

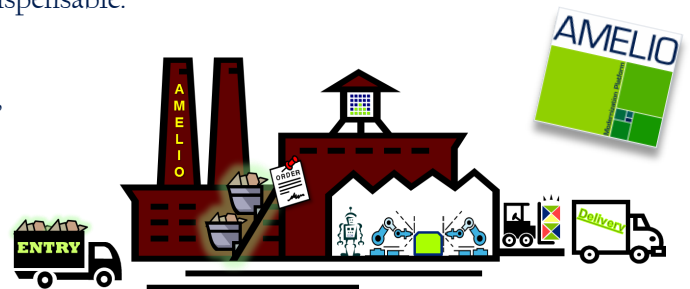
Safe Replacement of IMS Databases: How to Succeed!

Companies who want to replace their IBM IMS databases with relational databases are facing an enormous challenge:

- They have to transform their COBOL and PL/I applications as well.
- The paradigms of relational and hierarchic databases differ substantially.
- The IMS data structures and the application logic are tightly coupled.

Therefore, when migrating from IMS to SQL, a consistent and synchronised change of the data structures and the applications is vital indispensable.

With AMELIO Modernization Platform, Delta Software Technology provides a safe and very flexible solution for such complex modernisation projects.



AMELIO Modernization Platform: Fully automated from IMS to SQL

With AMELIO Modernization Platform you get a flexible and fully automated transformation factory for the safe in time and in budget replacement of your IBM IMS databases and the error-free transformation of your COBOL and PL/I applications. You gain:

- Consolidated data management systems
- Reduced licence and maintenance costs
- Flexible business applications
- Independence from rapidly dwindling expert knowledge

Safe Replacement of IMS Databases: How to Succeed!

The Problem: IBM IMS Database Reliable and Performant, but ...

Companies with very large data stocks and time-critical daily processing often use the hierarchic database system IMS Database (IMS DB) that has been developed by IBM already in the 1960's. In the meantime, newer database technologies are fighting for the "top dog" position. The once leading IMS technology increasingly turns out to be an obstacle for the creation of modern IT systems :

- **Redundant Data Management:**
IMS DB users typically use different DBMS simultaneously. Expensive ETL processes synchronise the data between IMS DB and relational systems to procure the data for direct access, ad-hoc requests, data warehouses, mobile applications and other requirements.
- **Inflexible Applications:**
Companies need faster adaptation of their business applications to new business models. But changes to the IMS data model are complex. The extremely tight coupling between the IMS database structures and the navigation in the COBOL and PL/I programs (being a main reason for the good performance), as well as the difficulty to detect the actually used data structures, obstruct the required flexibility and hinder maintenance and further development.
- **Missing Resources:**
The knowledge about how IMS was used in the applications dwindles and experts with IMS know-how are more and more difficult to find.
- **High costs:**
The already high costs for IMS applications are additionally increased by the redundant data management and the necessary synchronisation. New applications often already run on more cost-effective platforms.
But a platform migration of the COBOL and PL/I applications requires the replacement of the IMS database technology.

The Solution: From IMS to SQL Securely automated with AMELIO

AMELIO Modernization Platform is a rule-based modernisation factory with standard components for discovery, analysis and transformation that can be configured and extended project-specifically.

You will get:

- A **comprehensive in-depth analysis** of the applications to be transformed
- A detection of the actually used **IMS data model**
- A proposal for the relational data model as well as for the **model transformation** from hierarchic to relational
- An **ascertainment of all transformation tasks** for the sources and the specification of the rules to be applied
- A **fully automated transformation** of the database accesses, error handling, access routines, optionally as inline SQL or dedicated, separate data services
- **Audit proven documentation** of all changes

The flexible system of rules and the full automation of all changes do not only reduce the testing efforts. They also enable to change the decisions regarding platforms, databases, transaction systems even in the course of the project. It goes without saying that enterprise-specific development standards are taken into account.

The result are cleanly transformed applications without any traces of the IMS database technology.

