

BizTalk Integration Provides Business Critical Functionality for Expanding Medical Device Company

About Client

RDA's client is a leading global medical device company that develops, produces and markets instruments, implants and biomaterials for the surgical fixation, correction and regeneration of the human skeleton and its soft tissues. The company is represented on every continent and employs approximately 8,500 people worldwide. Annual revenues exceed US\$ 2.3 billion.

Background

This company's Global Product Supply (GPS) support system is responsible for the interchange of six transactions between a locally hosted JDE system and a European hosted SAP system.

Project Detail

RDA implemented a BizTalk 2006 integration solution that serves as a hub to decouple disparate systems in the enterprise. In this instance, it brokers information between JDE and SAP. Specific requirements included:

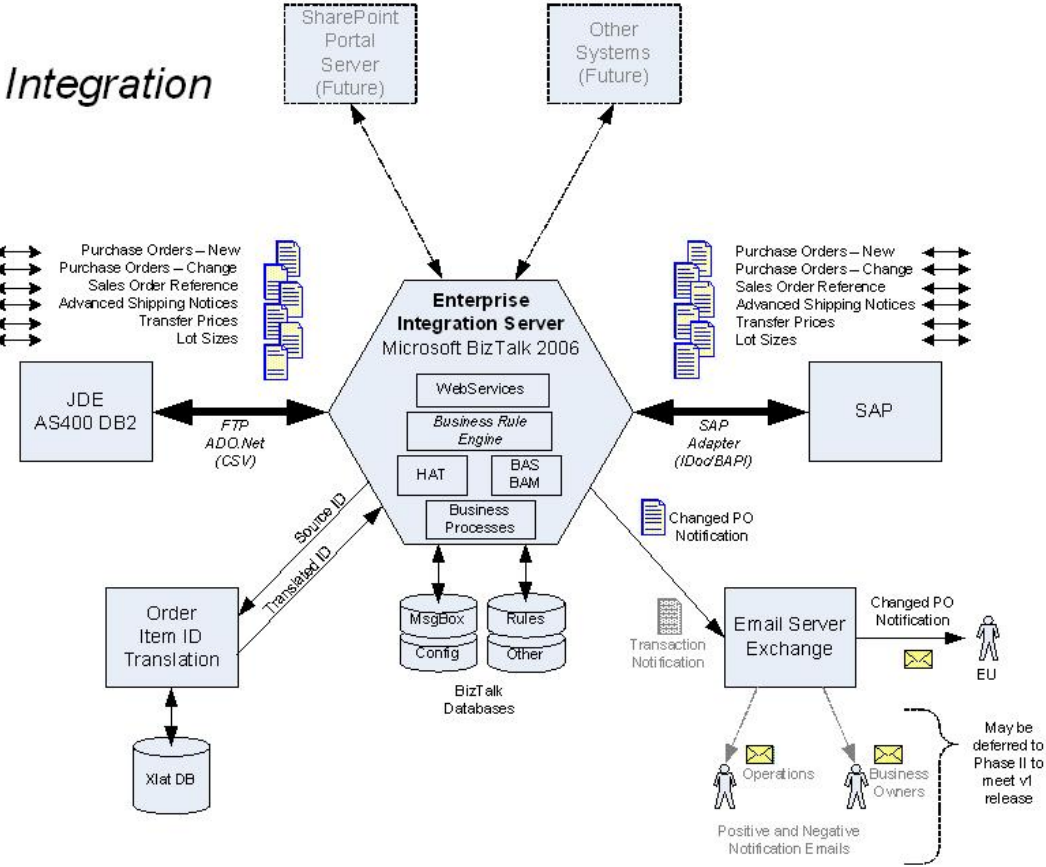
- Establishment of a core development and runtime framework;
- Bi-directional transfer of data between JDE and SAP as follows:
 - Purchase Orders - New
 - Purchase Orders - Change
 - Sales Order Reference
 - Advanced Shipping Notices
 - Transfer Prices
 - Lot Sizes
- Email of Purchase Order change to end users;
- Translation of SAP Order Item ID to and from JDE using a custom SQL Server translation table;
- Integration with JDE through FTP and a custom ado.net component;
- Integration with SAP through the BizTalk SAP adapter using IDoc and BAPI;
- Knowledge transfer to client staff as they worked under the direction of RDA completing basic requirements.

Benefits

The solution was a critical component in the integration between this company's U.S. and European operations. Transaction levels were soon to grow from a handful per day being manually entered to thousands per day that could not be managed without a robust, automated solution. Detailed alerts with complete audit trail information were implemented as well and provided for completion of any orders outside the normal process.

