

IBM WebSphere Business Integration for Financial Networks Base



Highlights

- ***Provides a robust business integration infrastructure to support you in a time of constant change***
- ***Helps you to realize cost-of-ownership savings through resource optimization and the protection of skills-building investments***
- ***Centralizes administration, operation and control, thereby helping to reduce operational costs***
- ***Provides a general platform to integrate financial networks, either by IBM, Internet service vendors (ISVs) or customers***
- ***Supports the SWIFTNet FIN application capabilities providing back-end payment functions and a payment-initiation capability***
- ***Delivers a flexible and cost-efficient integration foundation for financial messaging of any kind while reducing operational complexity using optional extensions***
- ***Leverages IBM's more than 20 years of experience with reliable financial messaging software and Society for Worldwide Interbank Financial Telecommunications (SWIFT) standards***

Financial institutions are faced with unprecedented challenges created by deregulation and mergers, more sophisticated, demanding customers, and pressure to work more efficiently. Migration and integration issues can complicate efforts to streamline business processes. But with increased competition, it's more important than ever to boost customer service and retention, lower distribution costs and gain flexibility—even in the face of regulatory changes and changing business models.

In this time of change you need the assurance of field-proven products to serve as reliable underpinnings for transition. The IBM WebSphere® Business Integration for Financial Networks solution addresses these needs with a robust, reliable and highly scalable messaging infrastructure that helps simplify operation, consolidate resources and improve productivity through its centralized services.

A foundation you can trust

The WebSphere Business Integration for Financial Networks solution is IBM's strategy for financial messaging. This solution serves as a

single point through which your financial applications can be developed. It provides services that process messages for these applications. Your installation can use these services to centralize common tasks such as controlling access to resources, recording audit data and logging events. This in turn simplifies operation, consolidates resources and improves productivity. These services are implemented as WebSphere MQ Integrator message flows and primitives.

WebSphere Business Integration for Financial Networks serves as an all-round foundation for the integration of communication channel-specific services. It provides facilities and security mechanisms to segregate data of concurrent user groups or organizational units, which is indispensable to financial service providers who need multibank capability.

WebSphere Business Integration for Financial Networks includes the following functionality:

- *Establishes a messaging infrastructure*
- *Includes functions common to the finance industry*
- *Provides a base on which external communications extensions can be added*
- *Provides access to the Secure IP Network (SIPN) from SWIFT*
- *Connects to both FIN and InterAct applications to the SIPN*
- *Provides support for business-to-business (B2B) payments initiation*
- *Allows for central administration, operation and monitoring of the applications*
- *Provides an extendable and expandable platform based on WebSphere MQ Integrator and DB2® software*
- *Provides reliability, availability, serviceability (RAS) support*

To provide this functionality, WebSphere Business Integration for Financial Networks consists of the following components:

- *A base containing the infrastructure layer*
- *An extension for SWIFTNet*
- *An extension for Trusted Payment Initiation*

The WebSphere Business Integration for Financial Networks Base is an infrastructure layer that provides services used by extensions, such as the SWIFTNet and Trusted Payment Initiation pillars. Additional extensions can be developed by IBM, or by any ISV or customer (see Figure 1).

Seamless migration to extended services

WebSphere Business Integration for Financial Networks Base provides an integrated, standards-based platform

