AWS Architect

Understanding Fundamental Cloud Concepts

Learning Objectives:

Understand cloud computing fundamentals and benefits
Gain knowledge of key cloud terminology and concepts
Explore public, private, and hybrid cloud models
Learn about IaaS and its applications
Familiarize yourself with PaaS and SaaS use cases
Review real-world use cases and applications

Topics:

What is Cloud Computing - I
What is Cloud Computing - II
Benefits of Cloud Computing
Key Concepts and Terminology
Cloud Models: What is Public Cloud
Cloud Models: Characteristics of Public Cloud
Cloud Models: What is Private Cloud
Cloud Models: Characteristics of Private Cloud
Cloud Models: Hybrid Cloud
Cloud Models: Characteristics of Hybrid Cloud
Review and What Next!!
What is IAAS?
Use Cases of IAAS
What is PAAS?
Use Cases of PAAS
What is SAAS?

AWS Certified Cloud Practitioner

Learning Objectives:

Intro to AWS Practitioner Certification.
Grasp foundational cloud concepts in AWS:
 benefits, design principles, migration, and economics.
Explore security and compliance in AWS for robust cloud governance.
Navigate cloud technology and services in AWS with essential skills.
Master AWS billing, pricing, and support for effective cost management.

Topics

Course Overview
Introduction to Cloud Concepts
Cloud Security and Compliance
Cloud Technology and Services
Billing, Pricing, and Support

AWS Certified Solutions Architect - Associate

Learning Objectives:

Design and deploy scalable, fault-tolerant systems on AWS
Select suitable AWS services for specific use cases
Implement AWS networking and storage solutions
Manage AWS applications, computing, databases, and serverless architectures
Prepare for the AWS Certified Solutions Architect exam

Topics

Introduction to Cloud Labs
The Basics of Cloud with AWS
Resilient Architectures
High-Performance Architectures
Secure Architectures
Cost-Optimized Architectures
Mock Test Papers

Cloud Migration and Cloud Security

Learning Objectives:

Understand AWS Shared Responsibility Model and security implications
Master AWS IAM for secure access control and user management
Explore AWS security services (WAF, Shield, Secrets Manager) for enhanced security
Utilize Trusted Advisor for security checks and implement recommendations
Implement IAM best practices for secure access control
Enhance AWS security using WAF, Shield, Secrets Manager

Topics:

Introduction to Migration
Cloud Migration Strategies
Assessment: Quiz
AWS Migration Services
Virtual Machine Migration
Homogeneous and Heterogeneous Concepts explained
Database Migration
AWS Cloud Adoption Framework
AWS Shared Responsibility Model
Identity Access Management
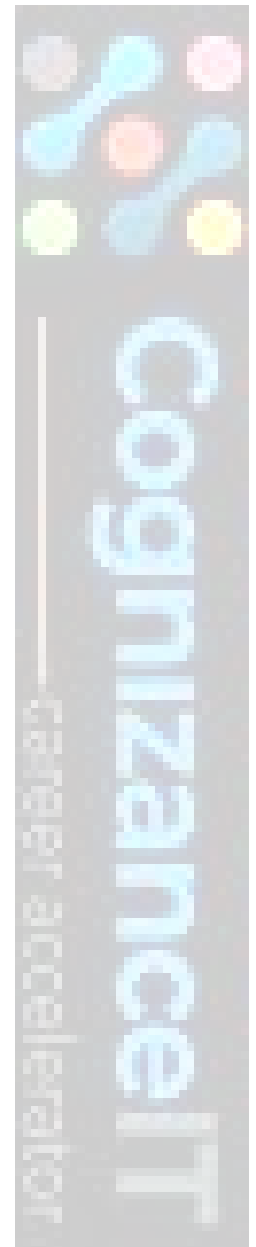AWS WAF, AWS Shield, AWS Secrets Manager
Trusted Advisor Security Checks

Elective 1: AWS Certified SysOps Administrator - Associate

Learning Objectives:

Deploy, manage, and operate scalable systems on AWS
Monitor and troubleshoot AWS applications for optimal performance
Utilize AWS management tools (CloudFormation, Systems Manager, Config)
Gain expertise in deploying and managing AWS applications and services
Prepare for the AWS Certified SysOps Administrator Associate exam

Topics:

Overview of AWS
Monitoring, Metrics and Logging
Networking
Cost Optimization in AWS
Security and Compliance
Data Management for SysOps
Scalability and Availability
Deployment and Provisioning
Preparing for Exam

Elective 2: AWS Certified Developer Associate

Learning Objectives:

Develop and deploy applications on AWS using services and APIs
Utilize AWS developer tools (CodeDeploy, CodeCommit, CodePipeline)
Build serverless applications with AWS Lambda
Master AWS application development, deployment, and management
Prepare for the AWS Certified Developer Associate exam

Topics:

Introduction
Required Tools
Amazon Web Services (AWS) Basics
Amazon Elastic Compute Cloud (Amazon EC2)
Amazon Simple Storage Service (Amazon S3)
Amazon Web Services (AWS) CloudFormation
Amazon DynamoDB
Amazon Virtual Private Cloud (VPC)
Amazon Web Services (AWS) Identity and Access Management (IAM)
Amazon Web Services (AWS) Lambda
Amazon Web Services (AWS) Databases
Amazon Web Services (AWS) Key Management Service (KMS)
Amazon Simple Workflow (SWF)
Amazon Simple Queue Service (SQS)
Amazon Simple Notification Service (SNS)
API Gateway
Amazon Web Services (AWS) Deployment Developer Tools
Amazon Elastic Container Service (Amazon ECS)
Amazon Web Services (AWS) Elastic Beanstalk
Amazon Web Services (AWS) Whitepapers
Amazon Web Services (AWS) Well-Architected Framework
Advanced Skills Section