Document Generated: 11/29/2026

Learning Style: Online Instructor-Led

Technology: Amazon Web Services

Difficulty: Beginner

Course Duration: 3 Days

Advanced Architecting on AWS (AWS-ADVARC)



About This Course:

In this course, each module presents a scenario with an architectural challenge to be solved. You will examine available AWS services and features as solutions to the problem. You will gain insights by participating in problem-based discussions and learning about the AWS services that you could apply to meet the challenges. Over 3 days, the course goes beyond the basics of a cloud infrastructure and covers topics to meet a variety of needs for AWS customers. Course modules focus

on managing multiple AWS accounts, hybrid connectivity and devices, networking with a focus on AWS Transit Gateway connectivity, container services, automation tools for continuous integration/continuous delivery (CI/CD), security and distributed denial of service (DDoS) protection, data lakes and data stores, edge services, migration options, and managing costs. The course concludes by presenting you with scenarios and challenging you to identify the best solutions.

Course Objectives:

In this course, you will be able to:

- Review the AWS Well-Architected Framework to ensure understanding of best cloud design practices by responding to poll questions while following a graphic presentation
- Demonstrate the ability to secure Amazon Simple Storage Service (Amazon S3) virtual private cloud (VPC) endpoint connections in a lab environment
- Identify how to implement centralized permissions management and reduce risk using AWS Organizations organizational units (OUs) and service control policies (SCPs) with AWS Single Sign-On
- Compare the permissions management capabilities of OUs, SCPs, and AWS SSO with and without AWS Control Tower to determine best practices based on use cases
- Discuss AWS hybrid network designs to address traffic increases and streamline remote work while ensuring FIPS 140-2 Level 2, or Level 3 security compliance
- Explore the solutions and products available to design a hybrid infrastructure, including access to 5G networks, to optimize service and reduce latency while maintaining high security for critical on-premises applications
- Explore ways to simplify the connection configurations between applications and high-performance workloads across global networks
- Demonstrate the ability to configure a transit gateway in a lab environment
- Identify and discuss container solutions and define container management options
- Build and test a container in a lab environment
- Examine how the AWS developer tools optimize the CI/CD pipeline with updates based on near-real-time data
- Identify the anomaly detection and protection services that AWS offers to defend against DDoS attacks

- Identify ways to secure data in transit, at rest, and in use with AWS Key Management Service (AWS KMS) and AWS Secrets Manager
- Determine the best data management solution based on frequency of access, and data query and analysis needs
- Set up a data lake and examine the advantages of this type of storage configuration to crawl and query data in a lab environment
- Identify solutions to optimize edge services to eliminate latency, reduce inefficiencies, and mitigate risks
- Identify the components used to automate the scaling of global applications using geolocation and traffic control
- Deploy and activate an AWS Storage Gateway file gateway and AWS DataSync in a lab environment
- Review AWS cost management tools to optimize costs while ensuring speed and performance
- Review migration tools, services, and processes that AWS provides to implement effective cloud operation models based on use cases and business needs
- Provide evidence of your ability to apply the technical knowledge and experience gained in the course to improve business practices by completing a Capstone Project

Audience:

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

Prerequisites:

We recommend that attendees of this course have the following prerequisites:

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

Course Outline:

- Module 1: Reviewing Architecting Concepts
- Module 2: Single to Multiple Accounts
- Module 3: Hybrid Connectivity
- Module 4: Specialized Infrastructure
- Module 5: Connecting Networks
- Module 6: Containers
- Module 7: Continuous Integration/Continuous Delivery (CI/CD)
- Module 8: High Availability and DDoS Protection
- Module 9: Securing Data
- Module 10: Large-Scale Data Stores
- Module 11: Large-Scale Applications
- Module 12: Optimizing Cost
- Module 13: Migrating Workloads
- Module 14: Capstone Project