

Overview

Cobol2Net is a migration service provided by ATX to migrate existing COBOL applications to .NET. Such a migration is very complex, especially when the semantic gap between source and target platforms is significant. This service helps organisations to reengineer or modernize their COBOL legacy systems, based on automated and customized processes.

This approach presents important benefits over fully manual migration processes:

- Minimizes time, cost and risk of the migration process;
- Preserves functionality of the original system;
- Increases development potential and business value of the new system.

Why Migrate?

Many companies are looking for strategies and tools to migrate from COBOL development environments to the modern environment Microsoft.NET.

The reasons for this interest vary, but include:

- Preserve huge investments in applications in use for many years;
- High cost of upgrades and operations, as well as a high cost/performance ratio;
- Lack of flexibility and long time-to-market for new or improved developments;
- Avoid using redundant and unsupported technologies, including difficulty finding suitable staff;
- High risk associated to full manual rewriting.

Why .NET?

.NET is a framework that consists of a large set of development tools, servers, software and services. It is a attractive platform for Internet-based applications, as it offers cutting-edge technologies for developing Web Services and Web Applications. .NET solutions have the potential for adding significant business value to IT systems for a number of reasons, including:

- Multi-language support, together with different platform capabilities;
- Faster/streamlined development effort, plus easier deployment and management;
- Optimal performance and improved scalability, with better security;
- Enhanced business agility and faster time-to-market for new developments.

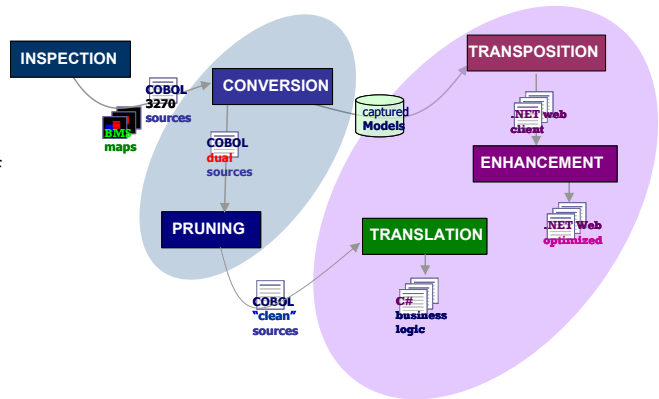
Scope of Migration

Cobol2Net services cover the complete scope of COBOL applications.

Front-End migration: 3270 CICS Transactions Conversion

The ATX migration approach is essentially a multi-phase reengineering process that removes the 3270 related code from the programs, followed by the optional generation of a new modern front-end and middleware, based on the captured information during the parsing of those programs.

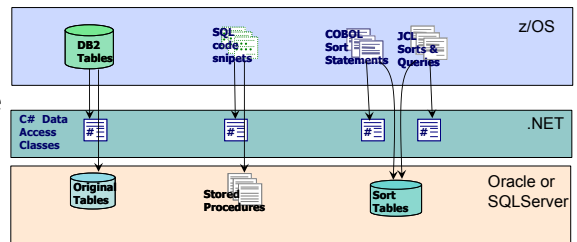
With this approach, we achieve an effective conversion of legacy 3270 transactions to message transactions, with a strict preservation of the original business logic and without any presentation related code.



Data Model Migration

Migration of DB2 Tables, Queries and Cursors to a Layered Architecture

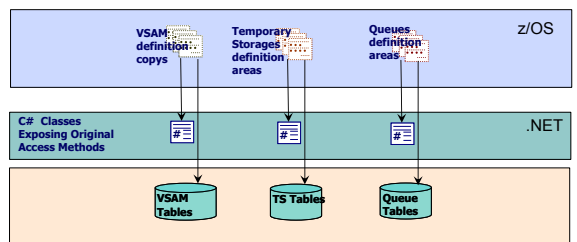
All DB2 data model entities and SQL statements are translated to target DBMS tables or procedures. A middle level layer is created with the C# generated classes that concentrate all accesses to the new tables or procedures, this way reducing direct dependencies in the migrated code.



