

SAS2PY Platform Overview

SAS2PY is the industry's first fully on-premise, parser-driven **SAS code migration and transformation platform**. Purpose-built for organizations looking to modernize legacy SAS environments—including **Base SAS**, **DI Studio**, **Enterprise Guide**, **and SAS Viya**—SAS2PY transforms SAS workloads into modern, scalable cloud-native formats optimized for **Snowflake**, **Databricks**, **BigQuery**, **Redshift**, **Azure Fabric**, **and DBT**.

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

What Makes SAS2PY Different

- Parser-Driven SAS Conversion
 - No AI hallucination—every line of SAS code is parsed, transformed, and auditable for full transparency.

SAS2PY

- Secure On-Premise Deployment
 Run entirely within your infrastructure (on-prem or VPC). No code or data ever leaves your environment.
- Full Metadata & Macro Preservation
 SAS macros, formats, libraries, and metadata are retained and mapped intelligently to their modern equivalents.
- Built-In Execution Layer
 Execute migrated pipelines natively in Snowflake, Databricks, and other platforms with visual control.
- (Optional) Merlin Al Developer Assistant
 Get real-time Al-based guidance for optimizing and debugging SAS-to-modern transformations.
- Comprehensive Validation & Matching Validate schema, data, logic, and outputs across platforms with row-level and partitioned comparisons.



End-to-End SAS Migration Process

1. Analyze

- Automatically scans and inventories all SAS scripts, workflows, and dependencies
- Maps libraries, formats, macros, and file relationships
- Prioritizes migration efforts based on code complexity and dependencies

2. Convert

- Converts SAS logic into modern modular code (e.g., PySpark, Snowpark, DBT SQL)
- Preserves business logic, metadata, and macro functionality
- Ensures clean, PEP8-compliant code ready for target execution environments

3. Validate

- Verifies schema alignment, data type accuracy, and logic consistency
- Compares outputs between SAS and target system (e.g., Snowflake, BigQuery)
- Enables side-by-side regression and functional testing

4. Execute

- Direct execution of converted workflows in Snowflake, Databricks, and more
- Visual controls for job scheduling, versioning, and pipeline packaging
- Supports full DAG workflow modeling and deployment

5. Data Matching

- Confirms row counts, aggregates, and KPI alignment
- Detects partition-level inconsistencies by date, region, or custom keys
- Ensures structural fidelity through schema reconciliation and data normalization

6. Document

- Generates audit-ready migration documentation
- Includes lineage visualizations, inline code comments, and version history
- Maintains full visibility of original SAS scripts for rollback and compliance



Automated Schema Mapping

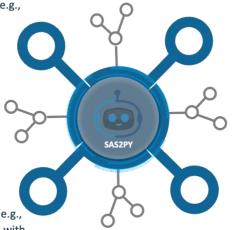
Automatically maps source schemas (e.g., SAS, Oracle, Teradata) to the target system for fast and efficient setup.

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.

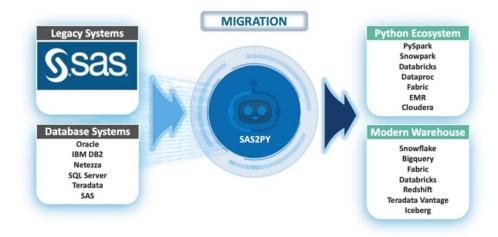


Metrics Comparison

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.

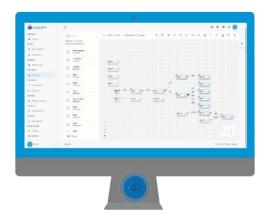




Code/Data Lineage

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 a GenAI developer assistant for developers and data engineers working with migrated code. Built directly 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, flexible, and automated legacy modernization platform—built to meet the needs of large enterprises across regulated, data-intensive industries. Whether modernizing SAS code, rebuilding ETL pipelines, or migrating entire platforms to the cloud, SAS2PY accelerates your path forward while reducing risk and cost.

Schedule a Demo: www.sas2py.com | sales@sas2py.com

