

ULTIMUS & BizTALK

SUCCESSFUL INTEGRATION STORIES



Introduction

For organizations looking at broad process initiatives that involve both human-intensive and integration-intensive processes, the combination of the Ultimus BPM Suite and Microsoft BizTalk Server 2004 provides capabilities and flexibility that no competitive solution can even approach. Ultimus is recognized as a leader in the workflow and pure play BPM market and Microsoft BizTalk is held in similar regard within the Enterprise Application Integration market. Combined, customers have a 100% Microsoft-centric solution that addresses every process imaginable.

Beyond allowing customers to fully leverage the strengths of each products, the beauty of the combined solution is the simplicity of integration. As Web Services and .NET adoption continues to grow, IT shops are looking more and more for solutions that support the development and use of Service Oriented Architecture (SOA) concepts. The framework of SOA is built around loosely coupled components that can easily interact using standard protocols. Ultimus and BizTalk support those concepts through four integration approaches:

- HWS - Ultimus can launch BizTalk Actions or Activity Models via Human Workflow Services (HWS)
- XML - Ultimus and BizTalk can launch activities and update processes in the either system via XML
- Web Services - Ultimus and BizTalk can launch activities and update processes in the either system via Web Services
- .NET Code - When low level interaction is need, direct .NET code connections can be established

Highlights

- Integration in a day
- Flexible options including HWS, XML, Web Services, or .NET Code
- Address any business process regardless of the complexity of human or system requirements
- Accelerate the deployment of Service Oriented Architecture (SOA) based solutions

This paper will describe two real world solutions that leverage these capabilities. As you review this material, you will discover that the following guidelines can be used to successfully position these complementary products for customers:

- If human-centric needs are driving the decision, lead with Ultimus.
- If integration-focused needs are driving the decision, lead with Microsoft BizTalk Server.
- If they are looking for a broad platform to address both complex human-centric processes and enterprise application integration, then offer both products for the most complete process solution available on the market today.

Defective Parts Management – XML Driven Integration

A leading manufacturer automated the entire defective parts management process and realized rapid measurable benefits in terms of cost reduction, improved quality of parts on the manufacturing floor, and reduction in resolution turn-around time.

