

Application integration solutions
To support your IT objectives

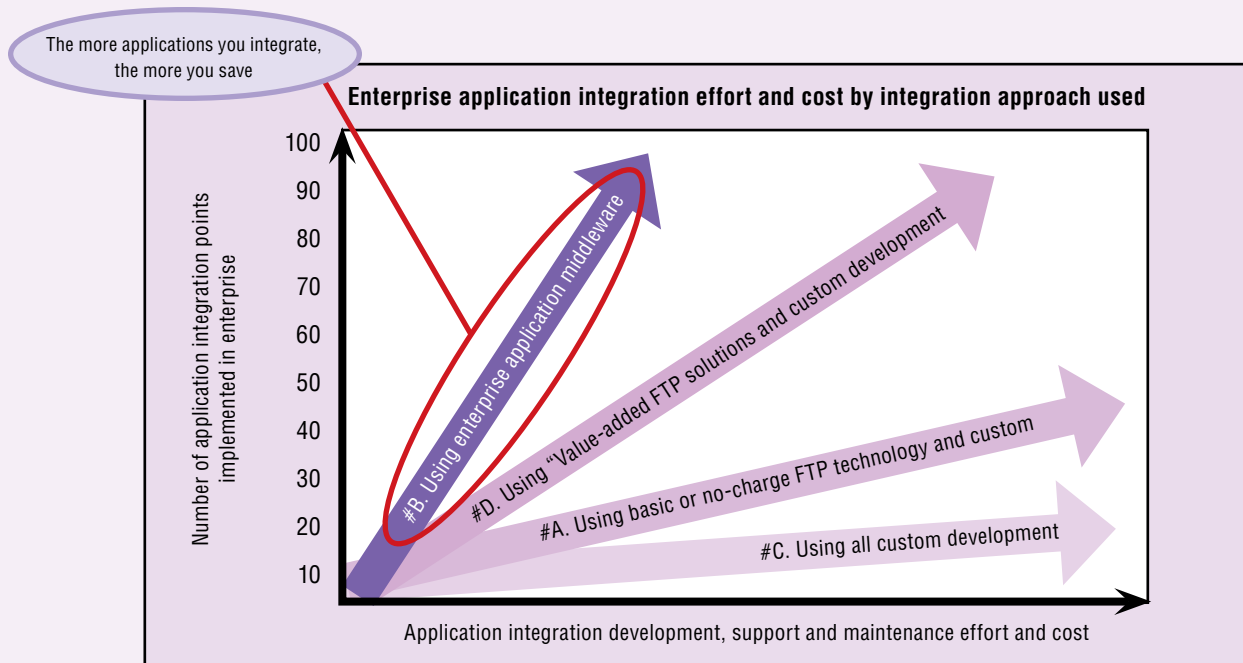


**IBM WebSphere application integration software:
A faster way to respond to new business-driven opportunities.**



Market conditions and business requirements are changing rapidly. Unpredictable market forces such as mergers and acquisitions, expanding regulatory requirements and globalization can inhibit revenue growth. To keep pace with the speed of business, you need to enable all your applications to communicate with each other—regardless of programming languages, system platforms, programming models, protocols or data formats. Perhaps you've invested a lot of time and money over the years in applications or solutions, or built your own, to connect important business systems together. Now, a large portion of your budget might be dedicated to building and maintaining custom code to keep everything running. It's just this kind of inflexibility that can affect your ability to respond quickly to market changes—and erode your competitive edge.

To thrive, you need to improve responsiveness and agility. The critical systems that run your business need to integrate with those of your customers, suppliers and trading partners, so that you can adapt quickly—while maintaining or even improving the quality of existing services. Building a sound foundation based on flexible application integration software can help you meet both IT and business challenges. You can help employees become more productive, make your business more accessible to customers and share information with suppliers and partners. You can also connect existing applications to new applications through a service oriented architecture (SOA).



According to a report by Software Strategies, application integration based on middleware from vendors like IBM cost up to four times less than integration solutions engineered in-house. The more applications you integrate, the more you save.

ESB without limits

IBM WebSphere® application integration software connects everything inside and outside your company—enabling your SOA to deliver reliability and security with high performance and high availability, spanning newly developed Web services and complex heterogeneous environments.

Use WebSphere application integration software to integrate, automate and manage end-to-end processes more effectively. Slash maintenance times and costs. Connect internal and external applications to exchange information reliably so that you can respond to customer needs faster. And share data descriptively and intelligently between dissimilar applications across your entire organization for increased reuse.

IBM recognizes that different companies have different SOA connectivity requirements and that even within one company different departments have different needs. That's why IBM provides the comprehensive and complete enterprise service bus (ESB) offerings for an SOA connectivity solution for enterprises of any size.



IBM ESB offerings are delivered through two products. *IBM WebSphere ESB* is the ESB offering for Web services connectivity and service-oriented integration, particularly where you have service-enabled assets in either a Java™ 2 Platform Enterprise Edition (J2EE) or Microsoft® .NET environment. WebSphere ESB is built on top of IBM WebSphere Application Server Network Deployment, inheriting WebSphere Application Server qualities of service, with its world-class clustering, failover, scalability and security.

