

It's no wonder that the \$17 trillion fixed income industry has always been faced with an assortment of challenges when it comes to gaining more efficient and cost-effective operations. Increasing trade volumes, complex product strategies needing new risk and profit/loss calculations, new regulations, shrinking settlement cycles – all contribute to the need for real-time processes.

Driven by the fixed income industry's initiatives towards an electronic, real-time environment and the pressures between broker/dealers, it is more critical than ever for firms to reduce cost and manage risk through improved straight-through processing (STP) and operational efficiency. As outsourcing becomes the optimal choice for many firms to manage clearance, settlement and connectivity, SunGard is providing specialized services designed to help firms react quickly to the changing industry and technology landscape, while ensuring a solid path for the future.

One such specialized service is SunGard's STN Settlements – a central interface management service that consolidates and optimizes many of the external connections firms need in order to properly clear and settle trades, and which offers advantages including reduced cost and counterparty risk, greater control and faster resolution of exceptions, better utilization of capital, and more proactive management of opportunities.

### Fixed Income Clearing Corporation

The Fixed Income Clearing Corporation (FICC) is spearheading real-time initiatives with its Real-Time Trade Matching (RTTM) service, a matching platform that uses standardized interactive messaging to maximize the volume of trades that match on trade date. While the FICC has developed uniform standards for messaging, reporting, netting and settlement, it is striving to make electronic confirmation and real-time messaging industry standards as well, and is progressing fast. With the FICC leading the charge, and becoming the standard for much messaging and regulatory reporting, it is imperative that broker/dealers ensure their operations support these new and upcoming criteria.

### Keeping up appearances

Buy-side firms are investing more in STP

# Outsourcing Interface Management

## The cost/benefits of real-time clearing and settlement for fixed income brokers

efforts and are demanding that their trading counterparties do the same by improving back-office efficiency. In a recent industry survey, 90% of buy-side firms expected electronic trade confirmation for all securities products across the globe – with little tolerance of brokers who cannot provide this service. Keeping up with technology initiatives is vital for broker/dealers to protect their reputations as premier institutions with the best technology and service propositions.

### Back-office critical areas

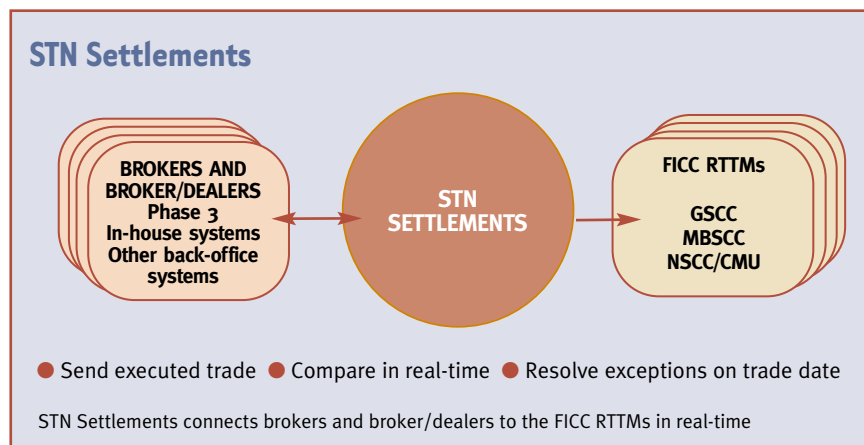
The main back-office functions – recording of trade entry and confirmation, trade matching, netting, clearance, firm financing, position maintenance, settlement and accounting – need to have resilient interfaces and STP. A critical factor for minimizing fails is having

up-to-date communications with clearing corporations (such as the FICC) and the depositories that hold and move securities. Timely reporting of trades and positions is also crucial, because it provides a firm with the ability to effectively project the upcoming day's actions.

With the FICC's move toward real-time trade matching, firms can project the day's actions on trade date, rather than the next day, thereby allowing better management of risk. But in order to realize the full potential of RTTM, firms on both sides of the trade must operate in a real-time environment.

### The outsourcing advantage

The focal point of outsourcing remains fundamental clearance and settlement tasks, as well as STP-related connectivity. Firms today



are focused on protecting their existing investment in IT infrastructure while replacing critical processes with proven, real-time solutions that enhance STP.

