

# **IBM WebSphere Partner Gateway, Version 6.1**

- Highlights Transforms data between Offers a component architecture Provides centralized and internal application and to enable scalability for high consolidated trading-partner throughput and availability external standards-based and transaction management formats, such as EDI and XML through multiple deployment options industry implementations Supports standards-based transport protocols, such as Delivers end-to-end transaction Leverages WebSphere EDIINT AS1, AS2 and AS3; RNIF, life-cycle management **Application Server Network** Version 1.1 and 2.0; cXML; CIDX Deployment, Version 6.1 Chem eStandards, Version 4.0; Provides trading-partner capabilities to provide enhanced and ebMS, Version 2.0 self-management and manageability and deployability, administration capabilities especially for multiple
  - Supports extensibility through the WebSphere Partner Gateway User Exit Framework

machine deployments

- Integrates with other WebSphere SOA and BPM-related businessintegration products
- Supports a large portfolio of WebSphere and other adapters for back-end application integration

Business services					
Development services	Interaction services	Process services	Information services		
	ESB			Management services	
	Partner services	Business application services	Access services		
Infrastructure services					
	WebSphere Partner Gateway				

WebSphere Partner Gateway can fit within your SOA or BPM implementation and help you integrate your business processes with those of your trading partners.

Business processes extend across supply and value chains on a global basis, and companies depend upon trading partners to run their businesses smoothly. Processes and rules change constantly—and you must quickly disseminate these changes to your trading partners. To keep pace, it is crucial that you strengthen your trading-partner relationships through tighter automated integration, so that you can make your trading partners an extension of your enterprise. You also have to comply with internal and external governance, including regulatory and reporting requirements associated with integrating your processes with those of your trading partners. In addition, over the past 20

years, there has been a unintended proliferation of connectivity protocols and industry data formats based on industry and geography. As a result, you need flexible and scalable business-to-business (B2B) gateways that can allow you to centralize, consolidate and efficiently manage all of your B2B trading-partner integration.

To help meet these needs, IBM WebSphere<sup>®</sup> Partner Gateway, Version 6.1 provides a centralized and consolidated B2B trading-partner and transaction-management application to enable and manage process and data integration with trading partners. It is an integral part of the WebSphere service oriented architecture (SOA)

and business process management (BPM) portfolio because of its ability to participate in SOA implementations and to enable organizations to integrate their trading partners within their BPM implementations.

WebSphere Partner Gateway, Version 6.1 is particularly useful for companies that need a single point-of-management for all B2B trading-partner integration and that need to support a wide range of B2B transport protocols, such as Electronic Data Interchange over the Internet (EDIINT) AS1, AS2 and AS3; commerce XML (cXML); RosettaNet Implementation Framework (RNIF); Version 1.1 and 2.0; and e-business XML Messaging Service (ebMS), Version 2.0, as well as EDI and industry XML implementations.



WebSphere Partner Gateway functional components

WebSphere Partners Gateway can support centralized and consolidated trading-partner and transaction management.

# Companies that implement B2B gateways

Many companies with varying business objectives and requirements implement B2B gateways. These objectives and requirements include:

- The need to improve the agility and responsiveness of their supply or value chains through streamlined, costeffective trading-partner integration
- The need to gain competitive advantage by improving business performance through reduced time to market, lower operational costs and more-flexible response to customer and marketplace needs
- The need to comply with governmental or regulatory mandates that require integration using specific B2B integration methods
- The need to support a wide range of B2B transport protocols and industry formats to comply with tradingpartner requirements

#### Useful across a wide range of industries

B2B integration capabilities are used in most industries that need to support supply or value chains for manufacturing and services. These industries include:

- Consumer retail
- Distribution and warehousing
- Manufacturing
- Automotive
- Electronics
- Transportation and logistics
- Healthcare
- Financial services
- Insurance
- Chemical and petroleum
- Public sector

### Applications for B2B gateways

B2B integration capabilities are used to enable and automate a variety of business processes and requirements. Key applications for B2B integration include:

- Supply- and value-chain management and optimization
- Global logistics optimization and management
- Collaborative product design and engineering

