



Highlights

- Save time, reduce cost and improve application security in your business integration efforts
 - Increase the flexibility and scalability of the SOA infrastructure
 - Optimize and simplify Enterprise Service Bus deployments
 - Decouple protocol bridging, web services management, security processing and policy enforcement from your business applications
 - Enable Enterprise Service Bus functions including routing, bridging, transformation and event handling
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IBM WebSphere DataPower Integration Appliance XI52

Save time, reduce cost, and improve security with this purpose-built appliance for application integration

Leaders at organizations of all sizes are challenged to increase flexibility, improve services, and reduce security risks, all while reducing the cost of delivering these services. Users are demanding new services that are accessible 24x7, from any device they choose to use.

Agility and innovation can be achieved when you find a way to rapidly and easily deliver on the needs of your business. Reducing IT complexity is critical to achieving flexibility while meeting the corporate financial goals. Addressing IT complexity is only a part of what's required, as connectivity challenges can stymie your best people, who are presented with a dizzying combination of proliferating data formats and transport protocols, an increasing number of industry and government regulations and a challenging blend of file, message and Application Programming Interface integrations. If your organization's integration strategy was initially developed for one type of file-based or API-based mediations, your team may be struggling now to accommodate an increasing demand to support modern data formats and web services mediations. If these are challenges you face today, you are ready for an easier, more scalable connectivity solution.

Around the world, IT and business leaders are discovering that innovation does not need to be expensive. Complexity can be managed, cost reduction, and productivity gains are all achievable.

IBM understands these business challenges, and the increasing demands of the user community, and has developed an appliance that is purpose-built for application connectivity and integration. The IBM WebSphere® DataPower® Integration Appliance XI52 helps enable business and IT leaders to take action to shrink their infrastructure, centralize services, and offload processing from the enterprise applications. This purpose-built appliance from IBM is designed to simplify business integration, provide centralized governance and policy control, and improve web and mobile facing application security.



DataPower Integration Appliance XI52

- 2U high-density rack-mount design
 - Two network I/O modules for increased flexibility and serviceability (eight 1-Gb and two 10-Gb ports)
 - Latest-generation hardware technology helps increase performance and capacity
 - Improved serviceability with multiple field-replaceable parts
 - Customized handling of intrusion detection
 - LED indicators that provide enhanced user feedback
 - Enhanced hardware diagnostic tools that simplify problem isolation
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Cost-effective change is possible

Organizations that thrive will be those that are capable of rapid, flexible connectivity throughout the breadth of their business network. Leaders are interested in the IBM WebSphere DataPower Integration Appliance XI52 because it gives IT a way to deliver timely, cost effective and flexible application integration.

Your business network encompasses more than just your IT systems; it comprises the sum of interactions and relationships that make up your business. This means you must not only be able to seamlessly connect applications and process within your business, but you must be able to effectively extend those connection processes to partners, customers, and suppliers. And your team must be prepared to extend these connections into the expanding realm of cloud applications.

IBM WebSphere DataPower appliances are designed to maintain the highest levels of reliability. These IBM appliances help you untangle the costly and debilitating IT complexity that is associated with point-to-point connectivity and integration, application and data security, API management and security, and enterprise mobility. Experience an appliance that helps you make the most of your existing infrastructure investments. The IBM WebSphere DataPower Integration Appliance XI52 delivers operational cost savings by providing advanced integration and security capabilities without any changes to your existing applications, resulting in rapid time-to-value on your investment.



IBM WebSphere DataPower Integration Appliance XI52

About this IBM integration appliance

The WebSphere DataPower Integration Appliance XI52 is purpose-built hardware platform that delivers solutions that are highly manageable, security-enhanced and scalable. The DataPower Integration Appliance XI52 provides many core functions to applications, such as service-level management, routing, data and policy transformations, policy enforcement, and access control, hardened security—all in a single “drop-in” device. When you employ this IBM appliance in the network layer, you offload security checks and structural checks from the applications which simplifies integration while minimizing performance degradation.

