AWS Certified Advance Networking Specialty (ANS-C00)

Introduction

The AWS Certified Advanced Networking – Specialty (ANS-C00) examination is intended for individuals who perform complex networking tasks. This examination validates advanced technical skills and experience in designing and implementing AWS and hybrid IT network architectures at scale.

It validates an examinee's ability to:

- Design, develop, and deploy cloud-based solutions using AWS.
- Implement core AWS services according to basic architectural best practices.
- Design and maintain network architecture for all AWS services.
- Leverage tools to automate AWS networking tasks.

Course Objective

This course teaches you about core aspects such as:

- Designing and Developing cloud-based solutions using AWS
- Implementing core AWS services according to basic architecture best practices
- Building and maintaining network architecture for all AWS services
- Leveraging tools to automate AWS networking tasks

Course Outline

Domain 1: Design and Implement Hybrid IT Network Architectures at Scale

1.1 Implement connectivity for hybrid IT
1.2 Given a scenario, derive an appropriate hybrid IT architecture connectivity solution
1.3 Explain the process to extend connectivity using AWS Direct Connect
1.4 Evaluate design alternatives that leverage AWS Direct Connect
1.5 Define routing policies for hybrid IT architectures

Domain 2: Design and Implement AWS Networks

2.1 Apply AWS networking concepts
2.2 Given customer requirements, define network architectures on AWS
2.3 Propose optimized designs based on the evaluation of an existing implementation
2.4 Determine network requirements for a specialized workload
2.5 Derive an appropriate architecture based on customer and application requirements
2.6 Evaluate and optimize cost allocations given a network design and application data flow

Domain 3: Automate AWS Tasks

3.1 Evaluate automation alternatives within AWS for network deployments
3.2 Evaluate tool-based alternatives within AWS for network operations and management

Domain 4: Configure Network Integration with Application Services

4.1 Leverage the capabilities of Route 53
4.2 Evaluate DNS solutions in a hybrid IT architecture
4.3 Determine the appropriate configuration of DHCP within AWS
4.4 Given a scenario, determine an appropriate load balancing strategy within the AWS ecosystem
4.5 Determine a content distribution strategy to optimize for performance
4.6 Reconcile AWS service requirements with network requirements

Domain 5: Design and Implement for Security and Compliance

5.1 Evaluate design requirements for alignment with security and compliance objectives
5.2 Evaluate monitoring strategies in support of security and compliance objectives
5.3 Evaluate AWS security features for managing network traffic
5.4 Utilize encryption technologies to secure network communications

Domain 6: Manage, Optimize, and Troubleshoot the Network

6.1 Given a scenario, troubleshoot and resolve a network issue

Prerequisites

- We recommend candidates hold an AWS Certified Cloud Practitioner or a current Associate-level certification: AWS Certified Solutions Architect - Associate, AWS Certified Developer - Associate or AWS Certified SysOps Administrator - Associate
- Advanced knowledge of AWS networking concepts and technologies
- Minimum five years of hands-on experience architecting and implementing network solutions
- Advanced networking architectures and interconnectivity options (e.g., IP VPN, MPLS/VPLS)
- Networking technologies within the OSI model, and how they affect implementation decisions
- Development of automation scripts and tools
- CIDR and sub-netting (IPv4 and IPv6)
- IPv6 transition challenges
- Generic solutions for network security features, including WAF, IDS, IPS, DDoS protection, and Economic Denial of Service/Sustainability (EDoS)

Target Audience

Advanced Networking on AWS Specialty is designed for individuals who perform complex networking tasks.

Duration

- 16 Hours Training Course