

# Automate your Modernization

## Visual Lineage. Visual Execution. **10X SPEED**

Python

PySpark

Snowpark

Snowflake

Databricks

### Migration Process

#### Analyze and Insights

- Automatic code assessment for rationalization and migration planning
- Comprehensive dependency mapping with data and file lineage
- Development of required frameworks and standards
- Code complexity analysis, block labels, and LoC assessment
- Rationalize and standardize current ETL

#### Convert and Migrate

- Automated SQL and ETL code translation with modernization
- Multi code conversion with enhanced optimization and unit testing
- Metadata preservation and comprehensive documentation
- Visual execution on Databricks, Snowflake, and cloud platforms
- Native integration with DBT, Airflow, and Git

#### Test and Validate

- End to end automated testing of data pipelines
- Comprehensive data validation and schema mapping
- Side by side output comparison and metrics validation
- Test data generation and cut over preparation
- Partitioned validation with automated error detection

### Analyze and Insights

Scan SAS, DataStage, Informatica, Teradata BTEQ, PL1, and JCL to auto build a complete inventory. Discover dependencies, macro chains, external calls, data sources, and fan in or fan out hot spots. Produce visual lineage and impact maps that guide the entire modernization.

- Inventory all **workflows, macros, and configurations**
- Dependency mapping with **data & file lineage**
- Code complexity analysis, block labels, and LoC assessment

Inventory

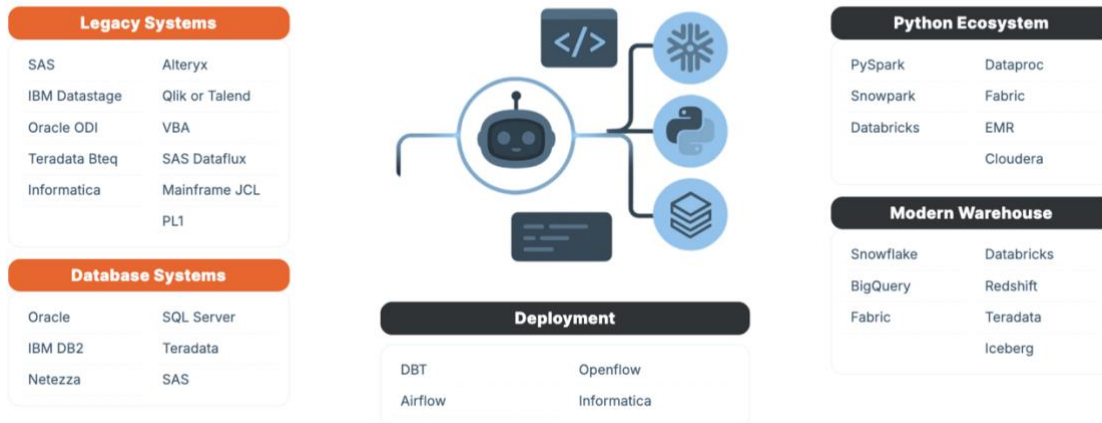
Lineage

Complexity

Validation

Risk

## Parser Engine



## Convert. Generate modern code.

Deterministic conversion into Python, PySpark, Snowpark, and SQL for Snowflake, Databricks, BigQuery, Redshift, and Fabric. All translations are explainable and auditable, with module level controls and style guides.

- **Multi-code** conversion with enhanced optimization
- Translated **workflows** to **notebooks**
- **Auto documentation** for each converted artifact

Python

PySpark

Snowpark

SQL

Templates

## Modernize faster across the full migration lifecycle

	Risk Level	Missing Macros	Missing Includes	
1.sas	Critical	0	0	Ensure 4 data
rd.sas	Critical	4	4	Ensure 4 data
p1.sas	Critical	4	8	Ensure 8 data

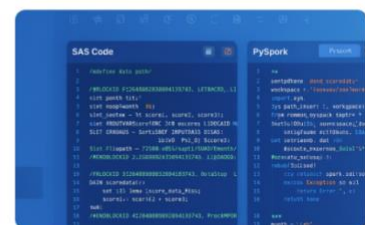
### Code Analysis

Quickly assess thousands of scripts, map complexity and dependencies, and flag readiness. Get clear scope, a prioritized plan, safer cutovers, and faster production.



