

## Introduction

The AWS Certified Big Data – Specialty (BDS-C00) examination is intended for individuals who perform complex Big Data analyses. This exam validates an examinee’s technical skills and experience in designing and implementing AWS services to derive value from data.

It validates an examinee’s ability to:

- Implement core AWS Big Data services according to basic architectural best practices
- Design and maintain Big Data
- Leverage tools to automate Data Analysis

### Examination Prerequisite

In order to take this examination, you must hold an AWS Associate Certification (*AWS Certified Solutions Architect – Associate, AWS Certified Developer – Associate, or AWS Certified SysOps Administrator – Associate*) or Valid AWS Cloud Practitioner Certification in good standing.

### Recommended AWS Knowledge

- A minimum of 2 years’ experience using AWS technology
- AWS Security best practices
- Independently define AWS architecture and services and understand how they integrate with each other.
- Define and architect AWS big data services and explain how they fit in the data lifecycle of collection, ingestion, storage, processing, and visualization.

### Recommended General IT Knowledge

- At least 5 years’ experience in a data analytics field
- Understand how to control access to secure data
- Understand the frameworks that underpin large scale distributed systems like Hadoop/Spark and MPP data warehouses
- Understand the tools and design platforms that allow processing of data from multiple heterogeneous sources with difference frequencies (batch/real-time)
- Capable of designing a scalable and cost-effective architecture to process data

## Exam Preparation

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

### AWS Training ([aws.amazon.com/training](https://aws.amazon.com/training))

- Big Data Technology Fundamentals  
<https://aws.amazon.com/training/course-descriptions/bigdata-fundamentals/>
- Big Data on AWS  
<https://aws.amazon.com/training/course-descriptions/bigdata/>

### AWS Whitepapers ([aws.amazon.com/whitepapers](https://aws.amazon.com/whitepapers)) Kindle and .pdf

- AWS Cloud Computing Whitepapers ([aws.amazon.com/whitepapers](https://aws.amazon.com/whitepapers)), specifically [Database](#) and [Analytics](#)
- 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 Big Data – Specialty (BDS-C00) examination 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
Domain 1: Collection	17%
Domain 2: Storage	17%
Domain 3: Processing	17%
Domain 4: Analysis	17%
Domain 5: Visualization	12%
Domain 6: Data Security	20%
<b>TOTAL</b>	<b>100%</b>

#### Domain 1: Collection

- 1.1 Determine the operational characteristics of the collection system
- 1.2 Select a collection system that handles the frequency of data change and type of data being ingested
- 1.3 Identify the properties that need to be enforced by the collection system: order, data structure, metadata, etc.
- 1.4 Explain the durability and availability characteristics for the collection approach

#### Domain 2: Storage

- 2.1 Determine and optimize the operational characteristics of the storage solution

- 2.2 Determine data access and retrieval patterns
- 2.3 Evaluate mechanisms for capture, update, and retrieval of catalog entries
- 2.4 Determine appropriate data structure and storage format

**Domain 3: Processing**

- 3.1 Identify the appropriate data processing technology for a given scenario
- 3.2 Determine how to design and architect the data processing solution
- 3.3 Determine the operational characteristics of the solution implemented

**Domain 4: Analysis**

- 4.1 Determine the tools and techniques required for analysis
- 4.2 Determine how to design and architect the analytical solution
- 4.3 Determine and optimize the operational characteristics of the Analysis

**Domain 5: Visualization**

- 5.1 Determine the appropriate techniques for delivering the results/output
- 5.2 Determine how to design and create the Visualization platform
- 5.3 Determine and optimize the operational characteristics of the Visualization system

**Domain 6: Data Security**

- 6.1 Determine encryption requirements and/or implementation technologies
- 6.2 Choose the appropriate technology to enforce data governance
- 6.3 Identify how to ensure data integrity
- 6.4 Evaluate regulatory requirements