Expect a simpler, more-connected business environment

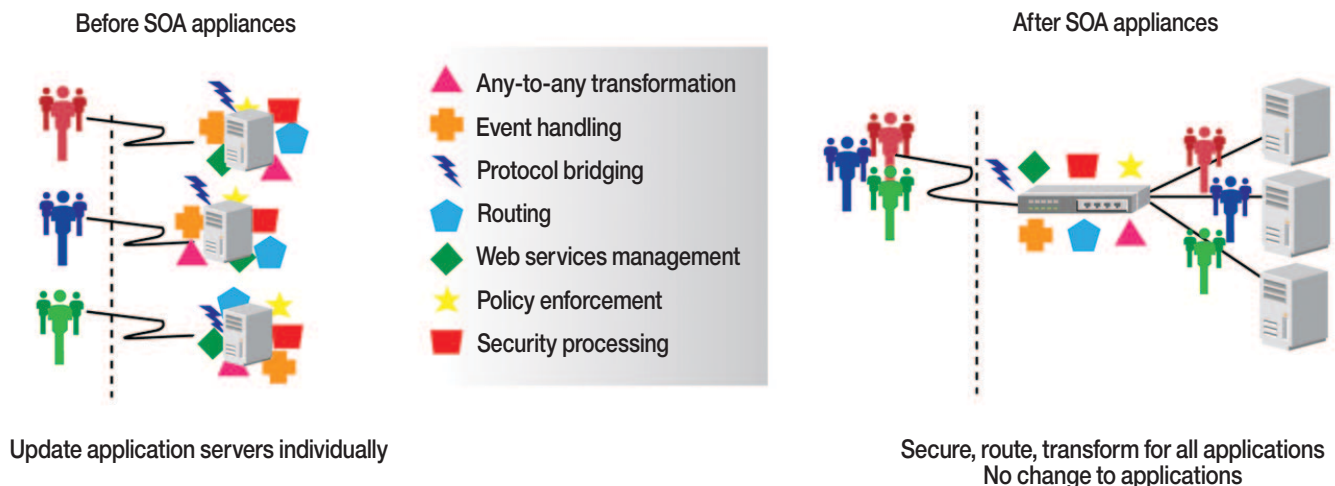
Leaders who employ the DataPower Integration Appliance XI52 within their organizations get rapid, flexible application integration with configuration-driven deployment. They discover that when they move numerous integration and Enterprise Service Bus (ESB) functions (such as routing, data transformation, protocol bridging, web services management, security processing and policy enforcement) onto this IBM appliance, a number of stakeholders can benefit. IT architects, integration architects, operations managers and security personnel can decouple these functions from core business applications; increasing the flexibility and scalability of SOA infrastructure integrations.

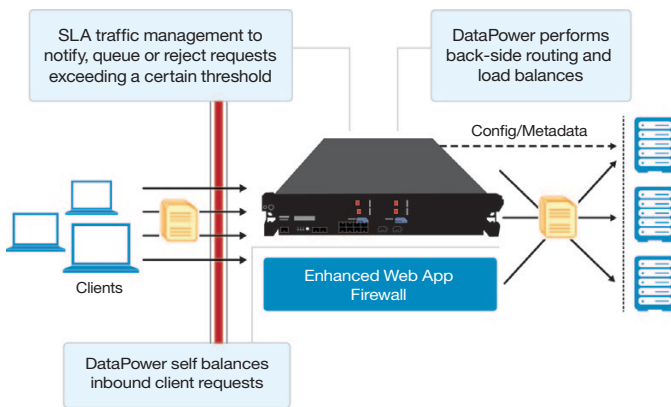
The DataPower Integration Appliance XI52 provides you with a drop-in, configuration-driven approach to connectivity. This helps reduce costs by simplifying development, deployment and manageability, and you can expose existing applications and data as new business services without impact to your current IT environment. You gain the power to bridge “next-generation” technologies to your back-end, core and legacy applications without having to make changes to these existing systems.

Modern applications are evolving, changing from heavy and rigid, to being agile and fluid, where application services can be consumed on mobile device. Your customers and partners have come to demand the same level of interactivity and data access for their business information, but critical business data is often locked away in existing applications that were not designed for this kind of usage. With native support for JavaScript Object Notation (JSON) and Representational State Transfer (REST), the WebSphere DataPower Integration Appliance XI52 can help you create low-cost services by unleashing existing system and non-XML real-time data for consumption by dynamic Web 2.0 and Mobile applications. Your team gains the ability to connect to existing system data and can handle many data formats, including text, binary, HTML, XML, and other data formats. And since the DataPower Integration Appliance XI52

is a configuration-driven appliance, these integrations can be achieved with little to no modification of the underlying hosting applications.

