

Introduction to AWS Cloud Practitioner Training

Nature of the course: Theory + Practical

Total hours per day: 2 hours

Course duration: 4 weeks

Course Summary

This course teaches you the skills and knowledge you'll need to become an AWS Cloud Practitioner. Instructors/trainers will demonstrate skills/tasks in this curriculum, and trainees will have the opportunity to perform them. Trainees will practice and learn skills using the program's standard tools, materials, equipment, and machinery. AWS Cloud and its global infrastructure, AWS core services and their use cases, Basic AWS Cloud architecture principles, security, features of compliance, and shared security model are among the topics covered in this course. Billing, account administration, and price models are all presented, as well as lab work for each service.

Completion Criteria

After fulfilling all of the following criteria, the student will be deemed to have finished the Module:

1. Has attended 90% of all classes held
2. Has received an average grade of 80% on all assignments
3. Has received an average of 60% in assessments
4. The tutor believes the student has grasped all of the concepts and is ready to go on to the second module.

Required Text Books

1. AWS Certified Cloud Practitioner Study Guide

Prerequisites

- Basic knowledge about programming, bits/bytes, procedures, classes, computer architecture, etc. If you just have a theoretical knowledge that is perfectly okay but you should have strong convictions on what programming is, and what you hope to achieve from this class.
- There is no prior educational level requirement for this course. Anyone from 10+2 student to someone who is doing their PHD in Genetic Engineering is welcome to take this course.
- If you are only interested in theory and have no interest/patience in spending at least 10 hours every week throughout the duration of the course, then this course might not be for you.
- If you have absolutely no idea about programming or do not see yourself doing programming in the next six -odd months, then this class may not be for you!

Course Details

WEEK 1

Cloud Concepts

- Define the AWS Cloud and its value proposition
- Identify aspects of AWS Cloud economics
- Advantages of Cloud Computing
- Trade capital expense for variable expense
- Benefit from massive economies of scale
- Stop guessing about capacity
- Increase speed and agility
- Stop spending money running and maintaining data centers
- Go global in minutes
- AWS Well-Architected Framework
- Features include agility, security, reliability, performance efficiency, cost optimization, and operational excellence.

WEEK 2

Security

- Define the AWS Shared Responsibility model
- Define AWS Cloud security and compliance concepts
- Identify AWS access management capabilities
- Includes services like IAM
- Identify resources for security support
- Includes services like Cloud Trail

WEEK 3

Technology

- Define methods of deploying and operating in the AWS Cloud
- Define the AWS global infrastructure
- Includes AWS concepts of regions, AZs, and edge location
- Identify and basic lab and core AWS services
- Compute Services – EC2, ECS, Elastic Beanstalk, Lambda, Auto Scaling
- Storage Services – S3, EBS, EFS, Glacier
- Security, Identity, and Compliance – IAM, Organizations, WAF
- Databases – RDS, Aurora, DynamoDB, ElastiCache
- Migration – Database Migration Service
- Networking and Content Delivery – VPC, Cloud Front, Route 53, Direct Connect, ELB
- Management Tools – Cloud Watch, Cloud Formation, Cloud Trail, Trusted Advisor, Personal Health Dashboard
- Messaging – SQS, SNS
- Includes AWS Services Overview and focuses on high-level knowledge of (but surely not deep enough)

- Identify resources for technology support
- Includes AWS Support Models and the key features and benefits the model provides to the customers

WEEK 4

Billing and Pricing

- Compare and contrast the various pricing models for AWS
- Includes AWS Pricing
- Recognize the various account structures in relation to AWS billing and pricing
- Includes AWS Organizations
- Includes Consolidated Billing
- Includes Billing and Cost Management
- Identify resources available for billing support
- Includes tools like TCO Calculator which helps compare the cost of running applications in an on-premises or colocation environment to AWS
- Includes Cost Explorer allows you to view and analyze costs

AWS Cloud Practitioner Certification Exam Preparation

- In this lesson, we will run through how the exam is going to be, the dos and don'ts, and we will be solving some questions which might be asked in the exam.

LABS

Lab assignments will focus on the practice and mastery of contents covered in the lectures; and introduce critical and fundamental problem-solving techniques to the students.

Learning Outcomes

- Define what the AWS Cloud is and the basic global infrastructure
- Describe basic AWS Cloud architectural principles
- Describe the AWS Cloud value proposition
- Describe key services on the AWS platform and their common use cases (for example, compute and analytics)
- Describe the basic security and compliance aspects of the AWS platform and the shared security model
- Define the billing, account management, and pricing models;
- Identify sources of documentation or technical assistance