



SNOWPRO® CORE COF-C02 AND COF-R02 EXAM STUDY GUIDE

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SNOWPRO® EXAM STUDY GUIDE OVERVIEW

Before you start studying for an exam, it is important to understand the exam content and format. This is a self-paced guide and will outline the Snowflake domains, objectives, and topics that will be covered on the exam.

Use this guide to develop a study plan, identify the areas you need to improve, and review the recommended resources. Prior to reviewing the exam study guide, please make sure you complete the following configurations:

- [Snowflake University \(using your Community log in\)](#)
- [Snowflake 30-day free trial Account for Hands-On Labs](#)

RECOMMENDATIONS FOR EXAM PREPARATION

Effective exam preparation requires more than reading and attending a training course. It involves using a variety of study and training assets to enhance your understanding of the exam content.



First, let's review some effective strategies for exam preparation:

- 1) **Set a timeline:** Schedule your exam and use that date as your target date. Plan ahead and create a study plan.
- 2) **Understand the exam format and content:** When reviewing the exam domain percentages, pay attention to the weightings in each domain and plan your study time accordingly. Some domains will have more questions than others.
- 3) **Study with Snowflake assets:** Use the exam outline as a checklist. Identify the objectives and topics you understand and the objectives you feel like you need more experience with.
- 4) **Review Snowflake Documentation:** All Core exam questions are 100% referenceable with [Snowflake Documentation](#).
- 5) **Practice with sample questions:** Gain familiarity with the question formats by taking our Practice exam found [here](#).



Learning is different for everyone! If you learn better with an instructor leading the way, consider our Snowflake Instructor-Led Training recommendations:

- [Snowflake Fundamentals Course](#)
- [SnowPro Core On-Demand Preparation Course](#)

SNOWPRO® CORE EXAM CONTENT AND FORMAT

CERTIFICATION OVERVIEW

This exam will validate knowledge to apply specific core expertise implementing and migrating to Snowflake. A SnowPro Core Certified individual has a thorough understanding of the Snowflake AI Data Cloud and has the knowledge necessary to develop and manage secure, scalable Snowflake solutions to drive business objectives.

The candidate is expected to have knowledge of:

- Data Loading and Transformation in Snowflake
- Virtual Warehouse Performance and Concurrency
- DDL and DML Queries
- Using Semi-Structured and Unstructured Data
- Cloning and Time Travel
- Data Sharing
- Snowflake Account Structure and Management

Target Audience:

We recommend that individuals have at least 6 months of knowledge using the Snowflake platform prior to attempting this exam. Familiarity with basic ANSI SQL is recommended.

PREREQUISITE KNOWLEDGE

The exam does not cover cloud fundamentals or basics of SQL syntax, but some questions on the exam assume knowledge of these concepts. If you need assistance learning these concepts, we recommend you review some additional resources.

Database Basic Concepts

- Basic Terminology Related to Databases and SQL
- Tables and Data Types
- Selecting and Manipulating Data
- Views, Store Procedures, Functions
- Security (Authentication and Authorization)

Basics of Cloud Fundamentals

- Types of Cloud Computing and Benefits
- Types of Cloud Services
- Cloud Computing Architecture (Storage and Compute)

EXAM FORMAT FOR CORE CERTIFICATION

Exam Version:	COF-C02
Total Number of Questions:	100
Question Types:	Multiple Select, Multiple Choice, Interactive
Time Limit:	115 minutes
Languages:	English, Japanese, Korean
Passing Score:	750 + Scaled Scoring from 0 - 1000

EXAM FORMAT FOR CORE RECERTIFICATION

Follows the same domain and weightings as the COF-C02 exam

Exam Version:	COF-R02
Total Number of Questions:	60
Question Types:	Multiple Select, Multiple Choice, Interactive
Time Limit:	85 minutes
Languages:	English and Japanese
Passing Score:	750 + Scaled Scoring from 0 - 1000
Prerequisites:	SnowPro Core Certified

EXAM DOMAIN AND WEIGHTINGS

The following table contains the domains and weightings covered on the exam. It is not a comprehensive listing of all the content that will be presented on the exam.

