AWS CERTIFICATIONS
V1.0 2021
AWS certifications

AWS Training and Certification leads to measurable results...

“We can measure how things are getting better with training. We have less outages, our costs are going down, and we are getting leaner with the way we use AWS.”

Alan Williams, Enterprise Architect, Autodesk

- 80% faster to adopt Cloud.*
- 4.7x more likely to improve IT staff productivity.*
- 78% of organisations that provide formal training report it is effective in developing the skills needed.

*Source: IDC White Paper, sponsored by AWS, Train to Accelerate Your Cloud Strategy, October 2017
Analytics on AWS

Fastest way to get answers from all your data to all your users.

AWS gives you the broadest and deepest portfolio of purpose-built analytics services optimized for your unique analytics use cases. These services are all designed to be the best in class, which means you never have to compromise on performance, scale, or cost when using them.

AWS makes it easy for you to combine, move, and replicate data across multiple data stores and your data lake.

Databases on AWS

The broadest selection of purpose-built databases for all your application needs.

Choose from 15+ purpose-built database engines including relational, key-value, document, in-memory, graph, time series, wide column, and ledger databases. AWS’s portfolio of purpose-built databases supports diverse data models and allows you to build use case driven, highly scalable, distributed applications.

Networking and Content Delivery on AWS

AWS provides the broadest and deepest set of networking services with the highest reliability, most security features, and highest performance in the world. This helps ensure you can run any kind of workload you have in the cloud.

The AWS global network lets you run your workloads on the cloud that delivers the best support for the broadest set of applications, even those with the highest throughput and lowest latency requirements.

The AWS Region/AZ model has been recognized by industry analysts as the recommended approach for running enterprise applications that require high availability.

Developer Tools on AWS

Host code, build, test, and deploy your applications to AWS.

Implement continuous integration and continuous delivery with the AWS Developer Tools to accelerate your software development and release cycle.

The AWS Developer Tools are built to work with AWS, making it easier for your team to get set up and be productive.

Machine Learning on AWS

Putting machine learning in the hands of every developer.

AWS offers the broadest and deepest set of machine learning services and supporting cloud infrastructure, putting machine learning in the hands of every developer, data scientist and expert practitioner. AWS is helping more than one hundred thousand customers accelerate their machine learning journey.

Security, Identity, and Compliance on AWS

Secure your workloads and applications in the cloud.

AWS provides services that help you protect your data, accounts, and workloads from unauthorized access. AWS data protection services provide encryption and key management and threat detection that continuously monitors and protects your accounts and workloads.

Network and application protection services enable you to enforce fine-grained security policy at network control points across your organization. AWS services help you inspect and filter traffic to prevent unauthorized resource access at the host-, network-, and application-level boundaries.
## Certification Overview

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### Speciality

Technical AWS Cloud experience in the Specialty domain as specified in the exam guide.

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AWS Certified Cloud Practitioner
The AWS Certified Cloud Practitioner examination is intended for individuals who have the knowledge and skills necessary to effectively demonstrate an overall understanding of the AWS Cloud, independent of specific technical roles addressed by other AWS Certifications.

Prerequisites
• We recommend candidates have at least six months of experience with the AWS Cloud in any role, including technical, managerial, sales, purchasing, or financial
• Candidates should have a basic understanding of IT services and their uses in the AWS Cloud platform

Recommended Training
AWS Cloud Practitioner Essentials (AMWSCPE)

Required Exam
Cloud Practitioner

What's next?
AWS Certified Solutions Architect - Associate
or
AWS Certified SysOps Administrator - Associate
or
AWS Certified Developer - Developer

View AWS' recertification policy here
AWS Certified Solutions Architect - Associate
The AWS Certified Solutions Architect - Associate examination is intended for individuals who perform a solutions architect role and have one or more years of hands-on experience designing available, cost-efficient, fault-tolerant, and scalable distributed systems on AWS.

