

*#734, Lakshmi Krupa Complex, 1st F Cross, 15th Main, 3rd Stage, 4th Block
Oppo BWSSB Office, Basaveshwar Nagar, Bangalore, 560079.*



Summary:

AWS certifications recognize IT professionals that possess the skills and technical knowledge necessary for designing, deploying, and operating applications and infrastructure on AWS. Earning certification helps you gain visibility and credibility for your proven experience working with AWS, as well as contributes to your organization's proficiency with AWS-based applications.

The AWS Certified Solutions Architect is one of the most valuable and in-demand cloud certifications available. The associate level certification is valued because it demonstrates capability in a wide range of AWS products and services.

Suitable for:

Anyone who has passed the AWS Certified Solutions Architect - Associate Certification
Experienced Engineers or Consultants
IT Managers looking to understand complex architectures and projects
Project Managers running large hybrid migrations or complex implementations within AWS

Learning Objectives:

The aim of the certification is to validate your knowledge across a number of different key areas, which have been defined by AWS as being able to:

- Design and deploy dynamically scalable, highly available, fault-tolerant, and reliable applications on AWS
- Select appropriate AWS services to design and deploy an application based on given requirements
- Migrate complex, multi-tier applications on AWS
- Design and deploy enterprise-wide scalable operations on AWS
- Implement cost-control strategies

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Course Topics:

S.No	Module	Topics
1	Quick Recap of the AWS Services and other concepts	
2	Design for Organization Complexity	<ul style="list-style-type: none"> Multi-Account Strategy for Enterprises Identity Account Architecture Creating Cross-Account IAM Roles AWS Organizations Creating first AWS Organization & SCP Managing Organizational Units IAM Permission Boundaries AWS Secure Token Service (STS) Cross-Account Logging for CloudTrail and Config Understanding CloudWatch Logs Overview of AWS License Manager Overview of Service Catalog Creating Product and Portfolio in Service Catalog S3 - Public Access Settings S3 Bucket Policies Bucket Policy Document - Condition based on IP Address Cross Account S3 Bucket Configuration Canned ACL Creating Stack Sets for Deployment Understanding Active Directory Introducing AWS Directory Service Domain Joining the Linux with SimpleAD Understanding SAML for SSO Overview of AWS Single Sign-On Integrating AWS SSO with AWS CLI Knowledge check - Sample Questions
3	Design for New solutions	<ul style="list-style-type: none"> Understanding DOS Attacks Mitigating DDOS attacks Document - DDoS Link AWS Shield CloudHSM AWS Key Management Service Understanding the Streaming Data

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Streaming with AWS Kinesis
Overview of Kinesis Data Streams
Configuring our first stream with Kinesis
Kinesis Data Firehose
Kinesis Data Analytic Streams
Kinesis Video Streams
External Link - Kinesis Video Streams
Overview of Cross-Account Log Data Sharing
Cross-Account CloudWatch Logs
RTO & RPO
Scalability with RDS Read Replicas
Implementing & Analyzing RDS Read Replicas
Automatic Failover with RDS Multi-AZ Deployments
RDS Event Notification
Overview of Amazon Aurora
AWS ElastiCache
Introduction to NoSQL Databases
DynamoDB - Read & Write Units
DynamoDB Auto-Scaling
DynamoDB Global Tables
DynamoDB Accelerator (DAX)
DynamoDB Streams
Disaster Recovery Models
Overview of Route53 for Multi-Site Failover
Advanced Route53 Configurations
Route53 - Understanding Health Checks
Route53 - Implementing Health Checks on NGINX
Route53 - Understanding Failover Routing Policy
Implementing Failover Routing Policy
Route53 - Weighted Routing Policy
Route53 - Geolocation Routing Policy
Route53 - Multi-Value Answer Routing Policy
Route53 - Latency Based Routing Policy
VPC Endpoints
VPC Endpoints - Architectural Perspective
Gateway VPC Endpoints - Access Control
Gateway Endpoint ACL (Resource)
Understanding Interface VPC Endpoints
Implementing Interface Endpoints
Understanding VPC Endpoint Services
Implementing end to end VPC Endpoint service
Revising VPC Peering
Revising NAT Gateways
NAT Gateway Performance
Egress-Only Internet Gateways
Network ACL
Overview of Elastic File System (EFS)
AWS EFS - Creating and Mounting EFS

