

Architecting on AWS

Course Benefits & Agenda



Overview

1

Course Benefits

1

Agenda

2

Overview

Architecting on AWS is for solutions architects, solution-design engineers, and developers seeking an understanding of 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 using the AWS Well-Architected Framework, and 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 with confidence.

Course Benefits

This course is designed to teach the student how to:

- Identify AWS architecting basic practices.
- Explore using the AWS management tools: The AWS Console, Command Line Interface (CLI), and CloudFormation in a lab environment.
- Examine the enforcement of accounts security using policies.

- Identify the elements that build an elastic, secure, virtual network that includes private and public subnets.
- Practice building an AWS core networking infrastructure.
- Determine strategies for a layered security approach to Virtual Private Cloud (VPC) subnets.
- Identify strategies to select the appropriate compute resources based on business use-cases.
- Practice building a VPC and adding an Elastic Cloud Compute (EC2) instance in a lab environment.
- Practice installing an Amazon Relational Database Service (RDS) instance and an Application Load Balancer (ALB) in the VPC you created.
- Compare and contrast AWS storage products and services, based on business scenarios.
- Compare and contrast the different types of AWS database services based on business needs.
- Practice building a highly available, auto-scaling database layer in a lab.
- Explore the business value of AWS monitoring solutions.
- Identify the role of monitoring, event driven load balancing, and auto scaling responses, based on usage and needs.

Agenda

Day 1

| Module | Topic |
|----------|---|
| Module 1 | Architecting Fundamentals Review |
| Lab 1 | Explore Using the AWS API Tools to Deploy an EC2 Instan |
| Module 2 | Account Security |
| Module 3 | Networking, Part 1 |
| Module 4 | Compute |
| Lab 2 | Build Your Amazon VPC Infrastructure |

Agenda

Day 2

| Module | Topic |
|----------|---|
| Module 5 | Storage |
| Module 6 | Database Services |
| Lab 3 | Create a Database Layer in Your Amazon VPC Infrastructure |
| Module 7 | Monitoring and Scaling |
| Lab 4 | Configure High Availability in Your Amazon VPC |
| Module 8 | Automation |
| Module 9 | Containers |

Day 3

| Module | Topic |
|--------------|--|
| Module 10 | Networking Part 2 |
| Module 11 | Serverless Architecture |
| Lab 5 | Build a Serverless Architecture |
| Module 12 | Edge Services |
| Lab 6 | Configure an Amazon CloudFront Distribution with an Amazon S3 Origin |
| Module 13 | Backup and Recovery |
| Capstone Lab | Build an AWS Multi-Tier Architecture |