### Visual Lineage

Visualize code across jobs, tables, and SQL to see sources, flows, and changes. Speeds impact checks, lowers migration risk, supports audits, and proves outputs match.



### Code Conversion

Convert legacy SAS, DataStage, BTEQ, and more into Python, PySpark, Snowpark, or SQL with matched outputs. Modernize faster, keep logic intact, and avoid risky rewrites.

## Execute. Orchestrate pipelines.

Run converted workloads in the right order with a driver notebook or job runner. Standardize on Delta and cloud storage, schedule, monitor.

- **Visual execution** on Databricks, Snowflake
- Native integration with **DBT, Airflow, Git**
- **Validate** results and capture lineage

Row counts

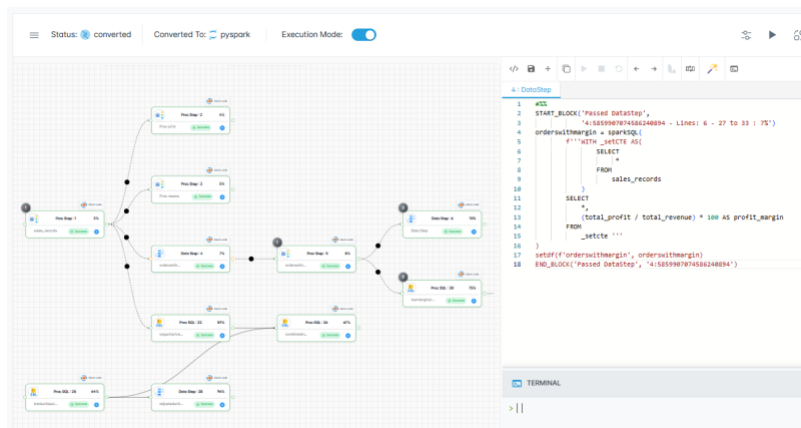
Common columns

Mismatched columns

## Visual Execution

Visual execution runs directly on Snowflake and Databricks, combining lineage and live code in one workspace with a direct warehouse session and step-by-step visibility to any failure point.

- Visual execute to Snowflake and Databricks. Left shows lineage. Right runs live code with a direct session. You see each step and the exact stop point.
- Streamlines troubleshooting, cuts retesting, provides audit ready logs, lowers engineering and compute costs.
- Lower risk. Visual Lineage shows upstream and downstream impact, so teams retest only what matters.



## Validate. Prove parity.

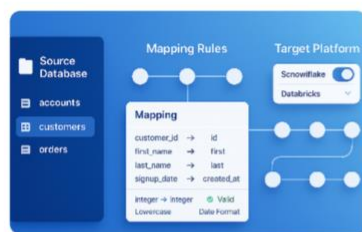
Partitioned validation compares row level and aggregate outputs between legacy and modern systems. Automatic schema checks, data matching reports, and exception trails give confidence to go live.

- **Verification** for row, column, source table, target table + more
- Automated **schema detection** and **data validation**
- Side-by-side output comparison

Row counts

Common columns

Mismatched columns



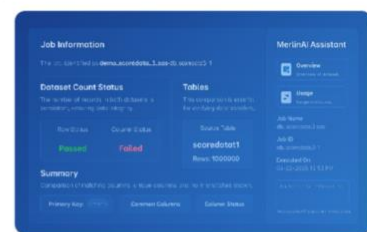
### Data Mapper

Automatically map legacy schemas to Snowflake or Databricks with clear mappings. Cut migration risk, enforce naming and data types, and get audit-ready visibility.



### Auto Docs

Automatic documentation captures your legacy code and the new target code, detailing working components, parameters, and dependencies for clear traceability.



### Data Matching

Compares source and target outputs at scale using configurable keys and rules. Flags mismatches, duplicates, and gaps with actionable reports for fast fixes.

## Merlin AI. Assist and accelerate.

Context aware assistance that knows your inventory, lineage, and conversion plans. Generate unit tests, explain diffs, suggest mappings, and draft notebooks with your rules applied.

- 100% optional
- **Debug errors**, and **improve efficiency**
- Nothing leaves your network
- Get **instant insights**

