VIRTUAL INSTRUCTOR-LED TRAINING

Architecting on AWS

ALREADY IN YOUR TRANSCRIPT

3 DAYS ENGLISH

This is a dedicated AWS instructor-led training class reserved for specific customers and/or programs. If you don't know whether you should take this class, please reach out to your employer, or contact AWS Customer Support.

ABOUT

Course description

Architecting on AWS is for solutions architects, solution-design engineers, and developers who seek an understanding of Amazon Web Services (AWS) architecting. In this course, you will learn to identify services and features to build resilient, secure, and highly available IT solutions on the AWS Cloud.
Architectural solutions differ depending on industry, types of applications, and business size. AWS Authorized Instructors emphasize best practices by using the AWS Well-Architected Framework. They guide you through the process of designing optimal IT solutions based on real-life scenarios. The modules focus on account security, networking, compute, storage, databases, monitoring, automation, containers, serverless architecture, edge services, and backup and recovery. At the end of the course, you will practice building a solution and apply what you have learned.

- Course level: Intermediate
- Duration: 3 days

Activities

This course includes presentations based on use cases. It also includes group discussions, demonstrations, assessments, and hands-on labs.

Course objectives

- Summarize the fundamentals of account security.
- Identify strategies to build a secure virtual network that includes private and public subnets.
- Practice building a multi-tier architecture in AWS.
- Identify strategies to select the appropriate compute resources based on business use cases.
- Compare and contrast AWS storage products and services based on business scenarios.
- Compare and contrast AWS database services based on business needs.
- Identify the role of monitoring, load balancing, and auto scaling responses based on business needs.
- Identify and discuss AWS automation tools that will help you build, maintain, and evolve your infrastructure.
- Discuss hybrid networking, network peering, and gateway and routing solutions to extend and secure your infrastructure.
- Explore AWS container services for the rapid implementation of an infrastructure-agnostic, portable application environment.
- Identify the business and security benefits of AWS serverless services based on business examples.
- Discuss the ways in which AWS edge services address latency and security.
- Explore AWS backup, recovery solutions, and best practices to ensure resiliency and business continuity.

Intended audience

This course is intended for:

- Solution architects
- Solution-design engineers
- Developers who are seeking an understanding of AWS architecting
- Individuals who are seeking the AWS Solutions Architect-Associate certification

Prerequisites

We recommend that attendees of this course have:

- Completed AWS Cloud Practitioner Essentials, or AWS Technical Essentials
- Working knowledge of distributed systems
- Familiarity with general networking concepts
- Familiarity with IP addressing
- Working knowledge of multi-tier architectures
- Familiarity with cloud computing concepts

Course outline

Day 1

Module 0: Architecting on AWS Introduction

- Preparing for class
- Guidance
- Course overview

Module 1: Architecting Fundamentals

WHERE

Virtual Location

LANGUAGE

English

DURATION

3 days

STARTS

11 December, 2023 @ 09:00 AM
Asia / Kolkata (UTC+05:30)

ENDS

13 December, 2023 @ 05:00 PM
Asia / Kolkata (UTC+05:30)

OFFERED BY

Amazon Web Services

- AWS services
- AWS infrastructure
- AWS Well-Architected Framework
- Hands-on lab: Explore and interact with the AWS Management Console and AWS Command Line Interface

Module 2: Account Security

- Principals and identities
- Security policies
- Managing multiple accounts

Module 3: Networking 1

- IP addressing
- VPC fundamentals
- VPC traffic security

Module 4: Compute

- Compute services
- EC2 instances
- Storage for EC2 instances
- Amazon EC2 pricing options
- AWS Lambda
- Hands-on lab: Build your Amazon VPC infrastructure

Day 2

Module 5: Storage

- Storage services
- Amazon S3
- Shared file systems
- Data migration tools

Module 6: Database Services

- Database services
- Amazon RDS
- Amazon DynamoDB
- Database caching
- Database migration tools
- Hands-on lab: Create a database layer in your Amazon VPC infrastructure

Module 7: Monitoring and Scaling

- Monitoring
- Alarms and events
- Load balancing
- Auto scaling
- Hands-on lab: Configure high availability in your Amazon VPC

Module 8: Automation

- AWS CloudFormation
- Infrastructure management

Module 9: Containers

- Microservices
- Containers
- Container services

Day 3

Module 10: Networking 2

- VPC endpoints
- VPC peering
- Hybrid networking
- AWS Transit Gateway

Module 11: Serverless

- What is serverless?
- Amazon API Gateway
- Amazon SQS
- Amazon SNS
- Amazon Kinesis

- AWS Step Functions
- Hands-on lab: Build a serverless architecture

Module 12: Edge Services

- Edge fundamentals
- Amazon Route 53
- Amazon CloudFront
- DDoS protection
- AWS Outposts
- Hands-on lab: Configure an Amazon CloudFront distribution with an Amazon S3 origin

Module 13: Backup and Recovery

- Disaster planning
- AWS Backup
- Recovery strategies
- Hands-on lab: Capstone lab – Build an AWS multi-tier architecture. Participants review the concepts and services that they learned in class and build a solution based on a scenario. The lab environment provides partial solutions to promote analysis and reflection. Participants deploy a highly available architecture. The instructor is available for consultation.

Module 14: Course Summary

- Recap
- Summaries
- Next steps