



# IBM Financial Transaction Manager for ACH Services IBM Redbooks Solution Guide

Automated Clearing House (ACH) payment volume is on the rise. NACHA, the electronic payments organization, estimates that ACH payments surpassed 21,000,000,000 in 2012. Financial institutions, businesses, and consumers are all contributing to a significant increase in direct electronic payments and causing a dramatic shift in the requirements for ACH processing. As result, financial institutions are re-evaluating their current payment platforms. Many have infrastructures in place that were not designed to handle high volumes of processing while still meeting the ever-changing needs of their customers and managing risk and compliance.

Customers are demanding improved information access to their payments, whether they are online, mobile, or using a traditional outlet. In addition, requirements for more open and visible transactions have created demand for new capabilities, such as near real-time payment status visibility, automated exception handling, and same-day processing. Along with higher customer expectations, financial firms are being tasked with reducing costs and offering new services to create additional revenue. At the same time, they must reduce financial risk. A single view of all types of customer payments can help them address these issues.

Gaining value from existing assets that are part of a complex web of unconnected transactional systems (see Figure 1) can be a significant challenge. Aging core transactional systems that are built on COBOL and assembly language technologies are costly to maintain, difficult to upgrade, and unaware of more than a single transaction type. Skills attrition can also be an issue for older platforms that are not in common use today. This IBM® Redbooks® Solution Guide describes how IBM Financial Transaction Manager for ACH Services can help address these challenges.

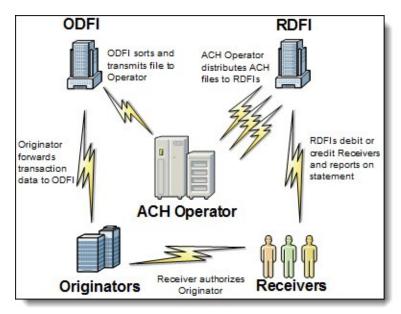


Figure 1. NACHA overview

## Did you know?

IBM offers a number of key differentiators in the financial transaction management area, including the following items:

- IBM offers an overall holistic payments platform, IBM Financial Transaction Manager, that supports pre-built IBM solutions supporting true payments convergence. These solutions include Corporate Payment Services (CPS), Single European Payment Area (SEPA), ACH, and Check Services.
- Embedded middleware for better price points, and unmatched feature functions in the IBM delivered solution (for example, database, application server, and message mapping (including a development studio)).
- The IBM payments platform is open, enabling (in addition to the pre-built IBM solutions) client built solutions and an IBM Business Partner ecosystem for third-party built solutions.
- Rules-based solution for validation, enrichment, routing, delivery schedules, receipt schedules, and so on.
- Support for batch payments and real-time payments simply by adjusting rules (rather than modifying an underlying architecture).

#### **Business value**

Virtually all financial institutions have multiple systems to process payment, trade, and securities messages. These systems have evolved over years or even decades and were implemented to be efficient at processing the needs of a particular department, function, or customer set. With so many systems evolving at different times, paces, and purposes, process duplication inherently exists. Duplication and inconsistent processes create workflow friction, slowing client relationships and time to market. Because of this duplication, and the existence of monolithic applications, redundant gateways, and numerous connections, payment systems can represent a higher percentage of expenses than revenue to a financial institution. The situation calls for strong pressure to reduce costs because the increasing transactional volume might be unable to compensate for the revenue/cost differential.

Although internal pressures grow, financial institutions face increased pressure from nontraditional competitors who offer only niche products and services and lack the heritage that established financial institutions must maintain. Additionally, clients might exert pressure to have services added, modified to their own requirements, or to add new outlets that could never have been conceived during the original system implementation years or decades ago.

IBM Financial Transaction Manager provides an enterprise business-oriented view of payment and securities messaging that can be modified and reused as your needs change and competition morphs. Modeling facilitates the renovation and justifies each change along the way. IBM incorporates industry standards, including ISO message formats and service-oriented architecture (SOA).

Implementing Financial Transaction Manager for ACH Services has the following benefits:

- Is agile in reaction to change
- Provides visibility of payments processes at design time and run time
- Integrates service components that are built, bought, or both
- Facilitates renovations by wiring together reusable service components
- Reduces the cost and impact of change
- Reduces the cost of testing additional applications with external networks

- Enhances liquidity management monitoring and control
- Reduces cost by enabling payment efficiencies and reducing system duplication
- Improves customer satisfaction with faster time to market

#### Solution overview

IBM Financial Transaction Manager for ACH Services provides pre-built support for processing all ACH transactions that flow through your system, including intake, validation, transaction management, and distribution. A robust rules-based environment handles payment routing and exception management, and an automated import and export facility handles ACH processing rules. Other key functions include administration, process management, data warehousing, and reporting and extracts. The overview of this solution is shown in Figure 2.

