



Prepare to pass
the AWS
Certified SysOps
Administrator –
Associate Exam

Live Virtual Class

Course Description

The AWS SysOps Administrator Live Intensive Training Course is designed to help you pass the AWS Certified SysOps Administrator Associate Exam with ease. The course provides essential hands-on training to help you build expertise in the deployment, management, and operations on the AWS platform. Utilizing best practices and recommended design strategies, you will be able to create automatable and repeatable deployments of networks and systems and perform systems administration on the AWS platform.

What will I learn?

By the end of this course, you will learn how to configure AWS services and tools ensuring high availability, fault tolerance, scalability and maximum performance, as well as common techniques used throughout the industry to monitor and maintain systems on AWS. This course will help you prepare for the AWS Certified SysOps Administrator – Associate Exam.

Enrolled already? Here is a bonus just for you!

As a bonus, when you take this course, you will be automatically enrolled into our AWS Certified SysOps Administrator – Associate Practice Exam Simulator. This exam simulator comes with 180 practice exam questions to help you prepare for the actual AWS Certification exams

Instructor-Led Live Virtual Class	Hands-On Lab Exercises & How-To-Guides
6-Months Access to LMS	Certificate of Completion
Assignments to re-enforce concepts taught	180 Practice Exam Questions to help you prepare for the AWS Exams!

Course Curriculum

1. Introduction to AWS Platform & The SysOps Certification

Learning Objectives

This section provides an overview of the AWS platform and introduces you to the AWS Certified SysOps Administrator – Associate Exam Blueprint. You will also learn how to setup your environment and a Free Tier account to benefit most from the rest of this course.

Topics

- Course Overview & Certification Roadmap
- Setup Your Free Tier Account
- Setup your environment
- The AWS Global Infrastructure & Multi-Tier Design Architectures

Labs

- Setup an AWS Free Tier Account
- Controlling Costs

2. Security

Learning Objectives

In this lesson, we look at Amazon Identity and Access Management (IAM) which is a core security service of the AWS platform. IAM helps to ensure that you correctly design solutions for both authentication and authorization of services on your AWS account. We look at data integrity and access controls and explain the importance of the shared responsibility model. We also learn how to configure Multi-Factor authentication and learn about the AWS Security Token Service (STS).

Topics

- AWS Global Infrastructure Security
- AWS Shared Security Model
- IAM Users, Groups and Roles Re-Cap
- Building IAM Policies
- Using IAM Roles with EC2 & S3
- Monitoring and Enhancing Security
- AWS Security for specific AWS Services
- Policies
- Identity Federation and Security Token Service

Labs

- Build IAM Policies
- Setup IAM Roles for EC2 & S3

3. Monitoring, Metrics and Analysis

Learning Objectives

In this lesson, we look at how to monitor availability and performance as well as manage billing and design solutions to be highly cost effective. Learn how to optimize the environment to ensure maximum performance, identify bottlenecks and implement remedies.

Topics

- Amazon CloudWatch
- CloudWatch Events & Logs
- Amazon CloudTrail
- Trusted Advisor
- EC2 Status Troubleshooting
- Monitoring EC2, EBS, ELB, RDS and ElastiCache
- AWS Config
- AWS Cost Management
- AWS Organization & Consolidated Billing

Labs

- Setup Amazon CloudWatch
- Build CloudWatch Dashboard
- Troubleshooting EC2 Instances
- AWS Organization & Consolidated Billing

4. High Availability

Learn Objectives

In this lesson, we will look at designing for high availability and configure AWS services to offer scalability and elasticity based on business requirements. You will also learn how to design for fault tolerance to ensure maximum availability and minimum downtimes.

Topics

- Decoupling your application using Amazon SQS
- Amazon Simple Notification Services
- Design highly available architecture with Elasticity and Scalability
 - Elastic Load Balancing
 - Auto Scaling
 - High Availability for Amazon RDS
- Multi-Region High Availability Design and Implementation
 - Simple Storage Service
 - Route 53
 - DynamoDB
- Design Network & Connectivity Solutions with high availability
- Whitepaper Review – Disaster Recovery & High Availability

Labs

- Deploy RDS with Multi-AZ and Read Replicas
- Setup SNS Notifications
- Create High Availability website with Route 53

5. Deployment & Provisioning

Learning Objectives

In this lesson, you will learn how to build Application deployment, provision and management. Build automated solutions to deploy applications in a predictable and repeatable fashion

Topics

- AWS Deployment Strategies
- Elastic Load Balancers
- Amazon Elastic Beanstalk
- OpsWorks
- CloudFormation
- EC2 Container Service

Labs

- Building an Elastic Beanstalk Environment
- Create an OpsWorks Stack
- Create a CloudFormation Stack

6. Data Management

Learn Objectives

Design Backup and Disaster Recovery Solutions for various AWS services. Incorporate Storage and Migrations solutions to manage your data effectively in the cloud.

Topics

- Storage Options in the Cloud
- AWS Services & Automated Backups
- Storage Gateway
- Snowball for Data Migration
- Auto Scaling Components, Scaling Plans and Health Checks

Labs

- Upgrading an EBS Volume
- Create a Glacier Vault
- S3 Lifecycle Management
- Enable Cross Region Replication

7. Amazon Compute

Learning Objectives

In this lesson, you will learn about the various AWS Compute services including how to troubleshoot your EC2 Instances. We will also look at EC2 Userdata and Metadata

Topics

- Amazon EC2 – Design, Deployment & Maintenance
- Amazon Elastic Beanstalk
- Amazon Lambda
- Amazon Lightsail

Labs

- Launch Linux and Windows Instances
- Design strategies for Bastion Hosts
- Attach an Elastic IP Address

8. Amazon Database Services, RDS, Redshift, ElastiCache and DynamoDB

Learning Objectives

Learn about AWS managed database services, their use cases and how to design for scalability and fault tolerance

Topics

- SQL vs. NoSQL Databases
- RDS Features and Benefits
- Database Migration Services
- Working with DynamoDB – Core Features and Capacity Planning
- Amazon Redshift Use Cases
- Amazon ElastiCache
- Monitoring Databases

Labs

- Backup Strategies for RDS
- Create a DynamoDB Database Table

9. Networking

Learning Objectives

In this lesson, we learn how to design and build networking and connectivity features on the AWS cloud and monitor and troubleshoot networking and connectivity issues.

Topics

- Custom VPCs
- NAT Gateways vs. NAT Instances
- NACLs vs. Security Groups
- VPC Flow Logs
- VPC Peering
- VPNs
- Direct Connect – Implementation and Security
- Amazon Route 53
- Routing Policies
- Amazon CloudFront
- Centralized Monitoring

Labs

- Build a custom VPC
- Create Routing Policies
- Exam VPC Flow Logs

10. Whitepaper Review & Exam Tips

Learning Objectives

In this last section of the course, review core whitepapers which will give you the edge needed to pass the AWS exams. Review architecture

Topics

- Security and Compliance on AWS
- Architecting on AWS – Best Practices