

# AWS Cloud Practitioner Essentials

This course is for individuals who seek an overall understanding of the Amazon Web Services (AWS) Cloud, independent of specific technical roles. You will learn about AWS Cloud concepts, AWS services, security, architecture, pricing, and support to build your AWS Cloud knowledge. This course also helps you prepare for the AWS Certified Cloud Practitioner exam.

- Course Level: Intermediate
- Duration: 48 Hours

## Course objectives:

In this course, you will learn to:

- Summarize the working definition of AWS
- Differentiate between on-premises, hybrid-cloud, and all-in cloud
- Describe the basic global infrastructure of the AWS Cloud
- Explain the six benefits of the AWS Cloud
- Describe and provide an example of the core AWS services, including compute, network, databases, and storage
- Identify an appropriate solution using AWS Cloud services with various use cases
- Describe the AWS Well-Architected Framework
- Explain the shared responsibility model
- Describe the core security services within the AWS Cloud
- Describe the basics of AWS Cloud migration
- Articulate the financial benefits of the AWS Cloud for an organization's cost management
- Define the core billing, account management, and pricing models

- Explain how to use pricing tools to make cost-effective choices for AWS services

## **Prerequisites:**

We recommend that attendees of this course have:

- Network+
- Linux Fundamentals (LPIC-1)
- DevOps Knowledge

## **Course outline:**

### Module 1: Introduction to Amazon Web Services

- Summarize the benefits of AWS
- Describe differences between on-demand delivery and cloud deployments
- Summarize the pay-as-you-go pricing model

### Module 2: Compute in the Cloud

- Describe the benefits of Amazon Elastic Compute Cloud (Amazon EC2) at a basic level
- Identify the different Amazon EC2 instance types
- Differentiate between the various billing options for Amazon EC2
- Describe the benefits of Amazon EC2 Auto Scaling
- Summarize the benefits of Elastic Load Balancing
- Give an example of the uses for Elastic Load Balancing
- Summarize the differences between Amazon Simple Notification Service (Amazon SNS) and Amazon Simple Queue Services (Amazon SQS)
- Summarize additional AWS compute options

### Module 3: Global Infrastructure and Reliability

- Summarize the benefits of the AWS Global Infrastructure

- Describe the basic concept of Availability Zones
- Describe the benefits of Amazon CloudFront and Edge locations
- Compare different methods for provisioning AWS services

## Module 4: Networking

- Describe the basic concepts of networking
- Describe the difference between public and private networking resources
- Explain a virtual private gateway using a real-life scenario
- Explain a virtual private network (VPN) using a real-life scenario
- Describe the benefit of AWS Direct Connect
- Describe the benefit of hybrid deployments
- Describe the layers of security used in an IT strategy
- Describe which services are used to interact with the AWS global network
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## Module 5: Storage and Databases

- Summarize the basic concept of storage and databases
- Describe benefits of Amazon Elastic Block Store (Amazon EBS)
- Describe benefits of Amazon Simple Storage Service (Amazon S3)
- Describe the benefits of Amazon Elastic File System (Amazon EFS)
- Summarize various storage solutions
- Describe the benefits of Amazon Relational Database Service (Amazon RDS)
- Describe the benefits of Amazon DynamoDB
- Summarize various database services

## Module 6: Security

- Explain the benefits of the shared responsibility model
- Describe multi-factor authentication (MFA)
- Differentiate between the AWS Identity and Access Management (IAM) security levels
- Describe security policies at a basic level

- Explain the benefits of AWS Organizations
- Summarize the benefits of compliance with AWS
- Explain primary AWS security services at a basic level

## Module 7: Monitoring and Analytics

- Summarize approaches to monitoring your AWS environment
- Describe the benefits of Amazon CloudWatch
- Describe the benefits of AWS CloudTrail
- Describe the benefits of AWS Trusted Advisor

## Module 8: Pricing and Support

- Understand AWS pricing and support models
- Describe the AWS Free Tier
- Describe key benefits of AWS Organizations and consolidated billing
- Explain the benefits of AWS Budgets
- Explain the benefits of AWS Cost Explorer
- Explain the primary benefits of the AWS Pricing Calculator
- Distinguish between the various AWS Support Plans
- Describe the benefits of AWS Marketplace

## Module 9: Migration and Innovation

- Understand migration and innovation in the AWS Cloud
- Summarize the AWS Cloud Adoption Framework (AWS CAF)
- Summarize six key factors of a cloud migration strategy
- Describe the benefits of various AWS data migration solutions, such as AWS Snow cone, AWS Snowball, and AWS Snowmobile
- Summarize the broad scope of innovative solutions that AWS offers

## Module 10: The Cloud Journey

- Summarize the five pillars of the AWS Well-Architected Framework
- Explain the six benefits of cloud computing

## Module 11: AWS Certified Cloud Practitioner Basics

- Determine resources for preparing for the AWS Certified Cloud Practitioner examination
- Describe benefits of becoming AWS Certified