Technically Speaking

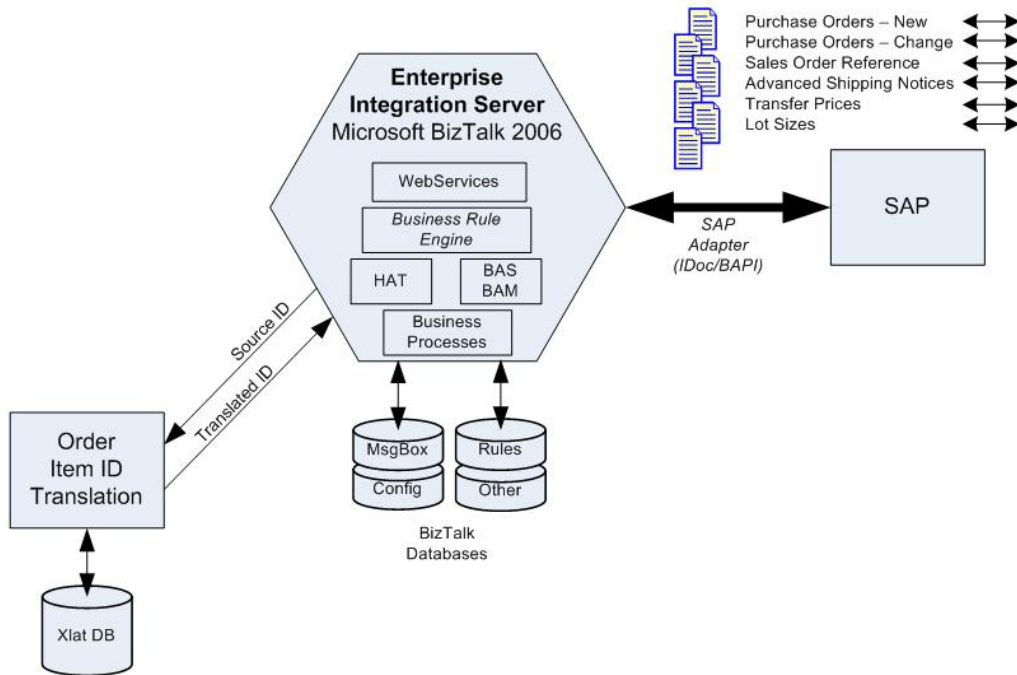
The first diagram below depicts the top level integration architecture for the Global Product Supply Support system responsible for the interchange of all transactions.



Enterprise to SAP Integration

The next diagram depicts the enterprise interfaces to and from SAP. The BizTalk SAP adapter is used to integrate to and from SAP via IDOC and BAPI. The Order Item ID translation database is also used to translate outgoing PO order item ID to the SAP system. An IDOC is consumed by BizTalk and an email is generated and sent to the U.S. users.

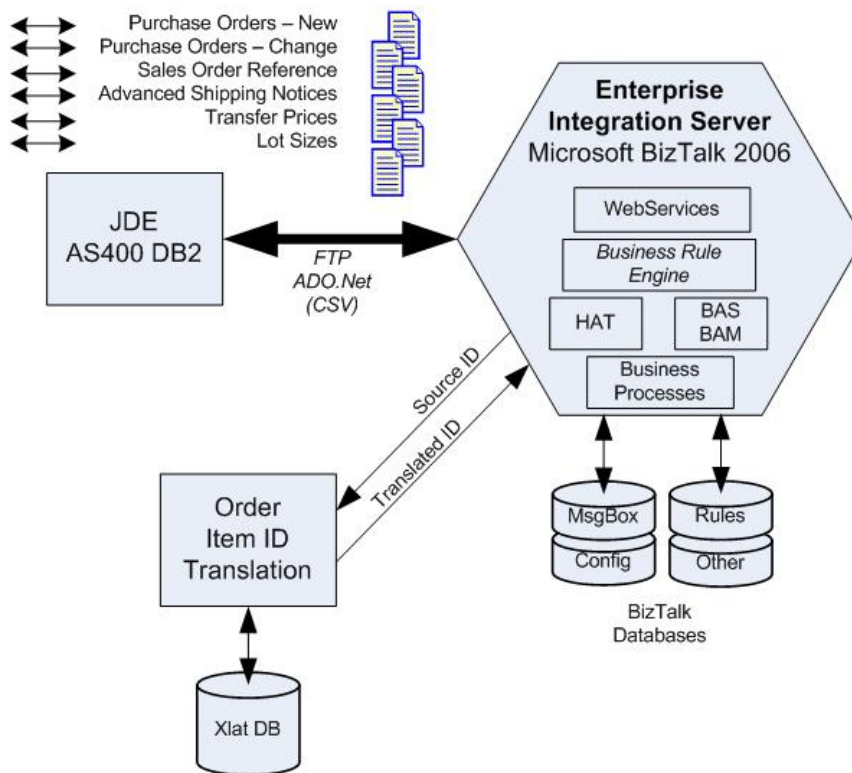
Enterprise to SAP Integration



Enterprise to JDE Integration

The next diagram depicts the enterprise interfaces to and from JDE. The BizTalk FTP adapter is used to integrate to and from SAP via CSV. The Order Item ID translation database is also used to translate an incoming PO item ID to the JDE system. An ADO.NET custom component developed by our client is utilized in the communications with JDE to trigger events. A CSV file with change PO information is dropped into BizTalk. BizTalk generates an email from this information and forwards it to the European users. The out of the box DB2 adapter for AS400 has been ruled out of the interface given its need to enable journaling on the AS400, which is not acceptable to the client's AS400 system.

Enterprise to JDE Integration



Purchase Order Change to SAP Integration

The final diagram depicts the enterprise interfaces to SAP for changed POs. The BizTalk SMTP adapter is used to send emails to EU to notify EU of a changed PO. The EU systems are not ready to electronically process changed POs and the business has decided to send POs electronically.

*Enterprise to SAP
Purchase Order Change Integration*