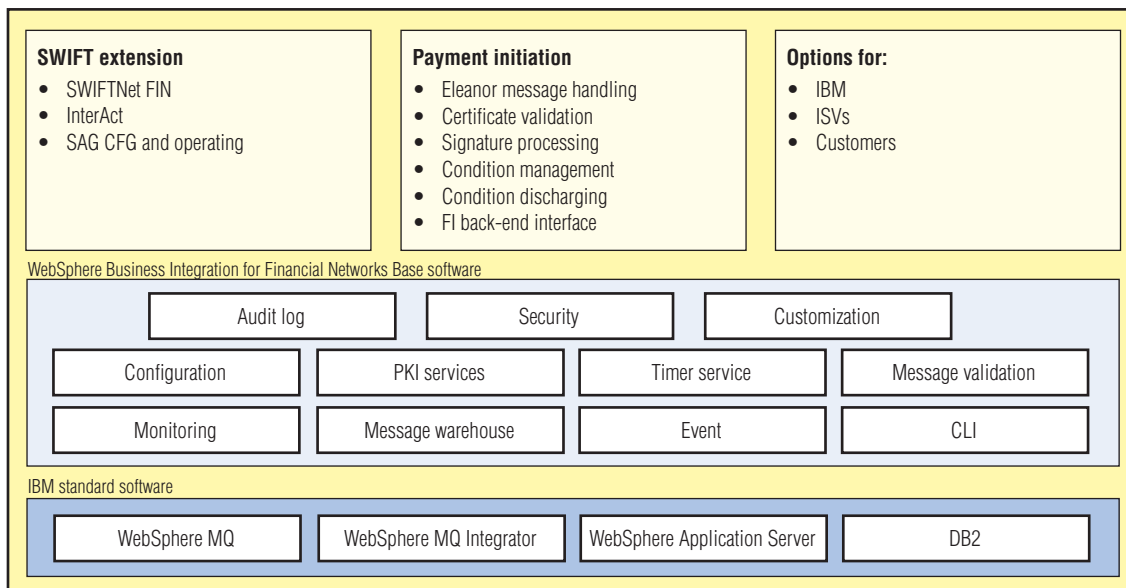


Figure 1. A common base using IBM standard software, showing extensions available for the WebSphere Business Integration for Financial Networks Base.

allowing your financial institution to build dynamically on current network technology investments as your business grows and changes. It supports communication channels and provides common infrastructure services such as message warehousing, security and event logging.

The WebSphere Business Integration for Financial Networks extensions provide off-the-shelf integration and management of networking standards and services for the financial industry, starting with the extension for SWIFTNet and extension for Trusted Payment Initiation.

WebSphere Business Integration for Financial Networks Extension for SWIFTNet

The new SWIFT IP network provides the added value of channel-specific communications. This solution offers customers of Message Entry and Routing with interfaces to Various Applications (MERVA), the current IBM product for SWIFT message handling, a seamless and logical migration path for shifting X.25-based SWIFT FIN messaging traffic over to the anticipated Internet Protocol (IP) based network announced by SWIFT. The Extension for SWIFTNet product can help you to migrate more easily, as well as reduce costs, improve automation and manage risk. The extension provides IP connectivity including

FIN support and addresses the SWIFTNet InterAct service. (InterAct is one of SWIFT's new services available only on the IP network and will be used by multiple applications and services in the near future.)

WebSphere Business Integration for Financial Networks Extension for Trusted Payment Initiation

Using the WebSphere Business Integration for Financial Networks Base, the WebSphere Business Integration for Financial Networks Extension for Trusted Payment Initiation is the bank-side implementation for B2B payment-initiation services. It provides the collaboration services to handle bank-to-bank, bank-to-client and bank-to-Identrus communication using the Identrus four-corner model. WebSphere Business Integration for Financial Networks Extension for Trusted Payment Initiation offers users a common identity across e-markets; strong authentication and a link to authorization—with transaction integrity, nonrepudiation and auditability across e-markets. It offers a common payment-initiation application process across all e-markets. With this solution, banks now have the chance to secure a leading role in B2B e-commerce by being able to attract lucrative corporate clients in this market.

Extending functionality on top of WebSphere MQ Integrator

IBM MQSeries® software is a de facto standard technology relied upon by thousands of customers and hundreds of banks. The powerful WebSphere Business Integration for Financial Networks Base builds on the WebSphere MQ Integrator and thus, inherits the characteristics of that product. This is extended in the areas of:

- *Customization—WebSphere Business Integration for Financial Networks Base provides you with a method to handle message flows together with their resources (for example, WebSphere MQ queues or DB2 tables) and to adapt these definitions to a customer environment.*
- *Configuration—Using configuration, the behavior of message flows and the resource that a message flow is using can be changed without changing the message flow itself.*
- *Security—Allowing access to a queue as the input resource for a message flow usually opens all functionality of that flow. Using WebSphere Business Integration for Financial Networks Base security, a customer can control access with much more granularity.*
- *Additional functions—These include multiple service sets from the underlying middleware. Additional services and nodes on top of the middleware are combined with the generic parts*

to create new flows and service sets that are crucial for financial networks.

