

## Introduction

The AWS Certified Advanced Networking – Specialty (ANS-C00) 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

### Recommended AWS Knowledge

- Professional experience using AWS technology
- AWS Security best practices
- AWS storage options and their underlying consistency models
- AWS networking nuances and how they relate to the integration of AWS services

### Recommended General IT Knowledge

- 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
  - Routing architectures (including static and dynamic)
  - Multi-region solutions for a global enterprise
  - Highly available connectivity solutions (e.g., DX, VPN)
- 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).

## Exam Preparation

These training courses and materials may be helpful for examination preparation:

- AWS Cloud Computing Whitepapers ([aws.amazon.com/whitepapers](https://aws.amazon.com/whitepapers))
- AWS Documentation ([aws.amazon.com/documentation](https://aws.amazon.com/documentation))

## Exam Content

### Response Types

There are two types of questions on the examination:

- **Multiple-choice:** Has one correct response and three or four incorrect responses (distractors).
- **Multiple-response:** Has two or more correct responses out of five or more options.

Select one or more responses that best complete the statement or answer the question. Distractors, or incorrect answers, are response options that an examinee with incomplete knowledge or skill would likely choose. However, they are generally plausible responses that fit in the content area defined by the test objective.

Unanswered questions are scored as incorrect; there is no penalty for guessing.

### Unscored Content

Your examination may include unscored items that are placed on the test to gather statistical information. These items are not identified on the form and do not affect your score.

### Exam Results

The AWS Certified Advanced Networking – Specialty (ANS-C00) is a pass or fail exam. The examination is scored against a minimum standard established by AWS professionals who are guided by certification industry best practices and guidelines.

Your score report contains a table of classifications of your performance at each section level. This information is designed to provide general feedback concerning your examination performance. The examination uses a compensatory scoring model, which means that you do not need to “pass” the individual sections, only the overall examination. Each section of the examination has a specific weighting, so some sections have more questions than others. The table contains general information, highlighting your strengths and weaknesses. Exercise caution when interpreting section-level feedback.

### Content Outline

This exam guide includes weightings, test domains, and objectives only. It is not a comprehensive listing of the content on this examination. The table below lists the main content domains and their weightings.

Domain	% of Examination
<b>Domain 1: Design and implement hybrid IT network architectures at scale</b>	23%
Domain 2: Design and implement AWS networks	29%
Domain 3: Automate AWS tasks	8%
<b>Domain 4: Configure network integration with application services</b>	15%
Domain 5: Design and implement for security and compliance	12%
Domain 6: Manage, optimize, and troubleshoot the network	13%
<b>TOTAL</b>	<b>100%</b>

#### 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 2.0: 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 3.0: 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 4.0: 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 5.0: 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 6.0: Manage, optimize, and troubleshoot the network**

- 6.1 Given a scenario, troubleshoot and resolve a network issue