Wrycan/Fitz and Floyd Customer Success Story

Altova partner uses Mapforce to create a modern, Web-based, Oracle to FTP system interface for a retail and manufacturing client.

Overview

Fitz and Floyd is a leader in design and manufacture of hand painted ceramic giftware. In 2007, they approached Wrycan, an Altova partner focused on content-centric XML expertise and related software development, for help creating a solution that would allow Fitz and Floyd to interface their existing CRM system to their new Web-based storefront application by MarketLive, the leader in E-commerce software solutions.

Fitz and Floyd had already purchased a license to Altova’s MissionKit software bundle, so Wrycan was able jump right in and start mapping data from Fitz and Floyd’s Oracle 8.0.5 database to MarketLive’s proprietary schema using Altova MapForce.

Wrycan assigned the project to a Principal Consultant, who had plenty of previous experience with XML technologies (including XSLT and XML Schema) as well as with large-scale databases, but who had never before used MapForce, Altova’s data conversion, transformation, and integration tool.

The Challenge

Fitz and Floyd required a solution that would automatically synchronize data from their Oracle database to MarketLive’s storefront application. It needed to perform the following functions: inventory updates, product updates, and order status updates. This way, when a customer ordered a Fitz and Floyd product via the MarketLive interface, they would be getting real-time information about the company’s inventory.

The solution needed to be easy to maintain, cost effective, completed on time, and easy to use so they could go live with their new storefront quickly and easily.

Fitz and Floyd’s existing data was housed in an Oracle database and was organized according to internal requirements. In order to transform their data into a format that would work with MarketLive’s storefront application, Fitz and Floyd data needed to be mapped to MarketLive’s XML Schema. In addition, there needed to be a system in place to track and log any transaction errors that occurred.
The Solution

Because of MapForce's ease-of-use, the Principal Consultant was able to get started using its intuitive features right away. Wrycan used MapForce to map the transformation from Fitz and Floyd's Oracle database to the XML Schema instance (XSD) provided by MarketLive. Using the database as the source component and the XSD as the target, the following mapping was produced:

In order to map to some XML Schema entities that were not explicitly defined in the original MarketLive schema, Wrycan used Altova XMLSpy's graphical schema editor to fill in the gaps, adding attributes to the schema that had not previously existed and thus ensuring that all necessary Fitz and Floyd data would be mapped to the MarketLive Web interface.
An example of the schema modifications is shown below:

MapForce's unique code-generation capabilities allowed Java code to be automatically produced for product, inventory, shipping, and order updates. This code was then packaged along with Wrycan's proprietary Transaction Manager.
MapForce made it very easy to update and deploy the quickly changing data requirements throughout the project. Because of MapForce’s built-in code-generation capabilities, non-technical users can also update the data mapping when there are changes.

**Simple Web-based Transaction Manager**

Utilizing open source Java technologies such as Apache Tomcat [http://tomcat.apache.org/](http://tomcat.apache.org/) and Quartz Enterprise Job Scheduler [http://www.opensymphony.com/quartz/](http://www.opensymphony.com/quartz/), Wrycan was able to create a simple transaction manager that easily allowed the MapForce Java transactions to be integrated, scheduled, and logged.

The Transaction Manager is a custom software application made specifically for Fitz & Floyd by Wrycan, but built in such a way that it can be reused for future clients. It consists of several components:

- **User interface** – Web-based UI allows the integration of MapForce-generated Java code
- **FTP interface** – adds the ability for files to be downloaded for transformation from Oracle database format to the MarketLive XML format or vice versa
- **Scheduler** – allows the automation of the data migration
- **Reporter** – stores transaction results in XML files accessible in the user interface and also has the ability send emails in case of exceptions.

The Transaction Manager’s user interface is the point of contact for Fitz and Floyd to control and schedule any data transformations. Because Wrycan wanted to be able to reuse the Transaction Manager, they chose to export the MapForce code in Java, a platform-independent programming language. (MapForce can also generate source code in C# and C++. This code is an integral part of the Transaction Manager, as it dictates the data mapping process, allowing Fitz and Floyd’s internal information to be accessed via the MarketLive interface.

The FTP interface is a simple way to manage the transfer and delivery of files from within the Transaction Manager once the MapForce Java code has been generated and the data has been transformed according to the MarketLive schema.

A built-in batch scheduler allows Fitz and Floyd to automate the data migration operations by content type (i.e. order, inventory, product, etc.).
The reporting component allows the result of each transaction to be logged in XML. Because of this, if any transaction errors occurred, Wrycan was able to use Altova XMLSpy to analyze and debug the issues.

**The Results**

Fitz and Floyd now has an easy to use data integration layer that is extensible by adding new MapForce transactions, and they can easily adjust their current transactions. Any updates made to the Fitz and Floyd Oracle database are automatically transferred to the MarketLive application in a format that it can readily understand.
Because the Transaction Manager application is based on platform-independent Java code (generated by MapForce), Wrycan also has a reusable application that can be used as an asset to any online retail company. Wrycan is now able to approach potential clients with a proven data integration layer product that provides job scheduling, email notification, and FTP integration and can utilize any database or schema output via a custom Altova MapForce transformation.
When speaking about this project, Dan Ochs, the principal consultant at Wrycan involved with the Fitz and Floyd application stated "MapForce has proven to be an easy to use, effective tool for making the data integration and mapping process much easier and faster to implement."

Find out how MapForce can help with your data integration challenge. Download a free 30-day trial of MapForce® 2007 today!