Cloud







Center for Technology & Management Education

AWS Certified SysOps Administrator – Associate Level



Course Introduction



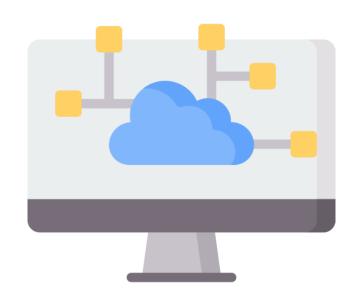
What Is Cloud Computing?

Cloud computing refers to the on-demand remote availability of resources, such as computing power, data storage, and networking without requiring any direct management of the resources by the user.

Companies which provide cloud computing services are cloud providers.

Services are made accessible to the users over the internet.

Cloud providers ensure large-scale management of the services.







What Is AWS?

Amazon Web Services (AWS) is one of the top cloud providers in the market that offers over 175 on-demand cloud services. The services are extended to individuals, companies, and governments on a pay-per-use payment model.





Why AWS

AWS offers:



AWS offers a cloud platform that's powering businesses in 190 countries.





History of AWS

2003

Chris Pinkham and Benjamin Black presented the idea of an integrated suite of web services.

2006

AWS was officially relaunched with Amazon S3.

2009

Amazon launched Virtual Private Cloud (VPC).











2004

AWS released its first service called Simple Queue.



Amazon EC2 service and SimpleDB were launched.



2010

Retail sites of Amazon.com moved to AWS.







History of AWS

2012

AWS held its first re:Invent developer conference.

2015

AWS had a revenue of \$6 billion.

2018

AWS surpassed its parent company in terms of profitability.













2013

AWS started providing certification courses for computer engineers.

2017

AWS and DXC Technologies announced an expanded alliance.

2019

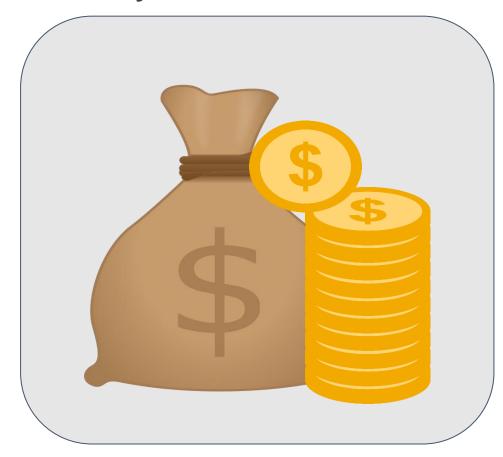
With a growth rate of 33%, AWS crossed \$10.2 billion in the first quarter.



Market Trends

The worldwide cloud computing market is expected to earn \$331.2 billion by 2022.

Salary of AWS Professionals



Demand for AWS Professionals



Demand for AWS professionals is sky-high with twenty million jobs available globally with lucrative salary.





AWS SysOps Certification

The AWS Certified SysOps Administrator – Associate examination is intended for systems administrators in a systems operation's role with at least one year of experience in deployment, management, and operations on AWS.





Certification Prerequisites

AWS Tech Essentials

Certification

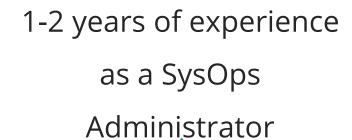








Knowledge and experience of AWS tenets, AWS SDK, API tools, and networking









Examination Syllabus

Domain	% of Exam
Domain 1: Monitoring, Logging, and Remediation	20%
Domain 2: Reliability and Business Continuity	16%
Domain 3: Deployment, Provisioning, and Automation	18%
Domain 4: Security and Compliance	16%
Domain 5: Networking and Content Delivery	18%
Domain 6: Cost and Performance Optimization	12%
TOTAL	100%





Examination Pattern



Response Types

- Multiple Choice: One correct response and three or four incorrect responses
- Multiple Responses: Two or more correct responses out of five
- Exam lab: Has a scenario that is composed of a set of tasks to perform in the AWS Management Console or AWS CLI



