



WebSphere® software

IBM WebSphere Business Integration Server Express, Version 4.3

Highlights

- Offers a flexible, yet comprehensive, business integration solution that can grow with your business needs
- Includes adapters, collaborations, simplified tooling and necessary prerequisites
- Provides streamlined installation, prebuilt process templates and fast-path documentation to help you get up and running fast
- Integrates with back-end systems to help leverage your existing assets and lower overall TCO
- Runs on multiple platforms
- Connects to a wide range of back-end systems, including databases and business applications such as Siebel and JD Edwards
- Provides leading-edge templates to speed implementation of industry-specific processes
- Offers affordable per-processor pricing and flexible terms so you can buy what you need now and upgrade later as your business grows
- Provides support for Web services, including BPEL and other industry standards

As today's midsize businesses react to intense market pressures, from sweeping regulation changes and new supplier requirements to automate and integrate business processes, responsiveness and flexibility have become high-priority issues. The ability to adapt and respond on demand to customers and trading partners, volatile marketplace conditions or new business requirements can have a significant impact on your company's opportunities to succeed. To transform your business into a successful e-business on demand™, you want to ensure all business-critical applications and processes can communicate with each other effectively. You may have many applications that you need to work with, both internally or externally with trading partners. An effective business integration solution can help increase business efficiencies across your entire value chain and reduce your overall total cost of ownership (TCO), while generating new revenue opportunities at the same time.

With short project timelines and limited IT resources, midsize companies can face unique challenges with business process

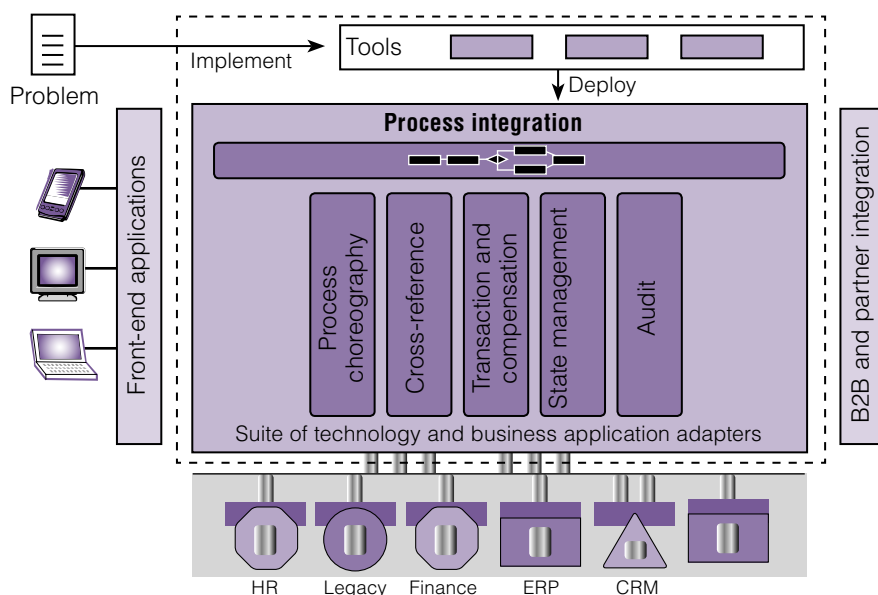


Figure 1. WebSphere Business Integration Server Express process flows.

transformation projects. IBM WebSphere® Business Integration Server Express is designed to help small and midsize businesses automate and integrate their processes and applications throughout their enterprises quickly and easily. Based on open standards, WebSphere Business Integration Server Express can grow to meet changing business needs, while helping you leverage existing investments. You can help increase operational efficiencies as you improve customer, trading partner and supplier relationships. You can compete with larger businesses because you are able to adapt your offerings on demand to meet customer or industry needs and a rapidly changing marketplace.

Get a quick start

A low-risk, affordable path to business integration, WebSphere Business Integration Server Express software can help you integrate your business processes quickly, without straining your budget. Per-processor pricing gives you the flexibility to pay for the solution you need, when you need it. By reducing the expense required to establish or expand your business integration initiatives, you can put more resources toward your business.