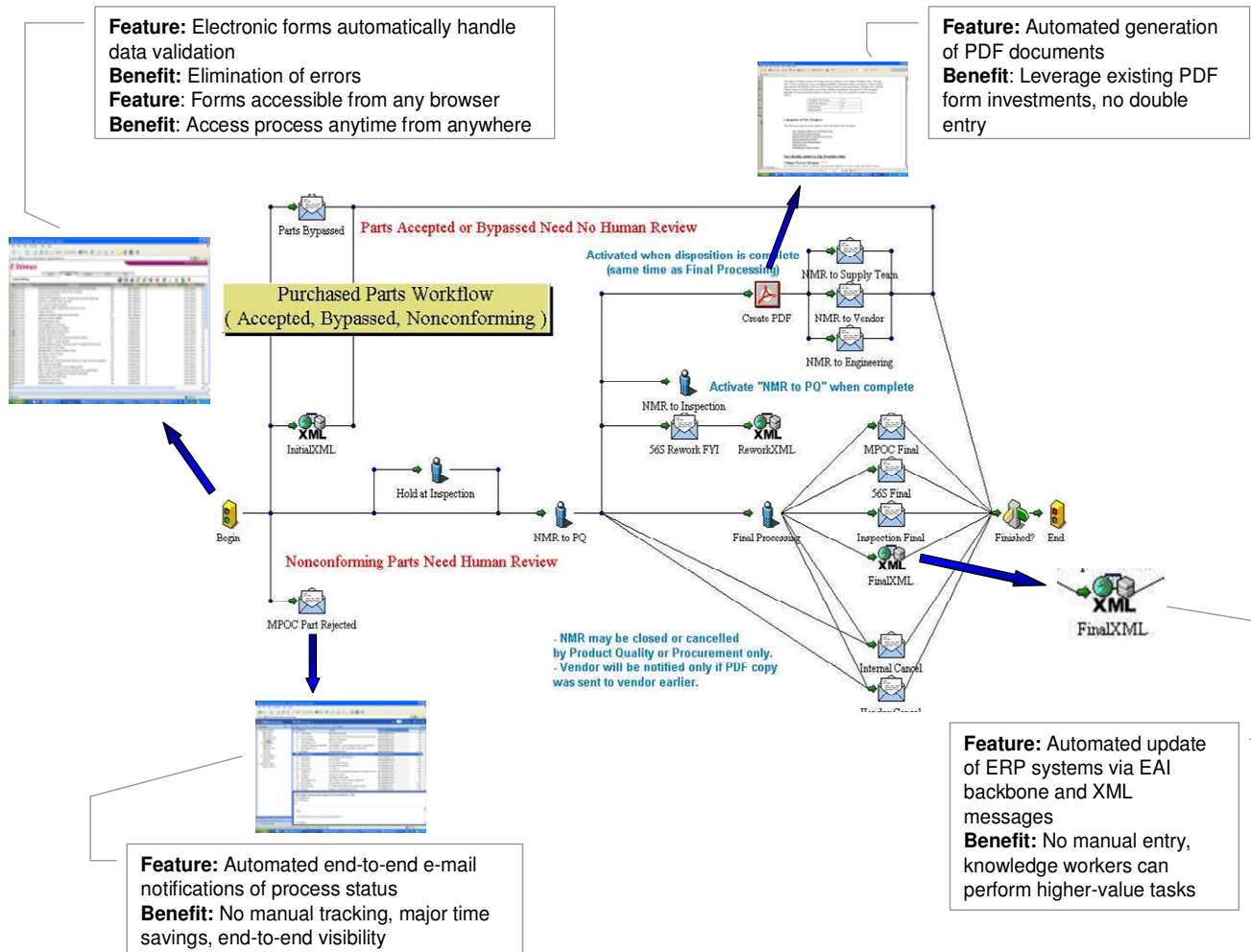
The process is initiated when an inspection manager discovers a defective part in an incoming shipment from a vendor. At this point, the inspection manager initiates a new incident of the process using an Ultimus Web-based electronic form. When the form loads, it automatically extracts valid part information from the manufacturer's ERP system, and provides that information in easy-to-select drop-down selection boxes in the form. This model eliminates errors as the information is validated in real-time on the form. Once the inspection manager has entered all of the required information on the form, the task is submitted, in so doing initiating a new incident of the process.

At the next step, the process automatically sends an XML message to the company's internal ERP system using an automated Ultimus step. This XML message is sent via the company's Enterprise Application Integration (EAI) backbone that leverages BizTalk Server, and marks the part as defective in the ERP system, ensuring that it is not allocated to any production batches.

At the next step, a product quality representative reviews the incident, decides whether the part should be fixed internally, or whether the defective part should be returned to the vendor. If the part is allocated to be fixed internally, the next step in the process sends an XML message to the ERP system, automatically scheduling the fix, and the process will complete. However, if the product quality representative selects to return the part to the vendor, the next step in the process automatically generates a PDF form with pertinent details about the defective shipment and e-mails the PDF form to the vendor. This gives the vendor prior notification that the manufacturer will be contacting them shortly about the defective part and ensures that the vendor is adequately prepared for the call. Both the generation of the PDF form and the e-mail occurs in a totally automated manner without any human intervention.

As a next step, the procurement department receives a task to contact the relevant vendor via telephone to arrange return authorization for the defective parts. The procurement representative will enter the return authorization information into the form and send the task forward to the next step in the process. An automated e-mail notification is then sent to the shipping/inspections department with return authorization details for final shipment to the vendor. All involved participants in the process are also notified of the final status of the defective parts through another automated e-mail notification.



