA
  - NIST
  - DHS
  - DoD
  - NSA
  - OMB
  - Federal CIO Council
Why do we need FedRAMP?

- Mandatory per OMB for cloud services that hold federal data
- "Do once, use many times" framework
  - Saves government cost – work smarter, not harder
  - Reduces redundant reviews
- Provides tailored set of NIST SP 800-53 security controls
  - Selected to provide protection in cloud environments.
  - Subsets defined for FIPS 199 Low, Moderate, and High categorizations.
- Established a Joint Authorization Board (JAB)
  - CIOs from DoD, DHS & GSA
  - Establish accreditation standards for 3rd party assessors of cloud solutions.

This is how we get assurance about Security OF the Cloud!
RMF Process: DoD Datacenter vs. In-Cloud

DoD Datacenter

- Application
- Operating System
- Server / Storage
- Network
- Datacenter
  - Facility
  - Power
  - HVAC

Inherited Controls from DoD ATO

In-Cloud

- Application
- Operating System
- Server / Storage
- Network
- Datacenter
  - Facility
  - Power
  - HVAC

Mission Owner Controls

Mission Owner ATO Package

Inherited Controls from CSP PA

FedRAMP
Agency-Specific Guidance Example: DoD

DoD has its own specific implementation

DoD Cloud Computing (CC)
Security Requirements Guide (SRG)

v1r3
6 MAR 2017

☞ Let’s look at the DoD CC SRG
What is the DoD CC SRG?

- Applies to Cloud Service Providers and is for DoD Mission Owners
- Aligns with FedRAMP
- Describes functional aspects of a security architecture in the Cloud
- Select controls from the NIST SP 800-53 catalog using CNSSI 1253 guidance

Think of the CC SRG as the DoD’s version of FedRAMP with extra functional security requirements to protect the DoDIN against perceived threats introduced by connecting to commercial Cloud Service Providers
What is IN the DoD CC SRG?

- Cloud Service Providers (CSP) definition
- Cloud Service Offerings (CSO) definition
- DoD RMF application to Commercial Cloud
- Use of FedRAMP & FedRAMP + controls
- DoD Provisional Authorization definition
- How to Classify and Categorize a system
- And more…
What is a Provisional Authorization?

• Pre-acquisition type of RMF authorization
• Pre-qualifies Commercial Cloud Service Offerings (CSO)
• Supports “do once, use many” framework of FedRAMP
• Uses by DoD and Federal Cloud Mission Owners
  • Source Selection
  • Subsequent authorization under RMF
• Used by Mission Owners the same as “Control Inheritance”
• Leveraged by Mission Owner AO in overall risk assessment
What is CSP?

• Cloud Service Provider
• Organization the offers/provides Cloud Services
• Commercial or Private
• DoD and non-DoD
• Commercial CSP Examples: AWS and Azure
• DoD CSP Examples: milCloud
What is a CSO?

• Cloud Service Offering
• A CSP’s Discrete Product or Service Offering
• Individual Assessed for Provisional Authorizations
• Well Defined Standardized Offerings
• Customer Level of Control Varies by Service Model
  • IaaS or PaaS or SaaS
• Shared Security Model Applies
Classifying IT Systems

FIPS 199 defines process to determine Impact Levels

Consider both:

- **Sensitivity of Information** &
- **Impact of Events**

Sensitivity of information stored or processed

- For example: Public / Controlled Unclassified / Classified

Impact of Event that results in loss of:

- **Confidentiality** (Low / Moderate / High)
- **Integrity** (Low / Moderate / High)
- **Availability** (Low / Moderate / High)
Categorization Example for Cloud: DoD CC SRG Information Impact Levels

<table>
<thead>
<tr>
<th>SRG v1r3 Impact Level</th>
<th>Maximum Data Type</th>
<th>Information Characterization</th>
</tr>
</thead>
</table>
| 2                     | Non-Controlled Unclassified Information | Unclassified information approved for public release  
Unclassified, not designated as controlled unclassified information (CUI) or critical mission data, but requires some minimal level of access control |
| 4                     | Controlled Unclassified Information | Requires protection from unauthorized disclosure as established by Executive Order 13556 (Nov 2010); Education, Training, SSN, Recruiting (if medical is not included), Credit card information for individuals (i.e., PX or MWR events)  
PII, PHI, SSN, Credit card information for individuals, Export Control, FOUO, Law Enforcement Sensitive, Email |
| 5                     | Controlled Unclassified Information + NSS | National Security Systems and other information requiring a higher level of protection as deemed necessary by the information owner, public law, or other government regulations |
| 6                     | Classified up to SECRET | Pursuant to EO 12958 as amended by EO 13292; classified national security information or pursuant to the Atomic Energy Act of 1954, as amended to be Restricted Data (RD) |

How to find our application a home in the cloud...