In a distributed application environment, which crosses ecosystems between your enterprise and your customers, partners and suppliers, business success requires reliability, ability to dynamically adopt to changing traffic conditions, and moment-by-moment management of (and feedback from) resources. To fully optimize your existing IT infrastructure and to gain reliability, incoming network traffic needs to map to the most appropriate resource available. The option for application optimization (AO) provided by WebSphere DataPower appliances helps provide dynamic, intelligent load balancing functions for the most demanding environments. By evenly distributing workloads throughout appliances and onward to load-selected servers, AO enhances uptime, user-visible responsiveness and resource usage. When combined with the robust message routing, service-level management, content inspection and security features of the DataPower Integration Appliance XI52, AO capabilities offer another avenue to achieve extreme reliability in your IT environment while simultaneously reducing complexity.





Get rapid, flexible application integration with configuration-driven deployment

As a hardware ESB, the WebSphere DataPower Integration Appliance XI52 provides a wide array of message transformations and can help you achieve higher levels of security for assurance certifications that are required by financial services and government agencies worldwide. It supports Public Key Infrastructure (PKI), Federal Information Processing Standard (FIPS), 140-2 Hardware Security Module (HSM), General Services Administration (GSA) eAuthentication, and Homeland Security Presidential Directive (HSPD)-12.

The DataPower Integration Appliance XI52 in your organization

Organizations in every industry find opportunities to take advantage of the Enterprise Service Bus (ESB) capabilities, existing systems enablement and integration features of the DataPower Integration Appliance XI52. If you have business requirements to improve web services management, governance, and security while providing ESB capabilities, the WebSphere DataPower Integration Appliance XI52 is a solution for you.

Your choice of SOA integration appliance can have significant business impact. The wide range of use cases for the DataPower Integration Appliance XI52 provides many benefits across your organization:

Drop-in integration for heterogeneous environments

As a core offering in the IBM ESB product portfolio, the DataPower Integration Appliance XI52 is a purpose-built hardware ESB for simplified deployment and hardened security. Gain the ability to quickly transform data between a wide variety of formats including XML, existing systems, industry standards and custom formats. This IBM appliance provides core ESB functions such as routing, bridging, transformation and event handling. The DataPower Integration Appliance XI52 provides a more reliable, performance-oriented solution to your integration challenges. Because it is not limited to handling just XML, the performance of this appliance resonates with IT teams that seek to benefit from the connectivity of SOA deployments but who must also deal with their current reality of managing multiple proprietary, industry, company-specific or existing data formats. The DataPower Integration Appliance XI52 is a true “drop-in” integration point for such environments, helping to reduce the time and cost of integrations and speeding the time-to-market for services.

Innovative XML and web services enablement of existing-systems infrastructure

Leaders want accelerated, security-rich integration capabilities. DataPower Integration Appliance XI52 provides transport mediation, routing and transformations among binary, text, and XML and non-XML message formats. You can use visual tools to describe data formats, create mappings between different formats and define message flows. With native connectivity to IBM DB2® and IBM System z®, the DataPower Integration Appliance XI52 offers an innovative solution for security-rich XML enablement of your existing distributed systems as well as mainframe connectivity.

Policy-driven approach to web services management and governance

Centralization of web services management tasks and policy enforcement which decouples these services from your business applications, adds flexibility and scalability to your SOA deployments. You can gain improved insight, visibility and control for network services and traffic. When you move functions such as access control, web services management, security and policy enforcement onto the DataPower Integration Appliance XI52, your entire organization becomes more agile while improving real time operational control within the IT organization. The

WebSphere DataPower Integration Appliance XI52 provides an easy-to-use graphical interface which simplifies development, deployment and manageability.

