Gentran Integration Suite™

Multi-Enterprise Finance Gateway

Version 4.2

Sterling Commerce
An IBM Company

About Multi-Enterprise Finance Gateway (MEFG)

Multi-Enterprise Finance Gateway (MEFG) is the Gentran Integration Suite solution that enables banks, broker-dealers, investment managers, and market infrastructures in payments, securities, treasury and trade to optimize financial sector process integration—both internally and with external enterprises and communities—for secure end-to-end management of financial data exchange.

MEFG leverages components of Gentran Integration Suite to enable file transfer and translation capabilities using financial-industry transport types and messaging formats. Enhanced reporting and notification tools provide improved insight into business processes, furthering your goal to create a sustainable competitive advantage. Available MEFG components include pre-built support for financial standards and protocols, services, adapters, code lists, pre-loaded DTDs and schemas in the Map Editor, and tools such as Reporting Services and the SWIFT Editor.

The added value of MEFG is the ability it brings you to integrate existing systems with a gateway solution offering visibility and simplified error/exceptions management, including routing of files and messages into legacy systems. This complete and streamlined automation of processes can help you reduce costs, increase revenue, and improve customer satisfaction while leveraging Gentran Integration Suite security features to provide secure, non-repudiated exchange of B2B information.

Depending on your needs, MEFG can be a simple file transfer solution for financial documents, a translation engine supporting financial standards and those of your back office systems, or a complex full gateway solution involving all types of file transfer, intelligent routing, translation, and transmission activities. An MEFG solution can be configured to be fully convertible between payments networks, platform agnostic, and deployed behind the corporate firewall. If needed, Sterling Commerce Professional Services can help you customize MEFG to enable full payload inspection and customized visibility into documents processed. MEFG is highly scalable to suit your evolving needs.

MEFG makes process continuity of business finance part of your organization's integrated value chain, shared by the business partners and financial institutions that make up your B2B communities. The following diagram illustrates this concept:
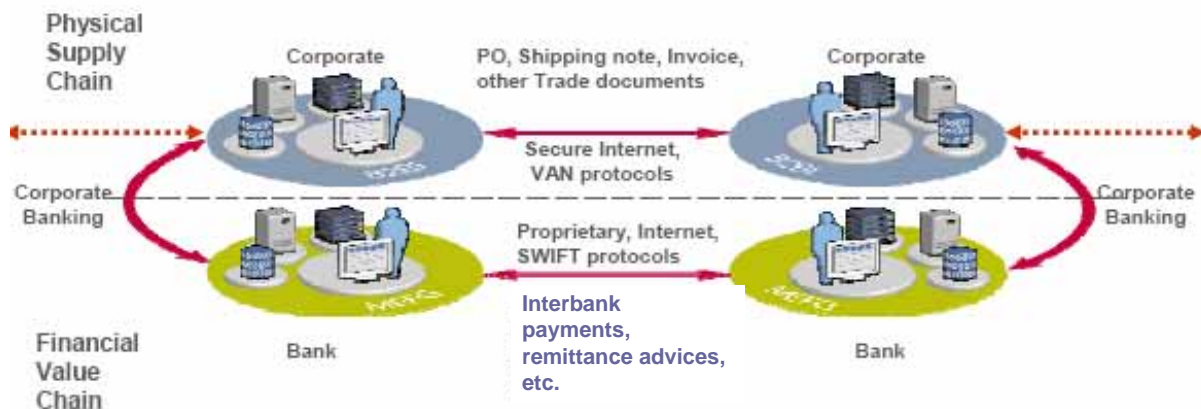
In a full MEFG gateway scenario, the financial value chain is linked as illustrated in the previous example with the physical supply chain for the most seamless, efficient cycle possible. When your have optimized the financial value chain with suppliers, vendors and service providers, keeping pace with market demands and government regulations is simpler to manage.

The primary features of MEFG are:

✦ Financial standards support

✦ Community management components

✦ Visibility and error resolution tools

✦ Advanced file transfer capabilities

✦ Security features

✦ Process automation

The following topics provide more detail about these features.

Standards and Protocol Support

The diversity of communications systems and standards makes it difficult to respond to customer demands for better and more comprehensive service. MEFG's built-in support for financial standards reduces the information technology costs involved in custom coding and enables you to more cost-effectively integrate disparate systems to overcome information silos. Pre-defined financial standards are automatically loaded into the Map Editor graphical mapping tool, including code lists. With MEFG, you can translate and move data among many different environments.

