



## IBM Sterling Business Integration Suite: A Packaged Solution to Solve Your Business Integration Challenges



**Redguides**  
for Business Leaders

Chris Hayes  
Matthew Bucey



- Learn how to have more effective communication with trading partners
- Improve business agility and your dynamic business network
- Realize end-to-end process visibility







## Executive overview

Businesses are faced with the need to reduce costs and complexity, grow revenue and profit, and protect their company's reputation. Many businesses are looking at improving their integration capabilities as a way to achieve their business objectives.

IBM® Sterling Business Integration Suite allows customers to solve critical business-to-business and managed file transfer challenges; connect people, systems, and technology; and enable the secure and seamless integration of key business processes.

Rather than relying on multiple vendors and complex cross-vendor implementations, customers can solve their integration problems with the IBM Sterling Business Integration Suite. This comprehensive set of solutions allows customers to capture the greatest amount of ROI while reducing the complexity and total ownership cost of implementing an integration strategy.

This IBM Redguide™ publication highlights the IBM Sterling Business Integration Suite and discusses how this solution offering can help your business improve the communication between you and your B2B community. This guide explores the need for dynamic business communication and the value of using the IBM Sterling Business Integration Suite. This guide explores the solutions architecture and the product offering that can be used to improve your ability to collaborate with your customers, partners, and suppliers.

## What is the business need

Businesses are faced with the need to reduce costs and complexity, grow revenue and profit, and protect their company's reputation. Many businesses are looking at improving their integration capabilities as a way to achieve their business objectives. These same businesses are also expressing concerns about the existing solutions available to them for solving their integration challenges. These concerns include:

- ▶ Too many disparate integration tools
- ▶ The many limitations of older integration technologies
- ▶ Lack of managed file transfer capabilities
- ▶ Poor support for process improvements
- ▶ Lack of business process visibility

At the same time, trends like globalization, digitization, stiffer regulation, and the need for increased security are making comprehensive integration more important for businesses every day. Companies are facing a rapidly changing and increasingly complex set of business issues that cannot be effectively addressed on a tactical, one-by-one basis. Managing these issues demands a comprehensive integration solution.

IBM Sterling Business Integration Suite is a comprehensive solution that can meet almost any integration need, from connecting businesses to one another, to moving massive amounts of data anywhere in the world, to streamlining the internal processes of a single enterprise. The suite includes the capabilities needed for a truly comprehensive integration strategy. Key capabilities include:

- ▶ Faster and easier partner onboarding
- ▶ More effective communication with trading communities
- ▶ Fast, secure, and reliable movement of massive amounts of data
- ▶ Visibility into business activity for predictable performance
- ▶ Improved service level agreement (SLA) compliance driving more business
- ▶ Bullet-proof data security to better protect your brand
- ▶ Mobile enabled

The suite also addresses today's integration concerns, because it supports ongoing business process improvements, provides business process visibility, and much more. No other solutions provider delivers the unique blend of B2B and data movement capabilities for end-to-end integration.

IBM Sterling Business Integration Suite optimizes and transforms your dynamic business network of internal stakeholders and external partners by responding to three imperatives:

- ▶ Improving business agility
- ▶ Increasing operational efficiency
- ▶ Driving greater performance

IBM Sterling Business Integration Suite does this through secure and flexible integration, seamless automation, and visibility into actionable information across IT and business processes. A dynamic business network enables companies and their customers, partners, and suppliers to connect, communicate, and collaborate in a productive, secure, and effective manner, driving positive business results for all involved.

The following scenarios exemplify the business need.

## A scenario to help tell the story

A company is looking for a way to automate manual, labor-intensive processes by integrating their B2B partner data directly with internal systems. They need to support certain B2B protocols and standards mandated by their major customers and they need to be able to connect with a diverse and disparate set of suppliers. As well as typical order-to-cash documents such as orders, ship notices, and invoices, they also need to be able to send large product catalogue files to their suppliers. Meeting regulation and compliance requirements from the government and their trading partners during data exchanges and ensuring the security of data is vital to the success of this activity.