To keep pace with technology changes while controlling costs, many broker/dealers are turning to outsourcing back-office processing for two main reasons: to control internal infrastructure costs, and to keep up with regulatory initiatives. Firms are now focusing on business areas where their expertise provides competitive advantage, leaving back-office IT to external providers. Furthermore, shrinking budgets have limited firms' abilities to maintain best-of-breed applications across all areas of their business on their own.

### The power of central interface management

When SunGard Securities Processing examined its methodology for developing clearing and settlement interfaces, it recognized the opportunity to further enhance STP and add value to the process of managing trade comparison and clearance.

As standardized messaging technologies became more widespread, SunGard developed a new central interface management solution called STN Settlements. With STN Settlements, firms no longer need to manage separate, bilateral interface connections for multiple product lines and trading desks. STN Settlements is a platform that embraces the real-time, interactive messaging standards of

## STN Settlements in action

Trade Date	Settlement Date	Close Lag	Contra Participant ID	Acct Nbr	Reference Nbr	Buy/Sell	Security M	Original Quantity	Price	Repo Rate	Amount	Firm Status	Interface Status	Contra Reference Nbr	Facility Reference Nbr	
3/27/2001	3/27/2001	3/28/2001	9609			BUY	912827987	5000000	0	0	1.55	53625000	ADVS	CMFR	86329432	0
3/27/2001	3/27/2001	3/28/2001	9608	94969903	X0650	BUY	912827987	5000000	0	2.55	0	53625000	...			
3/27/2001	3/27/2001	3/28/2001	9602	94969903	X0654	BUY	912827987	5000000	0	1.57	0	53625000	...	PACK	000675-1327	
3/27/2001	3/27/2001	3/28/2001	9512			BUY	912827987	5000000	0	0	1.25	53625000	ADVS	CMFR	86329835	0
3/27/2001	3/27/2001	3/28/2001	9504			BUY	912827987	5000000	0	0	3.65	53625000	ADVS	CMFR	86324237	2...103270000375
1/31/2003	1/31/2003	2/5/2003	9504	94969903	X0655	BUY	912827987	5000000	0	3.22	0	53625000	...	PACK	000674-1328	

STN Settlements' GSD Street-Side Comparison screen allows users to view trade activity and related messages, history of status updates, and exceptions

## Driven by the fixed income industry's initiatives towards an electronic, real-time environment, it is more critical than ever for firms to reduce cost and risk through improved straight-through processing and operational efficiency

the FICC's divisions and RTTM services, using a consolidated user interface. While helping firms to achieve greater STP, STN Settlements ensures complete on-time compatibility with changing regulatory requirements.

Because STN Settlements uses industry-standard data formats, including XML and ISO 15022, it does not require re-engineering or dramatic changes to the back-office – so protecting the investment in incumbent IT systems. STN Settlements is compatible with any

securities processing system, or multiple systems, and is designed to suit any size of firm – making it an effective solution for financial institutions experiencing frequent change.

STN Settlements' real-time environment and exception management capabilities have been proven to help firms reduce fail rates, counterparty and credit risk; allow real-time information to be shared across the firm to departments where it has the most value; and reduce the cost and burden of building

## Technology and Fixed Income

**The managing director of the Fixed Income Clearing Corporation (FICC)'s member services division, Thomas Quaranta, discusses industry changes and technological initiatives in the fixed income industry, as well as the opportunities for broker/dealers and back-office operations**

**SunGard World: How has the fixed income industry changed in the last several years?**

**Thomas Quaranta:** From the government securities side, the industry has become more automated. Electronic trading platforms, such as eSpeed and BrokerTec, have been introduced and are a significant part

of how trading is done, in conjunction with voice brokers. Today, more than half of broker or inter-dealer transactions are handled electronically. We've established a blind market for government securities, where trading is done anonymously, brokers are established as principals, and the FICC becomes the counterparty and guarantees those trades. We also have extensive risk management procedures in place. All of these changes give the dealer community a greater comfort level in having the inter-dealer broker stand in on a principal basis.

**SGW: What are the FICC's technology goals going forward?**

**TQ:** Our main technology goals are to estab-

lish a more efficient and robust Web front-end, enhance and fortify our disaster recovery process, and continually enhance and expand our Real-Time Trade Matching (RTTM) services in terms of capabilities and fixed income product coverage. The FICC is now offering to its members two network connections – Securities Industries Automation Corporation's SFTI and the Depository Trust Company's SMART network – to provide access to more products and improve disaster recovery.