Domain	Domain Weightings
1.0 Snowflake AI Data Cloud Features and Architecture	24%
2.0 Account Access and Security	18%
3.0 Performance and Cost Optimization Concepts	16%
4.0 Data Loading and Unloading	12%
5.0 Data Transformations	18%
6.0 Data Protection and Data Sharing	12%



Domain 1.0: Snowflake AI Data Cloud Features and Architecture

1.1 Outline key features of the Snowflake AI Data Cloud.

- Interoperable storage
- Elastic compute
- Snowflake's layers
- Overview of Snowflake editions

1.2 Outline key Snowflake tools and user interfaces.

- Snowsight
- SnowSQL
- Snowflake connectors
- Snowflake drivers
- Snowpark
- SnowCD
- Streamlit in Snowflake
- Cortex (AI/ML services)
- Snowflake SQL API

1.3 Outline Snowflake's catalog and objects.

- Databases
- Stages
- Schema types
- Table types
- View types
- Data types
- User Defined Functions (UDFs)
- User Defined Table Functions (UDTFs)
- Stored procedures
- Streams
- Tasks
- Pipes
- Shares
- Sequences

1.4 Outline Snowflake storage concepts.

- Micro-partitions
- Data clustering
- Data storage monitoring

Domain 1.0 Study Resources

Snowflake University On Demand Trainings

[Snowflake University, Level Up: Snowflake's Key Concepts](#)

[Snowflake University, Level Up: Snowflake Ecosystem](#)

Getting Started With Snowflake

[Module 2: Prepare your Lab Environment](#)

[Module 3: The Snowflake User Interface & Lab Story](#)

Reading Asset

[Definitive Guide to Managing Spend in Snowflake \(White Paper\)](#)



Domain 2.0: Account Access and Security

2.1 Outline security principles.

- Network security and policies
- Multi-Factor Authentication (MFA) enforcement
- Federated authentication
- Key pair authentication
- Single Sign-On (SSO)

2.2 Define the entities and roles that are used in Snowflake.

- Overview of access control
 - Access control frameworks
 - Access control privileges
- Outline how privileges can be granted and revoked
- Explain role hierarchy and privilege inheritance

2.3 Outline data governance capabilities in Snowflake.

- Accounts
- Organizations
- Secure views
- Secure functions
- Information schemas
- Access history
 - Tracking read/write operations
- Overview of row/column-level security
- Object tags

Domain 2.0 Study Resources

Snowflake University On Demand Trainings

[Snowflake University, Level Up: Accounts & Assurances](#)

[Snowflake University, Level Up: Container Hierarchy](#)

Getting Started With Snowflake

[Module 9: Working with Roles, Account Admin & Account Usage](#)

Reading Asset

[Quickly Visualize Snowflake's Roles, Grants and Privileges \(Article\)](#)



➤ Domain 3.0: Performance and Cost Optimization Concepts

3.1 Explain the use of the Query Profile.

- Explain plans
- Data spilling
- Use of the data cache
- Micro-partition pruning
- Query history

3.2 Explain virtual warehouse configurations.

- Types of warehouses
- Multi-clustering warehouses
 - Scaling policies
 - Scaling modes
- Warehouse sizing
- Warehouse settings and access

3.3 Outline virtual warehouse performance tools.

- Monitoring warehouse loads
- Scaling up compared to scaling out
- Query acceleration service

3.4 Optimize query performance.

- Describe the use of materialized views
- Use of specific SELECT commands
- Clustering
- Search optimization service
- Persisted query results

- Understanding the impact of different types of caching
 - Metadata cache
 - Result cache
 - Warehouse cache