With flexible options to help you develop and maintain comprehensive solutions, you can get started now and protect your

investment as you grow. WebSphere Business Integration Server Express, the ideal entry solution, provides:

- *Prepackaged Foundation Collaboration, a process template that enables you to create on-ramp solutions.*
- *Prepackaged business connectivity adapters (up to a maximum of three adapters).*
- *Comprehensive integration capabilities that include process integration, message mapping and transformation, back-end integration and trading partner integration.*
- *Easy-to-use administrative tools that enable business users to design, deploy and manage your Web site effectively without extensive programming.*
- *A streamlined design and user-friendly installation screens to accelerate your time to value.*
 - *An integrated end-to-end installation process*
 - *Automated checking for prerequisites*
 - *Automatic installation of prerequisites, many of which are provided with the product*
 - *A sample program that is installed with the product to provide verification of the installation, when completed*

In addition to the above functions, WebSphere Business Integration Server Express Plus provides additional, advanced capabilities such as:

- *Tools to extend and customize prepackaged business-process templates*
- *A simplified business-process modeling tool to create and manage completely the life cycles of business processes including, design, deployment and management*
- *Extended adapter availability (up to a maximum of five adapters)*
- *Optional Adapter Capacity Pack for WebSphere Business Integration Server Express Plus, which allows you to integrate business applications through a suite of prepackaged adapters*
- *Optional Collaboration Capacity Pack for WebSphere Business Integration Server Express Plus, which enables you to choose one grouping of collaborations (Process Accelerators) from four available business scenario groupings: procurement, customer relationship management, order management, and financials and human resources*

Automate and integrate to increase business efficiencies

Getting fast access to the data you need, wherever it may be, can help give you the flexibility and competitive edge you need in today's marketplace. With a high level of coordination along your value chain, you can increase your flexibility to respond on demand to unpredictable changes in pricing and labor, competition and the needs of customers and suppliers. Information can flow easily around your organization and beyond, into an integrated community of trading partners and customers.

WebSphere Business Integration Server Express software allows you to use a common set of business integration technologies to access information and automate functions that involve business rules and flows spanning back-end systems. Built on open standards, WebSphere Business Integration Server Express smoothly integrates with your existing resources, eliminating the need to rip out and replace your current infrastructure, systems and data stores. By helping you redefine the business processes underlying your operations, WebSphere Business Integration Server Express can help you solve common, as well as unexpected, business challenges. For example, you

can quickly automate individual steps and streamline processes to increase operational efficiencies. Link to trading partners and update shared data faster while eliminating the high costs of manual transactions. Connect internal and external applications to exchange information reliably so you can respond to customer needs faster.

A foundation for integration

InterChange Server Express, a key component of IBM WebSphere Business Integration Server Express, helps increase your business flexibility through automating and synchronizing business activities executed across multiple applications as business processes. By using multithreading to

execute business-logic processes concurrently, InterChange Server Express can handle transactions and interchanges efficiently, using a common approach to business logic to define the rules and specifications that control how transactions are executed.

InterChange Server Express leverages a logical, distributed hub-and-spoke model, which provides an efficient way to maintain a single point of control over several systems at once. The spoke architecture connecting applications to the server achieves additional scalability by enabling simultaneous processing of the same business events whenever the application interfaces support it. An important part of

