Introduction to snowflake

Prerequisites: Basic knowledge of data warehousing

Duration: 4 Days (8 Hrs./Day)

Course Objective: This four-day course covers the core concepts, design considerations, and Snowflake best practices intended for key stakeholders who will be working on the Snowflake Data Cloud. The course consists of lectures, demos, and labs covering a wide range of essential topics.

Lab Requirement: Koenig DC/Linux.

Module 1 - Overview and Architecture

Overview of Snowflake

Snowflake Structure

Using Snowsight

Storage Layer

Compute Layer

Cloud Services Layer

Snowgrid

Module 2 - Connecting to Snowflake

Connection Options

SnowSQL

Module 3 - Data Protection Features

Cloning

Time Travel

Fail-safe

Introduction to Replication

Module 4 - SQL Support in Snowflake

Tables, Views, and Data Types

Transactions

Standard SQL and Snowflake

Estimation Functions

Sampling

Collation

Multi-table Inserts

Query Tags

Working with Parameters

Module 5 - Metadata and Caching in Snowflake

Overview

Metadata

Query Result Cache

Data Cache

Module 6 - Query Performance

Using Explain

Query Profile

SQL Performance Tips

Module 7 - Data Loading and Unloading

Data Loading Objects

Data Loading Process

Transformations and Copy Options

Data Loading Recommendations

Continuous Data Loading

Unloading Data

Module 8 - Functions, Procedures, and Snowflake Scripting

User-defined Functions

Stored Procedures

Snowflake Scripting

Module 9 - Using Tasks

Overview

Creating Tasks

Managing Tasks

Module 10 - Managing Security

Security Overview

Access

Authentication

Authorization

Data Protection

Module 11 - Access Control and User Management

Concepts

Types of Roles

Ownership

View Grants

Module 12 - Semi-structured Data

Overview

Query Semi-structured Data

Module 13 - Introduction to Data Sharing

Snowflake Data Sharing Overview

Shares

Module 14 - Virtual Warehouse Scaling

Types of Virtual Warehouse Scaling

Auto-scaling Policies

Module 15 - Cost Management

Overview

Visibility

Control

Optimization