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Introduction to Docker
Document - Installing Docker
Elastic Container Registry (ECR)
Overview of ECS
ECS - Task Definition and Services
Introduction to Virtual Private Networks
Overview of AWS VPN
Different Load Balancer Types in AWS
Overview of Classic Load Balancer
Overview of Application Load Balancer
Implementing Path Based Routing in ALB
ALB - Listeners & Target Groups
ALB - Conditions & Host Based Routing
Understanding Network Load Balancer
Implementing Network Based Load Balancers
Overview of AWS WAF
AWS WAF Implementation with ALB
Overview of AWS Code Commit
Understanding Software Builds
Understanding Code Build Service
Understanding Code Deploy Service
Creating the first Code Deploy configuration
Overview of Code Pipeline
Introduction to Message Brokers
Revising SQS
Visibility Timeout in SQS
Queue Types in SQS
SQS Dead-Letter Queues
Introduction to Auto Scaling
Overview of Dynamic Scaling
Scheduled Scaling
Overview of Auto-Scaling LifeCycle Hooks
Creating our first LifeCycle hook in ASG
Overview of AWS OpsWorks
OpsWorks LifeCycle Events
Overview of AWS Config
Elastic Beanstalk
EB Deployment Policy
Performing Immutable Policy based Deployments
Blue Green Deployments
Overview of Elastic Network Interface
Understanding Enhanced Networking
Placement Groups
Understanding Business Intelligence & Data Warehouse
Deploying RedShift Cluster
Knowledge check - Sample Questions

4 Migration Planning

Migration Strategies
AWS Import/Export
AWS Snowball
VMWare vCenter Migartions
AWS Server Migration Service
AWS Application Discovery Service
Overview of Database Migration Service
Creating our first DMS task for Migration
Knowledge check - Sample Questions

5 Cost Control

Trusted Advisor
Implementing Resource level tags
Detailed Billing Report with Tags
Resource Groups
AWS Budget Alarms
The Architecture of Consolidated Billing
Understanding EC2 Instance Types
EC2 Pricing Models
Reserved Instances
EC2 Tenancy Attribute
Knowledge check - Sample Questions

6 Continuous Improvement on Existing Solutions

Overview of Systems Manager
Configuring SSM Agent
Overview of Sessions Manager
SSM - Run Command
Overview of Patch Manager
Implementing Compliance and Patch Baseline
AWS Secrets Manager
RDS Integration with Secrets Manager
Data LifeCycle Manager for EBS Snapshots
Simple Notification Service
S3 - Versioning
S3 - Multi-Part Uploads
S3 Event Notification
S3 Transfer Acceleration
Range GET in S3
S3 Storage Classes
New S3 Storage Class - Intelligent-Tiering
New S3 Storage Class - One Zone-IA
New S3 Storage Class - Glacier Deep Archive
S3 Lifecycle Policies
S3 Encryption

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S3 Requester Pays
S3 - Cross Region Replication
AWS Cognito
AWS Athena
Understanding ElasticTranscoder
Understanding AWS Certificate Manager
Provisioning first TLS certificate with ACM
Configuring ELB with HTTPS for SSL offloading
CloudWatch Events
Namespace, Metrics and Dimension
Understanding Direct Connect
DX - Public & Private VIF
Direct Connect Gateway
High Availability for Direct Connect
Overview of Transit Gateways
Link Aggregation Groups (LAG)
Understanding AWS Storage Gateways
Overview of Storage Gateway - File Gateway
Overview of AWS X-Ray
AWS SAM
Revising Content Delivery Networks (CDNs)
Demo - CloudFront Distribution
Deploying CloudFront Distribution
Origin Access Identity
Lambda@Edge
Connectivity Features of AWS Lambda
Integrating Lambda & S3 with S3 Event
Notification
Introduction to API
Understanding working of API
Building the function for our API
Building our API with API Gateway
API Gateway Logging
Implementing API Gateway Logging Functionality
X-Ray and API Gateway Integration
AWS Rekognition
EC2 Auto-Recovery
AWS Batch
EBS Volume Types
AWS Simple Workflow Service
AWS Elastic Map Reduce
AWS AppStream 2.0
AWS Step Function
Knowledge check - Sample Questions



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Contact Us:

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