Prerequisites
- Hands-on experience using compute, networking, storage, and database AWS services
- Hands-on experience with AWS deployment and management services
- Ability to identify and define technical requirements for an AWS-based application
- Ability to identify which AWS services meet a given technical requirement
- Knowledge of recommended best practices for building secure and reliable applications on the AWS platform
- An understanding of the basic architectural principles of building on the AWS Cloud
- An understanding of the AWS global infrastructure
- An understanding of network technologies as they relate to AWS
- An understanding of security features and tools that AWS provides and how they relate to traditional services

Recommended Training
- AWS Technical Essentials (AMWSE)
- Architecting on AWS (AMWSA)
- Architecting on AWS Accelerator (AMWAA)

Required Exam
Solutions Architect - Associate

What’s next?
AWS Certified Solutions Architect – Professional
View AWS’ recertification policy here
The AWS Certified SysOps Administrator – Associate examination is intended for systems administrators in a systems operations role with at least one year of experience in deployment, management, and operations on AWS.

**Prerequisites**
- Understanding of the AWS tenets – architecting for the cloud
- Hands-on experience with the AWS CLI and SDKs/API tools
- Understanding of network technologies as they relate to AWS
- Understanding of security concepts with hands-on experience in implementing security controls and compliance requirements
- Understanding of virtualization technology
- Monitoring and auditing systems experience
- Knowledge of networking concepts (e.g., DNS, TCP/IP, and firewalls)
- Ability to translate architectural requirements

**Recommended Training**
- AWS Technical Essentials (AMWSE)
- Systems Operations on AWS (AMWSSO)

**Required Exam**
- SysOps Administrator - Associate

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**AWS Certified DevOps Engineer - Professional**

**View AWS’ recertification policy here**
The AWS Certified Developer - Associate examination is intended for individuals who perform a development role and have one or more years of hands-on experience developing and maintaining an AWS-based application.

**Prerequisites**
- Understanding of the AWS tenets – architecting for the cloud
- Hands-on experience with the AWS CLI and SDKs/API tools
- Understanding of network technologies as they relate to AWS
- Understanding of security concepts with hands-on experience in implementing security controls and compliance requirements
- Understanding of virtualization technology
- Monitoring and auditing systems experience
- Knowledge of networking concepts (e.g., DNS, TCP/IP, and firewalls)
- Ability to translate architectural requirements

**Recommended Training**
- AWS Technical Essentials (AMWSE)
- Developing on AWS (AMWSD)

**Required Exam**
- Developer - Associate

**AWS Certified DevOps Engineer - Professional**

What’s next?
- View AWS’ recertification policy here
AWS Certified Solutions Architect - Professional

The AWS Certified Solutions Architect – Professional exam is intended for individuals who perform a solutions architect role with two or more years of hands-on experience managing and operating systems on AWS.

**Prerequisites**
- Two or more years of hands-on experience designing and deploying cloud architecture on AWS
- Ability to evaluate cloud application requirements and make architectural recommendations for implementation, deployment, and provisioning applications on AWS
- Familiarity with AWS CLI, AWS APIs, AWS CloudFormation templates, the AWS Billing Console, and the AWS Management Console
- Explain and apply the five pillars of the AWS Well-Architected Framework
- Design a hybrid architecture using key AWS technologies (e.g., VPN, AWS Direct Connect)
- Ability to provide best practice guidance on the architectural design across multiple applications and projects of the enterprise
- Familiarity with a scripting language
- Familiarity with Windows and Linux environments
- Map business objectives to application/architecture requirements
- Architect a continuous integration and deployment process

**Recommended Training**

- Advanced Architecting on AWS (AMWSAA)
- Exam Readiness Intensive Workshop: AWS Certified Solutions Architect – Associate (AMWSAER)

**Required Exam**

- Solutions Architect – Professional

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**What’s next?**

- Certification path complete
- View Speciality certifications
- View AWS’ recertification policy here
AWS Certified DevOps Engineer - Professional

The AWS Certified DevOps Engineer – Professional exam is intended for individuals who perform a DevOps engineer role with two or more years of experience provisioning, operating, and managing AWS environments.

**Prerequisites**
- Experience developing code in at least one high-level programming language
- Experience building highly automated infrastructures
- Experience administering operating systems
- Understanding of modern development and operations processes and methodologies

**Recommended Training**
- Advanced Developing on AWS (AMWSAD)
- DevOps Engineering on AWS (AMWSDE)

**Required Exam**
DevOps Engineer – Professional

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**What’s next?**
Certification path complete

- [View Speciality certifications](#)
- [View AWS’ recertification policy here](#)
**AWS Certified Advanced Networking – Specialty**

The AWS Certified Advanced Networking - Specialty is intended for individuals who perform complex networking tasks.