**SGW: What is the status of the FICC's Real-Time Trade Matching (RTTM) services, and what other key initiatives is the FICC working on?**

and maintaining in-house connections. Also, with real-time trade status information available across departments, firms can better utilize capital and react quicker to opportunities.

### The alternatives

There are other methods besides central interface management to achieve internal-external connectivity – for example (1) build your own; (2) use the interfaces provided in the firm's current back-office system; or (3) utilize separate RTTM terminals. However:

(1) Cost and time are critical factors when determining whether to build centralized interface connections. It is not unusual for a system to take months or years to develop, and then require ongoing programming changes. With an outsourced solution, all the groundwork has already been done.

(2) Interfaces provided as part of a core securities processing system may seem a reasonable option, but there are three main factors to be considered before using them.

First, if the RTTM interface connections provide multi-batch rather than real-time submission, the result will be delayed status information from the FICC. Given the implications of delayed information (such as the inability to calculate credit risk in real-time), multi-batching may not be the best option.

Second, a back-office system containing multiple, bilateral RTTM interfaces inhibits information from being viewed in a consoli-

## Central interface management with STN Settlements

- Manage fails faster and reduce counterparty risk
- Capitalize on real-time trade status information across the firm
- Ensure reliable systems connectivity after mergers and acquisitions
- Powerful solution for firms both large and small
- Know where you stand in case of sudden business interruption
- Connect with any back-office processing systems

## The march of electronic clearing

TowerGroup forecasts that 68% of all fixed income transactions in the institutional space will take place electronically by 2005 – a higher percentage than where the industry stands today across all sectors and client segments.

Source: TowerGroup

dated fashion. Each FICC interface formats data unique to its securities division and requires its own workstation, which hampers a firm's ability to grasp its credit risk exposure and ensure efficient use of capital.

Third, there are limitations to bundled solutions that supply FICC interfaces hard-coded into the back-office system. Should the firm ever decide to switch core processing infrastructures for specific product areas, the interface connectivity leaves along with the outgoing back-office system.

(3) When submitting trades directly to FICC RTTMs via separate division terminals, or using internal network infrastructure to connect with the FICC, staff must manually enter

trades directly into the back-office, then again into the FICC terminal – a duplicate process that risks introducing error and creating more exceptions that have to be managed.

STN Settlements, however, sends and displays all messages in real-time, allowing for real-time exception processing. It consolidates trade matching and comparison in a single-view format, so the firm as a whole knows where it stands across multiple trading desks. And STN Settlements is an open platform that does not rely on a specific back-office system – giving firms the flexibility to use multiple systems for particular trading operations, or change the back-office as needed to meet business goals in the future.

**TQ:** The government RTTM is now seeing 90% of trading activity coming through interactively. The mortgage-backed RTTM, which was launched last spring, projects activation by the top 15 dealers and inter-dealer brokers by the end of 2003. The most significant part of the RTTM initiative now is moving the corporate and municipal products currently supported by the National Securities Clearing Corporation from its Fixed Income Transaction Service to RTTM by mid-2004.

In addition, firms will be able to satisfy Municipal Securities Rulemaking Board reporting for muni bonds within a 15-minute period – which will be required by the end of 2004. Other key initiatives

include the introduction of a consolidated Web front-end, STP for institutional or buy-side netting, and the central counterparty initiative for mortgage-backs so the FICC can guarantee these trades as it currently does for governments.

**SGW: With the technology emphasis on the back-office, is operations contributing more to a firm's success today?**

**TQ:** The focus today is on matching trades as close to execution as possible, as opposed to the traditional T+1 match. The back-office is in a better position to view counterparty advisories and see discrepancies faster, so reconciliation can happen as soon as possible. Everything we do is geared toward giving operations the ability

to reconcile immediately and reduce the amount of time a trade sits unmatched.

**SGW: What should institutions seek in a systems vendor, in light of the FICC's initiatives and changes in the industry?**

**TQ:** Financial institutions should look for a vendor that can do everything – not only comparison and netting, but also the necessary real-time connectivity with clearing banks. Our goal is to make everyone real-time and eliminate batch processes. The FICC has disincentives in place to discourage firms from relying on batch processes, so firms have to either develop real-time capabilities themselves or sign up with a vendor that can meet these real-time requirements.

