AWS – Advanced Architecting on Amazon Web Services

Description

In this 3-day course you will build on concepts introduced in Architecting on AWS. You will learn how to build complex solutions that incorporate data services, governance, and security on the AWS platform. You will also learn about specialized AWS services, including AWS Direct Connect and AWS Storage Gateway, that support hybrid architecture, and you will learn about best practices for building scalable, elastic, secure, and highly available applications on AWS.

Course Content
Module 1: Reassessment of Architecturing for Cloud Best Practices

- Lesson 1: Reassessment of Architecturing for Cloud
- Lesson 2: Design Principles
- Lesson 3: Cloud Concepts
- Lesson 4: Cloud Best Practices

Module 2:AWS Well-Architected Framework

- Lesson 1: Introduction and Features
- Lesson 2: Build using a Structured Approach
- Lesson 3: Five Pillars of the Well-Architected Framework

Module 3: AWS Account Techniques

- Lesson 1: AWS Organisations

Module 4: Advanced Architectures of Networking

- Lesson 1: Amazon VPC
- Lesson 2: VPC Networking Fundamentals
- Lesson 3: Elastic Network Interface
- Lesson 4: VPC Peering
- Lesson 5: Routing Inside VPC
- Lesson 6: Advanced ELB
- Lesson 7: VPN

Module 5:AWS Deployment Administration

- Lesson 1: DevOps Practices

Module 6: Large Datastore Design

- Lesson 1: Amazon Elastic Block Store
- Lesson 2: Amazon Elastic File System
- Lesson 3: Amazon Glacier
- Lesson 4: AWS Storage Gateway
- Lesson 5: Data Transfer Services

Module 7: Transporting Large Datastores

- Lesson 1: What is Cloud Data Migration?
- Lesson 2: Unmanaged Cloud Data Migration Tools
- Lesson 3: Managed Cloud Data Migration Tools

Module 8: Architectures of Big Data

- Lesson 1: Introduction to Big Data
- Lesson 2: Elastic MapReduce (EMR)
- Lesson 3: Amazon Redshift
- Lesson 4: AWS Data Pipeline
- Lesson 5: Transporting Large Data Stores
- Lesson 6: AWS Storage Gateway
- Lesson 7: AWS Snowball
- Lesson 8: Advanced DynamoDB
- Lesson 9: DynamoDB Core Components
- Lesson 10 :DynamoDB Supported Technologies
- Lesson 11: DynamoDB API Operations
- Lesson 12: Control Plane and Data Plane
- Lesson 13: DynamoDB Streams
- Lesson 14: Conditional Update and Concurrency Control
- Lesson 15: DynamoDB Security

Module 9: Large Scale Applications

- Lesson 1: Scaling Applications
- Lesson 2: Types of AutoScaling
- Lesson 3: Scaling Servers

Module 10: Constructing Resilience

- Lesson 1: Resiliency
- Lesson 2: High Resiliency for Critical Workloads
- Lesson 3: Maximum Resiliency for Critical Workloads
- Lesson 4: Non-Critical Production Workloads or Development Workloads
- Lesson 5: AWS Managed VPN Connections as a Backup for the Direct Connect

Module 11: Cloud Security

- Lesson 1: Introduction and Benefits
- Lesson 2: Security Platform
- Lesson 3: Security, Identity, and Compliance Products

Module 12: Data Encryption

- Lesson 1: Encrypting with KMS
- Lesson 2: Encrypting and Signing DynamoDB Data in Your Application

Module 13: AWS Key Management Protecting Data

- Lesson 1: Data Protection
- Lesson 2: Data Protection with S3
- Lesson 3: Ten Ways to Protect Data on AWS

Module 14 : Performance Design Managing Deployment

- Lesson 1: AWS Elastic BeanStalk
- Lesson 2: AWS CloudFormation
- Lesson 3: AWS OpsWorks
- Lesson 4: AWS CodeCommit
- Lesson 5: AWS CodePipeline
- Lesson 6: AWS CodeDeploy
- Lesson 7:Amazon EC2 Container Service

Documentation

- Digital courseware included

Participant profiles

- AWS Certified Solutions Architects - Associate certification

Prerequisites

- To be experienced with designing scalable and elastic applications on the AWS platform

Objectives

- Apply the AWS Well-Architected Framework
- Manage multiple AWS accounts for your organization
- Connect an on-premises datacenter to the AWS Cloud
- Discuss billing implications of connecting multi-region VPCs
- Move large data from an on-premises datacenter to AWS
- Design large data stores for the AWS Cloud
- Understand different architectural designs for scaling a large website
- Protect your infrastructure from distributed denial of service (DDOS) attacks
- Secure your data on AWS with encryption
- Design protection of data at rest and data in transit
- Enhance the performance of your solutions
- Select the most appropriate AWS deployment mechanism

Niveau
Avancé
Virtual Classroom Registration Price (CHF)
2700
Duration (in Days)
3
Reference
AWS-102