

ADMINISTERING SNOWFLAKE I

Prerequisites: A background in database administration, foundational knowledge of snowflake

Duration: 3 Days (8 Hrs./Day)

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

Lab Requirement: Koenig DC/Linux.

Module 1 - Clients, Connectors, and Ecosystems

Clients and Interfaces

SnowSQL

Module 2 - Managing Security

Access

Authentication

Key-Pair Authentication

What is an Integration?

Security Integrations

Authorization and Access Control



Module 3 - Managing Roles

Users and Roles

Types of Roles

Using and Showing Grants

Ownership

Module 4 - Managing Users

User Management Overview

Password Policies

Managing Session Policies

Module 5 - Snowflake Environment

Account Structure

Set Account Parameters

Virtual Warehouse Scaling

Module 6 - Database Objects and Commands

Objects

Tables

Constraints

Views

Semi-structured Data

Using the Result_Scan Function

System Functions

External Tables



Module 7 - Managing Data Ingestion

Data Loading Overview

Bulk Loading

Error Handling

Fixing Load Failures

Loading Data Using the Web Interface

Continuous Loading with Snowpipe

Storage Integrations

Notification Integrations

Module 8 - Working with Semi-structured Data

Loading Semi-structured Data

Querying Semi-structured Data

Module 9 - Schema Inference and Evolution

Schema Inference

Schema Evolution

Module 10 - Tasks

Task Overview

Creating Tasks

Managing Tasks

What is a Stream?

Create and Query a Stream

Consume a Stream



Module 11 - Managing Query Performance

Get_Query_Operator_Status

Writing Efficient Queries

Join Elimination

Module 12 - Data Manipulation Language (DML) and Transaction Concurrency

Transaction Concurrency Goals

System's Point of View

Monitoring and Management Functions

Module 13 - 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