Consolidated control of standards and protocols in the MEFG platform streamlines your ongoing management so that you can focus on building new relationships and increasing revenue. MEFG-supported financial services standards include, but are not limited to, the following:

✦ FIX, FIXML, FpML, IFX

✦ ISO 8589, 20022, and 150222, including TWIST

✦ XBRL

✦ NACHA ACH

✦ SWIFTNet FIN MT messages (2005 & 2006) and SWIFTNet MX messages (including those specific to SWIFT Solutions)

✦ TARGET2

✦ EBA STEP2

MEFG supports batch and real-time protocols, including FTP and FTP/S; SSH/SFTP; Connect:Direct; HTTP/s; dial-up communications; SMTP; SOAP, MQ, JMS, and MSMQ messaging; AS2, and RosettaNet. In addition to the full suite of available Gentran Integration Suite protocol support, MEFG also supports the SWIFTNet InterAct and FileAct protocols for financial services communications.

Notes on SWIFT Support

✦ Sterling Commerce is a Society for Worldwide Interbank Financial Telecommunications (SWIFT™) Solutions Partner. Multi-Enterprise Finance Gateway achieved SWIFTReady Financial EAI Gold Certification in July 2006.

✦ MEFG supports the use of SWIFTNet FIN. You can send messages to SWIFTNet using either the InterAct or FileAct protocol for real-time messaging, store-and-forward messaging and real-time query and response. MEFG supports delivery notification, non-repudiation, and message priority. The SWIFTNet Client service enables you to use either synchronous or asynchronous messaging.

✦ MEFG enables you to create maps to support the translation of market practices (customized message template), and provides the following two Market Practices: Germany: MT515: Trade Confirmation (Broker to Asset Manager) and United States: MT536: ISITC-IOA: Statement of Transactions

✦ The SWIFT Editor tool identifies errors in messages found during pre-transmission validation, enabling you to correct them quickly through the interface and resend them, without being charged for an invalid transmission.

Notes on ACH Support

MEFG ACH support includes:

✦ Incremental trace numbers for ACH outbound

✦ Support for multiple ACH messages per file and multiple payments per batch

✦ Support for NACHA ACH message and SEC codes

✦ ACH envelope name in process data

✦ File-level rejection support for ACH inbound

Community Management Components

MEFG Community Management tools allow you to quickly add business partner information and organize your partners into groups so that you can track related documents and trends. When you create a community, you notify and invite your partners to join so that you can exchange documents with them. Data from these transactions are then grouped in Gentran Integration Suite for easy identification and tracking. Defining communications protocols and documents allows the community to run more smoothly, and allows you as the host to simplify enforcement of community goals. The community also helps you keep participating partners in sync with changing community parameters (protocols and documents) and provides community-wide messaging capabilities.

You can also join a community created by your business partner who also uses Gentran Integration Suite. The Community Management interface displays your hosted communities and associated partners, and any communities you have joined.

The Onboarding tool is another way to streamline partner management so that you can rapidly add and activate partners. Onboarding offers the following benefits:

✦ Online interface outside your firewall allows for easier onboarding of your partners.

✦ Replaces a manual process for adding non-Gentran Integration Suite, non-MEFG trading partners.

✦ Provides clear information for the community host about the status of a partner in the process of joining a community.

✦ Automates the invitation process for bringing partners into a community.

Visibility and Error Resolution Tools

Translation, integration and B2B collaboration all decrease costs and improve service, but integrating process visibility into these solutions is the key to optimizing process efficiency, improving responsiveness, and reducing penalties resulting from missed Service Level Agreements (SLAs). MEFG provides complete and consolidated processing views in near real time to assist with these goals.

MEFG uses the Reporting Services component to enable you to define and see your data in ways that support your business. Reporting Services allows you to offload your reporting to a secondary database, freeing the MEFG server to continue operational processing while your visibility and reporting can be worked on separately. Using Reporting Services consists of planning and installation; defining and building your constructs for collecting data; extracting data; and viewing data. As data is extracted, you can begin reviewing the default reports that are created automatically, edit those reports, or use them as templates for new reports. MEFG also supports your use of third party OLAP (Online Analytical Processing) tools that allow multidimensional views into large amounts of data.

In addition, the MEFG dashboard interface provides views of all data exchanges from a process, document, service, and activity perspective. You can search on correlated data items, configure your Dashboard to display reports created through Reporting Services, and customize preconfigured dashboard portal views of processing logs, statistics, notifications and system messages.

Sterling Control Center is another way to monitor and manage processing. MEFG enables you to participate fully within this network. Use Sterling Control Center to monitor MEFG and its Connect:Direct traffic with your other Connect:Direct nodes. Or, monitor the internal processes that MEFG is executing, be notified of failed processing, or of other events, using the Sterling Control Center management capabilities.

