

### **SAS2PY Platform Overview**

SAS2PY is the industry's first fully on-premise, parser-driven **Teradata BTEQ** migration and transformation platform. Purpose-built for organizations modernizing legacy BTEQ environments—including scripts, procedural logic, control flows, and batch operations—SAS2PY transforms these assets into modern, cloud-native formats optimized for **Snowflake, Databricks, BigQuery, Redshift, Microsoft Fabric**, and **DBT**.

With unmatched accuracy, security, and speed, SAS2PY helps organizations reduce risk, control cost, and accelerate their cloud data modernization roadmap.

## SAS2PY

#### What Makes SAS2PY Different

- Parser-Driven BTEQ Conversion
  - No AI hallucination—every BTEQ command, block, and flow is parsed, transformed, and fully auditable.
- Secure On-Premise Deployment
  - Run entirely within your infrastructure (on-prem or VPC). No code or data ever leaves your environment.
- Full Metadata & Control Logic Preservation
  - BTEQ variable handling, conditional branching, and control structures are intelligently retained and mapped to modern frameworks.
- Built-In Execution Layer
  - Execute migrated workloads natively in Snowflake, Databricks, and other platforms using visual controls.
- (Optional) Merlin Al Developer Assistant
  - Real-time Al guidance for debugging and optimizing BTEQ-to-modern transformations.
- Comprehensive Validation & Matching
  - Validate schema, data, and logic with row-level and partitioned comparisons across platforms.



### **End-to-End Teradata BTEQ Migration Process**

### 1. Analyze

- Automatically inventories BTEQ scripts, control logic, variable declarations, and macros
- Maps file I/O, schema references, and procedural dependencies
- Assesses complexity and classifies code for targeted transformation

#### 2. Convert

- Converts BTEQ components into Python, SQL, and modern formats (DBT, PySpark, Snowpark, etc.)
- Retains operational logic and job sequencing
- Generates clean, production-grade code for cloud platforms

#### 3. Validate

- Ensures schema and logic alignment between BTEQ and modern targets
- Performs side-by-side output validation and functional regression tests
- · Confirms business rule fidelity and platform compatibility

#### 4. Execute

- Enables direct execution in Databricks, Snowflake, and other target systems
- Includes version control, scheduling, and DAG packaging features
- Integrates seamlessly with Airflow, DBT, and Git workflows

## 5. Data Matching

- Verifies row counts, calculated metrics, and record-level integrity
- Performs partitioned checks by date, customer, or region
- Automatically aligns source and target schema mappings

#### 6. Document

- Generates detailed, audit-ready documentation for compliance
- · Includes data lineage visualization, transformation traceability, and rollback support





Supports full governance and IT controls

### **Automated Schema Mapping**

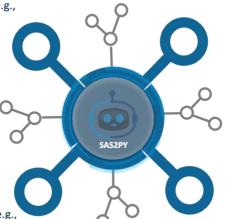
Automatically maps source schemas (e.g., SAS, Oracle, Teradata) to the target system for fast and efficient setup.

### **Metadata Comparison**

Compares metadata (e.g., table structures, indexes) between the source and target systems to ensure complete structural alignment.

### **Data Type Validation**

Ensures accurate translation of column types (e.g., numeric, string, date) into formats compatible with the target system, eliminating type mismatches.

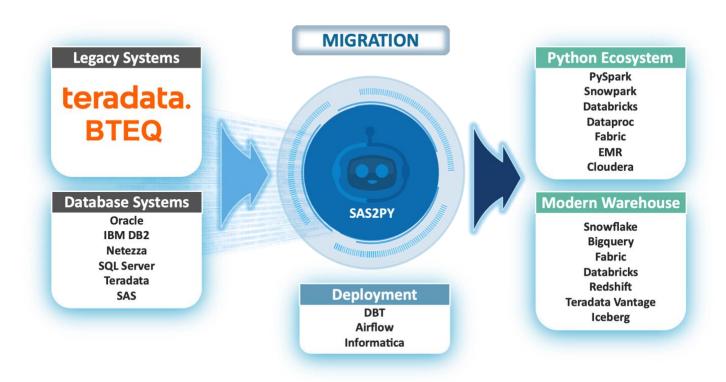


### **Metrics Comparison**

Validates key metrics (counts, sums, averages, etc.) between source and target systems to confirm data accuracy.

#### **Partitioned Validation**

Performs aggregate checks by partitions (e.g., date, region) to ensure data consistency within subsets.

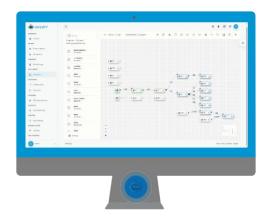




## **Code/Data Lineage**

End-to-End Code Lineage: SAS2PY automatically maps dependencies across all workflows, ensuring 100% traceability before, during, and after migration.

Clickable Lineage Exploration: Users can click on any dataset, transformation, or script to immediately view the original code alongside its migrated equivalent.



Legacy Code Preservation & Full Auditability: Every original script remains fully viewable, traceable, and auditable, ensuring long-term historical reference and compliance validation.

## Merlin AI – The Developer Assistant (Optional)

Merlin AI is an embedded on prem GenAI assistant for developers and data engineers working with converted ODI workloads. Fully integrated into the SAS2PY platform, Merlin supports:

- Real-time debugging and transformation assistance
- Auto-rewrite of SQL and Python blocks for optimization
- Error tracebacks, logic flow explanations, and quick fixes
- GenAl-enabled context-aware chat for specific code inquiries
- On-premise optional for security-sensitive environments

## **Enterprise-Grade Data Matching & Validation**

SAS2PY includes a powerful data validation engine to ensure consistency and trust throughout your migration:

- Automated Schema Mapping: Aligns source and target columns and formats
- Data Type Normalization: Ensures compatibility across platforms
- Metadata Comparison: Verifies structures, indexes, and dependencies





- Metric Validation: Confirms row counts, aggregates, and KPI accuracy
- Partition-Level Checks: Detects mismatches by date, region, or business slice

### **Deployment Options & Infrastructure**

- Deploy within your infrastructure or in the cloud you decide
- Docker-based delivery; compatible with AWS, Azure, GCP, on-prem VMs
- Standard Instances: AWS m5.2xlarge, Azure D8s v3, GCP n2-standard-8
- No data or logic ever leaves your environment

# **Licensing & Engagement Options**

- Volume Pricing Tiered by LoC (lines of code) and platforms migrated
- Proof of Concept (PoC) 4-week paid PoC
- Partner-Friendly We work with many SI's, technology partners and cloud migration partners

## **Take the Next Step in Digital Transformation**

SAS2PY is the world's most secure, parser-based **Teradata BTEQ** modernization platform purpose-built for large enterprises in regulated, data-intensive industries. Whether migrating BTEQ scripts, rebuilding procedural workflows, or shifting enterprise data operations to the cloud, SAS2PY accelerates your transformation with unmatched accuracy, security, and control.

Schedule a Demo: <a href="www.sas2py.com">www.sas2py.com</a> | <a href="sales@sas2py.com">sales@sas2py.com</a>





