

## GenAI-powered migration from SQL Server and SSIS to Microsoft Fabric.

Accelerate SQL Server to Microsoft Fabric Migration: Up to 2X Faster, 60–80% Lower Cost.

### The Modernization Challenge

Enterprise SQL Server estates accumulate T-SQL stored procedures, SSIS packages, SQL Agent jobs, and linked server dependencies across decades of development. Manual migration to Microsoft Fabric is slow and error-prone, particularly around SSIS package conversion, cursor-based procedural logic, and unsupported constructs like CLR assemblies, Service Broker, and triggers.

### Risks of Inaction

- Escalating SQL Server licensing, CAL, and Software Assurance costs
- 12 to 24 months manual migration timelines with scope creep
- SSIS packages with script tasks and complex data flows resist automation
- Unsupported constructs (CLR, Service Broker, triggers) block naive migration
- Delayed Microsoft Fabric ROI and slowed OneLake, Copilot, and AI initiatives

### The KPI Partners Solution: SQL Server to Fabric Migration Accelerator

A next-generation GenAI-powered, metadata-driven migration accelerator purpose-built for SQL Server to Microsoft Fabric:

- Assessment module that analyzes your SQL Server instance to produce timeline, resource, and cost estimates for complete migration
- GenAI-driven conversion of T-SQL stored procedures, functions, and views into Fabric Warehouse T-SQL and PySpark notebooks
- Automated SSIS .dtsx XML parsing and conversion to Fabric Data Pipelines, including control flow, data flow, and derived column logic
- SQL Agent job conversion to Fabric scheduler and pipeline triggers
- Explicit detection and flagging of unsupported constructs: CLR assemblies, Service Broker, in-memory OLTP, extended stored procedures
- Trigger logic extraction and redesign into pipeline pre/post actions (Fabric Warehouse does not support triggers)
- Built-in validation: Syntactic checks, dry-run execution, and reconciliation between SQL Server and Fabric

## Our Approach

### Phase 1: Intelligent SQL Server Assessment

Automated scan of the SQL Server instance via sys.\* catalog views and .dtsx parsing to quantify scope, complexity, and cost, including SSIS package analysis, SQL Agent job inventory, and unsupported-construct identification, enabling confident executive approval.

### Phase 2: AI-Based Automated Conversion

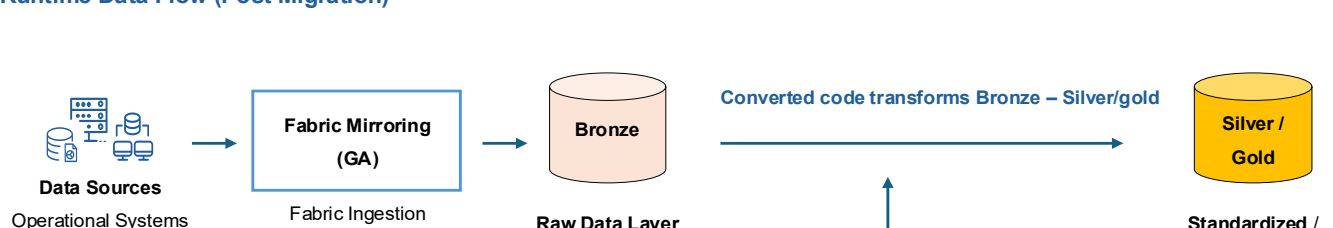
GenAI-powered conversion of T-SQL DDL, stored procedures, functions, views, SSIS packages, and SQL Agent jobs into Microsoft Fabric native artifacts with built-in validation, reconciliation, and human-in-the-loop review.

### 3-Week Quick Start

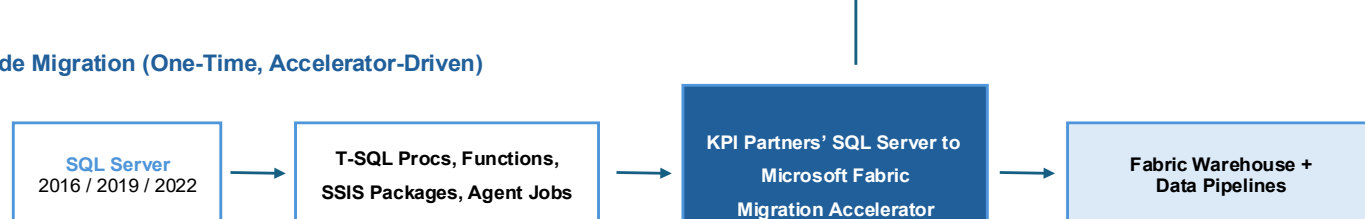
- Run KPI Partners' Assessment accelerator on your SQL Server estate to receive timeline, resources, and cost estimate for complete migration to Microsoft Fabric
- Dependency graph across tables, procs, SSIS packages, and SQL Agent jobs
- Fabric target architecture recommendation and unsupported-construct inventory
- Fixed-price: \$10,000
- Scope: Convert 10 SQL Server artifacts (60% simple tables/views, 20% medium T-SQL procs, 20% complex SSIS packages) that you select

