

IBM WebSphere Partner Gateway - Express



Product Overview

Version 6.0

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Note:

Before using this information and the product it supports, read the information in "Notices" on page 15.

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This edition of this document applies to IBM WebSphere Partner Gateway - Express (5724-L70), version 6.0, and to all subsequent releases and modifications until otherwise indicated in new editions.

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Preface

About this guide

This document provides an overview of IBM^(R) WebSphere^(R) Partner Gateway - Express. It briefly describes the entire WebSphere family and describes, in more detail, WebSphere Partner Gateway - Express.

Audience

This book is intended for the reader who wants an overview of the Partner Gateway - Express product. For information on installing and using Partner Gateway - Express, see the *WebSphere Partner Gateway - Express User Guide*.

Typographic conventions

This document uses the following conventions.

Convention	Description
Monospace font	Text in this font indicates text that you type, values for arguments or command options, examples and code examples, or information that the system prints on the screen (message text or prompts).
Bold	Boldface text indicates graphical user interface controls (for example, online button names, menu names, or menu options) and column headings in tables and text.
<i>Italics</i>	Text in italics indicates emphasis, book titles, new terms and terms that are defined in the text, variable names, or letters of the alphabet used as letters.
<i>Italic monospace font</i>	Text in italic monospace font indicates variable names within monospace-font text.
<i>ProductDir</i>	<i>ProductDir</i> represents the directory where the product is installed. For the IBM WebSphere InterChange Server environment, the default product directory is IBM\WebSphereICS For the IBM WebSphere Business Integration Adapters environment, the default product directory is WebSphere Adapters. All WebSphere Business Integration Adapters product path names are relative to the directory where the product is installed on your system.
%text% and \$text	Text within percent signs (%) indicates the value of the Windows text system variable or user variable. The equivalent notation in a UNIX environment is \$text, indicating the value of the text UNIX environment variable.

Convention	Description
Underlined colored text	Underlined colored text indicates a cross-reference. Click the text to go to the object of the reference.
Text in a blue outline	(In PDF files only) An outline around text indicates a cross-reference. Click the outlined text to go to the object of the reference. This convention is the equivalent for PDF files of the "Underlined colored text" convention included in this table.
" " (quotation marks)	(In PDF files only) Quotation marks surround cross-references to other sections of the document.
{ }	In a syntax line, curly braces surround a set of options from which you must choose one and only one.
[]	In a syntax line, square brackets surround optional parameters.
. . .	In a syntax line, ellipses indicate a repetition of the previous parameter. For example, option [. . .] means that you can enter multiple, comma-separated options.
< >	Angle brackets surround variable elements of a name to distinguish them from one another. For example, <server_name><connector_name>tmp.log.
\ /	Backslashes (\) are used as separators in directory paths in Windows installations. For UNIX installations, substitute slashes (/) for backslashes.

Related documents

The complete set of documentation available with this product includes comprehensive information about installing, configuring, administering, and using WebSphere Business Integration Connect - Express.

You can download, install, and view the documentation at the following site:

<http://www.ibm.com/software/integration/wspartnergateway/express/library/infocenter>

Note: Important information about this product may be available in Technical Support Technotes and Flashes issued after this document was published. These can be found on the WebSphere Business Integration Support Web site, <http://www.ibm.com/software/integration/websphere/support/>. Select the component area of interest and browse the Technotes and Flashes sections.

New in this release

New in release 6.0

- WebSphere Business Integration Connect - Express has been renamed WebSphere Partner Gateway - Express.
 - Support for WebSphere Application Server, Version 6.0
 - Support for systems running i5/OS or OS/400
 - Support for using a service daemon on a Linux system
-

New in release 4.2.1

June 2004

Business Integration Connect - Express can now be installed on the following platform:

- Systems running OS/400 V5R2M0

December 2003

Business Integration Connect - Express can now be installed on the following platforms (in addition to the Microsoft Windows 2000 server):

- Red Hat Advanced Server V2.1
- SuSE Linux Enterprise Server V8, SP2

Chapter 1. Product introduction

WebSphere Partner Gateway is a business-to-business (B2B) community management solution for companies large and small. The Partner Gateway solution addresses both the connectivity and the trading-partner enablement needs that are required to establish a mutually beneficial trading community.

With Partner Gateway, you exchange data and processes within a trading community, crossing enterprise boundaries and extending business integration beyond the enterprise and into the community.

The trading community

A trading community typically revolves around a hub—an enterprise that acts as the Community Manager. Community participants of various sizes connect to the hub through the Internet. Participants themselves can act as hubs.