- Radio frequency identification (RFID) integration
- Warranty, maintenance or service programs
- Elimination of proprietary data-transport methods
- Compliance with public-sector regulatory mandates
- Electronic customs and ports, and supply-chain security applications
- Electronic invoicing and payment, and related banking applications
- Healthcare claims, billings and records processing
- Product information management and synchronization

# Integration with small and midsized trading partners

You can use WebSphere Partner Gateway Advanced or Enterprise Edition, Version 6.1 to integrate with small and midsized trading partners using WebSphere Partner Gateway-Express, an existing lightweight, easy-to-implement gateway application with fewer capabilities (HTTP Secure [HTTPS] and EDIINT AS2). Further, you can use the following capabilities to create custom solutions to integrate with small and midsized trading partners:

- IBM Workplace Forms<sup>™</sup>, which uses XForms-based technology to allow transportable, self-validating B2B documents to be exchanged through e-mail or a secure portal
- RosettaNet Automated Enablement (RAE) technology-compliant solutions for the electronics and high-tech industry
- IBM WebSphere Portal, which you can use to build an application that enables smaller trading partners to enter information online related to B2B transactions

# Process integration beyond the enterprise

WebSphere Partner Gateway can help you integrate your trading partners within your shared business processes, and efficiently implement changes in business processes or rules throughout your supply or value chain. In a global economy, outsourcing and insourcing initiatives, and the virtual supply chain, have blurred both the boundaries of the enterprise and the distinction between public and private processes. Conversely, industry-standards bodies are standardizing the public business processes within each industry vertical, thus making them a commodity that can be consistently implemented and supported by all trading partners within a supply or value chain. As a result, only private processes are left to provide a basis for differentiation and competitive advantage.

Regardless of how such forces play out, it is clear that process integration across the extended enterprise is important to improve profitability and to build competitive advantage. You can use WebSphere Partner Gateway in conjunction with IBM WebSphere Process Server and IBM WebSphere Business Monitor to help support business-process integration and related IT and business-event management within your company to meet quality-of-service objectives, key performance indicators (KPIs) and requirements related to servicelevel agreements.

### Using WebSphere Application Server Network Deployment

WebSphere Partner Gateway, Version 6.1 works with and uses IBM WebSphere Application Server Network Deployment to provide enhanced manageability and deployability through:

- WebSphere Application Server Network Deployment Manager, to support efficient installation and deployment on multiple machines
- Consolidated management (logging, tracing and thread management) through a single WebSphere Application Server Network Deployment console
- Component-level clustering support, to provide centralized management, high availability and load balancing
- The ability to avoid a single point of failure by providing first-failure data capture to report and analyze problems as they occur, in multiple machine deployments
- Use of WebSphere platform messaging (common-infrastructure messaging)
- Leveraging common skills and resources that are also used to manage other WebSphere Application Server applications

#### **Multiple editions**

WebSphere Partner Gateway, Version 6.1 is available in two editions, Advanced Edition and Enterprise Edition, both of which provide the same functionality, but are licensed differently. WebSphere Partner Gateway Advanced Edition is licensed to support a specific number of trading-partner connections, and WebSphere Partner Gateway Enterprise Edition is licensed to support an unlimited number of trading-partner connections.

#### New in this release

WebSphere Partner Gateway, Version 6.1 incorporates and builds upon the capabilities of the previous release by adding substantial new functional capabilities, performance and usability enhancements, and operating-system platform support. These capabilities and enhancements include:

#### B2B transfer-protocol support

WebSphere Partner Gateway, Version 6.1 adds support, including Drummond Group certification, for ebMS, Version 2.0 (used in Canada, Europe and Asia, and in the healthcare and auto industries), as well as for the Basic, XML Encryption and Automotive Retail profiles. The XML Encryption Profile is designed to test message-based encryption based on requirements and methods originally defined by the U.S. Centers for Disease Control (CDC), which uses ebMS in its Public Health Information Network applications. The Automotive Retail Profile is based on requirements and recommendations from the Standards for Technology in Automotive Retail (STAR) consortium, which includes testing of gzip-based compression. Further, the ebXML Collaboration Protocol Profile and Agreement (CPPA) supports importing CPPAs to automate the exchange and implementation of structured trading-partner agreements.