## Technical Architecture Overview

### Runtime Data Flow (Post Migration)



### Code Migration (One-Time, Accelerator-Driven)



## Target Architecture

### Current State

- SQL Server 2016/2019/2022 on-prem or Azure VM
- T-SQL stored procedures, functions, views, triggers
- SSIS packages (.dtsx) and SSIS Catalog (SSISDB)
- SQL Agent jobs, schedules, and operators
- Linked servers and cross-database references

### Modernized Future State

- Microsoft Fabric as unified analytical platform
- Fabric Warehouse (T-SQL) for dimensional and logic layer
- Fabric Lakehouse (Delta) for fact and large-volume data
- Fabric Data Pipelines replacing SSIS orchestration
- OneLake with Direct Lake mode for Power BI
- CI/CD-enabled deployment via Fabric Git integration

### Infrastructure Requirements

- Microsoft Fabric capacity (F64 or higher for production)
- Azure subscription with Entra ID integration
- Azure OpenAI deployment in client tenant
- SQL Server source read access (sys.\* view permissions)
- Fabric Mirroring for supported SQL Server versions
- Azure DevOps or GitHub for artifacts-as-code

## Technical Benefits and Requirements

Technical Requirements	Technical Benefits
Microsoft Fabric workspace with Warehouse and Lakehouse capability	Automated T-SQL procedure conversion to Fabric Warehouse stored procedures
Azure OpenAI access with GPT-4.1 and o3 deployment	SSIS package XML parsing with control flow and data flow conversion
SQL Server source read access (VIEW DEFINITION, sysadmin optional)	SQL Agent job conversion to Fabric schedules and pipeline triggers
Python 3.11+, Visual Studio or VS Code	Explicit flagging of CLR, Service Broker, and in-memory OLTP for redesign
Fabric Mirroring enabled (SQL Server 2016+ recommended)	Trigger logic refactored to pipeline pre/post actions
Secure connectivity via private endpoints to Azure OpenAI	Embedded reconciliation and audit tracking per object

## Success Story

### Fortune 500 Manufacturing Enterprise

Global industrial manufacturer consolidating operational analytics onto Microsoft Fabric

- 3,200+ SQL Server objects (tables, views, stored procs)
- 450+ SSIS packages including 80+ with script tasks
- 2X faster migration than prior manual approach
- 80% reduction in conversion effort

- Up to 95% automation efficiency on T-SQL procedure conversion

- Completed in ~7 months end-to-end

### Business Benefits

- 60–80% reduction in migration timeline and cost over manual methods
- Up to 95% automation efficiency on T-SQL procedures and SSIS conversion
- Clean identification and remediation of unsupported constructs
- Native Microsoft Fabric foundation for Copilot, Power BI, and AI initiatives

## Outcome

Faster migration, reduced licensing spend, consolidated operational and analytical estate, and an AI-ready Microsoft Fabric foundation.

## Testimonial



The accelerator converted our SSIS packages and T-SQL procedures at a pace we did not believe was possible. The human-in-the-loop review kept us in control while automation did the heavy lifting.

— Director, Data Engineering

## Why KPI Partners

- Microsoft Fabric and Azure specialist partner
- Microsoft Solutions Partner for Data & AI (Azure) and Digital & App Innovation
- 200+ SQL Server and SSIS modernization projects delivered
- 100+ enterprise data modernization programs
- Proprietary Fabric accelerator with reusable T-SQL and SSIS pattern library
- Deep SSIS, SQL Agent, and SQL Server-to-cloud migration experience



SCHEDULE A DEMO TODAY!

See how KPI Partners accelerates Microsoft Fabric modernization with measurable business outcomes.