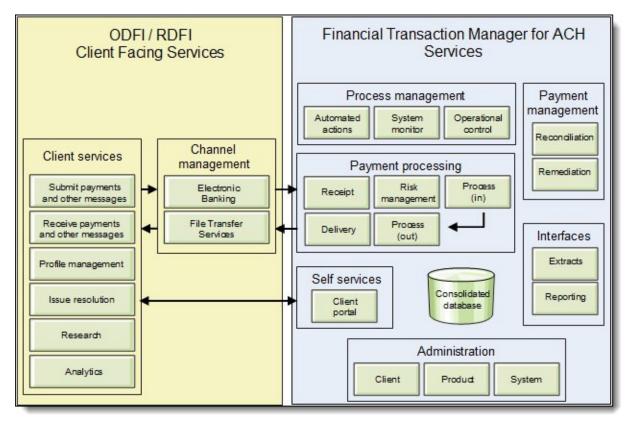


Figure 2. Solution overview

IBM Financial Transaction Manager for ACH Services includes ACH payment processing capabilities, including the following ones:

- Risk services
- Client billing for products and services
- Generation of accounting entries
- Inbound and outbound returns
- Accounts receivable check conversion services

ACH payment receipt capabilities include control total matching, authorization, Notification of Change, and Death Notification Entry management. In addition, it offers the following features:

- Support for receiving and sending files in accordance with the NACHA 2014 operating rules (includes all SEC codes)
- Reference implementations for NACHA file origination and receipt
- Transaction routing and delivery rules for ACH processors, including from one financial institution directly to another
- Documentation for the ACH implementation

#### Solution architecture

Financial Transaction Manager for Automated Clearing House (ACH) Services has the following features:

- Has prebuilt support for processing NACHA payments from receipt through distribution
- Helps reduce the total cost of operations by implementing ACH payment services within a modern, automated, and service-oriented architecture-based payments platform
- Helps offer increased revenue opportunities through improved client visibility and self-service
- Provides a high-performance, scalable platform to help address client demand for near real-time ACH processing and information access
- Helps offer improved risk management and assists with customers compliance obligations through improved visibility to payment transactions across multiple payment channels

IBM Financial Transaction Manager for ACH Services draws from many common components to provide ACH processing capabilities. The component architecture of Financial Transaction Manager for ACH Services is shown in Figure 3.

FTM Features	CPS		ж	SWIFT	Check	Receiv	vables	GTB	
Product Onboarding	Ctient Onboarding Us Entitler	unity Audiong &	Alerting	Warehousing	Operational	Business Day Management	Calendar Services	Data Setup Utility	2
Landing Zone Management	Inbound Deadine Management Eve		Transaction Enrichment	FX Services	Optimal (Intelligent) Routing	Customer Acknowledg ements	Duplicate Detection	Recurring Payments	Web
Operational Exception Management	Limit Checking Acco		Positive Pay	Stop Pay	Image Compliance	Payments Repair	Remediation Services	Cancellation & Reversals	S e
Research & Investigations	NOC & DNE Dupl Management Deter	ction () Reclaimations	Reclears	Message Type Monitoring	Transaction Review (OFAC)	Check Conversion	SWIFT Access Gateway	Receivables Reconciliation	) i c
Distribution	Outbound Deadline Management Edra	acts Advices	Reporting	Accounting (Settlement)	Adjustments	Correction & Reconciliation	Billing	Archiving	e s
Message Entry & Repair Management									
Message Standards SWIFT ISO 20022 Payments EDI x12 NACHA BACS FPS Fedwire SVPCo   Standards SEPA ISO 20022 Securities CPA ANSI x9 Networks BACS FPS Fedwire SVPCo									31
Canonical Bulking / Database Bulking / Transformation Dashboard Dashboard Configuration UI Orchestration Workflow Orchestration Models Address Correlation Correlation Integration									
Websphere Message Broker (WMB) Websphere Transformation extender (WTO) Rational COGNOS Websphere Software Architect (RSA) Websphere Application Server (WAS) DB2 / UDB Websphere MG Websphere Business Monitor (WBM)									
Operating Systems	z/OS	zLinux (SUS	E)	AIX	L	inux (Redhat)		Windows	

Figure 3. Financial Transaction Manager component architecture

## Usage scenarios

Here are some scenarios where you can use IBM Financial Transaction Manager for ACH Services:

- Capability to receive and send NACHA files with support for all SEC codes.
- All inbound files are validated in accordance with the NACHA operating rules.
- Reference implementations for NACHA file origination and receipt.
- Inbound and outbound return item processing in accordance with the NACHA operating rules.
- Partner Configuration for defining originators, receivers, third parties, Financial Institutions, and ACH operators.
- File and batch duplicate detection.
- Client Acknowledgements for files received and alerts for select processing events.
- Notification of Change (NOC) and Death Notification Entry (DNE) management.