IBM Sterling Business Integration Suite provides a comprehensive integration solution that can solve the most complex B2B and Managed File Transfer (MFT) integration scenarios. It provides a wide breadth of B2B communication protocols and data format standards, making it easy for them to support their customers, as well as to connect with small and medium suppliers with limited B2B capabilities. MFT capabilities also allow them to securely exchange very large product files with their suppliers. The solution provides them with the security, scalability, and performance capabilities that they need to integrate their B2B processes across their internal systems and B2B partner communities.

## A picture sums it up

Figure 1 on page 4 depicts a common flow of the *buy-sell-ship-pay* process between companies. The steps are:

1. Sales activity and proposal exchange between seller and buyer
2. Submission of (purchase) order to the seller
3. Order status checking by buyer
4. Advanced shipment notification between seller, buyer, and carrier
5. Tendering of the freight with the carrier by the seller
6. Shipment status is verified by carrier
7. Delivery made to buyer
8. Delivery verified between seller and buyer
9. Generation and sending of the invoice to the buyer from the seller
10. Generation and sending of payment from buyer to the (seller's) bank

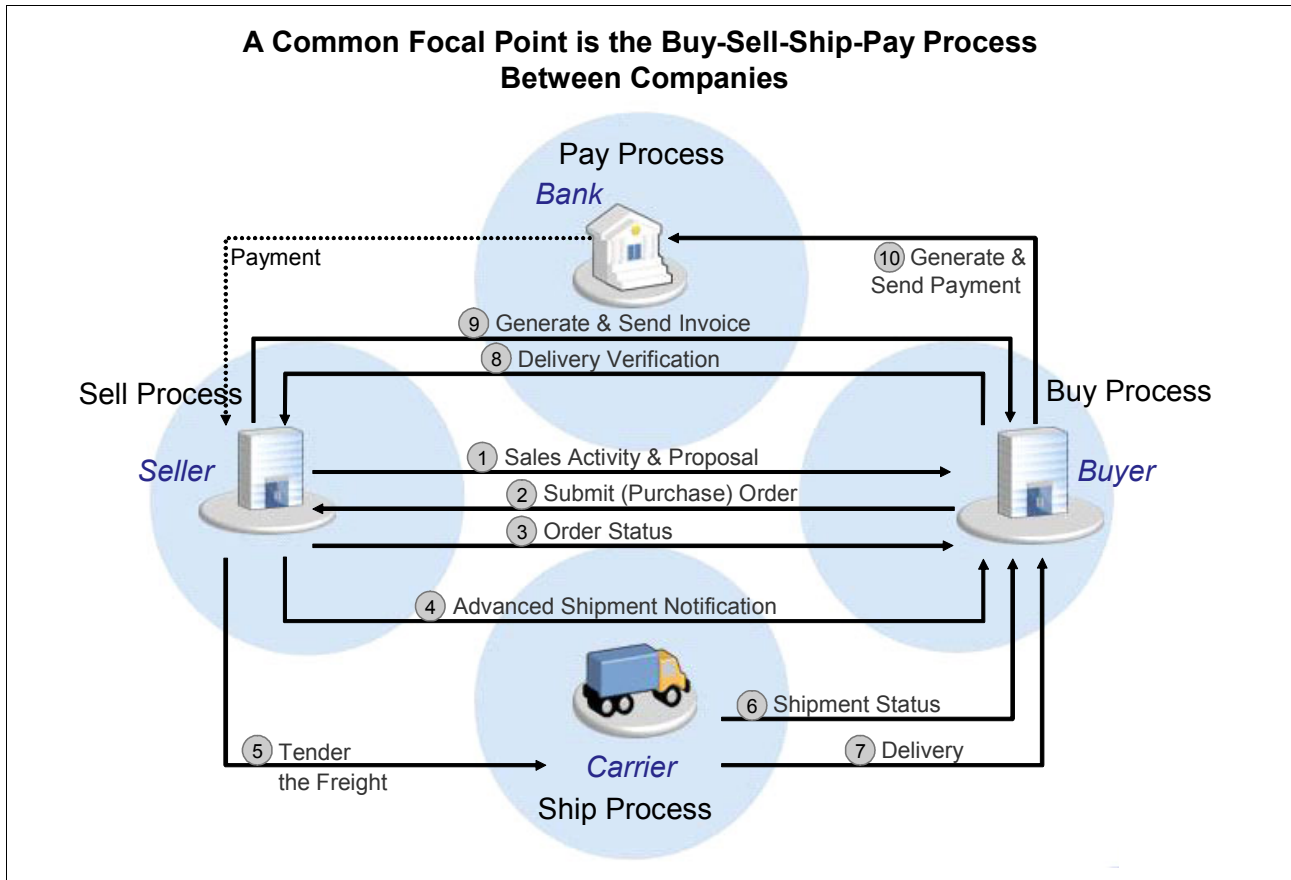


Figure 1 Buy-sell-ship-pay process

This activity can occur hundreds, if not thousands, of times a day. Automating this process can have tremendous benefits:

- ▶ Administrative cost reductions drive the potential for 30 - 60% hard dollar savings.
- ▶ Real-time order processing. The elimination of manual order entry results in the product being shipped faster, increasing the turnover of inventory.
- ▶ Management and control of peak processing drives the elimination of staffing challenges and improves order/invoice data accuracy during peak order cycles.
