

# Reynolds & Reynolds Streamlines Order Processing with Vitria



*Since we deployed Vitria's BusinessWare, we have reduced the time we spend integrating new applications from weeks or months to a matter of days – this is a dramatic improvement in productivity for us. Reynolds is now confident its IT infrastructure and integration procedures are flexible enough to easily add or change applications. Utilizing Vitria's superior business process automation component and BusinessWare's capability to process large volumes of transactions, we know we can successfully adapt to the changes the Internet and ebusiness will introduce to the automotive retail industry."*

- ▶ *Steve Hangen, Vice President Software Engineering Application Services, Reynolds and Reynolds*

## Solution Overview

Buying a car is one of the biggest investments we make, and it's amazing how fast and easy it is to do these days. Reynolds and Reynolds ("Reynolds") is facilitating the car-buying process by leveraging the power of Internet technology to simplify many business-related tasks, such as billing, shipping, and parts location and ordering, that can slow down automotive retail processes. To help make this happen, the company selected Vitria's BusinessWare® as its integration server for its flexible application integration capability and business process automation functionality. With BusinessWare, Reynolds successfully streamlined and automated internal processes company-wide and Web-enabled many of its operational support systems, improving service to its customers in the competitive automotive retail marketplace.

## Background

Reynolds is aggressively driving the global transformation of automotive retailing to create a positive purchase experience for the consumer, while also helping dealers and manufacturers get closer to the consumer and eliminate excess costs and market inefficiencies. Reynolds strives to improve dealership operations and strengthen relations with car companies. The company's services include a full range of retail and enterprise management systems, networking and support, ebusiness applications, Web services, learning and consulting services, customer relationship management solutions, document management and leasing services. Headquartered in Dayton, Ohio, Reynolds has over 70 years of automotive industry experience and operations in 19 countries.



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Reynolds and Reynolds is the leading provider of integrated solutions that help automotive retailers manage change and improve their profitability. With 75 years of experience serving automotive retailing, Reynolds enables car companies and retailers to work together to build the lifetime value of their customers.

**Employees:** 4,600  
**Revenue:** 992 million  
**Stock Ticker:** NYSE: Rey  
**Industry:** Automotive  
**Region:** Global

## Solution Facts

- ▶ Implementation time: 3 months per project
- ▶ Integrate Oracle, Sybase, Ingres, Engage Media-Bridge and legacy systems
- ▶ Hardware: Sun platform
- ▶ Operating system: Solaris
- ▶ BusinessWare

## Business Challenges/Objectives

To maintain its competitive advantage in serving the automotive retail industry, Reynolds planned to deploy many best-of-breed, modern applications as part of the ongoing redesign and development of its systems and processes. The company wanted a flexible application integration tool to efficiently connect legacy systems with recently deployed applications. "Speed and flexibility of integration were primary concerns when selecting an enterprise application integration (EAI) tool," commented Gary Hess, Project Manager at Reynolds. "The ability to deploy the applications we need quickly and efficiently was an essential objective when selecting an integration server."

A key goal was to accelerate order turnaround time and increase the volume of events Reynolds' back-end systems could process at any given time. With the unprecedented expansion of the Internet, more companies interact electronically. "The volume of orders coming in through Web-facing applications is steadily increasing and projected to at least double in the next year," noted Girish Balsavar, Business Systems Analyst at Reynolds. "We needed an integration server that could easily handle this increasing volume of orders and associated business events."

With Reynolds' legacy systems, each order placed required manual entry into multiple back-end systems. To automate these processes and maximize use of available resources, the company needed an integration strategy featuring powerful business process management (BPM) functionality. "Business process automation was another key goal we wanted to achieve with our implementation of an integration platform," noted Hess. "The ability to redesign our business processes to successfully adapt to any future changes in B2B communications or modern hardware was very important to us when choosing a platform."

In the past, the development of customized solutions to connect disparate systems adversely affected the speed of deploying essential applications. "We wanted to implement an integration server to standardize our integration strategy," commented Balsavar. "Developing point-to-point solutions wastes both time and resources, since each connection must be individually configured. We wanted an integration solution that would eliminate the need for such complicated software development and standardize the processes we use when integrating our applications."