Through visibility features and automated error-handling, you can provide enhanced levels of responsiveness when problems arise. MEFG can be configured to initiate notifications when errors occur and execute corrective action, including escalation. MEFG message editing tools further aid error resolution. For example, in a process designed to validate data for format errors and compliance before sending to your partners, when an error is found and you receive a notification or pinpoint the error through visibility windows, you can use tools such as the SWIFT Editor to quickly correct the error in the interface and resend the document.

Advanced File Transfer Capabilities

MEFG incorporates AFT (Advanced File Transfer) as its core for file transfer-oriented processes. AFT is a centralized, dynamic file-exchange platform for secure transfer of files within and between organizations. It provides end-to-end visibility of file movement in an event-driven, process-oriented, highly-scalable framework. These capabilities enable you to accelerate new product introduction, improve customer service, rapidly enable business partners, and improve operational efficiencies.

AFT enables B2B content distribution and Web services across business boundaries, communication modes, and document formats. The AFT Router application addresses both large-scale and small business implementation scenarios, with:

✦ Enhanced functionality for rapid partner on-boarding, change management, and broader file transfer protocol coverage support large-scale, direct file exchange in a multi-enterprise context such as for a large global organization. This is particularly important when partner networks are comprised of multiple, perhaps thousands, of globally dispersed partners and internal business units.

✦ Support for small businesses using very large-scale electronic document exchange hubs. This is typically an occasionally connected user with a lightweight data exchange requirement, such as a major manufacturer with a large retailer network requiring periodic secure and reliable file exchange.

AFT supports comprehensive Internet protocols, document-oriented and stream-oriented processing, advanced application integration, and tight integration with Gentran Integration Suite Mailbox, Sterling Control Center, Connect:Direct and Connect:Enterprise UNIX server products. AFT supplies a reliable and secure operational data exchange environment, implementing a policy-based automation and file transfer routing infrastructure.

AFT enables and supports:

✦ Routing - File transfer based on policies and profiles

✦ Visibility - Communication adapters record events for monitoring and reporting

✦ Notifications - Subscriptions for notification of AFT events to partners by e-mail

✦ Onboarding - Centralized interface management of partner relationships

✦ Extensibility - Custom features can be added to support additional situations and protocols

Notes On Routing

MEFG can do complex routing based on your own metrics, such as:

✦ The importance of a particular client

✦ Value or currency type of a payment

✦ Application or security policy

Sterling Commerce Professional Services can help you determine the best way to configure processing according to your needs.

Security Features

With increased adoption of electronic correspondence in the industry comes rising rates of consumer fraud. The surge in identity theft crimes makes identity authentication critical. Security, risk management and compliance are top strategic initiatives. To address these concerns, comply with mandates, and reduce the costs associated with security breaches, MEFG employs Gentran Integration Suite security components:

✦ Perimeter server, with a reverse proxy in the DMZ for managing protocols and ensuring firewall security from the outside

✦ Secure proxy, for setting up a two-tier DMZ proxy for even greater access security and control

✦ A suite of encryption services to ensure that data remains secure and meets organization, industry, and government mandates for data security

MEFG offers the option to automatically encrypt and store data securely in the file system and automatically decrypt the data when the files are accessed for transfer or translation.

Keeping the files under system encryption closes a potential security gap during temporary storage of data awaiting processing. When needed for processing, MEFG will decrypt the awaiting document and access it as a working document.

✦ Identification policies for recipients of data in a file transfer

- ✦ Authentication integrated with external certificate repositories

- ✦ Support for AUTACK authentication messages for EDIFACT transactions

- ✦ State information repository tracks and stores up to 100 percent of all transaction state information

- ✦ Community information repository securely stores comprehensive client profile information

- ✦ Support for attachment to Hardware Security Module (HSM) devices for protection of cryptographic keys. MEFG supports attachment to the SafeNet Eracom ProtectServer Orange External and ProtectServer Gold.

Process Automation

Automated processing is the foundation of efficient e-business, and MEFG employs the Gentran Integration Suite business process model strategy of enabling customized processes for your implementation. Using the Graphical Process Modeler (GPM), you can create and coordinate activities into business process models that can be run as-needed or configured to fire according to your schedule or the occurrence of a specified event, such as receipt of a file in a mailbox.

An example of a simple business process is fire-and-forget publishing of a business event to a group of interested participants. Most likely, your processes will be more complex, involving multiple interactions among many applications in a start-and-stop, request-response mode, along with human interaction, occurring over a long period of time. A single document may progress from receipt in a mailbox to de-enveloping, content inspection, a decision point, translation or routing in multiple steps, to enveloping and placement in another mailbox or a file system. Within that process, exceptions paths, notifications, and data tracking would be built in. The GPM enables configuration of your business processes without requiring programming.