- ▶ Significant reduction in errors related to manual entry of information, resulting in fewer incorrect orders being shipped to customers and less time spent on issue resolution.
- ▶ Automation enables a significant improvement in visibility and tracking, which is difficult to achieve across manual processes

## Business value of the solution

Sterling Commerce, an IBM Company, provides comprehensive integration solutions that help you optimize your dynamic business network. With the IBM Sterling Business Integration Suite you can:

- ▶ *Improve business agility* by securely and flexibly integrating with any partner, any system, anywhere. This is crucial to making vital connections with customers, suppliers, and others in your B2B community.
- ▶ *Improve operational efficiency* by seamlessly automating manual business and IT processes inside and outside your enterprise. This saves you staff, time, and money, which can be used to grow your business in other key areas.
- ▶ *Improve business performance* by providing visibility into actionable information across your key business and IT processes.
- ▶ *Empower data movement* by providing assured file delivery with visibility, control, and governance for all data movement, including with third-party FTP servers.

## IBM Sterling Business Integration Suite Architecture

Sterling Commerce, an IBM Company, provides the integration solutions and capabilities vital to optimizing your dynamic business network. The heart of IBM Sterling Business Integration Suite (Figure 2) comprises these two core product offerings:

- ▶ IBM Sterling B2B Integration  
This product offering enables the secure and seamless execution of multi-enterprise business processes with 100% of your customers, partners, and suppliers.
- ▶ IBM Sterling Managed File Transfer  
This product offering provides secure data movement enabling your enterprises to gain control and oversight of the transfer of huge amounts of vital corporate data while reducing security risks and improving your IT and business efficiency.

