

Assisting Data Conversion Projects Using IB-ARM

The Challenges



During application migration, a key success factor is always the effective and correct migration of existing data from the old platform to the new. The two obvious extremes for accomplishing this work are a fully manual vs. an automated approach. While an automated solution is naturally preferred, typically no 'out-of-the-box' conversion tools exist able to handle the complex environments found in practice. Consequently, more often than not, companies fall back to the manual approach. Costs for the design, implementation and use of a throw-away automated procedure typically outweigh the costs of manual conversions.

The resulting data conversion challenges can be described as:

- Confirming the scope for the data migration
- Understanding the 'core' data that must be migrated and its inter-relationships
- Capturing verifiable data consistency rules
- Establishing a consistent, repeatable and auditable conversion process
- Automating the conversion process, wherever it is cost-effective
- Creating test plans to ensure the accuracy and completeness of conversion
- Reducing business impact and project risk

Benefits of using IB-ARM

IB-ARM addresses the challenges described above in three key areas: First, it brings a robust and time-tested process to the table. Using IB-ARM's flexible quality-driven, self-auditing and repeatable process, the data migration project can be managed effectively and efficiently. All project activities are identified in the plan and can be estimated based on the experience of other IB-ARM data migration projects. The repeatability inherent in such a controlled process enables regression testing to be done at any point in the conversion, thus streamlining the elimination of any data conversion errors. This results in a higher overall conversion quality than is attainable with an ad-hoc process.

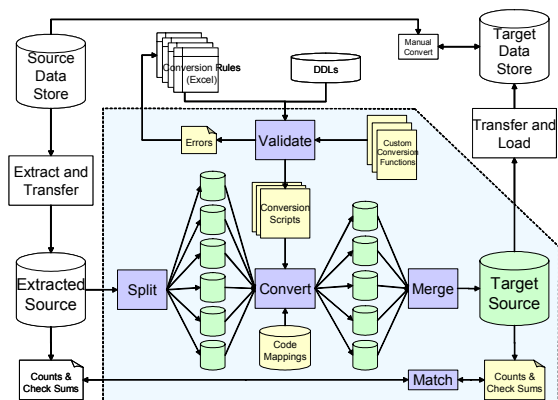
Secondly, the necessary understanding of the data and its relationships can be developed more quickly and effectively with IB-ARM, by viewing the 'live' system information captured in the ARM Repository. This ensures that the information on which critical decisions are based is complete, current and authoritative (unlike manual reviewing of portions of the data and out-dated documentation).

Thirdly, instead of having to develop automated conversion routines from scratch, IB-ARM is accompanied by an impressive set of automated tools. While (naturally) our tools must be customized to accomplish the client-specific task at hand, the capabilities within IB-ARM ensure that the conversion routines are simpler and that the cost of automation is more easily justified. As a result, with IB-ARM more conversion processes can be automated, reducing the error-prone and time-consuming manual conversions.

'Win-Win' — Using IB-ARM technology, data migration projects can be delivered *faster*, *cheaper* and with *higher* and more reliable *quality*. At Information Balance, we don't believe that 'magic bullets' exist — the next-best thing is to use IB-ARM and simply automate what makes sense to automate.

Conversion Framework

The following diagram illustrates a sample conversion solution using IB-ARM:



In the diagram the shaded area represents Information Balance's "black box" conversion solution. The process receives as its input an extract file containing data to be converted (prepared by the client) and produces as its output a load file containing the transformed data ready to be loaded into the target database.

The conversion engine also uses as input a series of static (i.e. prepared only once) Excel spreadsheets that describe mapping specifications for each table, file, column or field that is within the scope of the automated solution. The specifications reference data definition language (DDL) statements that describe the source and target data stores.

Repeated Conversion Execution


Actual conversion of data is typically planned to take place in segments over a period of time. This helps to mitigate project risks (avoiding the 'big bang' approach to data conversion).

Automated data conversion can be re-run as often as required with minimal effort. It is still possible that some data will need to be converted manually and entered into the target database via direct database edit. This manual conversion may take place before or after each automated conversion run.

The IB-ARM data migration process is designed to allow for that migration to take place in coordination with the Application Migration project itself. This tight integration of the data migration activities with the associated new application development improves the manageability of the overall project and optimizes resource utilization.

About Information Balance, Inc.

Information Balance, Inc. was founded in 1988 to provide consulting and training services to the IT industry. Over the years and through continuous growth, the company's field of expertise has significantly broadened and now includes all aspects of Systems Development and Integration, covering all platforms including mainframe, client/server and the Internet. Many of these areas are supported by formal training curricula.

 Today, Information Balance, Inc. is a well-established firm with offices in Canada and Europe. Sustainable, controlled growth has been the mainstay of Information Balance's success, with over 30% growth year over year. Information Balance has been awarded the following accolades supporting its corporate excellence.

- Financial Post Fast 50 ('98,'99,'00)
- Profit Top 100 ('99,'00)
- Andersen 50 Best Privately Managed ('99, Regional Finalist)

Information Balance maintains on-going professional relationships with many large Fortune 500 corporations and government organizations.

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