

# Intermediate Snowflake | Datawarehouse in the Cloud - TTSNW04

Gain next-level skills in Snowflake for managing complex workflows, enhancing collaboration, and optimizing performance and costs.

**Duration:** 2 Days

**Skill Level:** Intermediate

**Available Format:** ; Instructor-Led, Onsite In Person ; On Public Schedule

Take your Snowflake skills to the next level with this intermediate course. You'll master handling semi-structured data like JSON and Parquet, create secure data-sharing workflows, and automate tasks with scripting and stored procedures. Perfect for professionals who already understand Snowflake basics, this course focuses on optimizing performance and managing costs, helping you design efficient workflows and tackle enterprise-level challenges with confidence.

## What You'll Learn

### Overview

**Intermediate Snowflake / Datawarehouse in the Cloud** is a hands-on, two-day course that builds on your foundational Snowflake knowledge, focusing on advanced capabilities that enable organizations to work with semi-structured data, collaborate through secure data sharing, and optimize task automation. Through hands-on labs, expert-led sessions, and real-world use case exploration, you'll gain practical experience working with Snowflake's features to manage data complexity, streamline workflows, and reduce costs.

Over two days, you'll learn to handle semi-structured data formats like JSON and Parquet, leverage Snowflake's data-sharing capabilities for secure collaboration, and create automated workflows using tasks and scripting. The course also dives into performance and cost optimization techniques, equipping you to analyze resource usage, implement scaling strategies, and ensure efficient Snowflake environments. By

the end of the course, you'll have the tools to manage sophisticated data operations confidently and effectively.

## Objectives

This course combines engaging instructor-led presentations and useful demonstrations with valuable hands-on labs and engaging group activities.

Throughout the course you will learn to:

- **Work with Semi-Structured Data:** Query and transform complex data formats like JSON and Parquet, and manage nested structures efficiently.
- **Enable Secure Data Sharing:** Configure secure data-sharing mechanisms and explore collaborative use cases via Snowflake Data Marketplace.
- **Automate Workflows:** Build and manage scheduled workflows using tasks, stored procedures, and Snowflake scripting.
- **Optimize Performance and Costs:** Monitor resource usage, analyze costs, and implement strategies like auto-scaling for optimal efficiency.
- **Apply Advanced Snowflake Features:** Combine automation, collaboration, and performance techniques to address real-world business challenges.

If your team requires different topics, additional skills or a custom approach, our team will collaborate with you to adjust the course to focus on your specific learning objectives and goals.

## Audience

This course is ideal for data analysts, engineers, scientists, database administrators, and architects responsible for managing and optimizing data workflows. It's best suited for professionals who already have foundational Snowflake knowledge and are ready to advance their skills to handle complex data operations, enable secure collaboration, and optimize their Snowflake environments.

## Pre-Requisites

To ensure a smooth learning experience and maximize the benefits of attending this course, you should have the following prerequisite skills:

- **Basic SQL and Python Skills:** Proficiency in writing basic SQL queries and Python scripts.

- **Familiarity with Snowflake Fundamentals:** Knowledge of Snowflake architecture, basic data loading, and querying operations.
- **Understanding of Data Workflows:** Experience with managing data processes and workflows in a technical environment.

TTPS4800            Introduction to Python Programming Basics  
TTSQL002           Introduction to SQL Programming Basics

## Agenda

*Please note that this list of topics is based on our standard course offering, evolved from typical industry uses and trends. We'll work with you to tune this course and level of coverage to target the skills you need most. Topics, agenda and labs are subject to change, and may adjust during live delivery based on audience skill level, interests and participation.*

### Day 1: Semi-Structured Data and Data Sharing

#### 1. Working with Semi-Structured Data

- Querying and transforming JSON, XML, and Parquet formats.
- Using FLATTEN to manage nested data structures.

#### 2. Data Sharing and Collaboration

- Setting up secure data shares and managing permissions.
- Exploring Snowflake Data Marketplace use cases.
- Hands-On Lab
- Querying and visualizing semi-structured data.
- Configuring and testing data-sharing scenarios.

#### 3. Advanced Governance Features

- Configuring role-based access controls and managing authentication.
- Implementing data masking and encryption techniques.
- Hands-On Lab
- Securing data using advanced governance features.
- Testing secure sharing workflows.

### Day 2: Automation and Performance Optimization

#### 3. Task Automation

- Creating and managing tasks for scheduled workflows.

- Building workflows using Snowflake scripting and stored procedures.
- Hands-On Lab
- Automating workflows with tasks and scripting.

#### **4. Performance and Cost Management**

- Monitoring resource utilization with Query Profile and Account Usage views.
- Implementing auto-scaling policies for cost and performance optimization.
- Hands-On Lab
  - Analyzing resource utilization and optimizing virtual warehouse configurations.
  - Applying best practices for cost management and performance tuning.

## **Related Courses**

TTSNW04	Intermediate Snowflake   Datawarehouse in the Cloud
TTSNW06	Snowflake for Technologists
TTSNW03	Getting Started with Snowflake   Datawarehouse in the Cloud
TTSNW02	Snowflake for End Users
TTSNW07	Advanced Data Handling and Automation with Snowflake

### **Setup Made Simple! Learning Experience Platform (LXP)**

All applicable course software, digital courseware files or course notes, labs, data sets and solutions, live coaching support channels and rich extended learning and post training resources are provided for you in our "easy access, single source, no install required" online Learning Experience Platform (LXP), remote lab and content environment. Access periods vary by course. We'll collaborate with you to ensure your team is set up and ready to go well in advance of the class. Please inquire about set up details and options for your specific course of interest.

## **For More Information**

Please [contact us](#) or call 844-475-4559 toll free for more information about our training services (instructor-led, self-paced or blended), coaching and mentoring services, public

course enrollment or questions, partner programs, courseware licensing options and more.