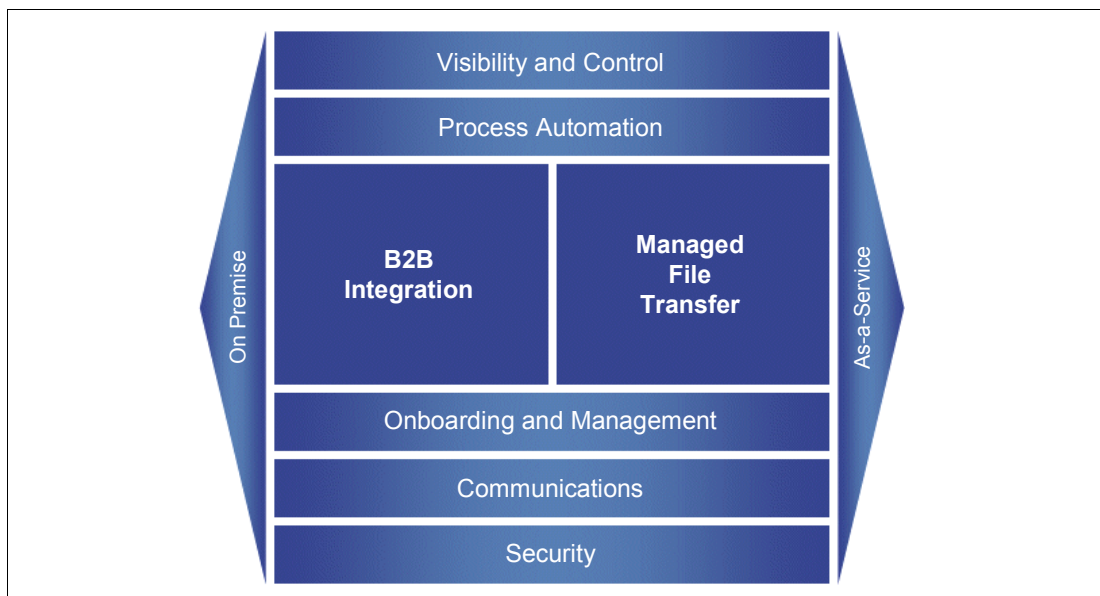


Figure 2 IBM Sterling Business Integration Suite

This product offering establishes five central services, which are:

- ▶ *Visibility and control* of your data and business processes
  - End-to-end process visibility and governance for all data movement
  - Centralized dashboards and alerts for tracking partner trading performance
  - Mobile access to critical processes so that you can manage exceptions and improve productivity
- ▶ *Process automation* streamlining and simplifying your business environment
  - Business process modeling
  - Integration flexibility
  - Data processing/translation
- ▶ *Onboarding and management* of new and existing business partners
  - Recruitment services and tools for document and partner expansion projects
  - Partner change management and tracking
  - Small partner enablement solutions
- ▶ *Communications* with your B2B community
  - Supports any format, any protocol, any size file/message transfer
- ▶ *Security* at all stages in the data-handling process
  - Proxy services that prevent direct communication between external and internal networks
  - Data privacy and integrity
  - Secure networks that have never been breached

## IBM Sterling B2B Integration

IBM Sterling B2B Integration automates business processes shared with trading partners and others in your B2B community. Automation of the complete *buy-sell-ship-pay* process (involving a wide range of documents and business processes) can be accomplished with this product. The *buy-sell-ship-pay* process goes beyond just the buyer or seller of the goods/services, and includes your greater B2B community, such as banks and third-party logistics companies. This solution automates key processes and provides visibility into data and processes shared with others in your B2B community. Benefits include:

- ▶ Extend business processes to 100% of your business community.
- ▶ Improve business agility, operational efficiency, and business performance.
- ▶ Add secure and flexible community integration and business process automation to your business processes.
- ▶ Gain visibility into actionable information across your IT and business processes.
- ▶ Deploy solutions on-premise, *as-a-service*, or as a hybrid combination of both.



IBM Sterling B2B Integration solutions are available in a various deployment and operational models (Figure 3) designed to meet your business needs:

- ▶ On-premise: Software solutions are located at your business site, executing within your IT environment, giving you overall control of the data and data transfer activity.
- ▶ As-a-service: Software solutions ranging from on demand to fully managed cloud-based solutions, providing you with the flexibility to quickly adapt as your business needs change and evolve.
- ▶ Hybrid: Providing a combination of software on-premise and in the cloud.

