

GenAI-powered migration from Oracle Database to Microsoft Fabric.

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

The Modernization Challenge

Enterprise Oracle estates built over 15–20 years contain tens of thousands of PL/SQL lines, deeply interconnected packages, materialized views, and hierarchical query logic. Manual migration to Microsoft Fabric is slow, expensive, and high risk, with procedural code conversion and Oracle-specific constructs being the dominant sources of effort and defects.

Risks of Inaction

- High Oracle licensing, support, and Exadata infrastructure costs
- 18 to 36 months of manual migration timelines with frequent budget overruns
- Oracle-specific constructs (CONNECT BY, MERGE, PL/SQL packages) rarely convert cleanly
- NUMBER precision drift causes silent data defects post-migration
- Delayed Microsoft Fabric ROI and slowed AI, Copilot, and OneLake initiatives

The KPI Partners Solution: Oracle to Fabric Migration Accelerator

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

- Assessment module that analyzes your Oracle schema to produce timeline, resource, and cost estimates for complete migration
- GenAI-driven conversion engine that transforms Oracle PL/SQL into Fabric Warehouse T-SQL procedures and PySpark notebooks
- Automated handling of Oracle-specific constructs: CONNECT BY hierarchical queries, MERGE statements, DECODE, NVL, materialized views, sequences, DB links, and synonyms
- Active NUMBER precision profiling to prevent data type drift in Fabric
- Chunked conversion for large PL/SQL packages with cross-procedure state reconciliation
- Built-in validation: Syntactic checks, dry-run execution, and row-level reconciliation between Oracle and Fabric

Our Approach

Phase 1: Intelligent Oracle Assessment

Automated scan of the ADF instance via REST API to quantify scope, complexity, and cost, including pipeline inventory, Data Flow classification, dependency graph, and Fabric routing recommendations, enabling confident executive approval.

Phase 2: AI-Based Automated Conversion

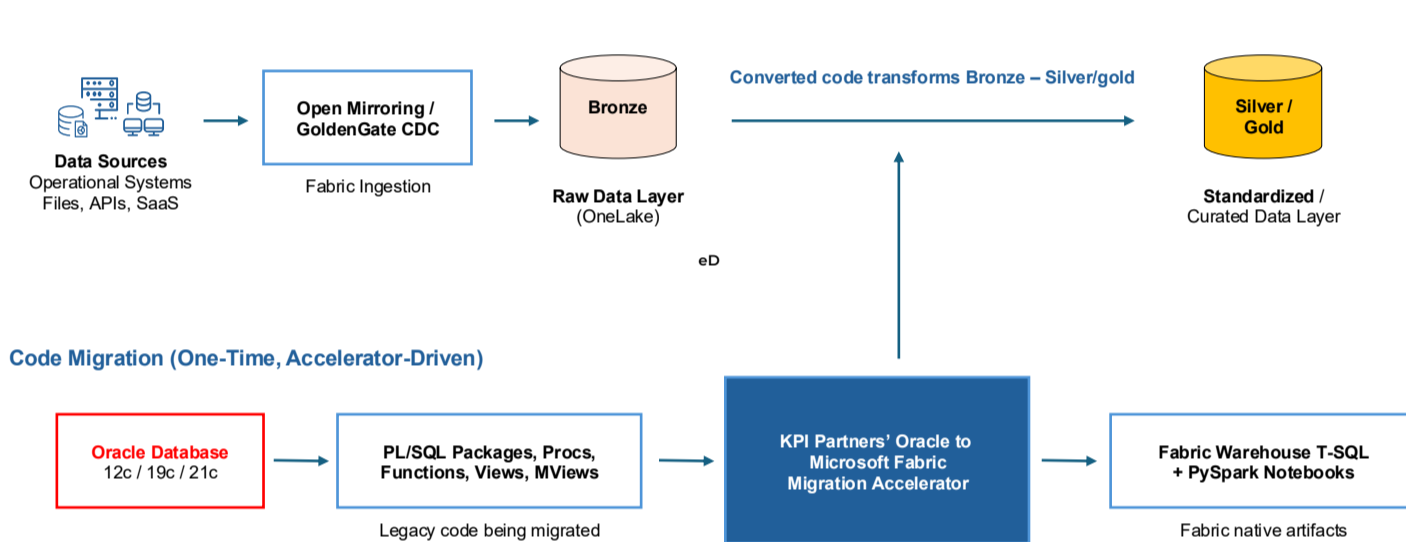
GenAI-powered conversion of Oracle DDL, PL/SQL procedures, packages, functions, views, and materialized view refresh logic into Microsoft Fabric native artifacts, Warehouse T-SQL and PySpark notebooks, with built-in validation, reconciliation, and human-in-the-loop review.