Support, including Drummond Group certification,for the EDIINT AS3 protocol enables the Secure Multipurpose Internet Mail Extension (SMIME) with File Transfer Protocol (FTP)-based data exchange, in addition to the preexisting support for EDIINT AS1 and AS2.

#### Improved AS Viewer

WebSphere Partner Gateway, Version 6.1 provides an improved AS Viewer based on Message Disposition Notification (MDN) return status to enable better tracking of AS-related exceptions and errors.

#### CIDX support

WebSphere Partner Gateway now supports Chemical Industry Data Exchange (CIDX) Chem eStandards (Version 4), a standard used in the chemicals industry.

### SOAP with attachments support

SOAP with attachments support in WebSphere Partner Gateway enables you to exchange documents within, and as attachments to, SOAP messages.

### Generalized XPATH support

WebSphere Partner Gateway now includes generalized XML Path Language (XPATH) support, which helps to enhance XML data querying and manipulation.

### Improved terminology

Improved terminology capabilities help simplify and streamline terminology across WebSphere Partner Gateway components to enhance usability.

### The ability to search on user-defined fields

A new capability enables you to search business messages through user-defined fields, such as a purchase order or invoice number. This release also includes additional user-defined attributes to the document definition for use in user-exit-based functions.

# Importing and exporting trading-partner profiles

WebSphere Partner Gateway now includes a trading-partner import and export capability, which enables you to move trading-partner profile data between WebSphere Partner Gateway instances, such as development, test and production. You can also move trading-partner profile data from other gateway products to WebSphere Partner Gateway.

#### Nonrepudiation by trading partner

The nonrepudiation by trading partner capability enables you to configure nonrepudiation at the trading-partner level, rather than globally for all trading partners. This function can be specified globally for a document definition and narrowed down to a particular trading partner to enable more-efficient use of system resources.

#### Selective archiving support

Selective archiving support enables you to archive selectively based on trading partner and document type to enable more-efficient use of system resources.

#### Role-based resend capability

The role-based resend capability enables users in other roles besides hub administrator to resend messages. It also allows multiple users to be assigned the hub administrator role.

#### EDI configuration wizards

Electronic data interchange (EDI) configuration wizards in WebSphere Partner Gateway facilitate the importing of EDI build-time artifacts and configuration of EDI trading partners and connections.

### Improved large-file handling

Improved support for large files is provided through better memory management and removal of prior constraints.

#### Improved performance

Performance has been improved by supporting increased throughput and improved use of server and network resources.

#### New platform and database support

New platform and database support in WebSphere Platform Gateway, Version 6.1 includes:

- Sun Solaris Operating Environment, Version 10
- Red Hat Enterprise Linux<sup>®</sup> for x86 (Intel<sup>®</sup>), Version 4
- Red Hat Enterprise Linux for IBM POWER<sup>™</sup>, Version 4

- SUSE Linux Enterprise Server for x86 (Intel), Version 10
- SUSE Linux Enterprise Server for POWER, Version 10
- HP-UX 11i, Version 2 on Itanium
- IBM DB2<sup>®</sup> Enterprise Edition, Version 9.1

You can find out about the most up-todate information on operating-system platform support at **ibm.com**/software/ integration/wspartnergateway/sysreqs.

## Support for newer versions of related products

Support for newer versions of middleware applications includes support for IBM WebSphere Message Broker, Version 6.0, IBM WebSphere MQ, Version 6.0 and IBM WebSphere Process Server, Version 6.0.2 to enable compatibility and interoperability with the latest versions of related products.

#### Integration with WebSphere

Transformation Extender and WebSphere Transformation Extender Trading Manager Integration with WebSphere Transformation Extender and WebSphere Transformation Extender Trading Manager provides documented and tested flow-through integration between WebSphere Partner Gateway and WebSphere Transformation Extender and WebSphere Transformation Extender Trading Manager to take advantage of robust B2B transformation and industry standards and EDI support available in these products.

### WebSphere Application Server Network Deployment support

WebSphere Application Server Network Deployment support provides improved deployability and manageability through automated deployment on multiple machines and through better process and thread management.