**Prerequisites**

- We recommend candidates hold an AWS Certified Cloud Practitioner or a current Associate-level certification: AWS Certified Solutions Architect - Associate, AWS Certified Developer - Associate or AWS Certified SysOps Administrator - Associate
- Advanced knowledge of AWS networking concepts and technologies
- Minimum five years hands-on experience architecting and implementing network solutions
- Advanced networking architectures and interconnectivity options (e.g., IP VPN, MPLS/VPLS)
- Networking technologies within the OSI model, and how they affect implementation decisions
- Development of automation scripts and tools
- CIDR and sub-netting (IPv4 and IPv6)
- IPv6 transition challenges
- Generic solutions for network security features, including WAF, IDS, IPS, DDoS protection, and Economic Denial of Service/Sustainability (EDoS)

**Recommended Training**

Digital format only available FOC from AWS directly

**Exam:**

Advanced Networking - Specialty

What's next?

No certification path available

View AWS' recertification policy here
# AWS Certified Data Analytics – Specialty

Earn an industry-recognized credential from AWS that validates your expertise in AWS data lakes and analytics services. Build credibility and confidence by highlighting your ability to design, build, secure, and maintain analytics solutions on AWS that are efficient, cost-effective, and secure. Show you have breadth and depth in delivering insight from data.

## Prerequisites
- At least 5 years of experience with data analytics technologies
- At least 2 years of hands-on experience working with AWS
- Experience and expertise working with AWS services to design, build, secure, and maintain analytics solutions

## Recommended Training
- Data Analytics Fundamentals*
- Big Data on AWS (AMWSBD)

*Digital format only available FOC from AWS directly.

## Exam:
- Data Analytics - Specialty

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- CERTIFICATION OVERVIEW

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No certification path available

View AWS’ recertification policy here
AWS Certified Database - Specialty
Earn an industry-recognized credential from AWS that validates your expertise in the breadth of AWS database services and accelerating the use of database technology to drive your organization’s business transformation. Build credibility and confidence by highlighting your ability to design, recommend, and maintain the optimal AWS database solution for a use case.

Prerequisites
• At least 5 years of experience with database technologies
• At least 2 years of hands-on experience working on AWS
• Experience and expertise working with on-premises and AWS-Cloud-based relational and nonrelational databases

Recommended Training
AWS Database Offerings*
Planning and Designing Databases on AWS (AMWSDPD)
Exam Readiness: AWS Certified Database – Specialty*

Exam: Database - Specialty

*Digital format only available FOC from AWS directly.
AWS Certified Machine Learning – Specialty
The AWS Certified Machine Learning - Specialty certification is intended for individuals who perform a development or data science role. It validates a candidate's ability to design, implement, deploy, and maintain machine learning (ML) solutions for given business problems.

Prerequisites
- 1-2 years of experience developing, architecting, or running ML/deep learning workloads on the AWS Cloud
- The ability to express the intuition behind basic ML algorithms
- Experience performing basic hyperparameter optimization
- Experience with ML and deep learning frameworks
- The ability to follow model-training best practices
- The ability to follow deployment and operational best practices

Recommended Training
- Practical Data Science with Amazon SageMaker (AMWPDSAS)
- Machine Learning Pipelines on AWS (AMWSMLP)
- Process Model: CRISP-DM on the AWS Stack*
- The Elements of Data Science*
- Deep Learning on AWS (AMWSDL)

Exam:
- Machine Learning - Specialty

*Digital format only available FOC from AWS directly.
AWS Certified Security – Specialty
The AWS Certified Security – Specialty is intended for individuals who perform a security role with at least two years of hands-on experience securing AWS workloads.

Prerequisites
- At least two years of hands-on experience securing AWS workloads
- Security controls for workloads on AWS
- A minimum of five years of IT security experience designing and implementing security solutions

Recommended Training
- Getting Started with AWS Security, Identity, and Compliance*
- AWS Security Fundamentals (Second Edition)*
- Architecting on AWS (AMWSA)
- Security Engineering on AWS (AMWSSEC)

*Digital format only available FOC from AWS directly.

Exam:
- Security – Specialty

What’s next?
No certification path available
View AWS’ recertification policy here