So many Cloud Service Providers…

So little time …

What is a Mission Owner to do?

Perhaps FedRAMP can help.. let’s take a look
Where can we find approved CSPs?

Thanks to FedRAMP you don’t have to check out each CSP yourself 😊

"Authorize Once & Use Many” approach

FedRAMP Authorized Services

Agency-specific Approved GSS/Providers
• Example: DoD Authorized Cloud Service Catalog

AWS Services in Scope Listing
• https://aws.amazon.com/compliance/services-in-scope/
FedRAMP Cloud Services Marketplace

FedRAMP at a glance
- **14** Ready
- **71** In Process
- **101** Authorized

Show me

<table>
<thead>
<tr>
<th>Products</th>
<th>Agencies</th>
<th>Assessors</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWS</td>
<td>Service Models</td>
<td>Impact Level</td>
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<tr>
<td>AWS GovCloud</td>
<td>IaaS</td>
<td>PaaS</td>
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<tr>
<td>AWS US East/West</td>
<td>IaaS</td>
<td>PaaS</td>
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</table>

FedRAMP Cloud Services Marketplace

Amazon - AWS GovCloud

System Profile
Service Models
IaaS, PaaS
Deployment Model
Government Community Cloud
Impact Level
High

FedRAMP Authorized Since 06/21/2016

Contact Information
POC: AWS Compliance Team
E-mail: awscompliance@amazon.com
Website: www.aws.amazon.com

Agencies using this service
Defense Health Agency
Defense Information Systems Agency
Department of Commerce
Department of Defense
Department of Education
Department of Energy
Department of Health and Human Services
Department of Justice
Department of the Interior
Department of the Navy
Department of the Treasury
Food and Drug Administration
Internal Revenue Service

Millennium Challenge Corporation
National Institutes of Health
National Labor Relations Board
National Nuclear Security Administration
Lawrence Livermore National Laboratory
National Oceanic and Atmospheric Administration
National Renewable Energy Laboratory
National Science Foundation
Office of Justice Programs
United States Census Bureau

…and more
# DoD Cloud Services Catalog

<table>
<thead>
<tr>
<th>CSP</th>
<th>GSD</th>
<th>Service Model</th>
<th>SR &amp; Z</th>
<th>SM 3</th>
<th>DoD Impact Level</th>
<th>Provider Type</th>
<th>Authorizing Agency</th>
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[http://www.disa.mil/~media/Files/DISA/Services/Cloud-Broker/AuthorizedCloudServicesCatalog.pdf](http://www.disa.mil/~media/Files/DISA/Services/Cloud-Broker/AuthorizedCloudServicesCatalog.pdf)

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This service is currently in scope and is reflected in current reports.

**In Progress**
This service is undergoing a full assessment by our third party assessor.

**Ready**
This service has been fully assessed by our third party assessor and the FedRAMP Security Package is available for review by authorizing officials (AO)

AWS US GovCloud

GovCloud designed to handle ITAR (International Traffic in Arms Regulation)

- JAB Provisional Authorization at the FedRAMP High Impact level
- Community Cloud: access controlled, US Persons for physical and logical access to the AWS infrastructure

Physically Isolated Regions East/West (Oregon & Ohio)

3 Availability Zones

Logical Network Isolation – all users run in VPCs

FIPS 140-2 Validated Hardware & Cryptographic Services for VPNs and AWS Service API End Points

Service(s) are only deployed into the Region based on customer demand

Separate Isolated Credential Database

**Offers the same high level of security as the other AWS Regions.** Access is restricted to customers who are US Persons, not subject to export restrictions, and who comply with US export control laws and regulations, including the International Traffic in Arms Regulations (ITAR).
Mine, Yours and Ours – Control Ownership