IBM WebSphere Message Broker, the advanced ESB, has been proven for many years in the market. It is highly capable of connecting and integrating any type of asset across your heterogeneous enterprise—whether they're Web services or non-services, non-standards-based assets. The robustness and flexibility of WebSphere Message Broker—and the range of its potential functionality—are what make it a truly advanced ESB for universal connectivity and transformation.

Along with these robust offerings, IBM has a product portfolio that delivers an ESB without limits that gives you a range of other complementary SOA connectivity capabilities, beyond those provided by an ESB alone:

- *IBM WebSphere MQ*, to integrate applications across a broad set of platforms and application environments
- *IBM WebSphere Transformation Extender*, to provide code-free transformation and validation of complex business documents in both real-time and batch processes, compatible with in-house and industry exchange standards
- *IBM WebSphere Adapters*, to accelerate time to value by integrating and service-enabling key business applications
- *IBM WebSphere DataPower® SOA appliances*, to simplify, help secure and accelerate your SOA with a hardened SOA infrastructure for on demand, scalable, multiprotocol messaging, any-to-any data transformation and XML Web services security
- *IBM WebSphere Service Registry and Repository*, to find and reuse services as building blocks for new applications, enable dynamic and efficient interactions between services at run times and govern services throughout the life cycle



IBM has designed the products that make up the WebSphere application integration portfolio to help you innovate interactions, improve flexibility and achieve operational excellence. WebSphere application integration software provides service-monitoring capabilities through seamless integration with IBM Tivoli® Composite Application Manager. And the portfolio's integrated SOA platform architecture even further extends to other WebSphere products such as IBM WebSphere Process Server and IBM WebSphere Portal.

WebSphere ESB: Providing Web services connectivity and service-oriented integration

You recognize the need to connect applications using reliable delivery mechanisms, and to help ensure that the data being exchanged is delivered in the right format to the right application at the right time. By separating application integration tasks from your application logic, you can help core applications operate more efficiently—and increase business flexibility in the process. This flexibility helps streamline IT operational efficiencies and provide consistent, accurate information to your customers, trading partners and suppliers.

WebSphere ESB is a flexible connectivity infrastructure designed to help you integrate applications and services as part of your SOA. It delivers “smart” integration using Web services connectivity, Java Message Service (JMS) messaging and service-oriented integration capabilities that enable you to begin reaping the benefits of an SOA across your entire IT infrastructure today.

You can connect and extend new and existing systems by simplifying your SOA integration development using open-standards-based connectivity between applications and heterogeneous systems. Improve time to value with an easy-to-learn, cost-effective solution that is simple to install, configure, build and manage. And gain business flexibility by taking advantage of a responsive SOA connectivity infrastructure that can adapt to business change quickly and easily.

WebSphere Message Broker: Implement an enterprise-wide SOA to meet your business needs

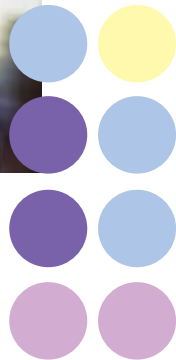
Relying on manual, labor-intensive approaches, or custom-coded programmatic solutions to bridge between applications is no longer effective. As your integration needs evolve, the time and expense to develop and maintain custom links between applications increase—which can directly affect your bottom line.

You can use WebSphere Message Broker to address your end-to-end, heterogeneous application integration needs. With its robust design, scalable architecture, ease of use and performance to match even traditional transaction-processing systems, WebSphere Message Broker enables you to build an advanced ESB that allows you to implement an enterprise-wide SOA to meet your evolving business needs. And you can take advantage of this flexible combination of capabilities to solve your integration challenges from virtually any starting point.

WebSphere Message Broker can accommodate the changing needs of your business by enabling you to add to your existing infrastructure without increasing its complexity, protecting your ongoing investments in applications and data structures, as well as products from other vendors, and seamlessly extending your ESB, regardless of the underlying message systems.

WebSphere MQ: Your key to integrating critical business applications and processes

In today's fast-paced business environment, you need to invest your valuable skills in improving the responsiveness and flexibility of your business instead of wrestling with underlying network complexities. Maintaining homegrown approaches for connecting applications, including the use of File Transfer Protocol (FTP), can divert your skills and time away from higher-level integration concerns. WebSphere MQ delivers reliable message-level integration for applications and Web services, enabling you to use your existing software and hardware investments across virtually all commercial IT systems.



With its award-winning messaging backbone powering your ESB as the connectivity layer of your SOA, WebSphere MQ can help increase business flexibility. It can also help as you work to fulfill regulatory-compliance obligations, such as the U.S. Sarbanes-Oxley Act (SOX) through increased transparency, reliability and auditability of data movement.

