AWS Cloud Practitioner

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 next module.

Required Text Books

1. Ben Piper and David Clinton, "AWS Certified Cloud Practitioner Study Guide", Sybex.

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

- Defining AWS Cloud and its Value Proposition
- Identifying Aspects of AWS Cloud Economics
- Advantages of Cloud Computing
- Trade Capital Expense for Variable Expense
- Benefits of Massive Economies of Scale
- Capacity Guessing
- Increased Speed and Agility
- Stop Spending Money Running and Maintaining Data Centers
- Going Global in Minutes
- AWS Well-Architected Framework
- Features of AWS
 - O Agility
 - O Security
 - Reliability
 - Performance Efficiency
 - O Cost Optimization
 - Operational Excellence

WEEK 2

SECURITY

- Defining AWS Shared Responsibility Model
- Defining AWS Cloud Security and Compliance Concepts
- Identifying AWS Access Management Capabilities
- Including Services like IAM
- Identifying Resources for Security Support
- Including Services like Cloud Trail

WEEK 3 TECHNOLOGY

- Define Methods of Deploying and Operating in the AWS Cloud
- Defining the AWS Global Infrastructure
- Including AWS Concepts of Regions, AZs, and Edge Locations
- Identifying 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
- AWS Services Overview
- Identifying Resources for Technology Support
- AWS Support Models

WEEK 4

BILLING AND PRICING

- Pricing Models for AWS
- AWS Pricing
- Account Structures in AWS Billing and Pricing
- AWS Organizations
- Consolidated Billing
- Billing and Cost Management
- Resources for Billing Support
- TCO Calculator
- Cost Explorer

AWS CLOUD PRACTITIONER CERTIFICATION EXAM PREPARATION

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.