## Boston's Eastern Bank Capital Markets thrives with SunGard's InTrader ASP

It's known in the securities industry that, during a slow economy, the bond market excels. As investors become wary of equities, they turn to bonds to provide more stability to their investment portfolios.

For Eastern Bank of Boston, Massachusetts, the timing for the launch of its Capital Markets group couldn't have been more favorable. By implementing SunGard's InTrader system for bond accounting, clearance and settlement in an Application Service Provider (ASP) environment, Eastern Bank Capital Markets was able to hit the ground running when it opened its doors in June 2000.

Serving nearly 300,000 customers, Eastern Bank is the largest independent, mutually owned commercial bank in New England. With \$4.6 billion in assets and 51 branches in Greater Boston, Eastern Bank is committed to growth, having doubled in size every five years since it was founded in 1818.

Eastern Bank Capital Markets deals primarily in tax-free municipal underwriting and taxable bond trading, including municipal bonds and notes, government and agency bonds, as well as corporates and commercial paper. The bank uses InTrader's Trading and Safekeeping capabilities for primary and secondary trading, as well as for completing trades for both its institutional and retail customers.

### Supporting growth

In the last year, Eastern Bank underwrote approximately \$3 billion in municipal notes and bonds, and expects this volume to rise. The bank recently established a municipal finance group and added trading staff within the last six months to handle the upsurge.

"As a relatively new player in the competitive municipal underwriting market, Eastern Bank needs to be able to offer the same (or better) service as its competitors, and our systems play an important role in enabling us to effectively achieve this goal," says John Mullin, vice president of Eastern Bank Capital Markets, responsible for the management of operations and systems for the group. "InTrader not only ensures the



**"It's not uncommon to be the lead participant in a deal with 20 different assets involved and 50-60 trades within the syndicate. InTrader is our main warehouse"**

**John Mullin, vice president,  
Eastern Bank Capital Markets**

most efficient processing of our trades and accounts, but also supports our growth."

In today's landscape of faster processing through to settlement, there's less room for error than ever before. In the complex municipal underwriting world, real-time accuracy is imperative for success. Reducing duplicate entry and manual tasks, and ensuring regulatory compliance, are also key factors to achieving maximum efficiency, reducing risk, and providing first-rate customer service.

### Real-time accuracy

Once Eastern Bank wins a municipal underwriting bid, it relies on InTrader to ensure all the necessary steps of the trade lifecycle are completed in a timely manner – from setting up portfolios and transactions, to tracking profit and loss and sales credits, to commu-

nicating with the Depository Trust Company (DTC), National Securities Clearing Corporation (NSCC) and Municipal Securities Rulemaking Board (MSRB).

Mullin explains the complexities of municipal underwriting: "It is not uncommon to be the lead participant in a deal with 20 different assets involved and 50-60 trades within the syndicate. We need to be sure our systems can set up the portfolios and the transactions accurately – and InTrader is our main warehouse for this."

Integrated into InTrader are interfaces to clearing corporations and regulatory bodies to ensure trades are compared and matched, and reports and filings are completed within the required time period. InTrader interfaces with the DTC for confirmations and clearance of municipals; the NSCC for trade comparison, settlement instructions, advisories and reports; and the MSRB for nightly regulatory filings.

InTrader allows Eastern Bank to send electronic notices via the DTC, enabling its institutional customers with access to the DTC to see confirmations right on their desktops. InTrader also generates nightly files for automatic upload to the NSCC and MSRB, which eliminates the need to manually re-key information. "With InTrader, we don't have to worry about reporting and compliance issues, since the system takes care of it all for us – allowing us to focus on our core business, and service our customers, more effectively," says Mullin.

### The outsourcing advantage

Utilizing InTrader in an ASP environment provides Eastern Bank with cost savings in the capital investment and manpower required to run servers and systems in-house. "By using InTrader in an ASP environment, we can be sure that the system is being maintained by the experts that built it – and that eliminates the need for us to train and retain IT people to manage the system in-house. InTrader is cost-effective and seamless to deploy, and enables us to leverage SunGard's vast technological expertise to our advantage," says Mullin.