AMELIO

Modernization Platform

Your Benefits

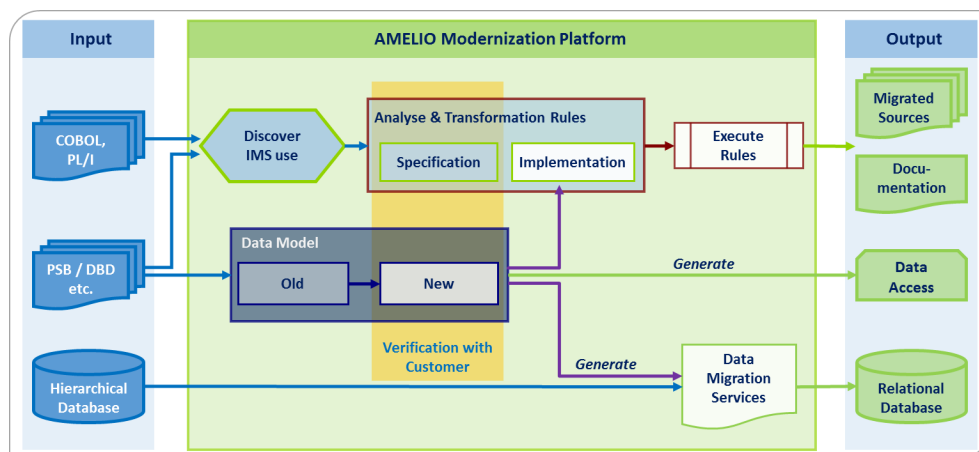
Besides absolute security, the fully automated migration from IMS to SQL with AMELIO Modernization Platform offers you many other advantages:

- **Flexible Project Management:**
The applications can be transformed stepwise, if necessary even according to their database usage – no big bang. It is possible to run IMS and SQL databases in parallel. The productive execution as well as maintenance and further development of the applications can be continued during the entire project. The actual transformation of the applications will be completed within a few hours. Thanks to this *Short Freeze*, our solution is also ideally suited for critical 24/7 applications.

- **Independence from scarce expert knowledge:**
The IMS database technology will be completely replaced. Therefore, the IMS knowledge does not have to be preserved.
- **No footprint:**
AMELIO Modernization Platform provides an absolute no-footprint and no-vendor-lock-in solution! The sources are transformed completely. Neither runtime modules nor other proprietary intermediate layers will be implemented. The code meets high standards and is maintainable without additional tools.

Further Options

AMELIO Modernization Platform is an extraordinarily flexible modernisation solution. Therefore, further application changes can be implemented simultaneously without any risk.



AMELIO Modernization Platform for the Automated Replacement of IBM IMS DB

- **Reduced Testing Effort:**
The full automation of all changes, based on an tailor-made system of rules and implemented using a *Clean Room* process, guarantees utmost security and reduces testing efforts drastically.
- **Strategy change:**
Implementation decisions can be changed at any time due to the full automation and the rule-based transformation.
- **Audit Compliancy:**
All changes are documented comprehensively, in detail, completely and in a revision-proof manner.
- **Architecture Modernisation:**
The entire code related to the data accesses can be extracted into re-usable data services and that way support the creation of a SOA, for example.
- **Platform Migration:**
The replacement of IMS DB promotes the migration to more cost-effective platforms. The modifications required for changing the platform, the operating system, the compiler, the transaction monitor, etc. can also be automated with AMELIO Modernization Platform.

AMELIO

Modernization Platform



AMELIO Modernization Platform: The Perfect Solution for the Safe Replacement of Your IMS Database

With AMELIO Modernization Platform you receive a tailor-made, perfectly fitting solution for the safe replacement of your IBM IMS databases and the error-free transformation of your COBOL and PL/I applications.
You gain:



- Consolidated data management systems
- Reduced licence and maintenance costs
- Flexible business applications
- Independence from scarce expert knowledge

For further information about features and functions, the operation and projects please visit our website.
www.delta-software.com/imsdb

Delta Software Technology

Delta Software Technology is a specialist for generative development tools that automate the modernisation, integration, development and maintenance of individual IT applications.

Our solutions help you to quickly and safely adapt your applications to new business requirements, architectures, technologies and technical infrastructures.

AMELIO® Logic Discovery™

Comprehending COBOL- and PL/I-Applications: Cut costs and risks for maintenance, modernisation and re-implementation.

AMELIO® Modernization Platform™

The tailor-made factory for the modernisation of large IT applications:
100% automatically and that's why it is safe, reliable and error-free.

SCORE® Adaptive Bridges™

Intelligent service enablement for the reuse of proven applications with modern technologies: flexible, profitable and non-invasive.

SCORE® Data Architecture Integration™

Data as real business services: fast, easy and independent of data architectures and management systems.

ADS™ Application Development for COBOL and PL/I

Platform independent development for future-proof back-end applications.

Delta has a more than 35-year track record of successfully delivering advanced software technology to Europe's leading organisations, including AMB Generali, ArcelorMittal, Deutsche Telekom, Hüttenwerke Krupp Mannesmann, Gothaer Versicherungen, La Poste, RDW, Suva and UBS.

www.delta-software.com