The growing number of financial derivative trade types has caused explosive growth in the securities industry. The need to support decreasing transaction speeds and increasing data volumes has forced financial institutions to migrate to electronic processing. However, a great deal of derivative trading still occurs via the telephone and unlike stocks and bonds, derivatives such as Over The Counter (OTC) have no unique, standardized identifier or Committee on Uniform Security Identification Procedures (CUSIP) number. The challenge comes in having to manually transcribe terms of the trade in formats that not only support the complexity and variety of the derivatives but also in the formats that back-end and legacy IT systems can understand. As a result, there is an overwhelming need to automate and standardize trade transaction processing.

The biggest challenge for successful trade process automation is integrating differing data across multiple internal and external systems as well as participant data sources. Systems are fraught with hard-coded, point-to-point interfaces and participants such as brokers, dealers, exchanges, and banks all record and store data in their own documents and programs. Hence, automating straight through trade processing, or STP, is a strategic initiative for virtually every financial institution. The benefits of STP come from accelerated trades, reduced costs and errors associated with manual intervention, and regulatory compliance and risk management.

A Strategic Technology Approach for Trade Processing

A technology strategy based on a centralized data hub can help financial institutions modernize and consolidate legacy systems, expand B2B network collaboration, and streamline business processes. This centralized hub can provide visibility, integration, management, and orchestration of data to enhance partner collaboration, reduce operational costs, accelerate growth, combat fraud, and improve customer acquisition and retention.
Trade Transaction Processing Challenges and Opportunities

The securities industry continues to experience dramatic increases in trading volumes. According to the International Swaps and Derivatives Association, Inc. (ISDA) in their 2008 Operations Benchmarking Survey, monthly OTC derivative volumes grew by 38 percent across all products, with credit derivatives showing the strongest growth at 73 percent. Large firms experienced even greater increases, reporting 87 percent growth in credit derivative volumes.

This explosive volume of derivative transactions in the securities industry increases the challenge in rapidly responding to opportunities in order to stay competitive. To meet the securities markets’ increasing velocity and automation needs, financial trading organizations need to manage higher data volumes, increase data accuracy and drive robust, real-time data management infrastructures. These challenges, along with corporate governance and financial mergers and acquisitions, create competitive opportunities to either adapt to changing market demands.

Reduce Manual Intervention in Processing Trades

The biggest challenge for successful trade process automation is integrating differing data across multiple internal and external systems as well as client and partner data sources. Financial services organizations manage trade transaction processes across a distributed network of banks and institutions. This management involves a great deal of manual intervention due to data inconsistencies, errors and omissions. Communication and confirmation of trade details often requires human intervention to describe the parameters regarding the products being traded. This leads to data inconsistencies as trade enrichments cause differing results in the back-end and Trade Life Cycle (TLM) systems which must process and confirm the trades. Manual intervention often leads to delays in trade validation.

Diminishing Time Windows to Execute and Settle Trades

The term “real-time” in securities trading is one of the few instances where time windows dramatically affect business outcomes. Prices change in the matter of seconds and regulations stipulate that trade execution and settlement must adhere to certain time constraints. Heavy fines are levied in the event of non-compliance and the impact is not only financial in terms of the fine, but as public performance benchmarks are highly visible, the impact it has on the reputation of the business can be detrimental: trade processing speed can determine whether or not the financial institution is competitive. The challenge comes in balancing time with accuracy as critical information exists across multiple systems and the volumes of data that must be passed with derivative trades is vast. In order to stay competitive, institutions must be able to grow trade volumes without fear of operational risk while approaching the adage of “real-time.”

Enable STP in Trade Transactions

Manual intervention for derivative trades and ever-shrinking time windows have brought about an overwhelming need to automate and standardize trade transaction processing and achieve STP.

Standards such as FpML (Financial products Markup Language) for Over The Counter (OTC) Interest Rate Derivatives (IRD) and SWAPS, and Financial Information eXchange Mark-up Language (FIX/FIXML) for equities and securities were developed to automate the flow of information across the entire trading partner and client network. Other standards such as TWIST for cash management of stocks and bonds and SWIFT for common trade services were also designed to help automate and standardize. The end result has been multiple standards governing trade processing.

Ever-present binary and proprietary formats and multitudes of unstructured data create large volumes of fractured, non-standard data which must be transformed into multitudes of governing standards. In order to automate trade processing to achieve STP securities networks must be able to manage these complex transformations with the assurance that operational risk and costs do not increase.

Informatica B2B Data Exchange for Trade Processing

Informatica B2B Data Exchange for Trade Processing is a powerful platform to address global, multi-enterprise trade transaction automation demands. From universal data transformations to support for a broad range of data types, including unstructured and derivative-specific data, Informatica B2B Data Exchange for Trade Processing provides a robust, adaptive, and comprehensive solution for the challenges of securities data exchange across trading partner and client networks. It is the platform that will automate the trade confirmation process, allow all trade tickets to be integrated into back-end and TLM systems, and ultimately drive STP in the securities industry. The software family includes two products:

- **B2B Data Transformation**: Translates unstructured and semi-structured formats into structured format.
- **B2B Data Exchange**: Contains B2B Data Transformation and connects the enterprise with business partners, suppliers, and customers and provides partner on-boarding and profile management, event monitoring, and any-to-any format transformation.
Universal Trade Data Transformation

Securities trading must support many types of trading processes, data formats, and communication protocols to address the specific needs of all client and partner networks within the trading community; clients, brokers, dealers, exchanges, and banks each have their own mechanism and applications for communicating trade information. Supporting any-to-any data format transformations for structured, semi-structured, and unstructured data in a codeless, reusable environment reduces the IT costs of custom development, validation, and error identification by automating access to all forms of data and thus streamlining intra- and inter-trading network collaboration and integration.