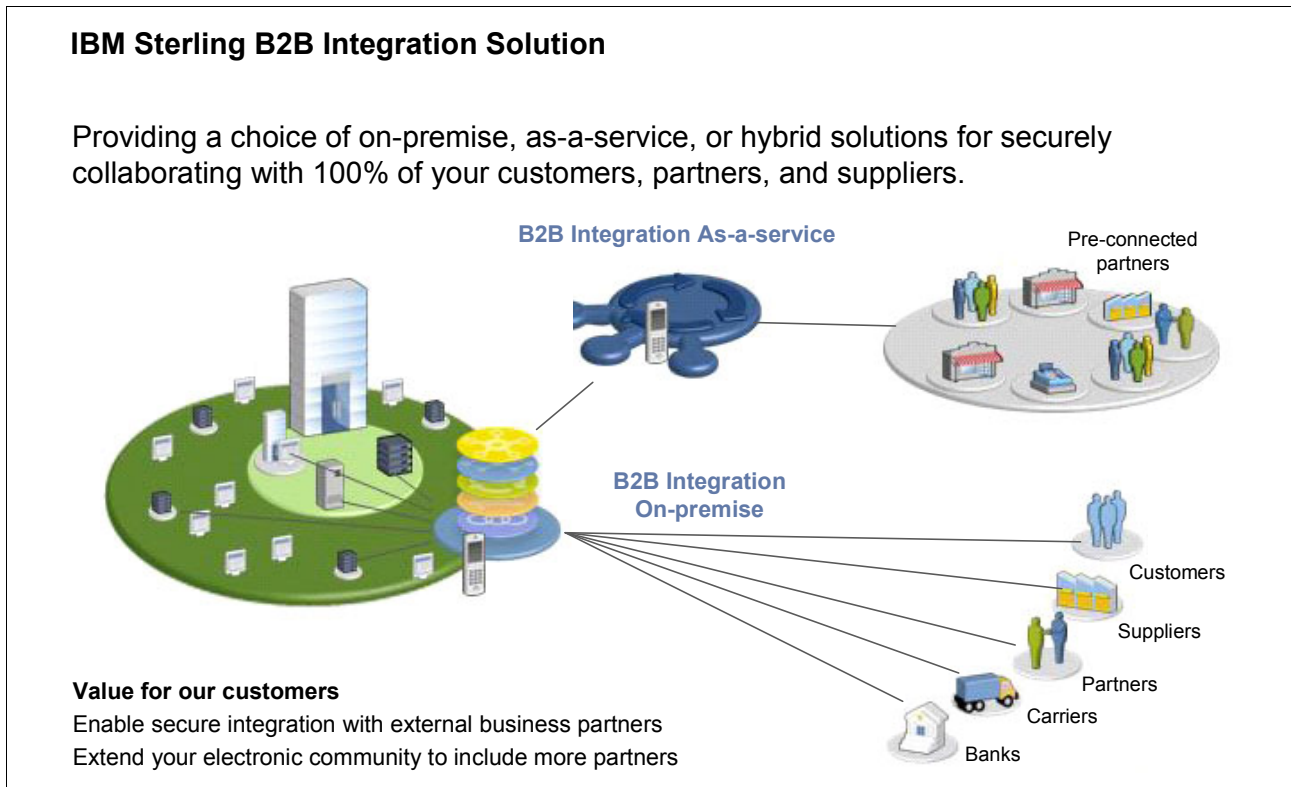


Figure 3 Deployment options

Table 1 lists Sterling B2B Integration solutions and their delivery modes.

Table 1 Sterling B2B Integration solutions

Solution	On-premise	As-a-service	Capabilities
IBM Sterling B2B Integrator	Yes	No	Powers business process orchestrations, high-volume electronic message exchange, complex routing, translation, and flexible interaction with multiple internal systems and external business partners.
IBM Sterling Gentran®	Yes	No	A trusted EDI and data translation solution helping you manage your B2B community.

<b>Solution</b>	<b>On-premise</b>	<b>As-a-service</b>	<b>Capabilities</b>
IBM Sterling e-Invoicing	Yes	Yes	Automates business processes and tax compliance, using global integration standards to support buyer and supplier compliance in a single solution. This is accomplished while also maintaining conformity with tax regulations for multiple countries.
Sterling mobile solutions	Yes	Yes	A variety of mobile solutions that enable your employees to conduct business easily on a wide range of mobile devices while away from the office.
IBM Sterling B2B Collaboration Network	No	Yes	Provides secure connectivity and collaboration with customers and business partners. It delivers unprecedented visibility and control over the business processes shared with outside companies.
IBM Sterling B2B Integration Services	No	Yes	Provides comprehensive partner onboarding, business process management, and community support.

## IBM Sterling Managed File Transfer

Enterprises depend on many types of data movement in their dynamic business network, including:

- ▶ Outside processing of information such as credit card transactions, payroll, and reporting
- ▶ B2B exchanges of information such as designs, planning and scheduling data, and order information
- ▶ Ad hoc communications to support special needs/situations such as sharing marketing proofs, legal documents, and IT support logs
- ▶ Batch file transfers to support file-based system integration

All these types of data movement show a linkage between data transfers and key collaborative processes. These data movements and the processes that they feed are critical to your business and communications, both inside and outside the organization. These various forms of data exchange have been established over time as part of many independent projects, causing solutions where the data handling takes place in silos and in many different forms, commonly categorized as managed and unmanaged file transfers.

