

**Introduction To Snowflake**

**Course Number:** SQL-704  
**Duration:** 3 days

**Overview**

This Introduction To Snowflake training course covers Snowflake architecture and teaches best practices for configuring and deploying a Snowflake cloud-based database.

**Prerequisites**

Students must have a basic knowledge of the Snowflake user interface and execution of SnowSQL.

**Materials**

All Snowflake training students receive comprehensive courseware.

**Software Needed on Each Student PC**

All attendees will need access to a Snowflake SQL environment with Accelebrate’s sample data loaded.

**Objectives**

* Describe the basics of Cloud, Data Warehouse, ETL/ETL, and Data Analytics
* Examine the architecture of Snowflake
* Examine Snowflake's key features
* Connect to Snowflake and assign roles
* Create database objects in Snowflake
* Ingest structured and unstructured data into Snowflake
* Ingest streaming data using Snowpipe
* Clone database objects
* Share Data using Web UI
* Un-drop database objects using SQL Commands

**Outline**

* Introduction to Cloud and Data Warehouses
  + Introduction to Cloud
  + Why Cloud?
  + Cloud Providers
  + SaaS, PaaS, IaaS
  + What is a Data Warehouse
  + Why Data Warehouse
  + Data Warehouse Basic
* Data Integration and Analytics
  + ETL/ELT
  + Batching vs. Streaming
  + Data Analytics & Visualizations
  + On-Prem Vs. Cloud
* Introduction to Snowflake
  + What is Snowflake
  + Snowflake History
  + Datawarehouse as a Service
  + Supported Cloud platforms & Regions
* Snowflake UI
  + Query Pane
  + Result Pane
  + Object Navigation Pane
  + Different Tabs
  + Examine Snowflake UI
* Snowflake Architecture
  + Introduction to Snowflake Architecture
  + 3 Tier Architecture
  + Data Storage
  + Query Processing
  + Cloud Services
* Snowflake Feature
  + Security & Data Protection
  + Standard & Extended SQL
  + Tools & Interfaces
  + Connectivity
  + Data Import & Export
  + Data Sharing
  + Database Replication & Failover
  + Continuous Data Protection
* Connecting to Snowflake and Assigning Roles
  + Connecting to Snowflake
  + Snowflake Roles
  + Snowflake Editions
* Creating Database Objects
  + Create Database objects
  + Stage Files
  + Create Objects in Snowflake
* Structure Data Ingestion
  + Structured Data Ingestion
  + Data Staging
  + Bulk load from Cloud Storage
  + Bulk load from Local Storage
  + Query Data
* Unstructured Data Ingestion
  + Unstructured Data Ingestion
  + JSON Ingestion
  + Query Data
* Stream Data Ingestion
  + Introduction to Snowpipe
  + How to Create Pipe
  + How to Load Streaming Data
  + How Query Data
  + Ingesting Streaming Data
* Clone Database Objects
  + Zero Copy Cloning
  + How to Clone a Database
  + How to Clone a Schema
  + How Clone Tables and Views
  + Cloning a Database
* Data Sharing
  + What is Data Share
  + Data Providers
  + Data Consumers
  + Share with Snowflake users
  + Using Wed UI to Share
  + Share Data with Snowflake and Non-Snowflake
* Un-drop Database Objects
  + Un-drop Database Objects
  + SQL Commands
* Conclusion