WebSphere MQ offers proven scalability, availability, and performance that grows with your needs. Renowned for its reliable once-and-once-only assured delivery of important messages and for its transactionality, WebSphere MQ handles the complexities of communication protocols and dynamically distributes messaging workload across available resources. Offloading these time-consuming tasks to WebSphere MQ frees you to apply your skills to higher-level integration challenges that bring benefits to your team and to the business.

WebSphere Transformation Extender: Providing a universal transformation engine

Transforming critical business information from one application format to other application formats is only one component of the integration challenge. Industry and regulatory compliance is adding more challenges when it comes to validating business information sent between organizations. Preassembled templates for industry-standard exchange formats, like Health Information Portability and Accountability Act (HIPAA), SWIFTNet, and electronic data interchange (EDI) help accelerate solution implementation by providing consistency and facilitating automation. The next level of complexity is to provide checks and balances within the ESB to help ensure that the actual information being exchanged makes sense before inserting it into your business systems.



WebSphere Transformation Extender enables you to address these kinds of challenges. Through its unique ability to transform and verify complex data in its native format, without scripting or programming, it tackles the more difficult challenges in integrating systems and information across your enterprise.

WebSphere Transformation Extender is a universal transformation engine designed to help ensure that even the needs of EDI users are met. It can process large documents of virtually any size and complexity, and is packaged in editions that can be embedded into C, COBOL and Java applications, participate in both batch and event-based business processes and can be deployed on Microsoft Windows®, UNIX®, Linux®, and IBM mainframes. These advanced transformation capabilities enhance IBM ESB offerings such as WebSphere Message Broker.

No matter where you are in the SOA life cycle, WebSphere Transformation Extender performs a key role, whether you are just starting out with a small project, or you have already implemented your SOA.

WebSphere Adapters: Accelerating change management and service implementation

The key to flexibility in today's marketplace is to reuse more of your existing assets, including currently running business processes and applications. As you adapt applications to meet business needs, you can incur significant opportunity costs because skilled programmers are maintaining custom interfaces between applications. Prebuilt adapters, configured by GUIs with discovery utilities, and data browsers and listeners, can help reduce the cost of connecting your business applications. And by connecting them to your ESB, you enable these applications to participate in your SOA.

By maximizing your flexibility to change, WebSphere Adapters enable you to quickly support new business services based on the combined information of existing application investments, ranging across enterprise resource planning (ERP), human resources (HR), customer relationship management (CRM) and supply chain systems.

WebSphere DataPower SOA appliances: An innovative approach to Web services processing

Although there is tremendous business value in SOA and XML Web services, complexity, security and performance are often the largest barriers to adoption. Enterprises require a pragmatic approach to simplify, help secure and accelerate their SOA initiatives. One that simultaneously recognizes the uncertainty of new standards, the value of existing infrastructure investments, the organizational challenges of SOA and the performance impact of XML Web services.

IBM WebSphere DataPower® SOA appliances represent an important element in IBM's holistic approach to SOA. WebSphere DataPower appliances are purpose-built, easy-to-deploy network devices that simplify, help secure and accelerate your XML and Web services deployments while extending your SOA infrastructure. They offer an innovative, pragmatic approach to harness the power of SOA while simultaneously enabling you to take advantage of the value of your existing application, security and networking infrastructure investments. The IBM SOA appliance family includes IBM WebSphere DataPower Integration Appliance XI50 for easy-to-deploy application integration; IBM WebSphere DataPower XML Security Gateway XS40, purpose-built for Web services security; and IBM WebSphere DataPower XML Accelerator XA35 for centralized Extensible Stylesheet Language Transformation (XSLT) management and wire-speed XML processing.



WebSphere Services Registry and Repository:

Enabling you to make the most of new and existing assets

SOA has the potential to drive business flexibility, performance and innovation by better aligning your information technologies to your business objectives. Maximizing this potential depends on how well you manage the services in your SOA throughout the life cycle. WebSphere Service Registry and Repository is an industrial-strength tool that helps you get the most business value from your SOA by enabling better management and governance of your services. Through its robust registry and repository capabilities, WebSphere Service Registry and Repository can be an essential foundational component of your SOA implementation.

WebSphere Service Registry and Repository includes:

- *A service registry that contains information about services, such as the service interfaces, its operations and parameters*
- *A metadata repository that has the robust framework and extensibility to suit the diverse nature of service usage*

Building an application integration solution that works for your business

WebSphere application-infrastructure solutions can help you:

- *Create new value from existing business applications.*
- *Optimize the value chain to increase flexibility and business responsiveness.*
- *Adapt quickly to a constantly changing environment.*
- *Accommodate infrastructure changes driven by the need to optimize business processes.*

IBM's focus is on helping you increase business flexibility while efficiently reusing your existing IT investments. With an ESB without limits delivered by WebSphere application integration software, you can achieve immediate impact—and be prepared for future growth—with standards-based, proven technology that is able to grow and change as business needs dictate.

For more information

To learn more about IBM WebSphere application integration solutions, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/websphere

To join the Global WebSphere Community, visit:

www.websphere.org



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