Software integration: Registry and repository, security, identity and service management

The DataPower Integration Appliance XI52 integrates with a variety of software applications for registry and repository, security, identity and service management. Coupled with access control software such as IBM Tivoli® Access Manager, this appliance helps you enforce fine-grained access controls. Working with the IBM Tivoli Federated Identity Manager, the DataPower Integration Appliance XI52 provides federated web services identity and policy management between organizations and enterprises. Integrated with IBM Tivoli Composite Application Manager for SOA, the DataPower Integration Appliance XI52 monitors web service and SOA traffic flows, which supports end-to-end service management and dashboard monitoring. Additional management services for configuration management, firmware management, and real time system status is provided by the WebSphere Appliance Management Center. Using a registry and repository (such as IBM WebSphere Registry and Repository) can help you discover and reuse services and can help you to configure new services for IBM DataPower policy and security enforcement. The combination of these applications and the vigorous security features of the DataPower Integration Appliance XI52 provide the capabilities that your team needs for stronger SOA security and web services management.

Advanced web services standards support and interoperability

Any meaningful SOA initiative must address the integration of heterogeneous environments within and outside enterprises. The IBM WebSphere DataPower Appliance portfolio approach offers a long-standing history of support for technical and advanced standards for security, policy, Simple Object Access Protocol (SOAP), Web Services Distributed Management (WSDM), WS-I Profiles, web services addressing, Extensible Access Control Markup Language (XACML), Security Assertion Markup Language (SAML), Secure Sockets Layer (SSL) and proprietary single sign on (SSO) tokens. Additional

third-party interoperability capabilities include Universal Description, Discovery and Integration (UDDI) registries, and databases such as IBM DB2, Microsoft SQL Server, Oracle and Sybase.

Integration throughout the IBM SOA Foundation for Smart SOA deployments

The DataPower Integration Appliance XI52 delivers integration throughout the IBM SOA foundation. Integration with popular integrated development environments such as the IBM Rational® portfolio helps reduce the time you spend in development and debugging. In addition to interoperability, the DataPower Integration Appliance XI52 also features deep integration with products such as WebSphere MQSeries®, WebSphere Enterprise Service Bus, WebSphere Message Broker and DB2. This deep integration helps you process SOA transactions in a faster, more secure and simplified way. The DataPower Integration Appliance XI52 makes it possible for your team to take advantage of the IBM autonomic computing self-management capabilities, creating infrastructures that require minimal intervention, which helps reduce your cost of ownership and improves service availability.

The business benefits of this IBM appliance

- Provides fast and flexible application integration with declarative any-to-any transformations between disparate message formats.
- Reduces integration costs with protocol mediation, protocol bridging, transport mediation and content-based message routing.
- Supports extreme reliability by securing services at the network layer with advanced JSON, XML, SOAP, and web services processing and policy enforcement.
- Reduces operational costs with native connectivity to existing access control, monitoring, database and management systems and processes.
- Offers standards-based, centralized governance and security, with support for a broad array of standards for security and security policy.

Why IBM

More than 1,800 organizations of all sizes employ IBM WebSphere DataPower SOA appliances to reduce IT complexity, reduce their costs, improve their return-on-investment and foster new business. The IBM approach to SOA appliances provides value to a wide range of organizations throughout major industries and for customer locations that span more than 50 countries—and you can combine different DataPower models to enable optimal functions at an optimal price. Engage a team whose SOA appliances deliver strong performance and give you a fresh ability to respond to new situations quickly and with ease. Take advantage of unmatched technical and industry knowledge. Work smarter with IBM.

Prepare your organization for a successful future

The WebSphere DataPower Integration Appliance XI52 is designed to help leaders manage some very real challenges. Take action to simplify connectivity, govern and optimize the way services and applications are delivered. Gain fresh ability to strengthen security, connectivity, gateway, data transformation, protocol bridging, and intelligent load distribution functions. Reduce the total cost of ownership for projects that involve security, integration, Web 2.0 and web services.

Engage a team that offers an innovative, pragmatic approach to security, integration, and intelligent application delivery. The DataPower Integration Appliance XI52 is purpose-built, easy to consume and easy to use. The IBM approach helps you to leverage the value of your existing infrastructure investments.

Deliver common message transformation, integration, and routing functions in a network device. You can help to reduce operational costs and complexity while you take action to improve performance. Because on-demand data integration becomes part of your shared application infrastructure, the addition of the DataPower Integration Appliance XI52 can be a game-changing approach for application integration and security at your organization. Take full advantage of the latest generation of purpose-built hardware appliances.

