



# SNOWFLAKE PARTNER TECHNICAL FOUNDATIONS

SNOWFLAKE ON-DEMAND TRAINING

25A08

## OVERVIEW

The Snowflake Partner Technical Foundations On-demand course covers the core concepts, design considerations, and Snowflake-recommended best practices intended for stakeholders who will be working on the Snowflake AI Data Cloud.

## KEY BENEFITS

- Flexibility to learn at your own pace and schedule
- Ability to access content and learning materials on an unlimited basis and from just about anywhere during the Term

## ACQUIRED SKILLS

- Outline the unique and differentiated architecture of the Snowflake AI Data Cloud.
- Load and transform data.
- Summarize query constructs, DDL, and DML operations.
- Use Snowflake's extensive SQL capabilities for data analysis.
- Describe how user and application access can be easily managed.
- Apply Snowflake-recommended best practices for working with semi-structured data.
- Discuss Snowflake's unique approach to caching.
- Implement the options provided to connect and interact with the Snowflake AI Data Cloud.
- Employ Snowflake's continuous data protection features.
- Utilize data sharing to send your data in real-time to Customers and Partners.
- Scale your virtual warehouses to improve performance and address concurrency needs.
- Explain the different ways you can manage and monitor your Snowflake account.
- Summarize Snowflake's AI and ML capabilities.

## WHO SHOULD ATTEND

- Data Analysts
- Data Engineers
- Data Scientists
- Database Architects
- Database Administrators

## PREREQUISITES

Previous data warehouse knowledge is assumed.

## DELIVERY FORMAT

This course consists of video lectures, video demos, and labs.

## TOPICS COVERED

### Overview and Architecture

- Overview
- Snowflake Structure
- Using Snowsight
- Storage Layer
- Compute Layer
- Cloud Services Layer
- Snowgrid

### Connecting to Snowflake

- Connection Options
- SnowSQL
- Visualizations in Snowsight

### Data Protection Features

- Cloning
- Time Travel
- Fail-safe
- Introduction to Replication

### SQL Support in Snowflake

- Tables, Views, and Data Types
- Transactions
- Standard SQL and Snowflake
- Collation
- Multi-table Inserts
- Query Tags
- Working with Parameters

## Metadata and Caching in Snowflake

- Overview
- Metadata
- Query Result Cache
- Data Cache

## Query Performance

- Using Explain
- Query Profile
- SQL Performance Tips

## Data Loading and Unloading

- Data Loading Objects
- Data Loading Process
- Transformations and Copy Options
- Data Loading Recommendations
- Continuous Data Loading
- Unloading Data

## Functions, Procedures, and Snowflake Scripting

- User-defined Functions
- Stored Procedures
- Snowflake Scripting

## Using Tasks, Streams, and Dynamic Tables

- Tasks Overview
- Creating Tasks
- Managing Tasks
- Streams Overview
- Dynamic Tables Overview

## Managing Security

- Security Overview
- Access



- Authentication
- Authorization
- Data Protection
- Trust Center

## Access Control and User Management

- Concepts
- Types of Roles
- Ownership
- View Grants

## Semi-structured Data

- Overview
- Query Semi-structured Data

## Introduction to Data Sharing

- Snowflake Data Sharing Overview
- Shares

## Virtual Warehouse Scaling

- Types of Virtual Warehouse Scaling
- Auto-scaling Policies

## Cost Management

- Overview
- Visibility
- Control
- Optimization

## Introduction to Snowflake AI and ML

- Generative AI
- Overview of Cortex LLM Functions
- Overview of Snowflake ML Functions

## DURATION

- Estimated five hours of content and demos
- Estimated 11 hours of lab exercises
- *Time is approximate as actual course duration is highly dependent on individual learning style.*
- Snowflake will provide access to an environment with sufficient credits to complete lab exercises during the Term.