



## Cloud Operations on AWS

- 5 Days
- Lecture and Hands-on Labs

### Course Overview

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.

Review this course online at <https://www.alta3.com/courses/sysops>

### Who Should Attend

- System administrators and operators using AWS Cloud
- IT professionals seeking to enhance their AWS operations skills
- DevOps practitioners aiming for automated cloud deployments

### What You'll Learn

- Recognize AWS services supporting Operational Excellence.
- Manage access and resource inventory using IAM, Systems Manager, and AWS Config.
- Automate deployments with AWS CloudFormation and Service Catalog.
- Deploy highly available systems with Route 53 and Elastic Load Balancing.

### Outline

#### Module 1: Introduction to Cloud Operations on AWS

1. What is Cloud Operations
2. AWS Well-Architected Framework
3. AWS Well-Architected Tool ##### Module 2: Access Management
4. AWS Identity and Access Management (IAM)
5. Resources, accounts, and AWS Organizations ##### Module 3: System Discovery
6. Methods to interact with AWS services
7. Tools for automating resource discovery
8. Inventory with AWS Systems Manager and AWS Config ##### Module 11: Operate Secure and Resilient Networks
9. Building a secure Amazon Virtual Private Cloud (Amazon VPC)
10. Networking beyond the VPC ##### Module 12: Mountable Storage
11. Configuring Amazon Elastic Block Store (Amazon EBS)
12. Sizing Amazon EBS volumes for performance
13. Using Amazon EBS snapshots
14. Using Amazon Data Lifecycle Manager to manage your AWS resources
15. Creating backup and data recovery plans
16. Configuring shared file system storage ##### Module 13: Object Storage
17. Deploying Amazon Simple Storage Service (Amazon S3)

18. Managing storage lifecycles on Amazon S3 ##### Module 14: Cost Reporting, Alerts, and Optimization
19. Gaining AWS cost awareness
20. Using control mechanisms for cost management
21. Optimizing your AWS spend and usage

#### Labs

1. Auditing AWS Resources with AWS Systems Manager and AWS Config
2. Automating with AWS Backup for Archiving and Recovery
3. Capstone lab for CloudOps

#### 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)