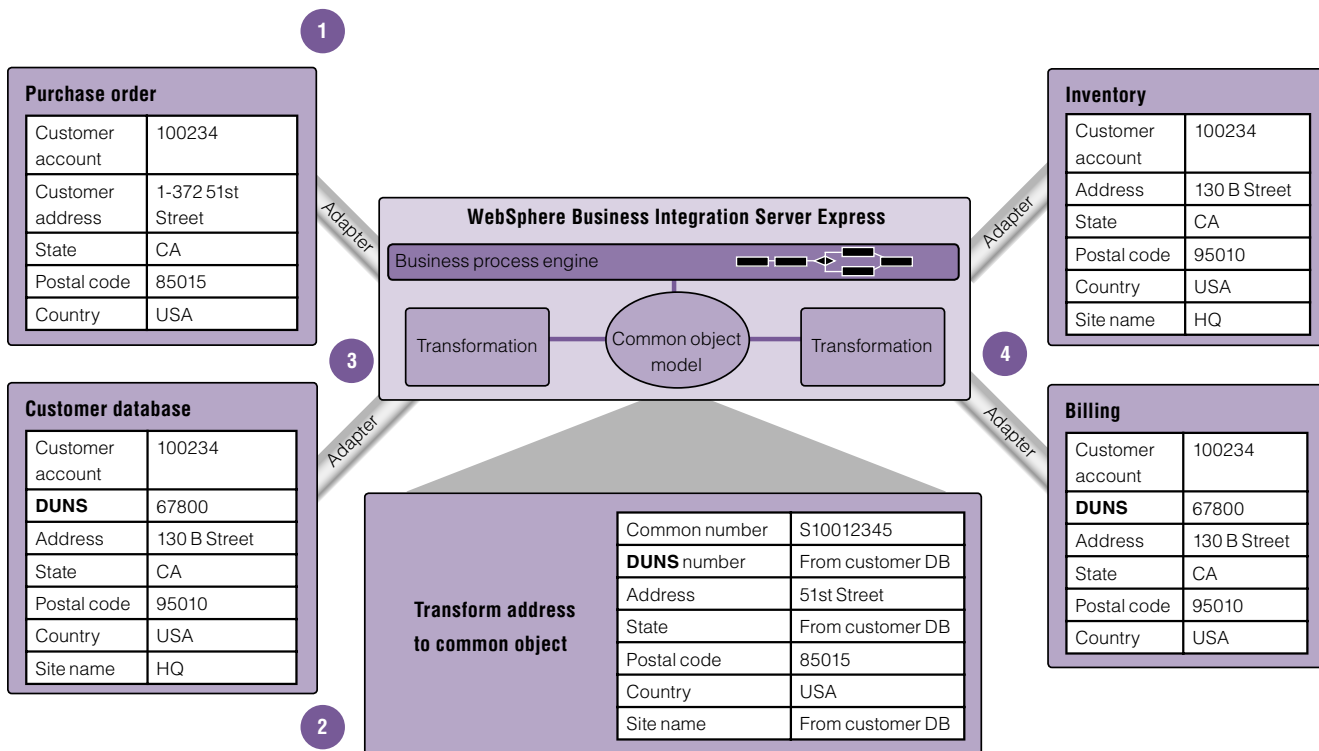


Figure 2. An example of a four-step purchasing order process created in WebSphere Business Integration Server Express. These steps include 1) validate customer information and update inventory and billing based on customer database information; 2) create generic business object, which maps to corresponding records to application-specific objects in other systems; 3) validate customer record in the customer database and update fields in the generic business object; and 4) through the updated generic business object, update the inventory and billing systems.

integration, the underlying transformation logic in InterChange Server Express can reconcile differences in format and structure among different application representations of the same business entity. For example, entries for a purchase order can be mapped to different systems in different formats. By decoupling processes and work flows from their corresponding applications and automating their execution, WebSphere Business Integration Server Express can help improve the efficiency of your business operations.

InterChange Server Express helps protect data integrity by enabling event sequencing, cross-referencing and transaction management services. Event sequencing helps keep events that trigger activities within a process in sequential order. This feature allows business processes to be executed in the order they are supposed to be executed in, independent of when the activities that are triggered within them finish.

Easy-to-use integration tools

An easy-to-use tool set provides a simplified graphical environment to help you rapidly configure and deploy business-object synchronization and process-automation logic. Based on the Eclipse open-standard framework, the tool set included in WebSphere Business Integration Server Express enables a consistent, flexible user interface across the entire platform.

This framework delivers a team-based visual design environment, which gives you the option to allow source-code management by a third-party program and helps simplify business-process design by reducing the need for specialized programming. Drag-and-drop capabilities help you rapidly create processes and connect to back-end systems, while deployment wizards walk you through the steps of executing their creations.

WebSphere Business Integration Server Express supports open standards like Web services and Business Process Execution Language (BPEL). Using the simplified tooling, you can consume Web services as part of the process flow. Similarly, you can expose processes as Web services for other applications to reuse your processes. WebSphere Business Integration Server Express allows you to import BPEL artifacts into your process flow. You can also export your current process flows into BPEL.

Simplified tooling can help you put more control over designing your business-critical processes into the hands of your line-of-business users, giving you increased business agility and the ability to change processes on demand to meet market needs. With your IT systems adjusting to the speed of your business ideas and your business staff in control of value-chain processes, you can help shorten your time to market and reduce costs.

