

AWS Certification Training - Solutions Architect

About Course

Sunshine Learning & Technologies, AWS Certification Training - Solutions Architect Training is moulded by top industry experts to meet the industry benchmarks which gives you a strong foundation to appear for the AWS Certified Solutions Architect - Associate exam SAA-C02 exam. You will be able to effectively architect and deploy secure and robust applications using AWS. This AWS training course will help you identify the appropriate AWS service based on databases, network, storage, cost optimization, compute, and security requirements.

AWS Certification Training Curriculum

Introduction to AWS :-

Topics:

- ☒ Classic Data Center
- ☒ Virtualization
- ☒ Cloud and Cloud Computing
- ☒ Cloud Computing Service Models
- ☒ Cloud Computing Deployment Models
- ☒ Service Comparison: AWS, Azure, and GCP
- ☒ Amazon Web Services (AWS) and its Benefits
- ☒ AWS Global Infrastructure
- ☒ AWS Regions and Replication of data between the Regions
- ☒ Availability Zones and High Availability
- ☒ AWS Edge Location
- ☒ Different Amazon Web Services
- ☒ Ways to access AWS: CLI, Console, and SDKs

Security Management in AWS :-

Topics:

- ☒ User management through Identity Access Management (IAM)
- ☒ Various access policies across AWS Services
- ☒ Security Token Services
- ☒ AWS Resource Access Manager (RAM),
- ☒ AWS Single Sign-On (SSO)
- ☒ AWS Cognito
- ☒ AWS Security & Encryption: KMS, CloudHSM, Shield, WAF, Guard Duty
- ☒ API keys service access
- ☒ Best practices for IAM
- ☒ Access billing and create alerts on billing

Object Storage Options :-

Topics:

- ❧ Traditional Storage
- ❧ Need to Move to Cloud Storage
- ❧ Traditional vs. Cloud Storage Cost
- ❧ Cloud Storage
- ❧ Different Storage Options Available on AWS
- ❧ Simple Storage Service (S3) and Its Components
- ❧ Working of S3
- ❧ Difference Between S3, EBS and EFS
- ❧ Bucket Policy
- ❧ Access Control List(ACL)
- ❧ Versioning
- ❧ Cross-Region Replication (CRR) and Its Use Case
- ❧ Amazon S3 Transfer Acceleration
- ❧ Choice of Storage Classes on S3
- ❧ Lifecycle Policy of S3 Bucket
- ❧ CDN: CloudFront and AWS Global Accelerator
- ❧ Storage Gateways

Amazon EC2 :-

Topics:

- ❧ Virtualization
- ❧ Amazon Elastic Compute Cloud (EC2) and Its Benefits
- ❧ Amazon Machine Image (AMI)
- ❧ Security Groups in AWS
- ❧ Authentication through Key-pair
- ❧ Hardware Tenancy – Shared vs. Dedicated
- ❧ Networking Layer in EC2: VPC
- ❧ Elastic Network Interface (ENI) and Its Attributes
- ❧ Different Categories of IP Address
- ❧ Public IP vs. Elastic IP
- ❧ Instance Store
- ❧ Elastic Block Store (EBS), Its Features and Volume Types
- ❧ Solid State Drive: General Purpose SSD and Provisioned IOPS
- ❧ Hard Disk Drive: Throughput Optimized HDD and Cold HDD
- ❧ Snapshots
- ❧ Elastic File System (EFS) and Its Features
- ❧ EBS vs. EFS
- ❧ Amazon FSx: Windows File Server and Lustre

Database Services and Analytics :-

Topics:

- ☞ Amazon RDS and its benefits
- ☞ Read Replica
- ☞ RDS IAM Authentication
- ☞ DynamoDB
- ☞ ElastiCache: Working, Redis vs Memcached
- ☞ Amazon RedShift
- ☞ Kinesis: AWS Kinesis Data Streams, AWS Kinesis Data Firehouse
- ☞ AWS Lake Formation
- ☞ AWS Athena
- ☞ AWS QLDB

Load Balancing, Auto-Scaling, and Route 53 :-

Topics:

- ☞ Elastic Load Balancer and its types
- ☞ Advanced features of ELB
- ☞ Launch Templates
- ☞ Launch Configurations
- ☞ Comparison of Classic, Network and Application Load Balancer
- ☞ Auto-Scaling
- ☞ Components of Auto-Scaling
- ☞ Lifecycle of Auto-Scaling
- ☞ Auto-Scaling policy
- ☞ Working of Route 53
- ☞ Various Routing Policies