**Mission Owners** inherit controls from **AWS**

- Consistent with the reciprocity model used for years

**AWS** is responsible for some controls completely

**Mission Owners** are responsible for some controls completely

Some controls are **shared** in that services provided by AWS must be properly configured and implemented used by Mission Owners

AWS calls this approach the **Shared Responsibility Model**
Cloud Security is a Shared Responsibility

Customers and Partners implement their own Application and Service controls

Multiple customers with:
- FISMA/ICD-503 ATOs
- DIACAP/RMF ATOs

AWS obtains industry certifications & third party attestations:
- SAS-70 Type II / SOC 1 / SOC 2
- ISO 27001/2 Certification
- Payment Card Industry (PCI)
- Data Security Standard (DSS)
- DoD PA IL2, IL4, IL5, IL6
- FedRAMP JAB P-ATO & Agency ATOs
- HIPAA / ITAR

Optimized Network/OS/App Controls
Service-specific Controls
Cross-service Controls
Cloud Service Provider Controls

Compliance in the Cloud
Compliance of the Cloud

https://aws.amazon.com/compliance
awscompliance@amazon.com
DoD Cloud Architecture
DoD SCCA FRD v2.9

• Secure Computing Architecture (SCCA) Functional Requirements Document (FRD)

• Released March 9th 2017

• Replaces the Draft CAP FRD

• Provides implementation flexibility

• **Freedom** to architect and manage as a shared services enclave
DoD SCCA Component Functional Requirements

**Virtual Datacenter Security Stack (VDSS)**
Provides network and application security capabilities such as an application-aware firewall and/or intrusion prevention system.

**Virtual Datacenter Management Stack (VDMS)**
Provides system support services for mission owner environments (AD/LDAP, DNS, Patch Repos). Potentially CSSP offerings as well.

**Trusted Cloud Credential Manager (TCCM)**
An individual or entity appointed by the Authorizing Official to establish policies for controlling privileged user access to connect Virtual Private Clouds to DISN and for administrating cloud services

**Cloud Access Point (CAP)**
Provides network access to the cloud and boundary protection of DISN from the cloud.
DoD SCCA FRD Recommended Leveraged Services Model

**Virtual Datacenter Security Stack (VDSS)**
Leveraged Network and Application Security Services:
- WAF - Application-Aware Firewall
- Network Intrusion Prevention/Detection System
- Network Firewall w/ Full Packet Capture
- Network Flow Logs

**Virtual Datacenter Management Stack (VDMS)**
Leveraged Infrastructure Management Support Services:
- ACAS / Vulnerability Scanning
- HBSS / Endpoint Protection
- AD / LDAP / SSO / OCSP
- DHCP / DNS / NTP
- Patching Services
- Log Management
Leveraged Services Supporting Multiple Mission Owners

Virtual Datacenter Security Stack (VDSS)
- Availability Zone A
  - Network Firewall Services
  - Network Intrusion Detection/Prevention Services
  - Full Packet Capture Services
  - Web Application Firewall Services
- Availability Zone B

Virtual Datacenter Management Stack (VDMS)
- Availability Zone A
  - ACAS / Vulnerability Scanning Services
  - HBSS / Endpoint Protection Services
  - AD / DNS / SSO / OCSP / DCHP Services
  - Other Shared Services
- Availability Zone B

Mission Owner A – Application Stack / VPC
- Web Server
- DMZ Subnet
- App Server
- Database Server

Mission Owner B – Application Stack / VPC
- Web Server
- DMZ Subnet
- App Server
- Database Server

Direct Connect
Co-Location
CAP
CND
DoDIN
IAP
Internet

AVGWS
Mission Owner A – Application Stack / VPC
Mission Owner B – Application Stack / VPC
Cloud Computing has become the new normal

FOCUS on differentiating your company.

INNOVATE at start-up like speed.

MIGRATE under your terms.