Unscored Content

 Questions or surveys to collect information about your background and get feedback about the exam experience





Course Objectives

By the end of this course, you will be able to:

- Deploy, manage, and operate scalable, highly available, and fault tolerant systems on AWS
- Implement and control the flow of data to and from AWS
- Select the appropriate AWS service based on compute, data, or security requirements
- Identify appropriate use of AWS operational best practices
- Estimate AWS usage cost, and identify cost control mechanisms
- Migrate on-premises workloads to AWS







Course Outline

1. Course Introduction

2. Deployment, Provisioning, and Automation

3. High Availability and Disaster Recovery

4. Data Management

AWS SysOps 5. Security and Compliance

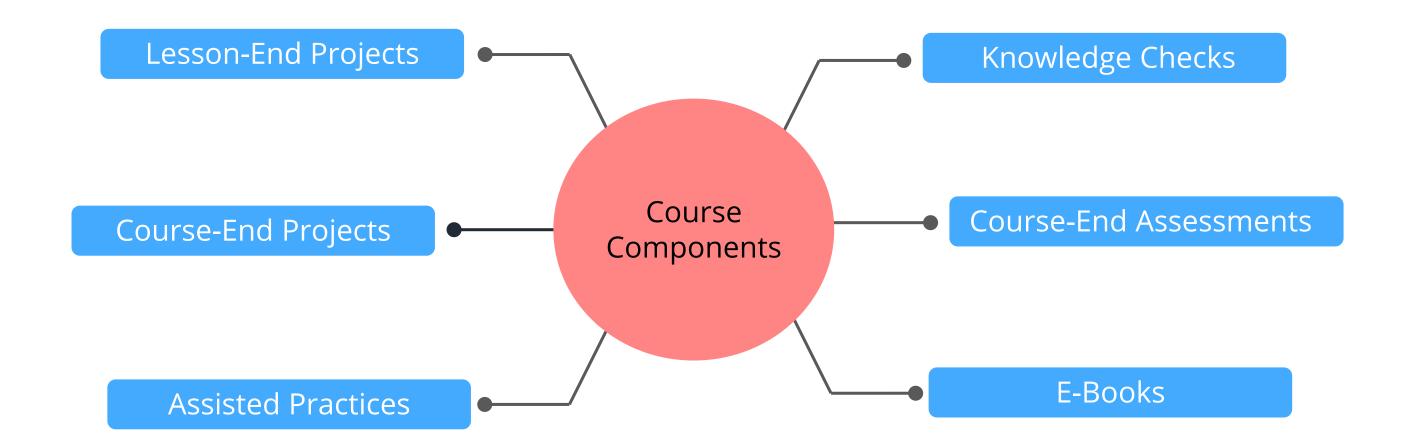
6. Networking

7. Route 53

8. Monitoring, Reporting and Cost optimization



Course Components





Project Highlights

Project 1

Project 2

Project 3

Set up a website on the cloud with the help of the Web Server (IIS) role, and create a load balancer to attach the instances.





Project Highlights

Project 1

Project 2

Project 3

Implement a team communication solution using Mattermost and AWS, and test the installation by accessing the IP of the public instance.





Project Highlights

Project 1

Project 2

Project 3

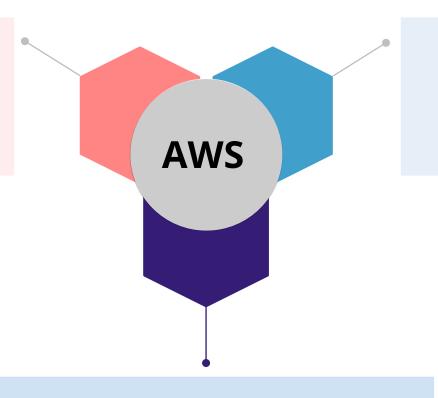
Create a website for a user to configure SQS service for email notification and deletion process in an organization.





Course Completion Criteria

Attend all the Live Virtual
Classes (LVCs)



Score a minimum of 70% in course-end assessments

Submit at least one courseend project





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Get Certified. Get Ahead.