3-Week Quick Start

- Run KPI Partners' Assessment accelerator on your Oracle schema to receive timeline, resources, and cost estimate for complete migration to Microsoft Fabric
- Dependency graph and complexity scoring across all Oracle objects
- Fabric target architecture recommendation (Warehouse vs Lakehouse routing)
- Fixed-price: \$10,000
- Scope: Convert 10 Oracle objects (60% simple tables/views, 20% medium procedures, 20% complex PL/SQL packages) that you select

Technical Architecture Overview

Runtime Data Flow (Post Migration)



Target Architecture

Current State

- Oracle Database 12c/19c/21c with Exadata or on-prem infrastructure
- PL/SQL packages, procedures, functions, triggers
- Materialized views, sequences, DB links, synonyms
- Oracle Scheduler, DBMS_SCHEDULER jobs

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 for 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
- Oracle source connectivity via Self-hosted Integration Runtime
- Open Mirroring or Oracle GoldenGate for CDC (optional)
- 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 Oracle PL/SQL conversion to Fabric Warehouse T-SQL and PySpark
Azure OpenAI access with GPT-4.1 and o3 deployment	CONNECT BY, MERGE, DECODE, NVL, and analytical functions handled by rule-based converters
Oracle source read access (DBMS_METADATA privileges)	Active NUMBER precision profiling prevents data type defects
Python 3.11+, VS Code or equivalent IDE	Chunked conversion for large PL/SQL packages (>2,000 LOC)
Self-hosted Integration Runtime for on-prem Oracle connectivity	Materialized view redesign to scheduled Fabric refresh pipelines
Secure connectivity via private endpoints to Azure OpenAI	Embedded reconciliation and audit tracking per object

Success Story

Fortune 500 Financial Services Enterprise

Global insurance and asset management firm modernizing finance analytics on Microsoft Fabric

- **2,400+** Oracle objects (tables, views, PL/SQL packages)
- **20+** year legacy Oracle estate with Exadata
- **2X** faster migration than prior manual approach
- **80%** reduction in conversion effort
- Up to **95%** automation efficiency on PL/SQL conversion
- Completed in **~8** months end-to-end

Business Benefits

- **60–80%** reduction in migration timeline and cost over manual methods
- Up to **95%** automation efficiency on PL/SQL and Oracle-specific constructs
- Preserved business logic integrity through SME-reviewed LLM conversion
- Native Microsoft Fabric foundation for Copilot and AI initiatives

Outcome

Faster migration, lower risk, reduced Oracle license spend, and an AI-ready Microsoft Fabric foundation.

Testimonial



KPI Partners' accelerator handled our Oracle PL/SQL packages with rigor and speed we had not seen in prior migration attempts. The combination of automation and disciplined human review gave us confidence at every step.

— VP, Enterprise Data Platform

Why KPI Partners

- Microsoft Fabric and Azure specialist partner
- Microsoft Solutions Partner for Data & AI (Azure) and Digital & App Innovation
- **50+** Oracle Fusion and Oracle Database projects delivered
- **100+** enterprise data modernization programs
- Proprietary Fabric accelerator with reusable Oracle pattern library
- Deep PL/SQL, Exadata, and Oracle-to-cloud migration experience