REDUCE risk.
Focus on differentiation and reduce technical debt.
Reduce time-consuming, expensive tasks

- Rethink your approach to technology investments, reducing complexity and cost
- Stop guessing at capacity planning
- Remove complicated infrastructure management that adds little business value
- Optimize the life of your existing IT investments

GE Oil & Gas migrated 9,000 applications, 300 disparate ERP systems to the cloud.

GE reduced its data center footprint by moving from 34 data centers to 4 data centers in three years as part of a major digital transformation, helping it attain a 52% reduction in TCO and greater speed to market.
Focus on your core mission

Lower the time spent on infrastructure → Concentrate on new business initiatives → Dedicate more resources to innovation

“3M HIS is not in the IT business. Rather, we are a healthcare-analytics company. We are getting out of IT operations, and by going to AWS, we can focus our R&D team on the science of healthcare. For us that means analytics rather than IT, enabling us to attack the healthcare industry’s cost and quality challenges.”

David Frazee
Chief Technology Officer
3M Health Information Systems
Global Enterprise Customers
Innovate at start-up like speed
AWS Pace of Innovation

1957 new features/services launched in 2018

AWS has been continually expanding its services to support virtually any cloud workload.
Get value out of your data

Data Ingestion
Get your data into S3 quickly and securely
- Kinesis Firehose
- Glue ETL
- Snowball
- Database Migration Service

Access & User Interface
Give your users easy and secure access
- API Gateway
- Identity & Access Management
- Cognito

Processing & Analytics
Use of predictive and prescriptive analytics to gain better understanding
- QuickSight
- Amazon AI
- EMR
- Redshift
- Elasticsearch
- Athena
- Kinesis
- RDS

Protect & Secure
Use entitlements to ensure data is secure and users’ identities are verified
- Security Token Service
- CloudWatch
- CloudTrail
- Key Management Service

Central Storage
Secure, cost-effective storage in Amazon S3

Catalog & Search
Access and search metadata
- AWS Glue Data Catalog
- DynamoDB
- Elasticsearch
Data Lakes on AWS

Machine Learning
- Amazon SageMaker
- AWS Deep Learning AMIs
- Amazon Rekognition
- Amazon Lex
- AWS DeepLens
- Amazon Comprehend
- Amazon Translate
- Amazon Transcribe
- Amazon Polly

Analytics
- Amazon Athena
- Amazon EMR
- Amazon Redshift
- Amazon Elasticsearch Service
- Amazon Kinesis
- Amazon QuickSight

Data Lake on AWS
- Storage
- Archival Storage
- Data Catalog

Traditional data movement
- AWS Direct Connect
- AWS Snowball
- AWS Snowmobile
- AWS Database Migration Service

Real-time data movement
- AWS IoT Core
- Amazon Kinesis Data Firehose
- Amazon Kinesis Data Streams
- Amazon Kinesis Video Streams
Artificial Intelligence fully integrated in AWS

APPLICATION DEVELOPERS

Amazon Rekognition
Image recognition & analysis

Amazon Machine Learning
Managed Machine Learning

Amazon Polly
Text-to-speech

Amazon Lex
Natural Language Understanding (NLU) &
Automatic Speech Recognition (ASR)

DATA SCIENTISTS & RESEARCHERS

AWS Deep Learning AMI
Use and scale deep learning frameworks quickly and easily

mxnet  torch  theano  Caffe
K  CNTK  TensorFlow™
Migrate under your own terms.
Migration to the Cloud is a process that takes time and iterations
AWS Stages of Adoption

- Discovery
- Project
- Foundation
- Migration
- Cloud Native
- Retire Tech Debt
- Reinvention

- "Envisioning your cloud journey"
- "Starting your cloud journey"
- "Building your cloud journey muscle memory"
- "Migration @ scale"
- "Continually optimise what and how you use AWS"
- "Continually optimise what and how you use AWS"

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AWS Cloud Adoption Framework Overview

• Provides supportive guidance for **six key organizational perspectives**

• Helps stakeholders understand how to **update skills, adapt existing processes, and introduce new processes**

• Takes maximum advantage of the **services provided by cloud computing**

Cloud Adoption Framework is based on six groups of stakeholder perspectives common to organizational structures of contemporary businesses.
Getting Started

