Over 35 Years Of Technology Training

Document Generated: 06/19/2026

Learning Style: Virtual Classroom

Technology: Amazon Web Services

Difficulty: Beginner

Course Duration: 3 Days

Cloud Operations on AWS (AWS-SYSOPS)

About This Course:

This course is designed to teach those in a systems administrator or Development Operations (DevOps) role how to create automatable and repeatable deployments of networks and systems on the AWS platform. The course covers the specific AWS features and tools related to configuration and deployment, in addition to best

practices for configuring and deploying systems.

Course Objectives:

In this course, you will learn how to:

- Recognize the AWS services that support the different phases of Operational Excellence, a Well-Architected Framework pillar.
- Manage access to AWS resources using AWS Accounts and Organizations and AWS Identity and Access Management (IAM).
- Maintain an inventory of in-use AWS resources using AWS services such as AWS Systems Manager, AWS CloudTrail, and AWS Config.
- Develop a resource deployment strategy utilizing metadata tags, Amazon Machine Images, and Control tower to deploy and maintain an AWS cloud environment.
- Automate resource deployment using AWS services such as AWS CloudFormation and AWS Service Catalog.
- Use AWS services to manage AWS resources through SysOps lifecycle processes such as deployments and patches.
- Configure a highly available cloud environment that leverages AWS services such as Amazon Route 53 and Elastic Load Balancing to route traffic for optimal latency and performance.
- Configure AWS Auto Scaling and Amazon Elastic Compute Cloud auto scaling to scale your cloud environment based on demand.
- Use Amazon CloudWatch and associated features such as alarms, dashboards, and widgets to monitor your cloud environment.
- Manage permissions and track activity in your cloud environment using AWS services such as AWS CloudTrail and AWS Config.
- Deploy your resources to an Amazon Virtual Private Cloud (Amazon VPC), establish necessary connectivity to your Amazon VPC, and protect your resources from disruptions of service.
- State the purpose, benefits, and appropriate use cases for mountable storage in your AWS cloud environment.
- Explain the operational characteristics of object storage in the AWS cloud, including Amazon Simple Storage Service (Amazon S3) and Amazon S3 Glacier.
- Build a comprehensive costing model to help gather, optimize, and predict

your cloud costs using services such as AWS Cost Explorer and the AWS Cost & Usage Report.

Audience:

- System administrators and operators who are operating in the AWS Cloud
- Informational technology workers who want to increase their system operations knowledge.

Prerequisites:

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

- Successfully completed the AWS Technical Essentials course
- Background in either software development or systems administration
- Proficiency in maintaining operating systems at the command line, such as shell scripting in Linux environments or cmd/PowerShell in Windows
- Basic knowledge of networking protocols (TCP/IP, HTTP)

Course Outline:

- Module 1: Introduction to Cloud Operations on AWS
- Module 2: Access Management
- Module 3: System Discovery
- Module 4: Deploy and Update Resources
- Module 5: Automate Resource Deployment
- Module 6: Manage Resources
- Module 7: Configure Highly Available Systems
- Module 8: Automate Scaling
- Module 9: Monitor and Maintain System Health

- Module 10: Data Security and System Auditing
- Module 11: Operate Secure and Resilient Networks
- Module 12: Mountable Storage
- Module 13: Object Storage
- Module 14: Cost Reporting, Alerts, and Optimization