B2B Data Transformation supports transformations and mappings via all the standards within the securities industry. Pre-defined libraries and out-of-the-box transformations using a meta-level approach and software updates supplied by Informatica help ensure that providers remain up to date with the latest standards and specifications and can minimize maintenance and updating costs. Additionally, B2B Data Transformation for Trade Processing includes pre-built frameworks that enable mappings between multiple versions of standards.

With universal data transformation, B2B Data Transformation enables securities firms to transform large volumes of data into usable and normalized formats for rapid trade confirmation. Using B2B Data Transformation, securities firms can:

- Define complex data transformations without the need to write code
- Immediately deploy and reuse transformations across the enterprise software infrastructure
- Preserve investments and promote cross-enterprise integration

Optimize and Automate Securities Partner Relationships

Informatica B2B Data Exchange for Trade Processing enables securities organizations to automate the gathering, processing, and normalization of data from all trading network partners. In an environment where speed is essential, automation reduces trade processing time and helps manage all aspects of communications in between parties in a securities trading network – the clients, brokers, dealers, exchanges, and banks.

It is engineered to give securities firms a strategic advantage through:

- Universal data transformation
- Trading network collaboration
- Data visibility and transaction management

Securities Network Collaboration

B2B Data Exchange provides dynamic trading partner management to manage communications between parties in a trading network—clients, brokers, dealers, exchanges, and banks. It supplies the capability to create, edit, and manage partner profiles and define data flows particular to a partner to accommodate integration with the insurer’s core systems and enabling STP of trade transaction processing. B2B Data Exchange promotes operational efficiencies and collaboration among all members of a securities network.

The speed and precision with which trades can be processed is increasingly important in this competitive environment as partner networks grow in scope and complexity and as the types of derivatives continue to grow. B2B Data Exchange for Trade Processing enables securities firms to:

- Tighten collaboration in extended partner networks
- Leverage FpML and FIXML industry standard and unstructured data
- Rapidly capitalize on new business opportunities

Data Visibility and Transaction Management

One of the ways to ensure that transactions comply with business needs is via transaction management. This involves deploying the necessary controls to easily view and monitor, notify, reconcile, analyze, and manage exceptions to enable business process flows within and across an insurance network. This allows for visibility to all data regardless of network protocol or format.

Informatica B2B Data Exchange for Trade Processing provides the following transaction management capabilities:

- Event Viewer to see lists of events, search on a specific event of interest, and drill down to obtain information such as event type, status, history, and any errors associated with it.
- Event Monitoring to centrally manage trade transactions, reconcile issues, and define the filters and triggers used to send alerts.
- Web-based Business Dashboard and Analytics to provide diagnostics and analyses of any trade transactions.

Being able to manage events by viewing, monitoring, notifying, reconciling, and diagnosing them ensures that all insurance transactions are conducted in an appropriate and timely manner. It streamlines transaction processing by interconnecting related parties and provides visibility and transparency into transaction processes. This helps ensure early detection of potential problems, and establishes the highest possible control over all transactions, which is an absolute must for compliance with regulatory requirements and fraud detection.
The Informatica Advantage for Trade Processing

The advantage of integrating Informatica B2B Data Exchange into any trade transaction data process is that this single data management source enables timely and accurate trade data at all times which in turn optimizes the use of any trade application such as TLM, SWAPWIRE, or other proprietary and legacy systems.

With this capability, enterprises can maximize operational capabilities without increasing risk, automate and increase the speed at which trades are processes. This leads to improved client service and satisfaction, decreased costs, and enables STP.

Strategic Business Value with B2B Data Transformation for Trade Processing

Informatica B2B Data Transformation for Trade Processing is designed to supply a centralized hub for visibility, integration, management, and orchestration of disparate data with any-to-any data transformations, including legacy COBOL data. With it, securities firms can:

• Enable STP by automating and integrating data flows across the entire trading network, from front-office applications to back office, database, legacy and TLM applications
• Increases competitiveness by allowing securities organization to meet the time windows demanded by the market as well as quickly deploy new financial products
• Reduces costs by eliminating development and maintenance of manual and custom-coded solutions
• Reduce trading and operational risks by decreasing trade processing time while providing visibility to transactions and trading positions
• Facilitate regulatory compliance and corporate governance and transparency

ABOUT INFORMATICA

Informatica is a leading provider of enterprise data integration software and services. With Informatica, organizations can gain greater business value by integrating all their information assets across the enterprise. Thousands of companies worldwide rely on Informatica to reduce the cost and expedite the time to address data integration needs of any complexity and scale.

CUSTOMER SUCCESS STORY

A leading global investment firm needed to eliminate manual trading and automate their trade processing; manual communication and confirmation of transaction details was prone to errors and often created delays. The cost to manually process new product offerings and maintain an increasing volume of products was also becoming prohibitive. As part of their business intelligence data warehousing project, this leading investment firm also wanted to integrate trade data into their backend systems for analysis and Trade Lifecycle Management.

Using Informatica B2B Data Transformation for Trade Processing, the global investment firm leveraged Informatica’s pre-built libraries for all industry standards, automated their trade processing and integration all of their data in FpML, FIX, TWIST, FIXML, SWIFT, and proprietary formats, and enabled STP of trade confirmation with Trade Lifecycle Management applications.

As a result, the leading global investment firm was able to utilize the service across not only their trade processing and business intelligence project but also other projects within the company, including risk management, treasury and payments services. They were able to reduce their operational risk by eliminating manual intervention during trade confirmations as well as reduce development and maintenance costs of hand-coding.