DataFactZ Case Study

Faster and easier Migration of Business Intelligence (BI) and Data with Snowflake

INDUSTRY
Retail- Warehouse
TECHNOLOGY
Teradata to Snowflake, MicroStrategy

Goals

Below mentioned were the desired goals of the client:
- Flexible infrastructure for growing data
- High performance and reliability between report server and multi-dimensional data
- The ability to provide reports to external users on Pay-per-use policy

The Challenge: Cost reduction and seamless Business Intelligence and data migration

The client was hugely focusing on inventory planning for the data warehouse across the country. Daily, huge amounts of data were generated, for which the on-premise systems needed continuous infrastructure upgrades.

The client was using: Teradata to store the multi-dimensional data, MicroStrategy 9.1 for reporting, and Business Intelligence. However, with so much data stored, the maintenance costs were raising which required immediate migration of Data and BI applications to a cloud-based platform.

With years of experience in migrating large volumes of data, as well as handling Business Intelligence implementations, DataFactZ proposed a solution that will seamlessly migrate BI and data.

Delivered Solution: Assessing, Selection, and Optimization of data

Our team at DataFactZ did a thorough assessment of all the inventory-related data and the respective Business Intelligence reports. The analysis showed that to efficiently implement the plan, a 'Lift and Shift' approach was not ideal. According to this approach, we were not only migrating data but also the on-premise problems related to it.

So, the appropriate solution for it was 'Assess, Select and Optimize' the data. This helps generate business value and helps the decision-makers with information that is related to cost savings and loss prevention. Once the data was reviewed and finalized, then it would be moved to the cloud platform. A similar approach was considered for BI reports also. For this, DataFactZ proposed Snowflake data warehouse to host the inventory data in the cloud as it was aligning with the nature and structure of the client's data.

Implementation was done in multiple steps, that's mentioned below:

- Reviewed on-premise data and process. Resolve the data quality and process issues, if any
- Migrate all inventory data that is worth value, to a schema modeled in the Snowflake data warehouse
- Implement 'Sync-Up' process that allows the on-premise ETL jobs to load data into the Snowflake database
- Finally, test cloud data with existing on-premise data
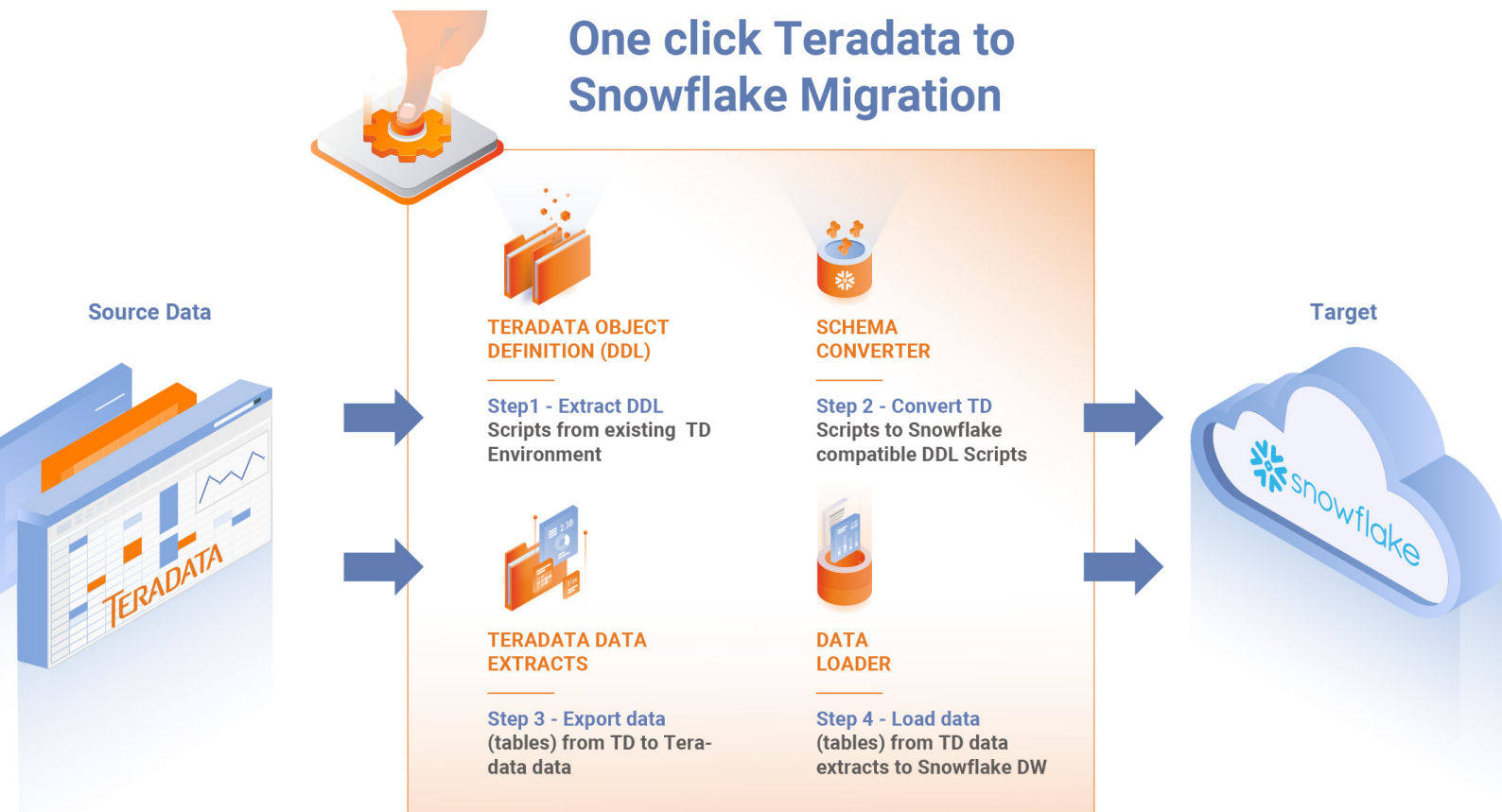
Implementing an automated migration solution
Besides the ongoing migrations, hundreds of hours were saved in the migration process with our "One-click", fully-automated migration solution. The Teradata table language was converted into a new syntax, to ensure that the Data Definition Language (DDL) script was compatible with Snowflake. The schema converter takes care of this and validates it to ensure it functions properly in the new DDL.

Once the tables are ready to load data, extracting and loading to Snowflake is optimized by splitting large tables and loading them in parallel to shorten load time. Load restarting and data recovery is available during this automated data load process. Customization is also possible to configure parameters for data loading or preventing duplication.

Result: Increased flexibility in data scaling and its usage, automated Teradata to Snowflake migration

With the migration of EDW to Snowflake, DataFactZ was able to provide the client a reduced data loss, implement prevention techniques, and have cost savings on infrastructure, as the platform allows flexibility (from 'use as you need' to 'use as you want') in scaling data and its usage.

One click Teradata to Snowflake Migration

Source Data

Target

TERADATA OBJECT DEFINITION (DDL)

Step1 - Extract DDL
Scripts from existing TD Environment

SCHEMA CONVERTER

Step 2 - Convert TD
Scripts to Snowflake compatible DDL Scripts

TERADATA DATA EXTRACTS

Step 3 - Export data
(tables) from TD to Teradata data

DATA LOADER

Step 4 - Load data
(tables) from TD data extracts to Snowflake DW

The Next Step

Request a 1 on 1 solution demo:
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