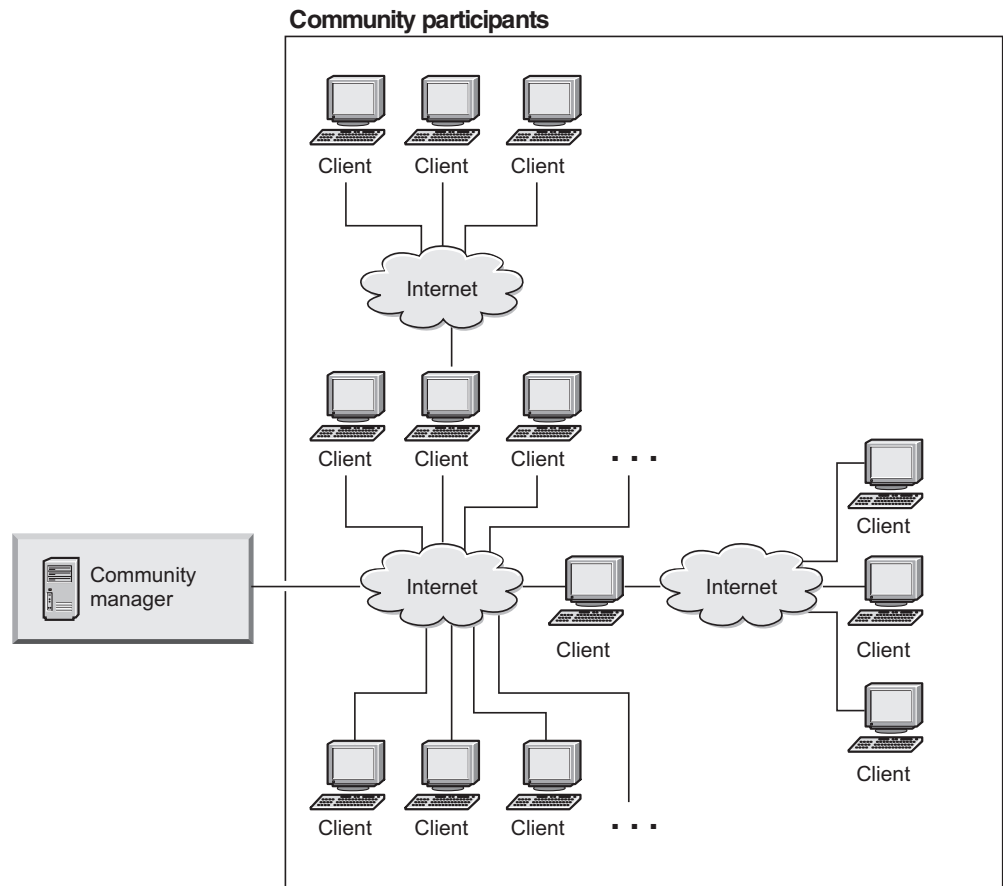


Figure 1. A trading community consisting of a Community Manager and a number of trading partners.

Partner Gateway provides a solution for each type of participant in the trading community.

- WebSphere Partner Gateway, Enterprise Edition is ideal for the larger enterprise that wants to connect to an unlimited number of trading partners using a variety

of transports and message formats. This enterprise acts as the Community Manager, establishing the community, getting partners on board, and monitoring the activity of all participants in the community.

- WebSphere Partner Gateway, Advanced Edition is suited to the customer who wants the flexibility of transport and message formats but has a more limited number of trading partners. This type of enterprise can act as a Community Manager (of its own smaller community) as well as a community participant in a larger community. The right side of the previous illustration shows an example of a client who is both a community participant (to the Community Manager) as well as a hub to its own community.
- WebSphere Partner Gateway - Express is ideal for the smaller enterprise that needs a quick and easy way to connect to a limited number of community members to exchange business messages. This type of enterprise acts as a community participant.

The remainder of this document focuses on Partner Gateway - Express. For information about Partner Gateway, Enterprise and Advanced Editions, see the Information Center for WebSphere Partner Gateway, Enterprise and Advanced Editions.

Benefits to users

The benefits of participating in a trading community and exchanging business documents electronically include the reduction in cost associated with a traditional, paper-based exchange as well as a reduction in the number of errors inherent in such an exchange. After all, critical transactions involving purchase orders, invoices, shipping notices, and other documents drive your business. The ability to participate in a trading community to exchange this information efficiently and securely is key to success.