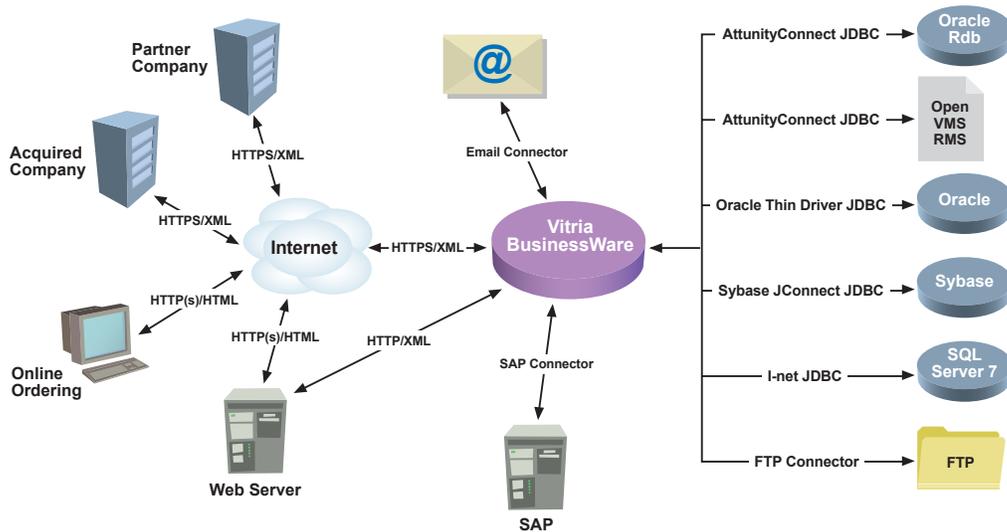
## Solution

After evaluating several vendors, Reynolds selected Vitria's BusinessWare as its integration server for its exceptional EAI functionality, its business process automation capabilities and Vitria's market-leading position.

"Compared with the competitors' solutions, BusinessWare's architecture has a much better design," commented Hess. "The process automation component is clearly the most advanced business process modeling and management tool available, while Vitria's portfolio of connectors surpasses all of its rivals in the EAI space."

Reynolds currently utilizes BusinessWare in four product/application solutions, and has many other projects planned for development over the next two years. Leveraging BusinessWare, the company has automated the order fulfillment and shipping processes used within its automotive and information solutions divisions. Two additional projects, Reynolds Advantage, which focuses on existing customers, and ReySource, which focuses on new customers, have also been completed. Both projects enable customers to order documents essential to automotive retailing, such as invoice templates and work order forms, from Reynolds' inventory using two different Web-facing interfaces, thus streamlining the procurement process by eliminating the need to deal with multiple vendors for every needed supply.

Although they utilize separate Web-based, front-end applications, both Reynolds Advantage and ReySource connect with the same back-end systems, which are integrated using Vitria connectors. Orders entering the Reynolds system via these two applications are published directly to a BusinessWare channel that connects the Web-facing applications to Reynolds' legacy databases—Ingres and Avalon, a Sybase application. Once an order enters the BusinessWare channel, business rules outlined in the process model are applied to the order. Each order is separated into four different components or business events, such as data regarding the location of the inventory required to fulfill the order and invoice information. Reynolds' legacy databases process these events, triggering automated inventory updates. Once this information is processed and recorded, information from the databases is sent to the front-end applications via the BusinessWare channel, alerting the customer to the status of the order. Additional order acknowledgements are automatically emailed to customers.



End-to-End Integration

ChoiceParts, an independent company providing online automotive parts locator and ordering system jointly started by Reynolds, Automatic Data Processing (ADP), and CCC Information Services, also leverages BusinessWare. BusinessWare's HTTP connectors are used to integrate the Web-facing, front-office ChoiceParts application with Reynolds' back-end ERA retail management system, linking the company's partners and creating an automotive parts trading network. "BusinessWare connectors enable our front-end applications and our back-end databases to connect in real time," commented Hess. "Retailers using the ChoiceParts application can source and order the automotive parts they need instantly, saving both time and resources."

