

Overview

Access2Net is a service provided by ATX Technologies to migrate Microsoft Access applications to a .NET/SQL Server solution, at a rate much faster than any manual approach.

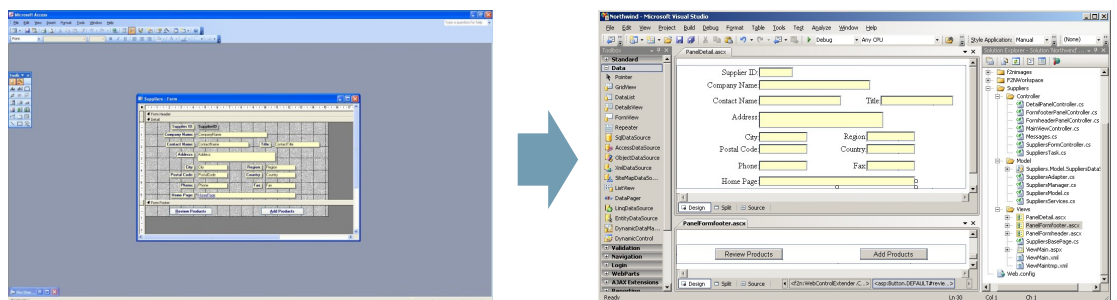
Using a combination of ATX tools and the SQL Server Migration Assistant for Access (SSMA), customers can quickly migrate their applications to the Cloud, taking advantage of several benefits whilst ensuring minimal impact on their user base. The resulting application also provides a framework for future developments, including new applications.

Reasons to Migrate

There are a number of reasons that companies are looking at migrating their Access applications to a .NET/SQL Server solution, but mainly the following reasons apply:

- Allow multiuser access to a database.
- Redesign and rewrite to fewer and better applications.
- Interchange data with the external world.
- Better analyze and solve performance problems.
- Benefit from SQL Server 2008 database security improvements.
- Technical limitations of Access (e.g. concurrent users, database size, etc).

Access applications can often be found in multiple quantities, with heavy reliance on in-built data navigation and management functionality that cannot easily be rewritten. Thus, companies cannot often afford to take the risk to rewrite these applications by hand and are looking for fast, efficient and safe solutions for upgrading them.



Strategy



Tables

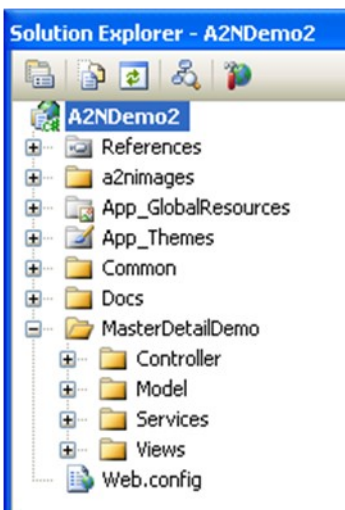
Each table is converted into a database table in SQL Server through SSMA. In addition, each table is represented in the application as a DataTable in a .NET DataSet, where each Form has one DataSet. The DataTable is exposed to the application through a Manager class (to handle loading, querying and saving data for that table) and an Adapter class (representing one record from that table).

Queries

A number of options are available for the target of the migration of Queries. Firstly, SSMA can convert queries to views and Access2Net will handle these in a similar way to tables. Secondly, the base SQL command can be used to generate new application Manager and Adapter classes for a DataTable, representing the view only in the application layer and not in the database. Thirdly, a query can be migrated to a database stored procedure, with application manager and adapter classes generated to populate data from the new database function.

Forms

Access2Net converts Forms into pure .NET code, with one Panel and Window class per Form, and all standard data navigation functionality built-in. Furthermore, for each DataTable in the Form's DataSet, a Search mode is made available for users to save time looking for important data.



Reports

The migration of Access Reports is targeted by SQL Server directly, where the Report Manager interface allows for the importing of Access files directly. The output is a hosted catalogue of SQL Server Reporting Services.

Macros and Modules

Access2Net targets the migration of macros and modules to .NET service methods in the application layer. The output is pure .NET code arranged as one class per macro/module, and one method per function or sub.

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

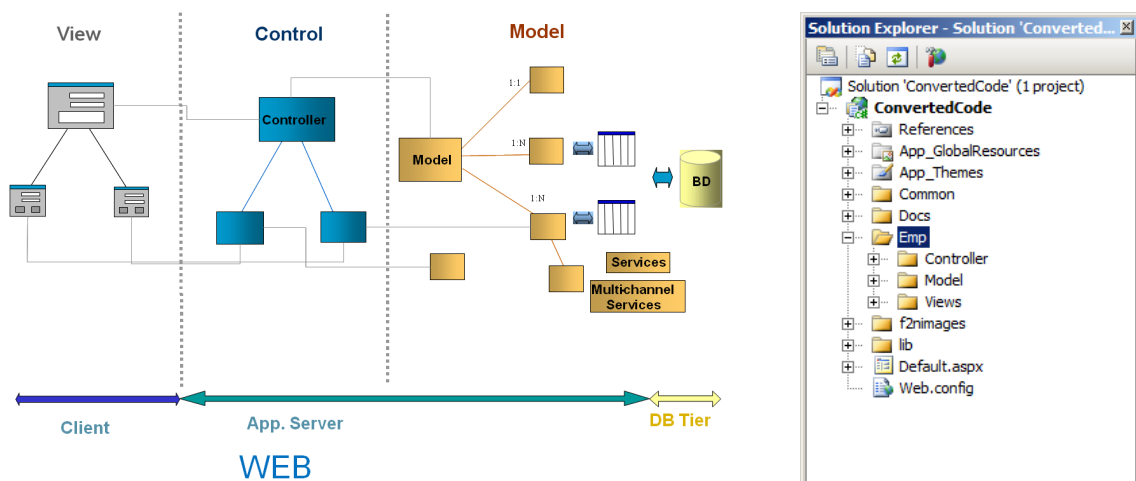
- Maintains and manages the information manipulated by the form.
- Manages the communication with the database, using Datasets to store the data.

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.



Access2Net makes use of the SQL Server Migration Assistant tool from Microsoft. This tool is capable of automatically migrating Microsoft Access database components (i.e. tables, data and queries) to SQL Server. In addition, SQL Server is capable of converting Microsoft Access Reports to SQL Server Reporting Services. For more information on SSMA, please go to <http://www.microsoft.com/Sqlserver/2005/en/us/migration-access.aspx>.

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 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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