Networking and Monitoring Services :-

Topics:

- ☞ VPC – Benefits and Components
- ☞ CIDR Notations
- ☞ Network Access Control List v/s Security Groups
- ☞ NAT (Network Address Translation): NAT Devices, NAT Gateway and NAT instance
- ☞ VPC peering
- ☞ Direct Connect
- ☞ Private Link
- ☞ AWS CloudWatch
- ☞ AWS CloudTrail
- ☞ AWS Config
- ☞ Trusted Advisor

Applications Services and AWS Lambda :-

Topics:

- ✍ AWS Simple Email Service (SES)
- ✍ Implement SES
- ✍ Demonstrate the working of SNS
- ✍ SQS: Work with SQS, ASG with SQS
- ✍ Amazon MQ
- ✍ Amazon Event Bridge
- ✍ AWS Simple Notification Service (SNS)
- ✍ AWS Simple Work Flow (SWF)
- ✍ AWS Lambda
- ✍ AWS Serverless Application Model

Configuration Management and Automation :-

Topics:

- ✍ Infrastructure as Code
- ✍ CloudFormation and its components
- ✍ Templates in CloudFormation
- ✍ Stack in CloudFormation
- ✍ Resource deletion policies in CloudFormation
- ✍ Introduction to AWS OpsWorks
- ✍ AWS OpsWorks services
- ✍ Components of AWS OpsWorks Stack
- ✍ OpsWorks Lifecycle Events and Deployment Commands
- ✍ OpsWorks for Chef Automate
- ✍ AWS OpsWorks for Puppet Enterprise
- ✍ Auto Healing
- ✍ Elastic Beanstalk
- ✍ Components of Elastic Beanstalk
- ✍ Beanstalk v/s OpsWorks v/s CloudFormation

Migration to AWS :-

Topics:

- ✍ Why Cloud Migration
- ✍ What is Cloud Migration
- ✍ Migration Phases
- ✍ CAF Perspectives and their Roles
- ✍ AWS Migration Hub and ways to use AWS Migration Hub
- ✍ Roles and Permissions for AWS Migration Hub
- ✍ AWS Migration Hub use cases
- ✍ AWS Application Discovery Service
- ✍ Application Discovery Tools
- ✍ Application Migration to AWS
- ✍ Application Migration Phases

- ❧ Virtual Machines migration ways
- ❧ AWS Server Migration Service(SMS) and its working
- ❧ Database Migration Implementation steps
- ❧ Working of DMS
- ❧ AWS Database Migration use cases
- ❧ Types of data transfer: Homogenous and Heterogenous
- ❧ Database Schema Migration tool
- ❧ Database Migration best practices

AWS Architectural Designs – I :-

Topics:

- ❧ AWS Well-Architected Framework
- ❧ How to Build Well Architected Framework
- ❧ Pillars of AWS Well-Architected Framework
- ❧ Resilience
- ❧ Design Highly Available and/or Fault-Tolerant Architectures
- ❧ Choose Appropriate Resilient Storage
- ❧ Designing Decoupling Mechanisms Using AWS Services
- ❧ Design a Multi-tier Architecture Solution
- ❧ Disaster Recovery (DR)
- ❧ Options to Implement DR Plans
- ❧ Design High-Performance Architecture
- ❧ Achieve Performance Efficiency using Selection
- ❧ Achieve Performance Efficiency using Review
- ❧ Achieve Performance Efficiency by Monitoring
- ❧ Achieve Performance Efficiency by Performing Trade-offs

AWS Architectural Designs – II :-

Topics:

- ❧ Design Secure Applications and Architectures
- ❧ Cloud Security
- ❧ IAM
- ❧ How IAM Secures your Resources
- ❧ Identity and Federation
- ❧ Shared Responsibility Model
- ❧ Shared Responsibility Model for Infrastructure Services
- ❧ Shared Responsibility Model for Container Services
- ❧ Shared Responsibility Model for Abstraction Services
- ❧ Network Security Layer
- ❧ Multi-Layer Architecture With Network Security
- ❧ AWS HSM and its working
- ❧ AWS S3 Security
- ❧ AWS Security and Compliance Centre
- ❧ Design Cost-Optimized Architectures
- ❧ Cost Optimization
- ❧ Cost Optimization Design Principles
- ❧ Cost Effective Resources

AWS Certified Solutions Architect Certification Exam Questionnaires (Self-Paced) :-

Topics:

- 🔗 AWS Solution Architect Certification Exam Guide
- 🔗 Certification Exam Questionnaires

Hands On:-

There will be separate Hands-On on each topic.