# Removal of WebSphere MQ, Version 5.3 prerequisite

WebSphere Partner Gateway no longer requires WebSphere MQ, Version 5.3. The removal of this prerequisite is accomplished by using WebSphere platform messaging for communication between WebSphere Partner Gateway components. WebSphere platform messaging also serves as the Java<sup>™</sup> Message Service (JMS) provider for WebSphere Partner Gateway, although you can still use WebSphere MQ to connect to external applications.

# Support for single sign-on through LDAP user-directory integration

Support for single sign-on through Lightweight Directory Access Protocol (LDAP)-based user directory integration enables more-efficient user access management.

#### Support for IPv6

Support for IPv6 gives you additional addressing capability to support more network devices.

### Installation on WebSphere Application Server. Version 6.1

WebSphere Partner Gateway, Version 6.1 Advanced Edition and Enterprise Edition include WebSphere Application Server Network Deployment, Version 6.1. If you are licensed to use WebSphere Application Server, Version 6.1 or WebSphere Application Server Network Deployment, Version 6.1, you can choose to add WebSphere Partner Gateway, Version 6.1 to your existing WebSphere Application Server, Version 6.1 installations.

#### For more information

To learn more about IBM WebSphere Partner Gateway, Version 6.1, contact your IBM representative or IBM Business Partner, or visit:

### **ibm.com**/software/integration/ wspartnergateway/

To join the Global WebSphere Community, visit:

#### www.websphere.org

Product	Function	Benefit
IBM WebSphere Business Modeler	Enables your organization to visualize, comprehend, document and deploy its business processes.	Enables tight links between business processes, technology enablement and strategic business objectives.
IBM WebSphere Integration Developer	Provides a common tool for building SOA-based integration for IBM WebSphere Process Server, IBM WebSphere Enterprise Service Bus (WebSphere ESB) and IBM WebSphere Adapters.	Enables integration developers to assemble complex business solutions for processes, mediations, adapters or code components.
IBM WebSphere Process Server	Delivers a BPM engine to automate and manage business processes.	Enables alignment of business and IT goals by implementing automated BPM.
IBM WebSphere Business Monitor	Enables you to monitor business processes in real time, providing a visual display of process status, and alerts and notifications.	Enables you to use real-time monitoring and analysis capabilities to continuously improve business processes.
IBM WebSphere Adapters	Enable you to connect and integrate disparate enterprise resource planning (ERP), human resources (HR), customer relationship management (CRM) and supply-chain systems.	Provide investment protection, business agility, speed of implementation, enhanced competitiveness, flexibility and adaptability, and ease of use.
IBM WebSphere ESB	Provides a framework for implementing SOA by supporting flexible and modular connectivity and messaging.	Enables your company to focus on core business needs rather than the IT infrastructure required for connecting the programs together by allowing you to add new services or make changes to existing services with little or no impact on the use of existing services.
IBM WebSphere MQ	Provides a reliable messaging backbone for integration between disparate applications with assured delivery.	Enables you to take advantage of the reliable messaging across more than 80 platforms to connect applications and Web services.
IBM WebSphere Message Broker	Supports powerful data manipulation and integration between disparate sources of data.	Provides an advanced ESB that delivers the connectivity and data transformation to support SOA.
IBM WebSphere Transformation Extender	Supports complex data transformation without coding, and provides support for EDI, Health Information Portability and Accountability Act (HIPAA), SWIFT and other industry standards.	Enables consistent data transformation and enrichment, reduced application development and maintenance costs, increased knowledge reuse, scalability of development, standardized components, increased quality of applications, reuse of transformation across the enterprise and decreased time to market of new applications.
IBM WebSphere Service Registry and Repository	Provides clear visibility into service associations and relationships while encouraging reuse of services to avoid duplication and reduce cost.	Enables companies to increase the business value of SOA through better management and governance of Web services.
IBM WebSphere Data Interchange	Supports EDI-related integration between trading partners based on ANSI X12, UN/EDIFACT and other industry standards for IBM z/OS <sup>®</sup> and distributed platforms.	Enables reliable, seamless, efficient and high-throughput integration between business applications of trading partners.