The WebSphere Business Integration Server Express tool set offers the essential design, deployment and management tools you need to implement your integration solutions, including:

Development tools

- Business Object Designer Express
Provides a graphical tool to generate and maintain business objects
- Map Designer Express
Provides a graphical tool to generate and maintain maps, and transform application-specific business objects to and from the IBM WebSphere Business Integration business object format
- Connector Configurator Express
Configures the adapter with information such as the enterprise information system (EIS) host name, port and the business objects that the adapter supports
- Relationship Designer Express
Defines the relationships between application objects necessary for simultaneously synchronizing data across multiple applications
- Process Designer Express
Allows users to graphically sketch and refine the logical flow of business processes (shipped only with the Express Plus version)
- Test Connector
Enables testing between agents without the complexity of application connectivity

Administrative tools

- System Manager
Manages project and component development, configuration editor and console and log output
- Flow Manager
Allows resubmission or deletion of failed flows
- Log Viewer
Allows logged test-file data to be viewed in a tool, providing better information and searching capability
- Relationship Manager
Is a visual tool that monitors and manages relationships between application objects to simultaneously synchronize data across multiple applications

Speed deployment with prepackaged business-process templates

To help you implement your solution faster, WebSphere Business Integration Server Express provides solution-specific business-process definitions already configured for common applications. With a range of collaborations that graphically define and automate process steps, WebSphere Business Integration Server Express can help you accelerate the integration of common business processes that span multiple applications.

Prepackaged business-process templates (collaborations) contain logic that describes a distributed business process; different collaborations are provided for different fundamental business processes. Data is exchanged through collaborations in the form of business objects with the help of adapters.

WebSphere Business Integration Server Express collaborations help support new ways of doing business by separating your business processes from the applications used to perform them. This capability can help you maximize your ability to reuse existing assets and give your systems more flexibility. You can create repeatable solutions for business process automation steps to help contain future costs as your business requirements evolve.

Connect to trading partners to increase your competitive advantage

WebSphere Business Integration Server Express provides prepackaged adapters that allow you to rapidly integrate with your trading partners using WebSphere Business Integration Connect - Express.

These adapters can provide greater flexibility and adaptability when integrating systems. This flexibility helps protect you from technology change and enables you to move to different integration systems as your business integration needs change. The adapters are available out of the box, which eliminates the need for in-depth knowledge of underlying applications or extensive coding, allowing you to get to market more quickly and focus on achieving business results.

Monitor and manage business activities

WebSphere Business Integration Server Express helps support Internet-based system monitoring with a variety of visual components that can display the health of the server and application adapters. You can collect business-process statistics and view them in customizable formats, such as charts or graphs. For example, this includes where business units or individuals may be underperforming, which deadlines are in jeopardy or other issues that potentially impede execution of corporate strategy.

Choose the right software to meet your unique business needs

WebSphere Business Integration Server Express creates an open-standards-based environment that integrates with new and existing technologies. This flexible infrastructure, combined with broad operating system support, provides a foundation that frees you from the constraints of a single proprietary platform. WebSphere Business Integration Server Express supports the Microsoft® Windows® platform, IBM OS/400® for IBM @server® iSeries™ systems and Linux, one of the world's fastest-growing operating systems. And because it uses the same code base as the rest of the IBM WebSphere Business Integration software family, you can easily upgrade or migrate to future versions. The result is reduced risk, IT investment protection and the capability to quickly add new features that work with existing systems and third-party applications.

Begin with a solution that can help drive the greatest value today and add capabilities as your business needs change. Whether you choose WebSphere Business Integration Server Express or WebSphere Business Integration Server Express Plus, you'll receive a comprehensive business integration solution that's easy to implement and administer. Both solutions are versatile, allowing you to connect to a variety of back-end systems, so you can make the most of your existing IT investments. Each solution is also fully integrated, so it's functional out of the box. Both solutions deliver a low total cost of ownership (TCO) to help you meet IT budget objectives, while making a positive impact on your company's bottom line.

Take the Express route

Express offerings from IBM combine best-of-breed hardware, software and services. Designed, developed and priced specifically for midsize companies like yours, Express software offerings come in complete packages, ready for you to use, right out of the box.

- *Speedy installation that takes minutes, not hours*
- *Packed with features, without requiring you to spend more*
- *Ready to help you grow, as your business needs demand*
- *Priced with a midsize budget in mind, with low-rate finance options available from IBM Global Financing*
- *Easy to own and to use, without adding administrative burdens or lengthy learning curves*

- *Built to run on key midsize platforms like Microsoft Windows 2000, IBM OS/400 for IBM @server iSeries systems and Linux systems*

With more than 90 000 highly qualified IBM Business Partners, you'll be able to find a local solutions provider to help you decide what offerings are right for your business.