• Understand your migration business goals, size, and scope.
• Assess your current state of operational readiness for migration.
• Assess your current state of application portfolio analysis, migration plan, and migration business case.
• Develop a joint path forward for a successful migration leveraging AWS Migration Acceleration Program
Migration Readiness Map of Activity
Application migration patterns

- **Re-host** (Lift and Shift)
  - Discover/Assess/Prioritize Applications
  - Retain / Revisit

- **Re-platform** (Lift & Reshape)
  - Retain / Revisit
  - Determine Migration Path

- **Re-purchase** (Replace - Drop & Shop)
  - Discover/Assess/Prioritize Applications
  - Retain / Revisit

- **Re-architect** (Re-writing/Decoupling applications)
  - Determine Migration Path

- **Redesign Application/Infrastructure Architecture**

- **App Code Development**

- **Full ALM / SDLC**

- **Integration**

- **Manual Install**
- **Manual Config**
- **Manual Deploy**
- **Validation**
- **Transition**
- **Production**

- **Use Migration Tools**
- **Automate**
- **Determine new platform**
- **Modify underlying Infrastructure**

- **Manual Install & Setup**

- **Purchase COTS/ SaaS & licensing**

- **Manual Config**

- **Manual Install**

- **Retire / Decommission**

- **Discover/Assess/Prioritize Applications**

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App migration automation/tools

**SERVER & DB MIGRATION**
- AWS Server Migration Service
- AWS Database Migration Service
- AWS Schema Conversion Tool
- VMWare Cloud on AWS

**DATA TRANSFER**
- S3 Transfer Acceleration
- AWS Storage and File Gateway
- AWS Snowball & Snowmobile
- AWS Direct Connect
- Amazon Kinesis Firehose

**PARTNERS**
- TSO Logic
- RISC Networks
- Cloudamize
- VELOSTRATA
- CloudHealth
- New Relic
- dynatrace
- Racemi
- ATADATA
- CloudEndure
- APPDYNAMICS

**ADDITIONAL 3rd PARTY MIGRATION TOOLS**

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Reduce risk.
Move fast.  OR  Stay secure.
Move fast. AND Stay secure.
Strengthen your security posture

- Over 50 global compliance certifications and accreditations
- Benefit from AWS industry leading security teams 24/7, 365 days a year
- Security infrastructure built to satisfy military, global banks, and other high-sensitivity organizations
- Leverage security enhancements from 1M+ customer experiences

"In the last four years as we transitioned to the cloud, I have come to realize that as a relatively small organization, we can be far more secure in the cloud and achieve a higher level of assurance at a much lower cost, in terms of effort and dollars invested. We determined that security in AWS is superior to our on-premises data center across several dimensions, including patching, encryption, auditing and logging, entitlements, and compliance.

John Brady
FINRA CISO
The AWS Cloud

FOCUS
Eliminate costly technical debt and reallocate resources to focus on differentiated work

INNOVATE
Innovate faster using the leading cloud platform, and solidify your competitive advantage.

MIGRATE
Migrate at your own speed leveraging tools, programs, and partnerships to make your migration to the cloud smooth

REDUCE
Reduce risk by focusing resources dedicated to security, compliance & availability
AWS Training & Certification

Get more out of the cloud, faster
What Does AWS Offer?

Digital Training
Free, self-paced online courses built by AWS experts

Classroom Training
Classes taught by accredited AWS instructors

AWS Certification
Exams to validate expertise with an industry-recognized credential
AWS Certifications Validate Knowledge

Role-Based Certifications
- AWS Certified Solutions Architect - Professional
- AWS Certified DevOps Engineer - Professional
- AWS Certified DevOps Engineer - Professional

Specialty Certifications
- AWS Certified Advanced Networking - Specialty
- AWS Certified Big Data - Specialty

Specialty certifications require one active role-based certification
We Can Help

AWS Training and Certification can help your organization build cloud skills to make your transition to the AWS Cloud easier, so you can get the most out of your investment, faster.
Learning Events

AWS Automating Compliance Workshops for DOD

AWS Worldwide Public Sector Summit – videos on YouTube

AWS re:Inforce – Cloud Security conference – videos on YouTube

AWS re:Invent – Annual User conference & training – 2-6 December (Las Vegas, NV)
More information on AWS training ...

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Thank you!