3.5 Describe cost optimization concepts and best practices in Snowflake.

- Understanding and exploring the costs of different Snowflake features and services
 - Cost insights feature in Snowsight
 - Use of different table types and sizes
 - Use of views
 - Use of search optimization paths
 - Storage costs
 - Compute costs
- Understand and explore cloud services costs in Snowflake
- Costs considerations when using serverless features
- Cost considerations when moving data among regions
 - Replication
 - Fail-over
- Monitor and control costs
 - Resource monitors
 - Snowflake Budgets service
- Attribute costs
 - Cost center tagging
 - Use of the ACCOUNT_USAGE schema

Domain 3.0 Study Resources

Snowflake University On Demand Trainings

[Snowflake University, Level Up: Query History & Caching](#)

[Snowflake University, Level Up: Context](#)

[Snowflake University: Level Up: Resource Monitoring](#)

[Snowflake University, Essentials -](#)

[Data Warehousing Workshop](#)

[FinOps for Snowflake](#)

Getting Started With Snowflake

[Module 6: Working with Queries, The Results Cache & Cloning](#)

Videos

[Accelerating BI Queries with Caching in Snowflake \(Video\)](#)

[Snowflake Workloads Explained: Data Warehouse \(Video\)](#)

[Tackling High Concurrency with Multi-Cluster Warehouses \(Video\)](#)

Reading Assets

[Optimizing the Warehouse Cache \(Article\)](#)

[How to: Understand Result Caching \(Article\)](#)

[Managing Snowflake's Compute Resources \(Blog\)](#)

[Performance Impact from Local and](#)

[Remote Disk Spilling \(Article\)](#)

[Search Optimization: When & How to Use \(Article\)](#)

[Snowflake Materialized Views: A Fast, Zero-Maintenance Accurate Solution \(Blog\)](#)

[Tuning Snowflake \(Article\)](#)

[Using Materialized Views to Solve Multi-Clustering Performance Problems \(Article\)](#)



Domain 4.0: Data Loading and Unloading

4.1 Define concepts and best practices that should be considered when loading data.

- Stages and stage types
- File size and formats
- Folder structures
- Ad hoc/bulk loading
- Snowpipe

4.2 Outline different commands used to load data and when they should be used.

- CREATE STAGE
- CREATE FILE FORMAT
- CREATE PIPE
- CREATE EXTERNAL TABLE
- COPY INTO
- INSERT/INSERT OVERWRITE
- PUT
- VALIDATE

4.3 Define concepts and best practices that should be considered when unloading data.

- File size and formats
 - Overview of compression methods
- Empty strings and NULL values
- Unloading to a single file
- Unloading relational tables

4.4 Outline the different commands used to unload data and when they should be used.

- GET
- LIST
- COPY INTO
- CREATE STAGE
- CREATE FILE FORMAT

Domain 4.0 Study Resources

Snowflake University On Demand Trainings

[Snowflake University, Level Up: Data Loading](#)
[Badge 1: Data Warehousing Workshop](#)

Getting Started With Snowflake

[Module 4: Preparing to Load Data](#)
[Module 5: Loading Data](#)

Videos

[Building and Deploying Continuous Data Pipelines \(Video\)](#)
[Easily Loading and Analyzing Semi-Structured Data in Snowflake \(Video\)](#)

Reading Assets

[Best Practices for Data Unloading \(Article\)](#)
[Best Practices for Using Tableau with Snowflake \(White Paper, requires email for access\)](#)
[How to Load Terabytes into Snowflake - Speeds, Feeds and Techniques \(Blog\)](#)



Domain 5.0: Data Transformations

5.1 Explain how to work with structured data.

- Estimation functions
- Sampling
 - SAMPLE command
 - /TABLESAMPLE command
 - Sampling methods
 - Fraction-based
 - Fixed-size
- Supported function types
 - System functions
 - Table functions
 - External functions
 - User-Defined Functions (UDFs)
- Stored procedures
- Streams
- Tasks

5.2 Explain how to work with semi-structured data.

- Supported data formats, data types, and sizes
- VARIANT column
- Flattening the nested structure
 - FLATTEN command
 - LATERAL FLATTEN command
- Semi-structured data functions
 - ARRAY/OBJECT creation and manipulation
 - Extracting values
 - Type predicates