For more information

To learn more about how IBM WebSphere Business Integration Server Express or IBM WebSphere Business Integration Server Express Plus solutions can help you automate and integrate your business processes, visit:

ibm.com/websphere/
wbiserverexpress

IBM WebSphere Business Integration Server Express, Version 4.3 at a glance

Hardware requirements

Minimum system requirements recommended for server components:

Microsoft Windows

- 1GHz processor or dual processors each with a minimum speed of 667MHz
 - 512MB RAM
 - 40GB disk space
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IBM OS/400

- IBM AS/400® server with a minimum commercial processing workload of 450
 - 1GB RAM
 - 40GB disk space
-

Linux

- 1GHz processor or dual processors each with a minimum speed of 667MHz
 - 512MB RAM
 - 40GB disk space
-

Minimum system requirements recommended for build-time components:

Microsoft Windows

- 1GHz processor
 - 512MB RAM
 - 10GB disk space
-

IBM WebSphere Business Integration Server Express, Version 4.3 at a glance (continued)

Software requirements

Microsoft Windows

- Windows 2000 operating system (Professional Server or Advanced Server) with Service Pack 3
 - One of the following databases:
 - IBM DB2® Universal Database™ Express Edition, Version 8.1 (included)
 - Microsoft SQL Server 2000 with Service Pack 3
- One of the following:
- IBM WebSphere Application Server - Express, Version 5.0.2 or later (included)
 - Tomcat, Version 4.1.24 or 4.1.27
- Simple Mail Transport Protocol (SMTP)-based e-mail system
 - Microsoft Internet Explorer 6 with Service Pack 1 or Netscape Navigator 4.75 or later, to view HTML documents
 - A C or C++ compiler that supports DB2® to compile DB2 stored procedures
 - Adobe Acrobat 4.05 or later, to view online publications
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OS/400

- OS/400, Version 5.2 or Version 5.3 operating system (5722-SS1), which includes:
 - IBM DB2 Universal Database for iSeries
 - IBM Developer Kit for Java (5722-JV1) Option 5 (JDK 1.3) and Option 6 (JDK 1.4)
 - Host servers (5722-SS1, Option 12)
 - QShell Interpreter (5722-SS1, Option 30)
 - Digital communication manager (5722-SS1, Option 34)

Other software products included as distribution media:

- Crypto Access Provider for IBM @server iSeries (5722-AC3)
- IBM HTTP Server Powered by Apache (5722-DG1)
- TCP/IP Connectivity Utilities for IBM @server iSeries (5722-TC1)
- IBM Toolbox for Java (5722-JC1)

One of the following:

- IBM WebSphere Application Server - Express, Version 5.1 for iSeries (5722-E51)(included)
 - IBM WebSphere Application Server, 5.0 for IBM @server iSeries (5733-WS5)
 - IBM WebSphere Application Server, Version 5.1 for IBM @server iSeries (5733-W51)
- SMTP-based e-mail system
 - Netscape Navigator V4.75 or Microsoft Internet Explorer 6 Service Pack 1 to view HTML documents
 - Adobe Acrobat 4.05 or later, to view online publications
-

Linux

- Red Hat Enterprise Linux Advanced Server for Intel® 3.0 or SuSE Linux Enterprise Server 8.0 operating system
- IBM DB2 Universal Database Express Edition, Version 8.1 (included)

One of the following:

- IBM WebSphere Application Server - Express, Version 5.1 (included)
 - IBM WebSphere Application Server - Express, Version 5.0.2
 - Tomcat, Version 4.1.24 or 4.1.27
- SMTP-based e-mail system
 - Netscape Navigator, Version 4.78 to view HTML documents
 - A C or C++ compiler that supports DB2 to compile DB2 stored procedures
 - Adobe Acrobat 4.05 or later, to view online publications
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**IBM WebSphere Business Integration Server Express, Version 4.3 at a glance
(continued)**



IBM WebSphere Business Integration Server Express tool set*

Microsoft Windows

- One of the following operating systems:
 - Windows 2000 (Professional Server, or Advanced Server) with Service Pack 3
 - Windows XP Professional with Service Pack 1A

Source code control (one of the following to support System Management [SM] source code control and to view HTML documents):

- IBM Rational® ClearCase® LT 4.2
 - Concurrent Version System (CVS) 1.11 to support SM source code control
 - Microsoft Internet Explorer 6 with Service Pack 1 or later or Netscape Navigator 4.75, or later
 - Adobe Acrobat 4.05 or later to view online publications
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**Note: InterChange Server Express must be installed on the same machine as the tool set. A separate instance of the database used as the InterChange Server Express repository, dedicated to testing purposes only, is also required.*

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