ADMINISTERING SNOWFLAKE

THREE-DAY COURSE

25A30

snowflake® | UNIVERSITY

DATASHEET

OVERVIEW

This three-day, role-specific course provides an in-depth exploration of database administrator duties and responsibilities in the Snowflake AI Data Cloud. This course covers data loading performance, security, role hierarchy design, and performance tuning. The course consists of lectures, labs, demonstrations, and discussions.

ACQUIRED SKILLS

- Identify the various aspects of Snowflake compute and storage management.
- Define the administrative tasks performed in support of the Snowflake AI Data Cloud.
- Apply Snowflake's recommended best practices and considerations for managing load operations and performance.
- Describe data governance in Snowflake, including column-level data security using secure views and dynamic data masking features.
- Explain the data definition language (DDL) operations that work with fundamental database objects.
- Apply strategies for Snowflake performance-tuning.
- Design and develop secure access to objects in Snowflake with Role-based Access Control (RBAC).
- Utilize Snowflake's recommended management, monitoring, and optimization best practices.

WHO SHOULD ATTEND

- Database Administrators
- System Administrators
- Database Architects
- Data Engineers

PREREQUISITES

- A background in database administration or management is required.
- Completion of "Snowflake Foundations" one-day course or equivalent Snowflake knowledge.

DELIVERY FORMAT

Instructor-led Public or Private classes are available.

TOPICS COVERED

Snowflake Administration

Clients, Connectors, and Ecosystems

- Clients and Interfaces
- SnowSQL

Managing Security

- Overview
- Access
- Authentication
- Key-Pair Authentication
- What is an Integration?
- Security Integrations
- Security Best Practices
- Trust Center

Managing Roles

- Users and Roles
- Types of Roles
- Using and Showing Grants
- Ownership

Managing Users

- User Management Overview
- Password Policies
- Managing Session Policies

Snowflake Environment

- Account Structure
- Set Account Parameters
- Virtual Warehouse Scaling

Database Objects and Commands

- Objects
- Tables
- Constraints
- Views
- Using the Result_Scan Function
- System Functions
- External Tables
- Dynamic Tables
- Dynamic Table Advantages
- Monitoring Dynamic Tables

Managing Data Ingestion

- Data Loading Overview
- Bulk Loading
- Error Handling
- Fixing Load Failures
- Loading Data Using the Web Interface
- Continuous Loading with Snowpipe
- Unloading Data
- Storage Integrations
- Notification Integrations

Work with Semi-structured Data

- Loading Semi-structured Data
- Querying Semi-structured Data

Working with Unstructured Data

Schema Inference and Evolution

- Schema Inference
- Schema Evolution

Tasks

- Tasks Overview

- Creating Tasks
- Managing Tasks

Streams

Managing Query Performance

- Get_Query_Operator_Status
- Writing Efficient Queries
- Join Elimination

Data Manipulation Language (DML) and Transaction Concurrency

- Transaction Concurrency Goals
- System's Point of View
- Monitoring and Management Functions

Managing Data Governance

- Data Governance and Snowflake
- Classification and Tagging
- Row Access Policies
- Masking Policies
- Context Functions
- Auditing Access History
- Access History and Column Lineage
- Snowsight Data Governance Dashboard