Your choice of SOA integration appliance can influence your organization's competitive success. Learn more about the WebSphere DataPower Integration Appliance XI52 today.

“The consumability of appliance technology, like IBM’s WebSphere DataPower technology, is vital to enabling the necessary unification by increasing the speed and efficiency of how IT delivers value to the business.”

—Dick LeFave, CIO, SprintNextel

XI52 supports

XML:

- XPath 1.0
- XSLT 1.0
- XML Schema 1.0

Optimization:

- Compression
- Multistep flow processing and mediation
- Hardware and software accelerated XML, XPath and XSLT processing
- Quality of service (QoS) and service prioritization

Enterprise messaging and integration:

- HTTP, Secure HTTP (HTTPS)
- FTPS, SFTP Support
- WebSphere MQ, WebSphere MQ File Transfer Edition (MQFTE), WebSphere Java Message Service (JMS)
- IMS Connect
- Protocol bridging (for example, from WebSphere MQ to HTTP)
- Routing (XPath, WS-Routing and XML)
- Non-XML message transformation (such as binary, flat text, COBOL Copybook, ISO 8583, etc)
- Message logging

Data security:

- Data validation (XML Schema, Web Services Description Language [WSDL] and SOAP filtering)
- XML encryption and digital signature
- S/MIME encryption and digital signature
- WS-Security 1.0, 1.1
- WS-SecureConversation 1.3
- Field- and message-level XML security
- Internet Content Adaptation Protocol (ICAP) integration for virus scanning

Security policy enforcement:

- Authentication of web services messages using WS-Security 1.0, 1.1 and Security Assertion Markup Language (SAML), Version 1.0, 1.1 and 2.0
- XACML 2.0
- Authorization for XML messages
- Support for Kerberos, RADIUS, Lightweight Directory Access Protocol (LDAP) v2 or v3, Microsoft Active Directory, SPNEGO/Kerberos and SAML queries
- Ability to process Liberty Alliance ID-FF, WS-Trust and WS-Federation messages when configured with Tivoli Federated Identity Manager or a similar policy manager
- Federal Information Processing Standard (FIPS) 140-2 Hardware Security Module (HSM) option
- SAF and IBM RACF® integration with z/OS
- Federation of security tokens when configured with Tivoli Federated Identity Manager or a similar policy manager

Web services:

- SOAP 1.1 and 1.2
- WSDL 1.1
- WS-SecurityPolicy
- WS-Policy Framework
- WS-Policy 1.2, 1.5
- Registry integration (UDDI V2/V3, UDDI V3 subscription, WebSphere Service Registry and Repository)
- WS-Trust 1.3
- WS-I Basic Profile 1.0, 1.1
- WS-I Basic Security Profile 1.0, 1.1
- WS-I Attachments Profile
- WS-I Simple SOAP Basic Profile
- WS-Addressing

- SOAP Attachment Feature 1.2
- Message Transmission Optimization Mechanism (MTOM)
- WSDM
- WS-Management
- Support for JavaScript Object Notation (JSON) and Representational State Transfer (REST) applications

System and service security:

- Service virtualization
- XML and SOAP firewall
- XDoS protection

Management:

- Web GUI
- Command-Line Interface (CLI)
- Simple Network Management Protocol (SNMP)
- SOAP management interface
- Integrated Development Environment (IDE) integration through Eclipse
- Service-level management (to configure, enforce and monitor qualities of service)
- Logging, drill down and alerting (on-box, off-box or centralized)
- Device partitioning and role-based management

Transport Layer Security (TLS):

- SSL and HTTPS, hardware accelerated

Public key infrastructure (PKI):

- XKMS, RSA, 3DES, DES, AES, SHA, X.509, PKCS, CRLs, OCSP
- XML digital signature, time stamp and nonrepudiation
- S/MIME digital signature, time stamp and nonrepudiation

Optional Features:

- Application Optimization
- Hardware Security Module
- Database integration
- TIBCO EMS integration
- Tivoli Access Manager integration

For more information

The best SOA appliance is the one that helps your business aspirations become reality. To learn more about IBM WebSphere DataPower appliances, or to confirm which appliance is the best fit for your organization, contact your IBM sales representative or your IBM Business Partner, or visit the following website: ibm.com/software/integration/datapower

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