
CTR-706 AWS Cloud Practitioner

Overview

Course Duration: 5 Days

About This Course

The AWS Cloud Practitioner course is an entry-level program that provides a broad understanding of AWS Cloud concepts, core services, security, architecture, pricing, and support. It is designed to build foundational knowledge of the AWS Cloud.

Audience Profile

This course is suitable for anyone looking to understand the AWS Cloud, including business professionals, IT managers, and beginners in cloud technology.

At Course Completion

- Understand the fundamental concepts of AWS Cloud.
- Identify AWS core services and their use cases.
- Grasp basic AWS Cloud architecture principles and security.
- Prepare for the AWS Certified Cloud Practitioner exam.

Course Outline

Module 1: Introduction to Cloud Computing and AWS

- What is Cloud Computing?
- Benefits and Key Concepts of Cloud Computing
- Overview of AWS Global Infrastructure
- Introduction to AWS Core Services
- Setting up an AWS Free Tier Account

Module 2: AWS Cloud Architecture and Services

- Understanding the AWS Well-Architected Framework
- Introduction to AWS Compute Services (EC2, Lambda)
- AWS Storage Services Overview (S3, EBS, Glacier)
- Networking in AWS (VPC, Route 53)
- Hands-On Lab: Deploying a Simple Application on AWS

Module 3: AWS Security and Compliance

- Introduction to AWS Security Services
- Identity and Access Management (IAM) Basics
- Data Encryption and Key Management
- AWS Compliance Programs and Shared Responsibility Model
- Best Practices for Security in the Cloud

Module 4: AWS Billing and Pricing

- AWS Free Tier Overview
- Understanding AWS Pricing Models (On-Demand, Reserved, Spot Instances)
- AWS Billing Dashboard and Cost Explorer
- Managing and Optimizing Costs on AWS
- Hands-On Lab: Setting Up Billing Alerts and Budgeting

Module 5: AWS Core Services in Depth

- Deep Dive into AWS Compute Services (EC2, Auto Scaling, Elastic Load Balancing)
- Storage Services (S3, EBS, Glacier, Storage Gateway)
- AWS Database Services (RDS, DynamoDB, Redshift)
- Content Delivery and Networking Services (CloudFront, Route 53)
- Hands-On Lab: Building a Scalable Web Application

Module 6: AWS Management and Governance

- Overview of AWS Management Tools (CloudWatch, CloudTrail, Trusted Advisor)
- Automating Resource Management with AWS CloudFormation
- Monitoring and Logging in AWS
- AWS Service Catalog and Control Tower

- Best Practices for AWS Governance

Module 7: AWS Identity, Governance, and Privacy

- Managing User Access with IAM
- AWS Organizations and Consolidated Billing
- Data Protection and Privacy in AWS
- Implementing Multi-Factor Authentication (MFA)
- Hands-On Lab: Configuring IAM Roles and Policies

Module 8: Cloud Economics and AWS Cost Management

- Understanding Cloud Economics
- Cost Optimization Strategies
- AWS Pricing Calculator
- Using AWS Trusted Advisor for Cost Optimization
- Hands-On Lab: Optimizing AWS Resources for Cost Efficiency

Module 9: Real-World Use Cases and Applications

- Industry-Specific AWS Use Cases
- AWS in Healthcare, Finance, Retail, and Other Sectors
- Customer Success Stories
- Building and Deploying Real-World Applications on AWS
- Group Project: Implementing a Cloud Solution for a Given Scenario

Module 10: Final Review and Certification Preparation

- Review of Key AWS Concepts and Services
- Exam Preparation Tips and Resources
- Sample Questions and Practice Exams
- Final Project Presentations
- Course Summary and Next Steps in AWS Learning Path

work environment: AWS Management Console, AWS IAM, AWS CloudFormation, AWS Cost Explorer

Prerequisites

- No prior AWS or cloud computing experience is required.
- Basic IT knowledge is helpful but not necessary