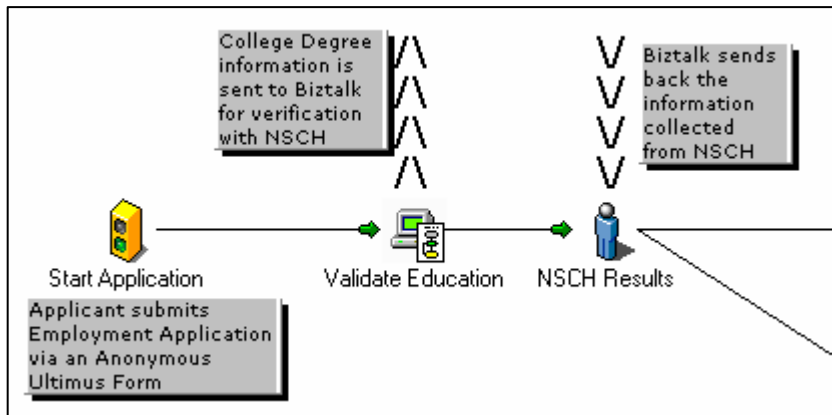


At all points throughout this process, multiple e-mails are sent out various internal groups notifying them of the status of the incident at key points in the process. This ensures that all involved parties are notified of the status of the defective parts situation automatically, whenever necessary. The loose coupling of system components provides the organization with a great deal of flexibility in managing and updating different aspects of the system

Applicant Processing – HWS and Web Services Integration in 1 Day

In another case, a major firm was looking for ways to extend the capabilities of their BizTalk Server 2004 solution with robust human workflow capabilities. One of their requirements was to improve the management of their recruiting practices. In their industry, they are required to perform a wide variety of background checks and others reviews that involve third parties. They were already in the process of leveraging BizTalk to manage those integration efforts, but wanted to extend the process to include all of the human steps involved in recruitment.

Ultimus was called in to develop a proof-of-concept for the solution. In one day, a complete process was developed that called BizTalk using an orchestration that was developed with Human Workflow Services (HWS). In turn, BizTalk exchanges information with the Ultimus process using Web Services. Since both products can both produce and consume Web Services, the customer has incredible flexibility to integrate the solutions and their entire computing infrastructure any way they need to support their processes.



The integration simplicity was driven by SOA concepts. In Ultimus, a BizTalk Flobot step was added to the process. The Ultimus BizTalk Flobot was trained by specifying the particular BizTalk Action to call and graphically mapping data between the two systems. Similarly, in BizTalk, a Web Services call was added to the orchestration to update Ultimus (again via a data exchange) with the results of the external information searches.

The proof-of-concept was very favorably received and the company is moving forward with a full implementation of both products.

Summary

On the surface, the discussion of platform requirements for business process management can be confusing. In most cases, every process involves some level of both human and system interaction. As a result, from a technical perspective, it can often be a challenge identifying whether to recommend a pure play BPM solution that is very strong in human-centric processes, like Ultimus, or a process centric integration platform, like BizTalk Server 2004. But, as you move to the next level of detail, which is really driven around ownership of the processes, the picture becomes clearer. When the ownership of the process resides within a business organization and they think of it as a solution that their people execute with the help of systems, then Ultimus is the right product to lead the project. When the ownership of the process resides within IT, and integration needs drive the solution, with people involved just to help it along, then BizTalk is the clear choice to lead. In most cases, you'll have a mix of these processes, and both products should be used to provide the best solution on the market.

This approach was summarized in a recent Meta Group Research Flash (Partners Deliver on Microsoft's Jupiter Vision, META Flash 2021, April 14, 2004).

“Bottom Line: When making business process management (BPM) technology decisions, organizations need to have a good understanding of their process requirements. If they are more human and paper-centric, they should consider a product like Ultimus that extends the HWS APIs of BizTalk 2004. If they are more EAI-driven, then BizTalk 2004 alone may be appropriate. When the process requires a mix of both, organizations should combine the two for complete coverage of the process spectrum in a service-oriented architecture model.

Business Impact: To fully leverage emerging BPM technology, organizations must devote as much attention to optimizing people and paper-oriented activities as they do to systems tasks.”

Ultimately, for customers, the combination enhances their ability to quickly and easily combine various aspects of their overall computing infrastructure in a service oriented architecture that is flexible, easily deployed, and provides the opportunity to gain significant competitive advantage.