Utilizing BusinessWare's flexible application integration functionality, Reynolds has also connected the applications that make up its F&I Forms Subscription. Subscribers to this service, primarily automotive retailers, gain access to various documents and forms designed for use in the automotive marketplace, such as legal forms and financial contracts. Subscribers connect to the system via a Web-based application. Leveraging BusinessWare, Reynolds connects the Web-based interface with essential back-end applications. "We use BusinessWare to connect both our recently deployed modern systems with our home-grown applications," noted Hess. "Without the ability to share data between our applications, enabled by BusinessWare, this system could not function effectively."

## Results

"We now have the ability to purchase and deploy new applications with exceptional speed and efficiency," commented Balsavar. "BusinessWare's flexible EAI capability is very impressive and has had a positive impact on our ebusiness development." With the implementation of BusinessWare, Reynolds has standardized its integration strategy. It is no longer necessary to develop time-consuming and labor-intensive point-to-point solutions to connect applications.

Reynolds has also reaped considerable benefits following its implementation of BusinessWare's process automation component, Automator. By automating and streamlining business processes, both time and resources have been conserved, manual data entry reduced and internal operations optimized. "Business process automation is a feature of BusinessWare that we intend to use company-wide in the future," noted Balsavar. "To date, our use of the Automator component has been in the development of new projects. By automating existing, manual business processes, we have achieved greater levels of operational efficiency."

Leveraging BusinessWare, Reynolds has seen a dramatic improvement in productivity. "When we roll out an integration using Vitria, we actually give our estimates in a matter of days now instead of the usual weeks or sometimes months," added Balsavar. "A lot of times, we can roll out our piece of the integration fully within three or four days in a process that used to take us several weeks."

After just ten weeks in operation, ReySource exceeded \$3 million in sales. By integrating Reynolds' sales force and its national network of warehouses, ReySource provides a convenient way for retailers to leverage the power of Internet technology to simplify their billing and supply management issues for their customers. In addition to providing an Internet-based automotive retailing procurement solution, ReySource also offers daily automotive news updates, stock market insight and a directory of over 22,000 automotive-related links. ReySource 2.0 will allow retailers to order customized products for their dealerships and provide retailers with in-depth order and shipping details, as well as online order status.

In the future, Reynolds plans to use Vitria's Process Analyzer component to monitor the data flow within its systems. By analyzing the information processed through BusinessWare, and the efficiency of its business process models, Reynolds can further redesign and develop its IT infrastructure. "The Process Analyzer component will allow us to change our business processes and ensure that system resources are being used optimally," concluded Hess. "With real-time access to pertinent information and statistics, we will continue to improve our essential business processes."

### Business Challenges/Objectives:

- ▶ Deploy an ebusiness solution capable of handling large order volumes and business events
- ▶ Connect multiple front-end, Web-facing applications with back-end legacy systems, eliminating the need for point-to-point solutions
- ▶ Implement an integration platform featuring a robust business process automation tool to streamline and optimize internal operations, particularly order turn-around time
- ▶ Standardize corporate integration strategy, enabling the efficient deployment of new applications

### Solution:

- ▶ Connect Reynolds Advantage and Print Player Web-facing applications with Ingres mainframe and Avalon databases via a BusinessWare channel

- ▶ Leverage BusinessWare for the componentization of orders, with each component triggering different business events
- ▶ Utilize Vitria's HTTP connectors to integrate ChoiceParts' Web-facing application with Reynolds' dealer management system
- ▶ Integrate the applications required by the Track A business process

### Results:

- ▶ Enabled customers to order essential documents and forms via the Web and developed closed-loop inventory updates and confirmation processes
- ▶ Automated essential business processes, including order fulfillment and shipping by streamlining dataflow through back-end systems and improving operational efficiency
- ▶ Experienced a dramatic improvement in productivity, such as being able to roll out an integration of a new application in days rather than weeks or months
- ▶ Achieved more than \$3 million in sales in just ten weeks due to the implementation of ReySource, which integrates Reynolds' sales force and its national network of warehouses to provide simplified online billing and supply management
- ▶ Created an automotive parts trading network with partners for automotive parts sourcing and ordering
- ▶ Developed a standardized integration strategy, eliminating the need for the development of point-to-point solutions, resulting in the ability to build a connection model and pass information in a matter of days
- ▶ Prepared Reynolds to analyze and monitor dataflow throughout the organization



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