AWS Solution Architect - Professional Level Training

COURSE CONTENT

About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

Multisoft Systems offers an extensive AWS Solution Architect - Professional Level Training program designed to empower IT professionals with advanced knowledge and skills in cloud architecture and solutions. This comprehensive course delves deep into AWS services, architecture best practices, and complex scenarios, enabling participants to design and implement scalable, reliable, and secure solutions on the AWS platform.

Module 1: Amazon VPC

- ✓ What is Amazon VPC?
- ✓ How to Get Started with Amazon VPC
- ✓ Create New VPC
- ✓ Launch an instance (Server) to use this VPC
- ✓ Security in Your VPC
- ✓ Networking in Your VPC
- ✓ Route Tables
- ✓ Internet Gateways
- ✓ NAT Instances
- ✓ DHCP Options Sets
- ✓ DNS
- ✓ VPC Peering
- ✓ Components of Your VPN

Module 2: Amazon ElastiCache

- ✓ What Is Amazon ElastiCache?
- ✓ Getting Started (Launch a Cluster)
- ✓ ElastiCache Terminology and Concepts
- ✓ Backup and Restore
- ✓ Clusters Explanation (Memcached and Redis)
- ✓ CloudWatch Metrics with ElastiCache
- ✓ Managing ElastiCache
- ✓ Managing Replication Groups
- ✓ DNS Names and Underlying IP

Module 3: Amazon Glacier

- ✓ What Is Amazon Glacier?
- ✓ Getting Started

- ✓ Working with Archives
- ✓ Access Control
- ✓ Audit Logging with AWS CloudTrail
- ✓ Computing Checksums
- ✓ Error Responses
- ✓ Vault Operations
- ✓ Archive Operations
- ✓ Multipart Upload Operations
- ✓ Job Operations
- ✓ Data Retrieval Policy Operations

Module 4: Amazon IAM

- ✓ What Is IAM?
- ✓ Security Credentials
- ✓ Getting Started
- ✓ How Users Sign in to Your Account
- ✓ Best Practices and Use Cases
- ✓ Adding a User
- ✓ Listing Users
- ✓ Renaming a User
- ✓ Deleting a User
- ✓ Creating Groups
- ✓ Adding and Removing Users in a Group
- ✓ Listing Groups
- ✓ Renaming a Group
- ✓ Deleting a Group
- ✓ Credentials (Access Key Management)
- ✓ Administering MFA with AWS (Device authentication like RSA token)
- ✓ Managing User Signing Certificates
- ✓ Using Identity Providers

✓ Roles (Delegation and Federation)

✓ Cross-Account Access

✓ Managing Server Certificates

✓ Permissions and Policies

✓ Logging IAM Events with AWS CloudTrail

✓ Testing IAM Policies

Module 5: Amazon Route 53

✓ What Is Amazon Route 53?

✓ DNS Constraints and Behaviors

✓ Getting Started

✓ Configuring Amazon Route 53 as Your DNS Service

✓ Registering a Domain Name and Configuring Amazon Route 53 as the DNS Service

✓ Migrating DNS Service for an Existing Domain to Amazon Route 53

✓ Creating a Subdomain That Uses Amazon Route 53 without Migrating the Parent Domain

✓ Working with Public Hosted Zones

✓ Working with Private Hosted Zones

✓ Working with Resource Record Sets

✓ Health Checks and DNS Failover

✓ Creating, Updating, and Deleting Health Checks

✓ Transferring a Domain to a Different AWS Account

✓ Using IAM to Control Access to Amazon Route 53 Resources

Module 6: Amazon Simple Storage Service (S3)

✓ What Is Amazon S3?

✓ Overview of Amazon S3 and This Guide

✓ Advantages to Amazon S3

✓ Amazon S3 Concepts

✓ Features

- ✓ Buckets
- ✓ Access Control
- ✓ Objects
- ✓ Cross-Origin Resource Sharing
- ✓ Deleting Objects
- ✓ Restoring Objects
- ✓ Managing Access
- ✓ Protecting Data
- ✓ Hosting a Static Website
- ✓ Notifications
- ✓ Request Routing
- ✓ Performance Optimization
- ✓ Amazon DevPay
- ✓ Server Access Logging