Partner Gateway - Express provides the key components that make joining a trading community easy:

- Ease of setup
- Flexibility

Ease of setup

Partner Gateway - Express makes joining a trading community quick and easy, allowing you to get on board with minimal cost and effort.

From installation through sending a first test message, you can be connected to the community in a matter of hours. With Partner Gateway - Express, the barriers to joining a trading community are virtually eliminated.

Flexibility

Partner Gateway - Express provides a certified AS2 connection so that you can join a community where the AS2 protocol is prescribed. Partner Gateway - Express also supports document exchange of any type of document through the HTTP protocol.

The Partner Gateway - Express customer can purchase and install the Enterprise or Advanced editions should the needs of the enterprise change. For example, the customer who determines a need to support additional message formats or to connect to additional community members can install the Advanced Edition.

Supported platforms

Partner Gateway - Express runs on the following platforms:

- Microsoft Windows 2000 server
- Microsoft Windows 2003 server
- Red Hat Advanced Server V3.0
- SuSE Linux Enterprise Server V9
- Systems running OS/400 V5R2, V5R3

You need a Web browser to view console information. Also, if you are planning to send alerts through e-mail, you need to have an SMTP server installed.

For detailed information about the hardware and software requirements, see the *WebSphere Partner Gateway - Express User Guide*.

Chapter 2. WebSphere product family overview

This section describes how Partner Gateway fits into the WebSphere family.

About WebSphere

IBM WebSphere is the leading software platform for e-business. It includes more than 150 Internet infrastructure software or middleware products designed to help businesses become on demand e-businesses. The WebSphere product family features broad support for open standards. Its products include application servers, messaging software, business integration tools, portal creation tools, and integrated development environments for creating Web-based business applications.

The WebSphere platform can help you to:

- Accelerate the delivery of products and services.
- Respond quickly to market changes and customer demand.
- Integrate and automate business processes.
- Create portals to simplify access to information and applications.
- Reuse and leverage existing and legacy assets.

The WebSphere product family

The WebSphere family of products falls into the following categories, providing a complete middleware infrastructure for dynamic e-business:

- Business Portals
- Business Integration
- Foundation & Tools.

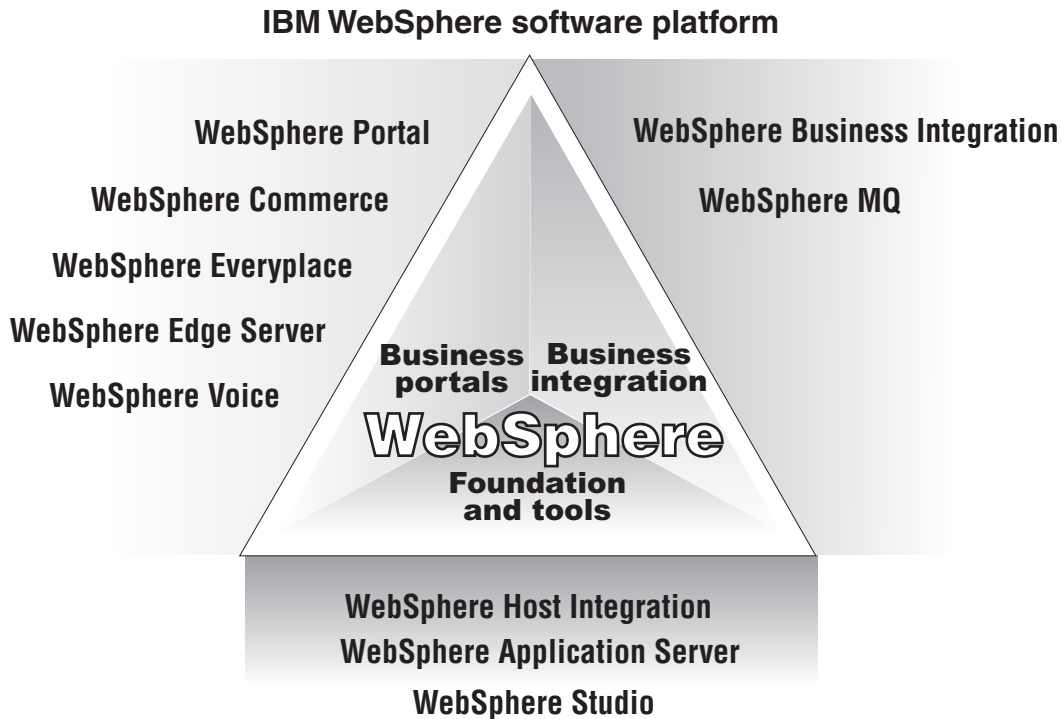


Figure 2. The three categories of software that comprise the WebSphere software platform.

