



Advanced Architecting on AWS

Course AWS-04

3 Days

Instructor-led, Hands on

Course Information

Ready to advance your ability to design scalable, elastic applications on the AWS platform? The Advanced Architecting on AWS training course is built for individuals who are experienced with designing scalable and elastic applications on AWS. It builds upon concepts introduced in Architecting on AWS and explores complex solutions that incorporate data services, governance, and security on AWS.

This course introduces specialized AWS services, explores the best practices for building scalable, highly available solutions, and helps you make informed architectural decisions using the AWS Well-Architected Framework. You'll gain hands-on experience with real-world scenarios that support hybrid architecture, including AWS Direct Connect and AWS Storage Gateway.

Who Should Attend?

This course is intended for cloud architects, solutions architects, and anyone who designs solutions for cloud infrastructures.

At Course Completion

By the end of this Advanced Architecting on AWS course, you'll be able to build complex solutions that incorporate data services, governance, and security on AWS. You'll apply the AWS Well-Architected Framework, manage multiple AWS accounts, design hybrid connectivity using AWS Direct Connect and AWS Storage Gateway, and automate infrastructure with CI/CD pipelines.

The course also covers designing scalable, secure, and elastic applications on the AWS platform, while reinforcing best practices introduced in Architecting on AWS. This AWS training prepares you to solve enterprise-level challenges through real-world architecture patterns.

Prerequisites

We recommend that attendees of this course have:

- Knowledge and experience with core AWS services from the Compute, Storage, Networking, and AWS Identity and Access Management (IAM) categories
- Attended the Architecting on AWS classroom training OR
- Achieved the AWS Certified Solutions Architect – Associate certification OR
- Have at least 1 year of experience operating AWS workloads.

Contact ISInc for more information at 916.920.1700 or by visiting our website at <http://www.isinc.com>

Course Outline

Module 1: Reviewing Architecting Concepts

- Review of best practices introduced in Architecting on AWS
- Securing Amazon S3 with VPC endpoints

Module 2: Multi-Account Strategies

- Managing multiple AWS accounts with AWS Organizations and AWS SSO
- AWS Control Tower for governance and compliance

Module 3: Hybrid Connectivity

- Implementing VPN and AWS Direct Connect
- DNS resolution with Route 53 Resolver
- Supporting hybrid architectures with Direct Connect and AWS Storage Gateway

Module 4: Specialized Infrastructure

- Deploying AWS Outposts and Local Zones
- On-premises integration using Storage Gateway
- Using VMware Cloud on AWS

Module 5: Networking and Resource Sharing

- Connecting VPCs with Transit Gateway and PrivateLink
- Using Resource Access Manager for sharing across accounts

Module 6: Containers

- Container strategies using Amazon ECS, EKS, and AWS Fargate
- Running microservices at scale

Module 7: CI/CD and Automation

- Automating deployments with AWS CodePipeline and CloudFormation StackSets

Module 8: Security and High Availability

- Designing for high availability and DDoS protection with AWS Shield and AWS WAF
- Implementing layered security on AWS

Module 9: Encryption and Secrets Management

- Managing encryption keys with AWS KMS and CloudHSM
- Secrets management with AWS Secrets Manager



Module 10: Data Storage at Scale

- Building data lakes with Lake Formation
- Managing storage classes in Amazon S3
- Comparing data lakes and data warehouses