- ODFI Risk Services, including Account and Partner Monitoring, SEC code authorization, and Control Total checking.
- Protection against unauthorized payments to receivers through the use of Credit and Debit Blocking, Positive Pay, and Stop Payment services.
- Generation of accounting data.
- Generation of billing and fee data for products and services that are offered to customers of the ODFI.
- Sample extracts for customer advice, and DDA, accounting, and billing feeds.
- Comprehensive reports, including customer activity reporting, returned item lists, and notifications of change.
- Extensive web services interface to enable financial institutions to add key features to their Mobile / web portals.

#### Integration

IBM Financial Transaction Manager for ACH Services is part of the IBM Financial Transaction Manager offering. The IBM Financial Transaction Manager offering is a set of pre-integrated solutions for visibility and control of payment transactions, liquidity management, financial risk management, financial planning, and performance management (see Figure 4).

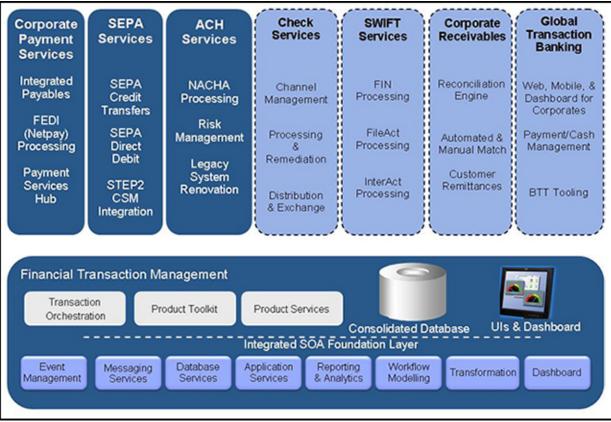


Figure 4. Financial Transaction Manager family

Because IBM Financial Transaction Manager for ACH Services is part of this set of integrated solutions, it has all of the advantages of being part of a single modern payments hub. A common data model for all payment types supports financial transactions, partner profile data, common services, and channel definitions. A common rich repository stores payment data in a standardized message model that is based on ISO 20022. A common prebuilt set of dashboards enables you to monitor business activity that spans payment types with real-time insights and proactive notification.

Built on IBM WebSphere® Application Server, IBM WebSphere MQ, IBM WebSphere Transformation Extender, IBM WebSphere Message Broker, IBM DB2®, IBM Cognos® Business Intelligence, and IBM Business Monitor, the IBM Financial Transaction Manager solution can handle ACH transactions, and SWIFT and SEPA. The solution is extensible, so you can add payment types as you need them and new services in the future. Web services interfaces enable the integration of the solution with various channels, including web and mobile, and administration capabilities enable partner onboarding and maintenance.

#### Supported platforms

IBM Financial Transaction Manager runs on IBM AIX®, Linux, Windows, and IBM z/OS® platforms. For detailed system requirements, see http://www.ibm.com/support/docview.wss?uid=swg27027034.

#### Ordering information

Table 1 shows the ordering information for IBM Financial Transaction Manager.

Program number	Program name					
5725-F79	IBM Financial Transaction Manager for Multiplatforms V2.0					
5655-Y11	IBM Financial Transaction Manager for z/OS V2.0					

Table 1. Ordering information

## **Related information**

For more information, see the following documents:

- *Financial Transaction Manager Technical Overview*, SG24-8187: http://www.redbooks.ibm.com/abstracts/sg248187.html
- Tracking Payments and Securities with IBM Financial Transaction Manager V2, TIPS0963: http://www.redbooks.ibm.com/abstracts/tips0963.html
- IBM Financial Transaction Manager for SEPA Services, TIPS0993: http://www.redbooks.ibm.com/abstracts/tips0993.html
- IBM Financial Transaction Manager for Corporate Payment Services, TIPS1001: http://www.redbooks.ibm.com/abstracts/tips1001.html
- IBM Financial Transaction Manager product page: http://www.ibm.com/software/industry/financial-transaction-manager
- IBM Offering Information page (announcement letters and sales manuals): http://www.ibm.com/common/ssi/index.wss?request\_locale=en

On this page, enter Financial Transaction Manager, select the information type, and click **Search**. On the next page, narrow your search results by geography and language.

# 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 Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites 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.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurement may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

#### 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.

#### © Copyright International Business Machines Corporation 2014. All rights reserved.

Note to U.S. Government Users Restricted Rights -- Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

This document was created or updated on April 1, 2014.

Send us your comments in one of the following ways:

- Use the online **Contact us** review form found at: ibm.com/redbooks
- Send your comments in an e-mail to: redbook@us.ibm.com
- Mail your comments to: IBM Corporation, International Technical Support Organization Dept. HYTD Mail Station P099 2455 South Road Poughkeepsie, NY 12601-5400 U.S.A.

This document is available online at http://www.ibm.com/redbooks/abstracts/tips1149.html .

# Trademarks

IBM, the IBM logo, and 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:

AIX® Cognos® DB2® IBM® Redbooks® Redbooks (logo)® WebSphere® z/OS®

The following terms are trademarks of other companies:

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

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

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