Sterling Managed File Transfer provides the services needed to take control of file transfers and ensure secure delivery of the data. Sterling Managed File Transfer includes these key capabilities:

- ▶ Encrypt data both while it is being transferred and at rest.
- ▶ Provide safe internet transfer, reducing the number of dedicated lines needed to transfer data.
- ▶ Integrate with your existing security infrastructure.
- ▶ Increase the speed of transfer by up to 400%.

- ▶ Ensure the delivery of your data by using built-in automation and checkpoint restart.
- ▶ Simplify automating file transfer processes with pre-built templates.
- ▶ Provide community management and enable onboarding of new members with minimal IT involvement.
- ▶ Provide service level agreement (SLA) management using automated notification of file transfer problems.
- ▶ Conduct fast remediation with the ability to trace the cause of problems and fix them faster.
- ▶ Assure compliance by providing full documentation of data transfers and audit trails.

Figure 4 shows how the Sterling Managed File Transfer solution offers a modular deployment. Sterling File Gateway provides B2B onboarding and file transfers. Connect:Direct enables point-to-point file transfers. Sterling Control Center manages and monitors file transfer activity, and Sterling Secure Proxy prevents unauthorized access to your business networks.

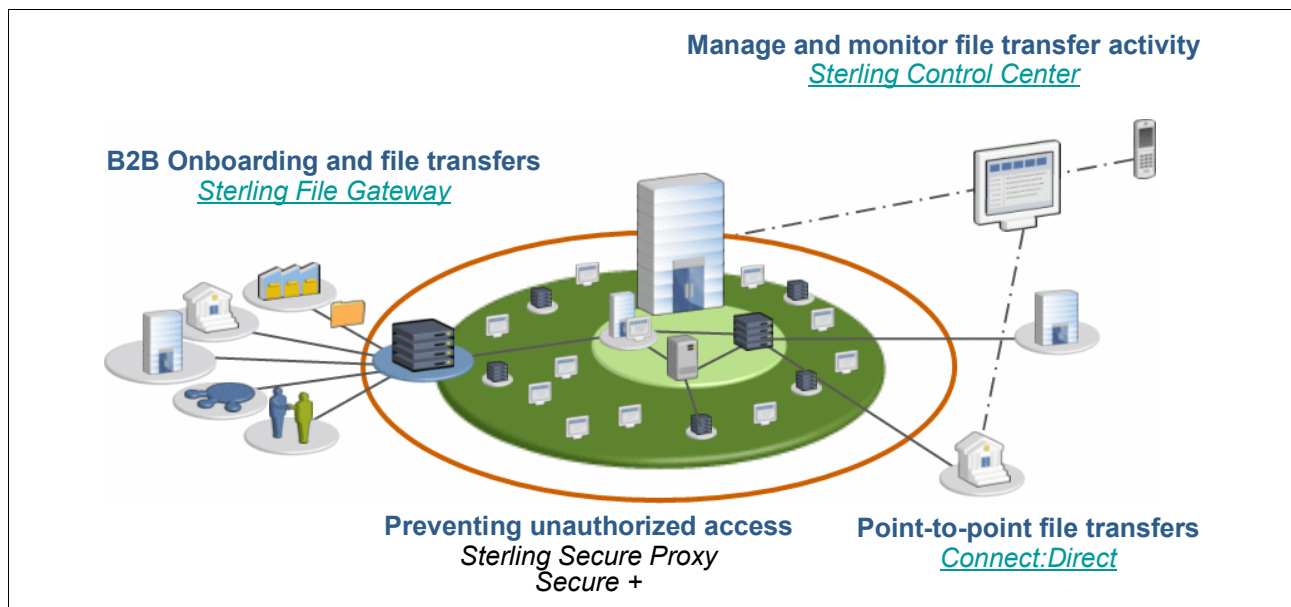


Figure 4 Sterling Manage File Transfer a modular deployment

The Sterling Managed File Transfer solution is available with various products that can either work stand-alone or together. The products are:

- ▶ IBM Sterling Connect:Direct
  - Point-to-point file transfer software optimized for high-volume, assured data delivery of files within and between enterprises
- ▶ IBM Sterling Connect:Direct Secure Plus
  - An add-on to IBM Sterling Connect:Direct that provides configurable authentication and encryption
- ▶ IBM Sterling Control Center
  - A management solution for all your file transfer activity
- ▶ IBM Sterling File Accelerator
  - High-speed Transmission Control Protocol (TCP) alternative increasing transfer speed by up to four times

