

# **AWS Solutions Architect Associate (SAA-C03) Course 2026**



## **Lets Gets Started**

- Welcome and How to Use this Course
- The SAA-C03 Exam
- Hands-On Practice: Free Tier vs Sandbox
- AWS Account Overview
- Create your AWS Account
- Configure Account and Create a Budget
- Install Tools and Configure AWS CLI
- Course Download

## **AWS Identity & Access Management**

- Introduction
- AWS Identity and Access Management (IAM)
- [HOL] Creating IAM Users and Group
- [HOL] Setup Individual User Account
- IAM Authentication and MFA
- [HOL] Setup Multi-Factor Authentication (MFA)
- Permissions Boundaries
- IAM Policy Evaluation
- IAM Policy Structure
- [HOL] IAM Policy Simulator
- [HOL] Access Evaluation Tools
- IAM Best Practices

## **Amazon Elastic Compute Cloud (EC2)**

- Introduction
- Amazon EC2 Overview
- [HOL] Launching Amazon EC2 Instances
- [HOL] Connecting to Amazon EC2
- Amazon EC2 User Data and Metadata
- [HOL] Using User Data and Metadata
- [HOL] Launch Instance with User Data and Metadata
- Access Keys and IAM Roles with EC2
- [HOL] Practice with Access Keys and IAM Roles
- [HOL] Status Checks and Monitoring
- EC2 Placement Groups
- Network Interfaces (ENI, ENA, EFA)
- Public, Private and Elastic IP Addresses
- NAT for Public Addresses
- [HOL] Working with ENIs and IP Addresses
- Private Subnets and Bastion Hosts
- [HOL] Private Subnets and Bastion Hosts
- NAT Gateways and NAT Instances Overview
- [HOL] Private Subnet with NAT Gateway
- EC2 Instance Lifecycle
- Nitro Instances and Nitro Enclaves
- Amazon EC2 Pricing Options
- Amazon EC2 Pricing Use Cases

## **Elastic Load Balancing & Auto Scaling**

- Introduction
- Scaling Up vs Scaling Out
- Amazon EC2 Auto Scaling
- [HOL] Create an Auto Scaling Group
- High Availability and Fault Tolerance
- Amazon Elastic Load Balancing
- ALB and NLB Deployments
- [HOL] Create an Application Load Balancer
- Amazon EC2 Scaling Policies
- [HOL] Create a Scaling Policy
- Cross-Zone Load Balancing
- Session State and Session Stickiness
- Secure Listeners for ELB
- [HOL] Create a Secure Listener
- [HOL] Network Load Balancer (NLB)

## **Aws Organization & Control Tower**

- Introduction
- AWS Organizations
- [HOL] Create Organization and add Account
- Service Control Policies (SCPs)
- [HOL] Create Service Control Policy (SCP)
- AWS Control Tower

## **Amazon Virtual Private Cloud**

- Introduction
- The AWS Global Infrastructure
- IP Addressing
- Amazon VPC Overview
- Defining VPC CIDR Blocks
- [HOL] Create a Custom VPC
- Security Groups and Network ACLs
- [HOL] Using Security Groups and NACLs
- Amazon VPC Peering
- [HOL] Configure VPC Peering
- VPC Endpoints
- [HOL] Create VPC Endpoint
- AWS Client VPN

- AWS Site-to-Site VPN
- AWS VPN CloudHub
- AWS Direct Connect (DX)
- AWS Direct Connect Gateway
- AWS Transit Gateway
- Using IPv6 in a VPC
- [HOL] VPC Flow Logs
- Exam Cram
- Architecture Patterns

## **Amazon Simple Storage Service (S3)**

- Introduction
- Amazon Simple Storage Service (S3)
- Amazon S3 Storage Classes
- [HOL] Working with S3 Buckets and Objects
- IAM Policies, Bucket Policies and ACLs
- [HOL] S3 Permissions and Bucket Policies
- S3 Versioning, Replication and Lifecycle Rules
- [HOL] Configure Replication and Lifecycle
- MFA with Amazon S3
- Amazon S3 Encryption
- [HOL] Enforce Encryption with AWS KMS
- [HOL] S3 Event Notifications
- [HOL] S3 Presigned URLs
- Multipart Upload & Transfer Acceleration
- S3 Select and Glacier Select
- Server Access Logging
- [HOL] Create an Amazon S3 Static Website
- Cross-Origin Resource Sharing (CORS)
- [HOL] Cross-Account Access
- S3 Object Lambda

## **DNS,Caching & Performance Optimization**

- Introduction
- [HOL] Register Domain with Route 53 (Optional)
- DNS and Amazon Route 53
- Route 53 Routing Policies
- [HOL] Failover Routing Policy with ALB
- Amazon Route 53 Resolver
- Amazon CloudFront Origins and Distributions

- Amazon CloudFront Caching and Behaviors
- CloudFront Signed URLs and OAI/OAC
- [HOL] CloudFront Cache and Behavior Settings
- CloudFront SSL/TLS and SNI
- Lambda@Edge
- AWS Global Accelerator