#### IBM WebSphere Partner Gateway Advanced and Enterprise Editions, Version 6.1 at a glance

#### Hardware requirements

#### AIX operating environment

- Processor: System i or System p model at 600 MHz or faster
- Main memory: 2 GB minimum
- Hard disk: Minimum 1.3 GB (1350 MB) available disk space for installation

#### HP-UX on Itanium operating environment

- Processor: Intel Itanium 2 processor
- Main memory: 2 GB minimum
- Hard disk: Minimum 1 GB (1080 MB) available disk space for installation

#### Linux for Intel (x86) operating environment

- Processor: Intel Pentium® at 2 GHz or faster
- Main memory: 2 GB minimum
- Hard disk: Minimum 1.3 GB (1350 MB) available disk space for installation

#### Linux for POWER operating environment

#### Linux for IBM System i<sup>™</sup> operating environment

- Processor: System i models that support logical partitioning (LPAR) (64-bit kernel support only) with a minimum of 450 commercial processing workload (CPW) in the Linux partition
- Main memory: 2 GB minimum
- Hard disk: Minimum 1.3 GB (1350 MB) available disk space for installation
- Linux for IBM System p<sup>™</sup> operating environment
- Processor: System p models that support Linux (64-bit kernel support only)
- Main memory: 2 GB minimum
- Hard disk: Minimum 1.3 GB (1350 MB) free disk space for installation

#### Sun Solaris Operating Environment

- Processor: Sun SPARC at 750 MHz or faster
- Main memory: 2 GB minimum
- Hard disk: Minimum 1.3 GB (1350 MB) available disk space for installation

#### Windows operating environment

- Processor: Intel Pentium at 2 GHz or faster
- Main memory: 2 GB minimum
- Hard disk: Minimum 1.3 GB (1350 MB) available disk space for installation

### Notes:

- Actual hardware requirements for your system might be greater, depending on the complexity of your specific environment, throughput and data-object size.
- Multiserver installations require shared network-attached storage (NAS).
- Additional servers might be needed for added capacity and redundancy.
- Additional hard-disk storage capacity is needed for document storage.

#### IBM WebSphere Partner Gateway Advanced and Enterprise Editions, Version 6.1 at a glance (continued)

#### Software requirements

AIX operating environment

- For 32 bit: AIX 5L, Version 5.2 or 5.3
- For 64 bit: AIX 5L, Verion 5.2 or 5.3

HP-UX operating environment

• For 64-bit Itanium: HP-UX 11i, Version 2

Linux for Intel (x86) operating environment

• Red Hat Enterprise Linux, Version 3 and 4

• SUSE Linux Enterprise Server, Version 9 and 10

Linux for POWER operating environment

32 bit (one of the following):

- Red Hat Enterprise Linux AS, Version 4
- SUSE Linux Enterprise Server, Version 10

64 bit (one of the following):

- Red Hat Enterprise Linux AS, Version 4
- Linux Enterprise Server, Version 10

Sun Solaris Operating Environment

• For 32 bit: Sun Solaris (SPARC) Operating Environment, Version 9 or 10

Windows operating environment

32 bit (one of the following):

- Windows Server 2003 Standard
- Windows Server 2003 Enterprise

Up-to-date information on operating system platform support is available at **ibm.com**/software/integration/wspartnergateway/sysreqs.

#### IBM WebSphere Partner Gateway Advanced and Enterprise Editions, Version 6.1 at a glance (continued)

#### Other software requirements

Application server (one of the following)

• WebSphere Application Server Network Deployment, Version 6.1 (included with terms and conditions limitations for use with WebSphere Partner Gateway only)

• WebSphere Application Server, Version 6.1 (optional)

Web browser for console access (one of the following)

• Microsoft Internet Explorer, Version 6.0 with Service Pack (SP) 1 or later

• Mozilla, Version 1.4 or 1.7

A Simple Mail Transfer Protocol (SMTP)-based e-mail relay server for e-mail alert delivery and SMTP message delivery

Databases (one of the following)

- DB2 Universal Database Enterprise Server Edition, Version 8.2
- DB2 Enterprise Server Edition, Version 9.1 (included with terms and conditions limitations for use with WebSphere Partner Gateway only)
- Oracle Enterprise Edition 9i, Release 2 (9.2)
- Oracle Enterprise Edition 10g, Release 1 (10.1)



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