

AWS Certified SysOps Administration Associate (SOA-C02) Prep

AWS SOA-C02 SysOps Associate. Monitoring, automation, and operational best practices.

IT Certifications Instructor: Brian Taylor • 5 sections • 47 lessons • 15.25h total

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About this course

This course prepares you for the AWS Certified SysOps Administrator Associate (SOA-C02) exam. We cover monitoring, automation, security, and operational best practices on AWS. Hands-on labs, real scenarios, and practice exams included.

Course curriculum

Foundations and AWS Environment Setup

- **Understanding the SOA-CO2 Exam Blueprint (12m)**
We'll break down the exam domains, question formats, and scoring so you know exactly what to expect on test day.
- **Setting Up Your AWS Free Tier Account (15m)**
A practical walkthrough of creating your AWS account, configuring billing alerts, and setting up your first IAM user securely.
- **the AWS Management Console and CLI (22m)**
Learn to navigate the console efficiently and get hands-on with the AWS Command Line Interface for faster administration.
- **Core AWS Services You Must Know (18m)**
A focused overview of the key services like EC2, S3, VPC, and IAM that form the backbone of the exam.
- **Introduction to AWS CloudTrail and CloudWatch (10m)**
Get your first look at the tools you'll use for logging and monitoring, essential skills for any SysOps admin.
- **AWS Shared Responsibility Model Explained (8m)**
A clear explanation of security responsibilities in the cloud, a foundational concept tested heavily.
- **Cost Management and Billing Dashboard Deep Dive (14m)**
Learn how to analyze your spending, use Cost Explorer, and set up budgets to avoid surprise bills.
- **Your First EC2 Instance: A Step-by-Step Guide (25m)**
Launch, connect to, and manage a virtual server, covering instance types, key pairs, and security groups.

Compute, Storage, and Networking Core

- **EC2 Auto Scaling and Load Balancing in Action (32m)**
We'll build a resilient architecture using EC2 Auto Scaling Groups and Application Load Balancers.
- **EBS vs. EFS vs. S3: Choosing the Right Storage (16m)**
A problem-solving session to help you select the correct storage type for any given scenario.
- **Managing EBS Volumes and Snapshots (20m)**
Learn how to attach, resize, and back up your block storage with practical, step-by-step instructions.
- **S3 Lifecycle Policies and Versioning (14m)**
Automate your data management and learn how to protect against accidental deletions in S3.
- **VPC Fundamentals: Subnets, Route Tables, and Gateways (28m)**
Demystifying VPCs with a real case study analysis of building a secure network from scratch.
- **Configuring Security Groups and NACLs (19m)**
Understand the critical differences between instance-level and subnet-level firewalls.
- **Hybrid Connectivity: VPN and Direct Connect (13m)**
A practical overview of connecting your on-premises data center to your AWS VPC.

- **Elastic Load Balancer Types and Use Cases (17m)**
We'll show you when to use ALB, NLB, and GLB for optimal application performance.
- **Route 53: DNS Management and Health Checks (21m)**
Learn to configure domain names and routing policies to ensure high availability.
- **Understanding ENIs and Network Interfaces (9m)**
A quick guide to Elastic Network Interfaces and their role in network configuration.

Deployment, Provisioning, and Automation

- **CloudFormation: Infrastructure as Code Basics (30m)**
Write your first CloudFormation template to automate the deployment of a full web stack.
- **AWS Systems Manager for Patch Management (23m)**
Learn how to keep your fleet patched and compliant without SSH using Session Manager.
- **Deploying Applications with Elastic Beanstalk (18m)**
A hands-on guide to deploying and managing applications without managing the underlying infrastructure.
- **Introduction to AWS Lambda and Serverless (15m)**
Understand how to run code without provisioning servers, a key concept for modern ops.
- **Using EC2 User Data for Bootstrapping (11m)**
Automate instance configuration at launch with a downloadable script template.
- **Managing AMIs: Creation and Copying (16m)**
Learn to create custom Amazon Machine Images for consistent deployments across regions.
- **Automating Tasks with AWS CLI and SDKs (24m)**
A practical session on scripting common administration tasks to save time and reduce errors.
- **Docker on EC2: Container Fundamentals (20m)**
Get hands-on with running containerized applications on your EC2 instances.

Security, Monitoring, and Troubleshooting

- **Deep Dive into CloudWatch Metrics and Alarms (26m)**
We'll set up custom metrics and alarms to monitor your infrastructure proactively.
- **Centralized Logging with CloudWatch Logs and Insights (25m)**
Learn to aggregate logs from your instances and query them to troubleshoot issues fast.
- **Using AWS Config for Compliance and Auditing (17m)**
A real case study analysis of how to track configuration changes and ensure compliance.
- **Protecting Data with KMS and Encryption (22m)**
A step-by-step guide to encrypting EBS volumes, S3 buckets, and database data.
- **IAM Best Practices: Roles, Policies, and MFA (29m)**
Master identity and access management to secure your AWS account against common threats.
- **Troubleshooting EC2 Connectivity Issues (32m)**
A problem-solving session covering common 'can't connect' scenarios and their fixes.
- **Troubleshooting S3 Access Denied Errors (14m)**
Learn to quickly diagnose and resolve S3 permission issues using policy simulators.
- **AWS GuardDuty and Security Hub Overview (12m)**
Get introduced to AWS's intelligent threat detection services for a more secure environment.

- **Analyzing VPC Flow Logs for Network Issues (19m)**

Learn how to use flow logs to see exactly what traffic is hitting your instances.

Advanced Operations and Exam Readiness

- **High Availability Patterns: Multi-AZ and Multi-Region (27m)**

Design resilient systems that can withstand an Availability Zone failure.

- **Disaster Recovery Strategies: RTO and RPO (20m)**

We'll discuss backup and restore, pilot light, and warm standby strategies.

- **Advanced CloudFormation: Stacks and Nested Templates (28m)**

Organize your infrastructure code for complex environments.

- **Performance Tuning for EC2 and RDS (24m)**

Practical tips for optimizing your compute and database performance for cost and speed.

- **Cost Optimization Deep Dive: Savings Plans and Reserved Instances (21m)**

Learn how to significantly reduce your AWS bill with the right purchasing strategies.

- **Automating Backups with AWS Backup (15m)**

A guide to centralizing your backup strategy for EBS, RDS, and EFS.

- **Transferring Large Data Sets with AWS DataSync (11m)**

Learn efficient ways to move large amounts of data on and off the cloud.

- **Using Service Quotas to Manage Limits (9m)**

A quick guide on how to check and request service limit increases.

- **Final Exam Strategy and Mindset (13m)**

Our last session on managing your time during the exam and identifying trick questions.

- **Full Practice Exam: Timed Simulation (40m)**

Test your knowledge with a timed set of questions that mimic the real exam environment.

- **Walkthrough of Practice Exam Solutions (35m)**

We'll review every question, explaining the 'why' behind the correct and incorrect answers.

- **Next Steps: Maintaining Your Certification (8m)**

A brief guide on continuing education and how to prepare for the recertification process.

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