

AWS Certified SysOps Administrator – Associate (SOA-C02)

Level: Associate

Duration: 40–50 Hours

Course Overview

This course is designed for system administrators and operations professionals who manage AWS infrastructure. It prepares candidates for the **SOA-C02 certification** by focusing on **deployment, operations, automation, monitoring, and troubleshooting** in the AWS cloud.

Course Objectives

- Deploy and operate scalable, highly available systems on AWS
 - Automate AWS tasks using scripts and tools
 - Monitor and report on AWS resources
 - Implement security controls and compliance
 - Prepare for the **SysOps Administrator – Associate** certification exam
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Course Outline

Module 1: Introduction to AWS and Certification

- Understanding the SOA-C02 exam domains
 - AWS global infrastructure
 - Overview of core AWS services
 - AWS CLI and SDK usage basics
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Module 2: Monitoring, Reporting, and Automation

- Amazon CloudWatch (metrics, logs, alarms, dashboards)
- AWS CloudTrail and AWS Config
- Automating tasks using AWS Systems Manager
- AWS Trusted Advisor and operational health tools

Module 3: Deployment, Provisioning, and Infrastructure as Code

- Launching EC2 instances and configuring AMIs
- Creating and managing EBS volumes and snapshots
- Introduction to AWS CloudFormation
- Managing infrastructure with AWS Elastic Beanstalk

Module 4: Networking and Content Delivery

- VPC design: subnets, route tables, NAT gateway
- Elastic Load Balancing (ELB) and Auto Scaling
- Route 53: DNS management and routing policies
- CloudFront: CDN for content delivery

Module 5: Storage and Data Management

- Working with S3 buckets and policies
- Glacier, EFS, and lifecycle management
- AWS Backup and data protection strategies
- Storage performance optimization

Module 6: Security and Compliance

- IAM users, roles, policies, and permissions
- AWS KMS and encryption best practices
- Implementing AWS Organizations and SCPs
- Monitoring compliance using Config Rules

Module 7: High Availability and Business Continuity

- Designing fault-tolerant architectures
 - Load balancing and multi-AZ deployments
 - Backup and disaster recovery plans
 - Health checks and failover strategies
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Module 8: Cost and Performance Optimization

- Analyzing billing using AWS Cost Explorer
 - Budget alerts and resource tagging
 - Choosing cost-effective services
 - Right-sizing compute and storage
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Module 9: Exam Preparation and Practice

- Detailed exam blueprint review
 - Practice quizzes and hands-on scenarios
 - Tips for taking the performance-based exam
 - Final exam simulation
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Target Audience

- System administrators and IT operations professionals
 - AWS practitioners managing infrastructure
 - Individuals preparing for the **SOA-C02** certification
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Prerequisites

- 1 year of experience with AWS deployment and operations (recommended)
- Familiarity with networking, monitoring, and system administration