The WebSphere platform consists of middleware software for three major e-business needs: portals, integration, and foundation and tools.

As shown in Figure 3, the WebSphere platform provides:

- Tools to create and deploy Web-enabled applications for e-business, such as WebSphere Studio tools, WebSphere Application Server, and WebSphere Host Integration.
- Tools to integrate business applications and enable them to communicate with each other and over the Web, such as WebSphere Business Integration and WebSphere MQ.
- Tools to extend business applications and access to portals and mobile devices, such as WebSphere Portal, WebSphere Commerce, WebSphere Everyplace, WebSphere Edge Server, and WebSphere Voice.

WebSphere Business Integration

WebSphere Business Integration, one of the three types of WebSphere solutions and products, allows businesses to connect their applications and exchange information quickly, efficiently, and cost-effectively, with minimal human intervention. Business Integration enables companies to realize the benefits of end-to-end integration through five core capabilities:

- **Model:** Map and simulate business processes.
- **Integrate:** Link people, processes, systems, and information.
- **Connect:** Expand your processes to include partners and clients.
- **Monitor:** Track the progress of business processes as they are implemented.
- **Manage:** Review and analyze the performance of your processes.

Partner Gateway helps fulfill the **Connect** capability. Not only does it allow you to communicate with the members of your trading community, it extends the business integration within your enterprise to trading partners and customers.

Figure 3 shows Partner Gateway's place in WebSphere's Business Integration product line.

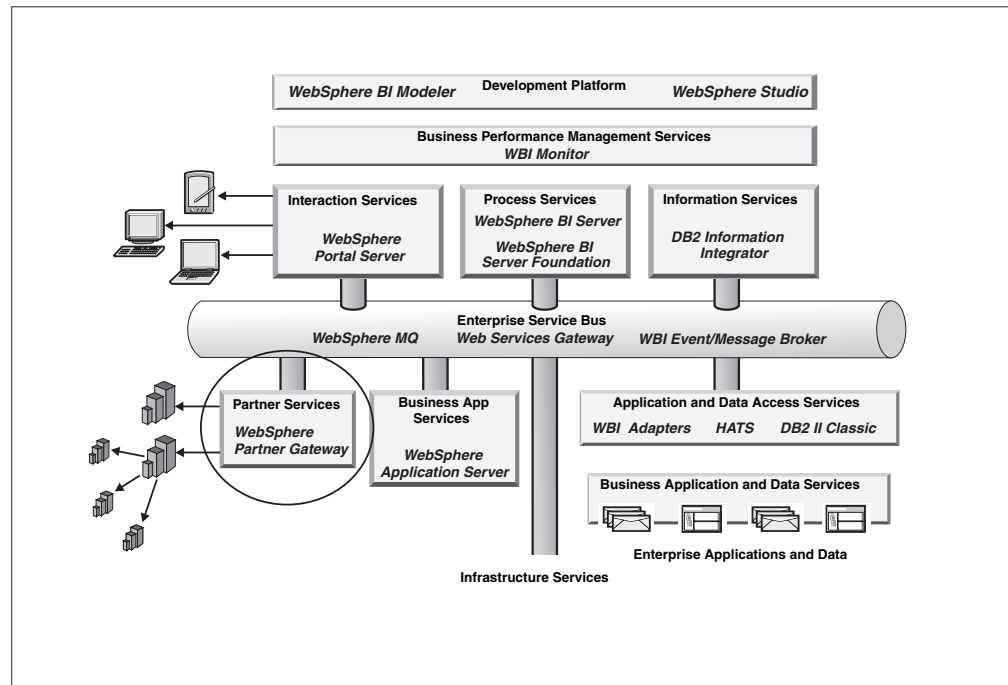


Figure 3. Partner Gateway's role in WebSphere Business Integration's product line.

WebSphere Partner Gateway is layered with other WebSphere products to build comprehensive, flexible business integration solutions. Partner Gateway's role is to enable enterprises and their trading partners to exchange business documents. Through the use of back-end systems such as WebSphere Business Integration Message Broker or WebSphere InterChange Server, business information contained in the exchanged documents is easily integrated with the business-critical applications on which companies depend.

Integration with enterprise applications

All editions of Partner Gateway provide the ability to connect to back-end integration systems. Partner Gateway - Express provides file-based integration.