Module 7: Amazon Auto Scaling

- ✓ What is Auto Scaling?
- ✓ Auto Scaling Benefits
- ✓ How Auto Scaling Works
- ✓ Setting Up
- ✓ Planning your Auto Scaling Group
- ✓ Controlling Access to Your Auto Scaling Resources
- ✓ Creating Launch Configurations
- ✓ Creating Your Auto Scaling Groups
- ✓ Controlling instances
- ✓ Tagging instances
- ✓ Load Balance Your Auto Scaling Group
- ✓ Attach EC2 Instances to Your Auto Scaling Group
- ✓ Detach EC2 Instances from Your Auto Scaling Group
- ✓ Merging Auto Scaling Groups

✓ Temporarily Removing Instances

✓ Suspend and Resume Process

✓ Shut Down Your Auto Scaling Process

✓ Monitoring Your Auto Scaling Instances

✓ Health Checks

✓ Getting Notifications When Your Auto Scaling Group Changes

✓ Amazon EC2 AMIs

✓ Load Balancer Configuration

✓ Capacity Limits

Module 8: Amazon Elastic Load Balancing (ELB)

✓ What Is Elastic Load Balancing?

✓ How Elastic Load Balancing Works

✓ Concepts

✓ Create a Basic Load Balancer

✓ Listener Configurations

✓ SSL Negotiation Configurations

✓ SSL Certificates

✓ Elastic Load Balancing in Amazon VPC

✓ Attach Subnets

✓ Detach Subnet

✓ Managing Load Balancers

✓ Custom Domain Names

✓ Cross-Zone Load Balancing

✓ Connection Draining

✓ Idle Timeout

✓ Proxy Protocol

✓ DNS Failover

✓ Sticky Sessions

✓ Monitoring and Logging

✓ Controlling User Access to Your Load Balancer

Module 9: Amazon CloudFront

✓ What Is Amazon CloudFront?

✓ How CloudFront Delivers Content

✓ Getting Started

✓ Working with Distributions

✓ Working with Web Distributions

✓ Working with RTMP Distributions

✓ Working with Objects

✓ Request and Response Behavior

✓ Serving Private Content through CloudFront

✓ Using an HTTPS Connection to Access Your Objects

✓ Using IAM to Control Access to CloudFront Resources

✓ Monitoring CloudFront Activity Using CloudWatch

Module 10: Amazon Elastic Compute Cloud (EC2)

✓ What Is Amazon EC2?

✓ Regions and Availability Zones

✓ Root Device Volume

✓ Getting Started

✓ Amazon Machine Images

✓ Instances

✓ On demand Instances

✓ Spot Instances

✓ Reserved Instances

✓ Importing and Exporting Instances

✓ Monitoring

✓ Network and Security

✓ Security Groups

- ✓ Controlling Access
- ✓ Instance IP Addressing
- ✓ Elastic IP Addresses
- ✓ Elastic Network Interfaces
- ✓ Resources and Tags
- ✓ Stop, start, restart, terminate Your Instance

Module 11: Amazon EBS

- ✓ Amazon EBS
- ✓ Features of Amazon EBS
- ✓ EBS Volumes
- ✓ EBS Snapshots
- ✓ EBS Encryption
- ✓ EBS Performance
- ✓ Instance Store
- ✓ Instance Storage Concepts
- ✓ Instance Stores Available on Instance Types
- ✓ Instance Store Volume TRIM Support
- ✓ Instance Store Swap Volumes
- ✓ Instance Store Device Names
- ✓ Instance Store Usage Scenarios
- ✓ Adding Instance Store Volumes to an AMI
- ✓ Optimizing Disk Performance

Module 12: Amazon Relational Database Service (RDS)

- ✓ What Is Amazon RDS?
- ✓ Amazon RDS Components
- ✓ Getting Started
- ✓ DB Instances
- ✓ Back Up and Restore

- ✓ DB Instance Replication
- ✓ Security: Using IAM to Manage Access to Amazon RDS Resources
- ✓ Amazon RDS Security Groups
- ✓ Limits
- ✓ Managing My SQL Database server
- ✓ DB Instance Life Cycle: Renaming a DB Instance
- ✓ Deleting a DB Instance
- ✓ Rebooting a DB Instance
- ✓ Working with Storage Types
- ✓ Upgrading a DB Instance
- ✓ Working with Option Groups
- ✓ Working with DB Parameter Groups
- ✓ Working with DB Security Groups
- ✓ Working with Reserved DB Instances
- ✓ Monitoring
- ✓ Database Log Files