

# Transforming Financial Services Data Warehouse with Snowflake Integration

By automating data extraction and integrating Snowflake's internal stage, a Financial Services Organization overcame API limitations in their off-the-shelf data warehouse, reducing setup time, streamlining governance, and enabling seamless, real-time data access.

## At a Glance

### *Problem*

A Financial Services Organization struggled to efficiently deliver mastered security data via API from an off-the-shelf cloud data warehouse, despite significant time and resource investments.

### *Solution*

By leveraging Snowflake's capabilities, data extraction from the existing warehouse was automated and seamlessly integrated into Snowflake's internal stage. This eliminated setup complexities and accelerated data delivery while adhering to corporate IT policies.

### *Outcome*

The implemented solution reduced startup costs, streamlined data governance processes, and enabled immediate API access to mastered data, enhancing operational efficiency and compliance.

### *Framework*

- Snowflake
- SQL Server
- Data Warehousing
- DevOps
- Data Integration

Our client needed to deliver mastered security data from data vendors via API. The data was sourced from vendor files and loaded into an off-the-shelf cloud data warehouse from one of the client's technology vendors. Here, the data was mastered and data governance professionals were given access. At this point, the data was valuable, already having been mastered and serving as the main access point for data governance professionals.

Unfortunately, the off-the-shelf-cloud data warehouse was unable to serve the data to the API. The client tried and failed to use this warehouse to serve data to the API, an eight month expenditure of time. Because so much time had already passed, they needed to get things done quickly and correctly.

The client required a solution that minimized startup times while adhering to corporate IT policy. One of the main contributors to startup times was a requirement that any use of cloud resources like Azure Blob Storage meant developers had to be set up with roles, entitlements, and access to Azure Developer Platform, a process that would have doubled the time to delivery.

We worked with the client to automatically extract data from their off-the-shelf cloud data warehouse and load it into Snowflake using Snowflake's internal stage, thus eliminating several startup costs and minimizing time to delivery.

## Process

SQL Server access files via SMTP masters the data using definitions set forth by the business and writes it to an off-the-shelf-data warehouse. Here, data governance professionals have access to apply changes and interact with the data.

While data cannot be presented via API from the off-the-shelf-data warehouse, it can be extracted to delimited files. Using SQL Server, the mastered data is extracted and loaded into a network storage via SFTP. On this file server, a batch file was built to look for new data and automatically load this into Snowflake internal storage. From this internal storage location, the data is immediately available to query. Views were built on top of the internal storage data and this data is then accessed via API.