Partner Gateway - Express can use this file-based integration to connect to other WebSphere products, such as WebSphere InterChange Server, WebSphere Data Interchange, or other packaged applications. See "Directory structure" on page 10 for more information.

Chapter 3. Technical overview

Partner Gateway- Express is a cost-effective, easy-to-install and easy-to-use AS2-certified connectivity solution that enables your company to participate in a B2B community.

With Partner Gateway - Express, you can send and receive:

- Documents containing XML, EDI, or binary content over AS2
- Any document over HTTP.

System features

Partner Gateway - Express includes a set of robust tools that let you view the status of your documents. For example, you can:

- View information about queued documents that are pending transmission and acknowledgment
- View historical information about documents that have been sent and received successfully and unsuccessfully
- View, add, and update public certificates and private keys

With Partner Gateway - Express, you have 24 x 7 visibility into your document processing, so you can manage, analyze, track, and troubleshoot the flow of your business processes.

In addition, you can configure Partner Gateway - Express to suit your requirements. For example, you can have Partner Gateway - Express alert one or more individuals by e-mail if a document fails to be transmitted.

How documents flow through the system

You can send documents from the Partner Gateway - Express console, or a back-end application can generate the document to be sent. In either case, the document is placed in a directory (the Send directory) associated with the intended recipient.

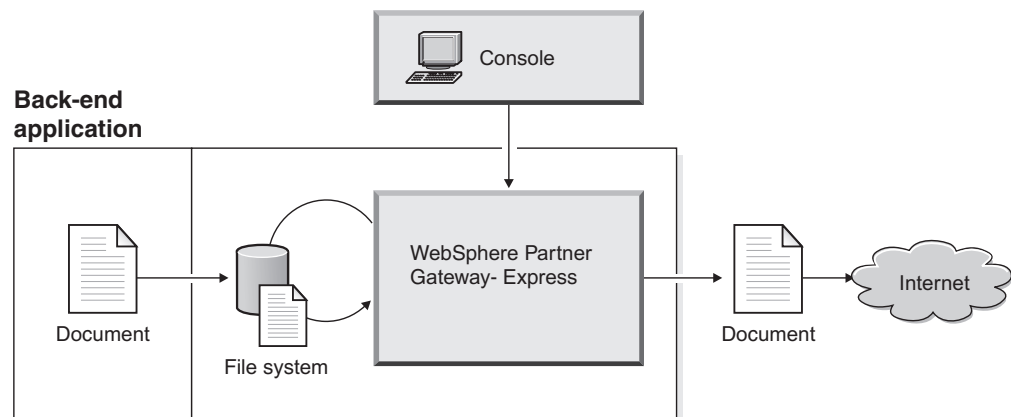


Figure 4. Document flow

Partner Gateway - Express polls this directory. When it detects a new document, Partner Gateway - Express retrieves the document and sends it over the internet to the intended recipient. Partner Gateway can detect, from the directory structure, the recipient, protocol, and transport.

The process is reversed when a document is sent to Partner Gateway - Express. The document is placed in the Received directory associated with the sender.

Directory structure

When you create a new community participant, Partner Gateway - Express creates a corresponding directory structure for that participant. It contains the participant's name and transport protocols supported, with subdirectories for each state in the processing of a document (for example, sent and received). The directory structure is as follows:

```
data
  FileSystemAdapter2
    partners
      partner_name
        error
          as2
            binary
            EDI-Consent
            EDIFACT
            EDI-X12
            MDN
            XML
          http
        rec_err
          as2
            binary
            EDI-Consent
            EDIFACT
            EDI-X12
            MDN
            XML
          http
        received
          as2
            binary
            EDI-Consent
            EDIFACT
            EDI-X12
            MDN
            XML
          http
        send
          as2
            binary
            EDI-Consent
            EDIFACT
            EDI-X12
            MDN
            XML
          http
        sent
          as2
            binary
            EDI-Consent
            EDIFACT
            EDI-X12
            MDN
            XML
          http
```

If an application is routing a document with a format of EDIFACT to partner XYZ, for example, it sends the document to the following directory:
data/FileSystemAdapter2/partners/XYZ/send/as2/EDIFACT

Chapter 4. Fast paths

To set up and begin using Partner Gateway - Express:

- Install the product (see the installation section of the *WebSphere Partner Gateway - Express User Guide*)
- Register with the Community Manager and begin using the product (see the *WebSphere Partner Gateway - Express User Guide*)

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WebSphere Partner Gateway - Express includes software developed by the Eclipse Project (www.eclipse.org).



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