AWS Solutions Architect - Associate

Why Get AWS Certified?

AWS Certifications recognize IT professionals with the skills and knowledge to design, deploy, and operate applications and infrastructure on AWS. Earning an AWS Certification helps you validate your technical expertise, stand out by distinguishing your cloud skills, enhance your confidence and credibility, and contribute to your organization's ability to create AWS solutions.

Learn more at aws.amazon.com/certification

Prerequisite:

- AWS Cloud Computing Architecture requires a strong conceptual foundation in multiple computing, software development, and IT concepts and skills.
- Understand how modern applications—especially web-hosted applications—are built, and the tools and methods used to manage development.
- Conceptual understanding of common database technologies and solutions, including: relational, NoSQL, and distributed frameworks.
- Understand the design philosophies, architecture, and operation of modern data centers, including: hardware, software, infrastructure, processes (change management), connectivity (backbones and peering), offsite backup services, scalability, availability, durability, and elasticity.
- Understand typical networking devices, protocols, and services, know how to configure IP settings on common operating systems and devices, understand and apply Classless Inter-Domain Routing (CIDR) addressing, explain how TCP sessions are established and maintained, describe common network appliances and their functions.
- Understand common methods used to secure data centers, including: access control and identity management, cryptography algorithms and how they're applied, PKI to create trusted relationships, securing data in transit and at rest.
- Install and manage operating systems manually or unattended, manage storage by partitioning disks and formatting and mounting/attaching volumes, install applications, manually and via packaged deployments, manage system security by administering users and groups, assigning permissions to resources, and configuring personal firewalls, understand distributed systems concepts including fault tolerance, high availability, configuration management, and automation.
- Understand common storage concepts and solutions related to servers and application environments.

Syllabus

- Introduction to Cloud Computing: Legacy Datacenters and Software Defined Datacenters. IaaS, PaaS and SaaS.
- Introduction to Amazon Web Services.: Account Setup, Introduction to Console, General Settings.
- Identity and Access Management. (IAM)
- Route 53
- Virtual Private Cloud. (VPC): Create and manage VPC, Subnets, Internet Gateways, NAT Gateways, VPN Gateways, Route Tables, Peering, EIP, ACL's, Security Groups.
- Elastic Compute Cloud. (EC2): Instances, Windows and Linux, Bootstrap Scripts, Autoscaling, Instance Size, Instance Type, EBS Volumes, Snapshots, Key Pairs, AMI's.
- Cloud Watch.
- Elastic Load Balancer. (ELB)
- Elastic Beanstalk.
- Simple Storage Service. (S3): Buckets, Permissions, Versioning, Encryption, Logging, Static Websites, Lifecycle Management, Replication.
- Glacier.
- Cloud Front.
- Introduction to Snow Ball and Snow Mobile.
- Relational Database Service. (RDS)
- Dynamo Database.
- Lambda.
- Cloud Formation.