5.3 Explain how to work with unstructured data.

- Define and use directory tables
- SQL file functions
- Types of URLs used to access data files
- Processing unstructured data
 - User-Defined Functions (UDFs) for unstructured data analysis
 - Stored procedure

Domain 5.0 Study Resources

Snowflake University On Demand Training
[Badge 3: Data Application Builders Workshop](#)

Getting Started With Snowflake
[Module 7: Working with Semi-Structured Data, Views & Joins](#)

Video

[Easily Loading and Analyzing Semi-Structured Data in Snowflake \(Video\)](#)

Reading Assets

[Best Practices for Managing Unstructured Data \(E-book\)](#)

[Structured vs Unstructured vs Semi-Structured Data \(Blog\)](#)

[Understanding Unstructured Data With Language Models \(Blog\)](#)



➤ Domain 6.0: Data Protection and Data Sharing

6.1 Outline Continuous Data Protection with Snowflake.

- Time Travel
- Fail-safe
- Data encryption
- Cloning
- Replication and failover

6.2 Outline Snowflake data sharing capabilities.

- Account types
- Snowflake Marketplace
- Data Exchange
- Access control options
 - DDL commands to create and manage shares
 - Privileges required for working with shares
- Secure Data Sharing
 - Direct shares
 - Data listings

Domain 6.0 Study Resources

Snowflake University On Demand Trainings

[Snowflake University, Level Up: Container Hierarchy](#)

[Snowflake University, Level Up: Backup and Recovery](#)

[Badge 2: Collaboration, Marketplace & Cost Estimation Workshop](#)

Getting Started With Snowflake

[Module 8: Using Time Travel](#)

[Module 10: Data Sharing](#)

Videos

[Data Protection with Time Travel in Snowflake \(Video\)](#)

[Getting Started on Snowflake with Partner Connect \(Video\)](#)

[Top 10 Cool Snowflake Features, #7:](#)

[Snowflake Fast Clone \(Blog + Video\)](#)

Reading Assets

[Meta Data Archiving with Snowflake \(Article\)](#)

[Snowflake Continuous Data Protection \(White Paper\)](#)

SNOWPRO® CORE CERTIFICATION SAMPLE QUESTIONS

1. Which type of data integration tools leverage Snowflake's scalable compute for data transformation?
 - A. Account replication
 - B. ELT*
 - C. ETL
 - D. Streaming
2. What is the maximum number of consumer accounts that can be added to a share object?
 - A. 1
 - B. 10
 - C. 100
 - D. Unlimited*
3. What technique does Snowflake use to limit the number of micro-partitions scanned by each query?
 - A. Pruning*
 - B. Indexing
 - C. Map Reduce
 - D. B-Tree
4. Which of the following are options when creating a virtual warehouse? (Select TWO).
 - A. Auto-suspend*
 - B. Storage size
 - C. Auto-resume*
 - D. Cache size
 - E. Default role
5. Which role in Snowflake allows a user to administer users and manage all database objects?
 - A. SYSADMIN
 - B. SECURITYADMIN
 - C. ACCOUNTADMIN*
 - D. ROOT

NEXT STEPS

REGISTERING FOR YOUR EXAM

When you are ready to register for the exam navigate [here](#) to get started. Select the exam you want to take and click “Register Now”. This will take you to our Certification Management system where you will register to take the exam.

MAINTAINING YOUR CERTIFICATION

All Snowflake Certifications expire two (2) years after your certification issue date. The SnowPro Core Recertification exam offers candidates a route to maintain their certification status with Snowflake. The Recertification exam shares the same outline as the regular Core Certification exam, but is shorter and is offered at a reduced rate. You must hold the Core Certification in good standing to take the Core Recertification exam.

For additional recertification pathways check [here](#).

Snowflake Product Releases

If you are studying for the SnowPro Core Recertification exam, make sure you are up to date with what’s new with Snowflake:

[Snowflake Documentation: What’s New?](#)

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