

INFOSYS DATABASE MIGRATION (iDM)

Automated and Generative AI-based solution for database and data management

With the advances in technology, open-source databases provide multiple advantages over maintaining traditional legacy databases. However, the process of migration presents challenges. These challenges include differences in syntax, data types, procedural languages, and compatibility issues between databases. The Infosys Database Migration (iDM) solution addresses this by utilizing a Generative AI Chatbot add-on to provide a more accurate last-mile code conversion, especially when compared to traditional utilities like Ora2PG and SQLines, which have inherent limitations.



Key Features

- **Database Migration Strategy** – Wizard-driven application schema script assessment and recommendation of the most optimal engine.
- **Smart Schema Migration** – Integrated with Generative AI for smart schema conversion.
- **Autonomous Engineering** –
 - Generative AI and ML-based auto mapper for objects, attributes, and reusable transformations.
 - NiFi custom processes to support complex data migration (BLOB and Nested Tables).
- **Business Data Validation** – Auto generation of test cases with KPIs and metrics such as run time, object count, row count, and data statistics.

Key Benefits

- **Easy Configuration** – UI interface to configure source/target databases.
- **Pre-assessment Report** – Extracts key information like number of objects, lines of code, type of objects, incompatibilities, etc.
- **Migration** –
 - Schema and data migration
 - Indexes/constraints migration
- **Reconciliation for Schema/Data** – Automated reports to reconcile schema objects and table data.
- **Selective Schema Objects Migration** – Option to selectively choose objects to migrate.

Success Stories

iDM was deployed at a **large Swiss Bank in the EMEA** migration program to migrate more than 1000 databases from Oracle to PostgreSQL and SQL Server to PostgreSQL.

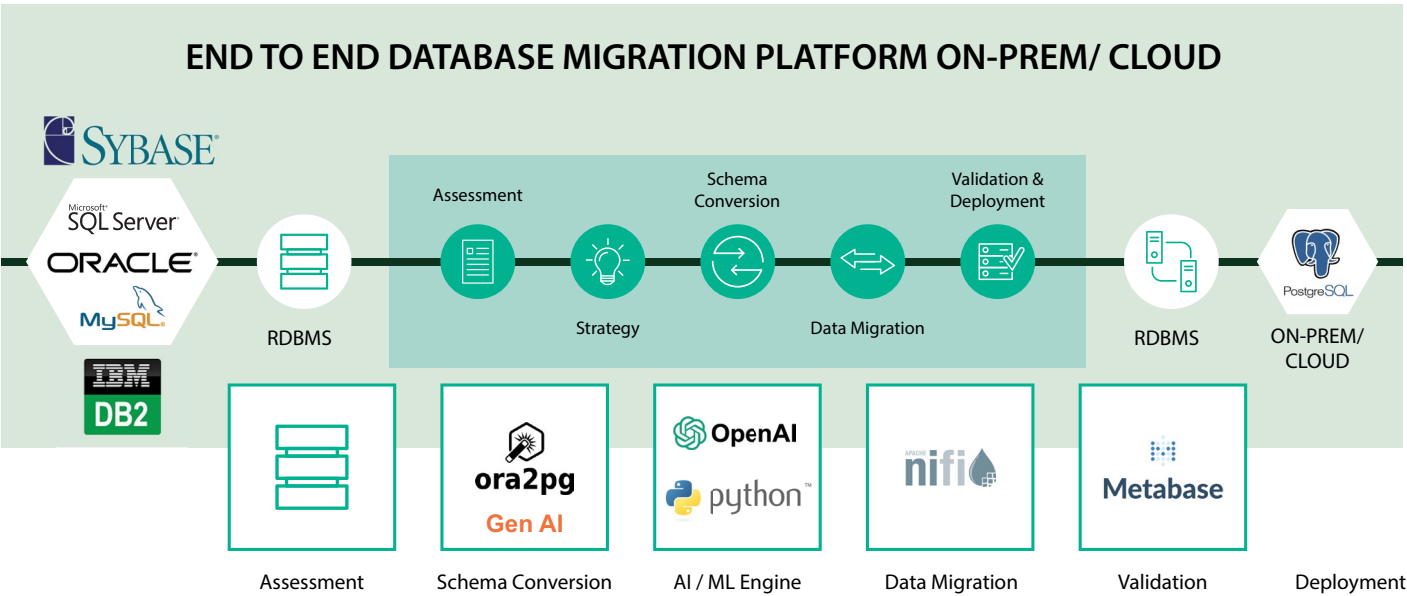
iDM migrated **200+ databases**, and the migration continues until all the databases are migrated.

iDM enabled partition-based load for tables with data of around 400 GB in one table and is integrated with **custom-built wrappers on top of Ora2PG and NiFi utilities** for additional capabilities.

The business data validator and auto test case generator help validate the performance of DB code and the accuracy of data migration, resulting in a 15% reduction in the cost of operation and a 20% reduction in FTE.

Generative AI based Intelligent Solution Offering for Database Migration and Modernization

Migration Strategy	Provides a comprehensive report with Application Schema Script assessment and recommendation of the most optimal migration engine and/or utility.
Generative AI integration	Integrated with Azure OpenAI on top of open source Ora2PG/SQLines for schema migrations.
Auto Mapper for Migrations	Seamlessly integrated with Machine Learning-based algorithms to intelligently suggest source-to-target mapping across multiple databases.



iDM Promise

Up to 90%	Up to 80%	Zero
Saving on License Cost	Automated Migration of DB code	Vendor Lock-in

Infosys Topaz is an AI-first set of services, solutions and platforms using generative AI technologies. It amplifies the potential of humans, enterprises and communities to create value. With 12,000+ AI use cases, 150+ pre-trained AI models, 10+ AI platforms steered by AI-first specialists and data strategists, and a 'responsible by design' approach, Infosys Topaz helps enterprises accelerate growth, unlock efficiencies at scale and build connected ecosystems. Connect with us at infosystopaz@infosys.com.

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