These include:

- *Message warehouse* – This search-optimized IBM DB2 database stores messages handled by WebSphere Business Integration for Financial Networks Base. All messages within the message warehouse are stored in XML format. Users can search quickly for any specific message.
- *Audit and event logging* – WebSphere Business Integration for Financial Networks Base collects and stores message- and user-related data and system activities in an audit database that you can use for audit purposes. The event service and the event store nodes collect all WebSphere Business Integration for Financial Networks Base related events and keep these events ready for operators or management review. All events are saved in an event database and are published by a subscription list.
- *Command and script interface* – A command line interface (CLI) lets you administer, configure and operate the WebSphere Business Integration for Financial Networks Base services. The CLI scripting languages such as REXX or UNIX® shells can be used to automate operation.

- *Message format validation* – The message-validation service provides a generic subset of validations as required by the Identrus Eleanor scheme. The design of the message-validation service is open and extendable for any other message format.

- *Authorized system administration* – A base facility is provided to support dual authorization (four-eyes principle) for all security-relevant administration tasks.

Extending applications, increasing services

Using the graphical integration tool, you can customize the generic and specific message nodes, flows and services to create adapted or new business applications of the base.

A WebSphere Business Integration for Financial Networks Base instance can contain multiple servers to increase scalability and availability of its services. Customization tools simplify the setup of a WebSphere Business Integration for Financial Networks instance.

A WebSphere Business Integration for Financial Networks system can be operated and administered as a single system and can also run in a multi-bank or multiorganization setup. The segregation concept of the product for organizational units ensures that busi-

ness data of different organizational units are not intermixed. The principle has been extended into the schema for user-access control, providing a fine granularity of roles and rights.

Why IBM WebSphere for your financial network integration?

IBM is a trusted, single-source global provider, and WebSphere provides a single platform that brings information connectivity and process integration into the financial services marketplace. WebSphere Business Integration for Financial Networks is part of the WebSphere Business Integration platform. This platform is the next step in the IBM evolution of leadership in integration middleware. Customers can tailor and customize the platform according to their specific needs. With IBM WebSphere Business Integration for Financial Networks, you can effectively realize cost-of-ownership savings through resource optimization and the protection of skills-building investments. This solution can help you to reduce your operational costs by centralizing administration, operation and control. To ensure operational resilience and business continuity, especially for the SWIFT X.25 migration phase, you need the WebSphere strength in scalability and reliability. We can help you to minimize your investment requirements and carry out the migration process incrementally.

Hardware requirements

Platform	zSeries	AIX	Windows 2000 (for WebSphere MQ Integrator access and SWIFTNet Access [SAG] only)
Processor	ESA/390, or compatible processor, that can run OS/390® Version 2.10 or z/OS™ Version 1.0 or later	2-way 450-MHz RS64 III	Intel® Uniprocessor
Random access memory (RAM)		1 GB	512 MB
Disk space		2 x 18 GB	
Display		Any graphical display that supports X-Windows®	

Software requirements

z/OS	IBM SMP/E for z/OS and OS/390 Version 3.1 (5655-G44) IBM DB2 Universal Database™ (UDB) Version 7.1 (5675-DB2) including XML Extender IBM WebSphere MQ for z/OS Version 5.2 (5655-F10) IBM WebSphere MQ Integrator for z/OS Version 2.1 (5655-G97) XML Toolkit for OS/390 Version 3.1 (5655-D44)
AIX (DB2 UDB for AIX V 7.1 including DB2 XML Extender V7)	IBM MQSeries for AIX 5.2 IBM WebSphere MQ Integrator for AIX 2.1 Object REXX for AIX 1.1.2.0
Windows	WMQI Version 2.1 for Windows Adobe Acrobat Reader (for documentation purposes)

Hardware and software requirements

The WebSphere Business Integration for Financial Networks Base runs under the requirements found in the table above.

The following versions are required for the operating systems:

- *OS/390 V2.10 (5647-A01) or z/OS V1.1 (5694-A01), or later*
- *AIX® V4.3.3*

In addition for WebSphere MQ Integrator Broker configuration deployment, a Windows® 2000 SR1 workstation for the WebSphere MQ Integrator Broker Control Center and Configuration Manager is also needed.

For more information

WebSphere Business Integration for Financial Networks can help you to protect your existing investments in IT infrastructure while providing a platform for centralizing your

external communication needs. You can add extensions to the base product, including SWIFTNet and Trusted Payment Initiation, an Eleanor component for banks. For more information, go to

ibm.com/websphere/integration/fn

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