

Wonderware Enterprise Integration Application

Executive Summary

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In order to effectively compete in today's dynamic manufacturing environment, successful companies are recognizing the importance of developing operational excellence as a competitive advantage. A key factor for operational excellence is the capability to integrate the manufacturing supply chain by linking manufacturing systems to business-end supply-chain applications such as SAP, Oracle, and J.D. Edwards, and various Enterprise Asset Management applications.

Wonderware's Enterprise Integration Application capabilities enable customers to integrate manufacturing supply chains and achieve manufacturing operational excellence, providing the business and manufacturing agility required to stay ahead of their competition.

In the United States, the Wonderware Enterprise Integration Application plays a role in enabling executives to comply with the Sarbanes-Oxley Act. This is particularly true for section 404 of the Act, which compels executives to adopt a back-to-basics approach to understanding and prioritizing infrastructure elements according to their material impact on the company's financial statements. Wonderware software can be used to expose, in real time, the material produced, consumed and moved, which in many companies makes up a large part of the inventory financial figures.

Wonderware software plays an integral role in a company's manufacturing and business infrastructures by facilitating an executive's ability to implement and maintain critical business processes related to manufacturing, as well as supporting accurate, real-time financial transactions. The benefits of this capability are universal and relevant whether or not a company is governed by the Sarbanes-Oxley Act.

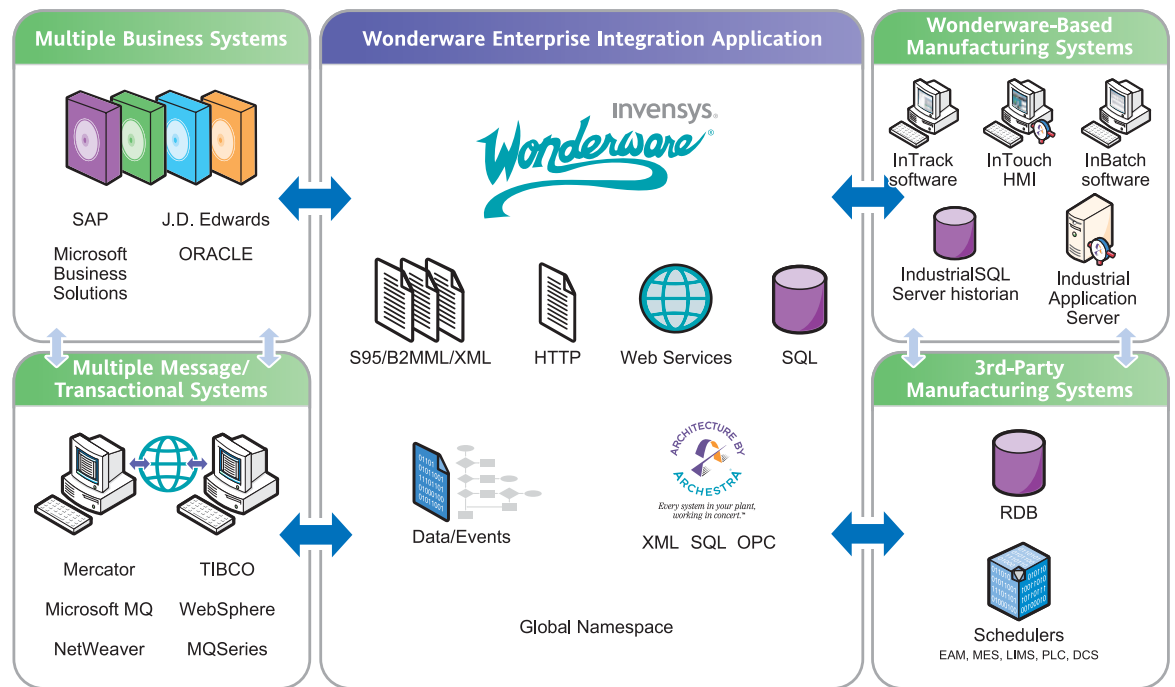
APPLICATION CAPABILITIES

Wonderware's Enterprise Integration Application capabilities are delivered through software and application templates, built on the highly productive ArchestrA industrial software architecture, and applications consulting assistance. These capabilities address many

of the typical problems associated with integrating manufacturing facilities, by enabling:

- **Enterprise Application Integration Between Manufacturing and Business Systems** - Wonderware's Enterprise Integration Application enables the integration of real-time manufacturing data with business applications, such as those from SAP, Oracle Applications and J.D. Edwards, and to other enterprise-level applications in your supply chain, such as Enterprise Asset Management applications.
- **Multi-Site Integration** - Wonderware's Enterprise Integration Application enables coordination and integration between different manufacturing systems on different sites. Multiple applications based on Wonderware software, or other vendors' manufacturing applications, can be linked across sites to complete the manufacturing supply chain. For example, an intermediate product completed at one site may need to be tracked to another site and consumed as a material input in operations at that plant.
- **Transactional Integration Between Manufacturing and Other Supply Chain Applications** - Wonderware's Enterprise Integration Application enables coordination and integration between different manufacturing and business applications, ranging from production scheduling and reporting to inventory management systems to financial analysis packages. This unique application acts as a coordinated, global namespace for all existing manufacturing systems, enabling customers to standardize solutions across all manufacturing operations by normalizing data, messages, calculations and other functions. Abstracting the different shop-floor execution and control systems greatly simplifies overall business-to-manufacturing integration efforts and drastically reduces ongoing maintenance costs.
- **Integration with Existing Messaging and Middleware Investments** - Wonderware's Enterprise Integration Application can utilize a customer's existing messaging and middleware systems and architectures, such as WebSphere, TIBCO and MQSeries, enabling seamless integration to Wonderware software applications within the existing IT infrastructure.





The Wonderware Enterprise Integration Application can operate automatically, transparently sending and receiving messages and forwarding and transforming message content, while concurrently controlling the sequence of operations required to keep applications interconnected and up to date in real time.

APPLICATION BENEFITS

To help our customers succeed, Wonderware's Enterprise Integration Application combines Wonderware's market-leading, real-time event and production management capabilities — built on and integrated with innovative ArchestrA technology — with Microsoft BizTalk 2004's powerful orchestration and workflow management functions, supported by Wonderware applications consulting assistance.

This unique combination of capabilities enables customer solutions with unparalleled flexibility and ease of integration. For instance, the Wonderware Enterprise Integration Application offers:

- Open integration based on industry-recognized S95 XML standards
- A powerful software architecture that offers high availability
- One unique, coordinated global namespace for all manufacturing and control systems

- Architectural freedom combined with built-in, operational security
- Out-of-the-box integration to hundreds of applications in manufacturing automation and business enterprise management
- Easy application configuration and maintenance through graphical assembly, not custom programming
- Message transformation and event detection

The Wonderware Enterprise Integration Application empowers customers to easily design, build, deploy and maintain secure, standardized applications for integrating manufacturing operations and enterprise applications.

This comprehensive approach addresses critical business-to-manufacturing requirements including:

- Integration Capabilities
 - Powerful multi-application workflow orchestration and message transformation
 - Scalability from a small pilot to global multi-site applications
 - The ability to easily and graphically configure workflows without programming
 - Security across non-trusted IT environments
 - Message delivery via highly available architectural options
 - Message transformation
 - The capability to roll out workflows across multiple customer sites

- Seamless integration with Wonderware products and ArchestrA components, as well as databases and automation and manufacturing packages from a wide variety of other vendors
- Support for integration standards such as SQL, ODBC, XML and OLE
- Support for Industry Standards
 - ISA S95
 - B2MML standards
 - ArchestrA architecture
 - Microsoft's BizTalk Server 2004
 - OPC for real-time connectivity to plant-floor devices
 - SQL/OLE DB support for integration with other data sources
- Libraries of Integration Templates
 - Production schedule downloads from ERP, automating creation of batches and lots
 - Upload of production and performance information to ERP systems
 - Linkage to and tracking of materials and processes from site to site via Wonderware integration templates
 - Condition-based monitoring templates that facilitate integration of enterprise asset management and preventive maintenance applications

CONCLUSION

Wonderware's Enterprise Integration Application leverages the ArchestrA software architecture so that customers can easily design, build, deploy and maintain secure and standardized automation and information applications. This offering consists of software as well as applications consulting assistance. With the Wonderware Enterprise Integration Application, you can completely integrate manufacturing operations with business and other enterprise systems. This integration is critical to achieving operation excellence and business performance in today's highly competitive manufacturing environment. Effective integration enables for the development of competitive advantage in cost control, customer service and rapid response to market opportunities.



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