## **Block & File Storage**

- Introduction
- Block vs File vs Object Storage
- Amazon EBS Deployment and Volume Types
- Amazon EBS Copying, Sharing and Encryption
- Amazon EBS Snapshots and DLM
- EC2 Instance Store Volumes
- [HOL] Create and Attach an EBS Volume
- [HOL] EBS Snapshots and AMIs
- Using RAID with EBS
- Amazon Elastic File System (EFS)
- [HOL] Create an Amazon EFS File System
- Amazon FSx
- AWS Storage Gateway

## **Docker Containers & ECS**

- Introduction
- Docker Containers and Microservices
- Amazon Elastic Container Service
- Amazon ECS and IAM Roles
- Scaling Amazon ECS
- Amazon ECS with ALB
- [HOL] Launch Docker Containers on AWS Fargate
- Amazon Elastic Kubernetes Service (EKS)
- Amazon Elastic Container Registry (ECR)
- AWS App Runner
- Exam Cram
- Architecture Patterns

## **Serverless Applications**

- Introduction
- Serverless Services and Event-Driven Architecture
- AWS Lambda
- [HOL] Create Function to Resize Instance
- Application Integration Services Overview
- Amazon SQS

- Amazon SNS
- [HOL] Simple Event-Driven App
- AWS Step Functions
- [HOL] Create a State Machine
- Amazon EventBridge
- [HOL] Create Event Bus and Rule
- Amazon API Gateway
- [HOL] Simple HTTP API

## **Databases & Analytics**

- Introduction
- Database Types and Use Cases
- Amazon Relational Database Service (RDS)
- Amazon RDS Backup and Recovery
- [HOL] Create Amazon RDS Database
- [HOL] Create a Read Replica
- Amazon RDS Security
- [HOL] Create Encrypted Copy of RDS Database
- Amazon Aurora
- Amazon Aurora Deployment Options
- Amazon RDS Proxy
- Amazon ElastiCache
- Scaling ElastiCache
- [HOL] Create ElastiCache Cluster
- Amazon DynamoDB
- [HOL] Practice Creating DynamoDB Tables
- DynamoDB Streams
- DynamoDB Accelerator (DAX)
- DynamoDB Global Tables
- [HOL] Enable Global Table
- Amazon RedShift
- Amazon Elastic Map Reduce (EMR)
- Amazon Kinesis
- Amazon Athena and AWS Glue
- [HOL] Query S3 ALB Access Logs with Athena
- Amazon OpenSearch Service (Elasticsearch)
- AWS Batch
- Other Database Services
- Other Analytics Services

## **Deployment & Management**

- Introduction
- Infrastructure as Code with AWS CloudFormation
- [HOL] Creating and Updating Stacks
- [HOL] Create Nested Stack using the AWS CLI
- Platform as a Service with AWS Elastic Beanstalk
- [HOL] Create an Elastic Beanstalk Application
- SSM Parameter Store
- AWS Config
- [HOL] SSM Automation and Config Rules
- AWS Secrets Manager
- AWS Resource Access Manager
- [HOL] Share a Subnet Across Accounts
- RPO, RTO, and DR Strategies

## **Monitoring, Auditing & logging**

- Introduction
- Amazon CloudWatch Overview
- [HOL] Create a Custom Metric and Alarm
- Amazon CloudWatch Logs
- The Unified CloudWatch Agent
- AWS CloudTrail
- [HOL] Create a Trail in AWS CloudTrail
- Amazon EventBridge (Refresher)
- [HOL] Create EventBridge rule for CloudTrail API calls
- Metric Analysis and Tracing

## **Security In the Cloud**

- Introduction
- AWS Directory Service
- Identity Providers and Federation
- [HOL] IAM Identity Center in Action
- Amazon Cognito
- Encryption Primer
- AWS Key Management Service (KMS)
- [HOL] Encrypt and Decrypt Data with AWS KMS
- AWS CloudHSM
- AWS Certificate Manager
- [HOL] SSL/TLS Certificate in ACM

- AWS Web Application Firewall (WAF)
- Amazon Inspector
- Amazon Macie
- AWS GuardDuty
- AWS Shield
- Defense In-Depth

### **Migration & Transfer**

- Introduction
- AWS Migration Tools Overview
- AWS Application Discovery Service
- AWS Database Migration Service (DMS)
- AWS Application Migration Service (MGN)
- AWS DataSync
- AWS Snow Family
- The 7 Rs of Migration

### **Web , Mobile,ML & Cost Management**

- Introduction
- AWS Amplify and AppSync
- AWS Device Farm
- AWS Machine Learning and AI Services
- [HOL] Process and Analyze Videos
- AWS License Manager
- AWS Compute Optimizer
- [HOL] AWS Budgets
- [HOL] AWS Cost Explorer
- [HOL] Cost Allocation Tags
- AWS Cost Management Tools
- [HOL] AWS Cost Management Tools

**THANK YOU  
CONGRATULATION**