Migration of VSAM Files and Temporary Storage

All other legacy persistence mechanisms are migrated according the relational model strategy, by creating a middle layer level library to isolate and concentrate all data accesses. Original access methods are preserved.

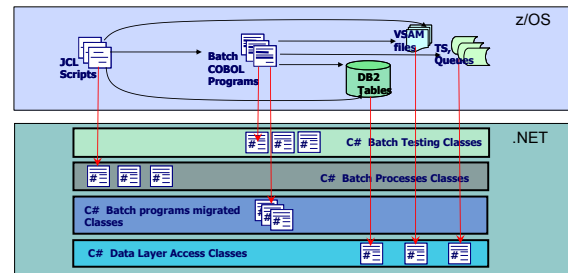
This middle layer library also implements the original access methods, thus allowing the migrated code to preserve the exact functionality, structure and organization as the original one.



Back-End Migration

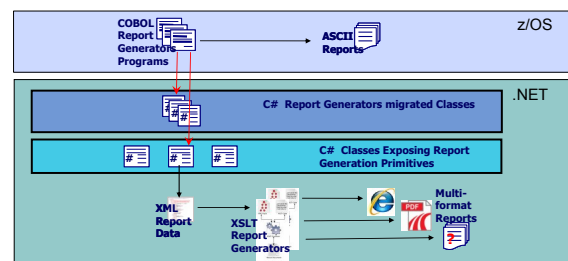
Batch Programs and JCL Scripts Migration

The strategy for batch and online programs migration focuses on retaining the structure of the original legacy code while organizing the new migrated application according to the best practices of software design and target architecture.



Report Generators Migration

While following the same strategy on the batch programs migrations, by preserving the original report generation directives, the output generation is much more powerful, since it will separate the data and positioning from the target output, allowing an easy way to expose the same reports in different formats (HTML, PDF, etc.).



Architectural Optimization

The application's design is organized according to the industry-accepted Model-View-Controller (MVC) architectural pattern, in order to minimize interdependencies amongst different parts.

Model

- Maintains and manages the information manipulated by the form.
- Manages the communication with the database, using Datasets to store the data.

View

- Visualization of the model state;
- Responsible for the user interaction.

Controller

- Responsible for the relation and coordination between the Model and View components, in addition to the form's functional interface;
- Manages user interactions, mapping user actions and events into application responses;
- Translates the actions within the View to actions performed on the Model.

ATX Technologies Ltd provides innovative and powerful solutions as well as a comprehensive set of services for companies and organizations that wish to modernize their software applications or improve their development process and software infrastructure. Our mission is to help our clients survive and grow in the turbulent markets of today by relying on IT systems that are agile in responding to business and technological changes, and can maximise efficiency across organisational structures.

Our mother company - ATX Software SA - has been in operation since 1996, when a team of young graduates decided to channel their creativity to the development of cutting-edge software engineering tools. During this period, we have built a wide portfolio of clients in the public and private sectors, both nationally and internationally, who have been using our services and solutions (often in more than one occasion) with improved results in cost effectiveness, productivity, quality and performance.

One of the main keys to our success is the degree of technological innovation and specialization that we have achieved. Our investment in R&D has been paramount for developing technology that is both cost effective and highly innovative. The fact that we have been full partners of several European research projects and networks has allowed us to remain at the cutting edge end of IT and be competitive in what is a very fierce market.

Our partnership with the University of Leicester (initially sponsored by the European Commission) has given us the opportunity to engage with - and recruit from - a highly qualified pool of people. We take pride in having put together a flexible, multinational team of top professionals, which has allowed us to adjust to - and cope with - different project scales and market needs.

These factors are key to our ability to deliver the highest possible return to our customers and we are committed to developing and expanding them further.

For more information, please go to www.atxtechnologies.co.uk.

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