- ▶ IBM Sterling File Gateway  
A service-oriented architecture (SOA) based solution allowing you to incorporate your file transfer communities into all your business processes and incorporates web-based interfaces for customer self-services and rapid onboarding
- ▶ IBM Sterling Secure Proxy  
A demilitarized zone (DMZ) based application proxy that protects internal networks from the security risks associated with internet-based trading partner, customer, and supplier data exchanges

## Summary

This guide explained how IBM Sterling Business Integration Suite can be used to achieve integration of your ever-changing business network. We discussed situations that can be helped using these products and the architecture of the suite. Every business wants to perform better and communicate effectively and securely with their B2B community and have efficient and effective business processes. IBM Sterling Business Integration can make that happen.

## Other resources for more information

For more information review these resources:

- ▶ IBM Sterling Business Integration Suite and the Sterling product  
<http://www.sterlingcommerce.com/>
- ▶ IBM Redbooks® publication *Sterling Integration for Commerce and File Transfer*, SG24-7927

## The team who wrote this guide

This guide was produced by a team of specialists from around the world working with the International Technical Support Organization (ITSO).

**Chris Hayes** is a Senior Product Marketing Manager for Sterling B2B Integration Solutions based in the UK. He has over 15 years of experience in the B2B integration field. He holds a degree in physics from the University of Liverpool. His areas of expertise include B2B Gateways, electronic invoicing, and IBM Sterling B2B Integrator.

**Matthew Bucey** is a Product Marketing Manager for Sterling Managed File Transfer in the United States. He has 11 years of experience in both the wireless telecommunications and B2B software technology fields. He holds degree in marketing from the University of Kentucky and an MBA in strategy and finance from Ohio State University. His areas of expertise include cloud-based file transfer, file transfer processes in communications and media, and IBM Sterling Connect:Direct.

Thanks to the following people for their contributions to this project:

LindaMay Patterson  
International Technical Support Organization, Rochester Center

## Now you can become a published author, too!

Here's an opportunity to spotlight your skills, grow your career, and become a published author—all at the same time! Join an ITSO residency project and help write a book in your area of expertise, while honing your experience using leading-edge technologies. Your efforts will help to increase product acceptance and customer satisfaction, as you expand your network of technical contacts and relationships. Residencies run from two to six weeks in length, and you can participate either in person or as a remote resident working from your home base.

Find out more about the residency program, browse the residency index, and apply online at:

[ibm.com/redbooks/residencies.html](http://ibm.com/redbooks/residencies.html)

## Stay connected to IBM Redbooks

- ▶ Find us on Facebook:  
<http://www.facebook.com/IBMRedbooks>
- ▶ Follow us on Twitter:  
<http://twitter.com/ibmredbooks>
- ▶ Look for us on LinkedIn:  
<http://www.linkedin.com/groups?home=&gid=2130806>
- ▶ Explore new Redbooks publications, residencies, and workshops with the IBM Redbooks weekly newsletter:  
<https://www.redbooks.ibm.com/Redbooks.nsf/subscribe?OpenForm>
- ▶ Stay current on recent Redbooks publications with RSS Feeds:  
<http://www.redbooks.ibm.com/rss.html>



# Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing, IBM Corporation, North Castle Drive, Armonk, NY 10504-1785 U.S.A.*

**The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:** INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM websites are provided for convenience only and do not in any manner serve as an endorsement of those websites. The materials at those websites are not part of the materials for this IBM product and use of those websites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

## COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs.

This document, REDP-4723-00, was created or updated on January 28, 2011.



## Trademarks

IBM, the IBM logo, and [ibm.com](http://www.ibm.com) are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. These and other IBM trademarked terms are marked on their first occurrence in this information with the appropriate symbol (® or ™), indicating US registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the web at <http://www.ibm.com/legal/copytrade.shtml>



The following terms are trademarks of the International Business Machines Corporation in the United States, other countries, or both:


The following terms are trademarks of other companies:

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

IBM®

Redbooks®

Redbooks (logo) ®

IBM Sterling Gentran®

Redguide™

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Linux is a trademark of Linus Torvalds in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.