



Cutting VAT Reporting Compute Costs by Over 80% on Snowflake

CLIENT

Global pharmaceutical company running centralized VAT compliance reporting across multiple tax regions.

THE CHALLENGE

VAT compliance reporting ran on a legacy Snowflake architecture of stored procedures and temporary tables that were costly to run and hard to maintain.

- Monolithic stored procedure running the main reporting flow, hard to maintain and scale
- Wide SAP S/4HANA source tables pushing large volumes of unused data through every run
- Heavy use of temporary tables inflating runtime and obscuring the transformation logic
- Oversized Gen1 warehouse driving high compute cost, with limited visibility into processing

SOLUTION

UD4D refactored the pipeline in two phases, reducing cost and runtime without changing reporting outputs.

- Code and query review of the stored procedure, simplifying the most expensive transformation steps
- Removal of 11 unused source tables and 3,869 unused CRT stage columns, roughly an 88% reduction of columns at that layer
- Replacement of stored procedure logic with modular, parallel Snowflake Dynamic Tables, and removal of all temporary tables
- Filtering moved upstream, plus removal of around 60 of 150 reporting columns
- Documentation of 100+ objects and their columns (~2,500 columns) and right-sizing to an XS (Gen2) warehouse

BUSINESS IMPACT

83% **lower Snowflake compute:** Weekly usage fell from around 61 credits to about 10, an estimated 2,600 credits and roughly \$9K saved per year.

7x **faster reporting runs:** Execution dropped from 40 to 50 minutes to 6 to 7 minutes through parallel processing and simplified logic.

88% **smaller processing footprint:** Removing 3,869 unused CRT stage columns and redundant reporting columns cut the data handled on every run.

100+ **objects fully documented:** Table and column-level comments across roughly 2,500 columns replaced an opaque monolith with a modular, traceable pipeline.

TECHNOLOGY STACK Snowflake (Dynamic Tables) | SAP S/4HANA | Informatica IICS