

AWS Certified Developer–Associate (DVA-C01) Examination Guide

Introduction

This AWS Certified Developer-Associate Examination (DVA-001) is intended for individuals who perform a Developer role.

It validates an examinee's ability to:

- Demonstrate an understanding of core AWS services, uses, and basic AWS architecture best practices.
- Demonstrate proficiency in developing, deploying, and debugging cloud-based applications using AWS.

Examination Prerequisite

There are no prerequisites for taking the Developer-Associate examination.

Recommended AWS Knowledge

- One or more years of hands-on experience developing and maintaining an AWS based application
- In-depth knowledge of at least one high-level programming language
- Understanding of core AWS services, uses, and basic AWS architecture best practices
- Proficiency in developing, deploying, and debugging cloud-based applications using AWS
- Ability to use the AWS service APIs, AWS CLI, and SDKs to write applications
- Ability to identify key features of AWS services
- Understanding of the AWS shared responsibility model
- Understanding of application lifecycle management
- Ability to use a CI/CD pipeline to deploy applications on AWS
- Ability to use or interact with AWS services
- Ability to apply a basic understanding of cloud-native applications to write code
- Ability to write code using AWS security best practices (e.g., not using secret and access keys in the code, instead using IAM roles)
- Ability to author, maintain, and debug code modules on AWS
- Proficiency writing code for serverless applications
- Understanding of the use of containers in the development process

Exam Preparation

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

AWS Training (aws.amazon.com/training)

- Developing on AWS: An instructor-led live or virtual 3-day [course](#)
- AWS Digital Training: [Application Services](#), [Developer Tools](#), and other services covered on the exam

AWS Whitepapers (aws.amazon.com/whitepapers) Kindle and .pdf

- AWS Security Best Practices [whitepaper](#), August 2016
- AWS Well-Architected Framework [whitepaper](#), November 2018

- Architecting for the Cloud AWS Best Practices [whitepaper](#), October, 2018
- Practicing Continuous Integration and Continuous Delivery on AWS Accelerating Software Delivery with DevOps [whitepaper](#), June 2017
- Microservices on AWS [whitepaper](#), September 2017
- Serverless Architectures with AWS Lambda [whitepaper](#), November 2017
- Optimizing Enterprise Economics with Serverless Architectures [whitepaper](#), October 2017
- Running Containerized Microservices on AWS [whitepaper](#), November 2017
- Blue/Green Deployments on AWS [whitepaper](#), August 2016

AWS Documentation

- AWS Documentation for services, including, but not limited to, the compute, database, application services, and messaging [web pages](#) including service guides and references

Exam Content

Response Types

There are two types of questions on the examination:

- **Multiple-choice:** Has one correct response and three 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 non-scored questions that are placed on the test to gather statistical information. These questions are not identified on the form, and do not affect your score.

Exam Results

The AWS Certified Developer-Associate Examination (DVA-C01) is a pass or fail exam. The examination is scored against a minimum standard established by AWS professionals guided by certification industry best practices and guidelines.

Your results for the examination are reported as a score from 100 - 1000, with a minimum passing score of 720. Your score shows how you performed on the examination as a whole and whether or not you passed. Scaled scoring models are used to equate scores across multiple exam forms that may have slightly different difficulty levels.

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
Domain 1: Deployment	22%
Domain 2: Security	26%
Domain 3: Development with AWS Services	30%
Domain 4: Refactoring	10%
Domain 5: Monitoring and Troubleshooting	12%
TOTAL	100%

Domain 1: Deployment

- 1.1 Deploy written code in AWS using existing CI/CD pipelines, processes, and patterns.
- 1.2 Deploy applications using Elastic Beanstalk.
- 1.3 Prepare the application deployment package to be deployed to AWS.
- 1.4 Deploy serverless applications.

Domain 2: Security

- 2.1 Make authenticated calls to AWS services.
- 2.2 Implement encryption using AWS services.
- 2.3 Implement application authentication and authorization.

Domain 3: Development with AWS Services

- 3.1 Write code for serverless applications.
- 3.2 Translate functional requirements into application design.
- 3.3 Implement application design into application code.
- 3.4 Write code that interacts with AWS services by using APIs, SDKs, and AWS CLI.

Domain 4: Refactoring

- 4.1 Optimize application to best use AWS services and features.
- 4.2 Migrate existing application code to run on AWS.

Domain 5: Monitoring and Troubleshooting

- 5.1 Write code that can be monitored.
- 5.2 Perform root cause analysis on faults found in testing or production.