



CLEARING BROKER

PERSHING

Moving towards seamless processing

With operations in the United States and Europe, Pershing provides comprehensive brokerage execution, clearance, data processing, and investment products and services to financial organizations worldwide. Pershing is a division of Donaldson, Lufkin & Jenrette Securities Corporation, a leading investment banking and securities firm with total capital of over \$2.8 billion and total assets of over \$48 billion. Pershing employs more than 2,000 from its headquarters in Jersey City, N.J., regional offices in Chicago, Los Angeles, and San Francisco, and its London subsidiary, Pershing Limited, which provides multicurrency execution and clearing services.

Pershing has been processing trade executions for more than 50 years and has built its reputation by providing the highest quality service. Central to delivering quality service is Pershing's commitment to operating only the most efficient and secure financial processing and information management systems. Pershing continuously invests in developing technology and streamlining automated processes to support 500 financial institutions in 7,000 locations, on behalf of more than 2.5 million investors.

Marty Rogan, who joined Pershing in 1978, is Vice President of Trading Operations and responsible for leading the automation efforts of Pershing's Trading Services Group. In 1989, Rogan fielded a request from the company's Institutional Equities Block Trading Desk to assist the desk's institutional clients by further streamlining the company's processes for settling trades. Rogan took the request as a challenge to find the right technology that would permit growth while safeguarding accuracy.

- Boston
- Chicago
- Hong Kong
- London
- Los Angeles
- Mexico City
- New York
- San Francisco
- Singapore
- Sydney
- Tokyo
- Toronto

The Challenge

More than two decades ago Pershing determined that by automating their most routine processes, they could speed service, reduce the potential for errors, and free more resources to focus on business opportunities. Automation would also ensure that the organization had complete control over its processes and could safeguard the confidentiality of customer accounts.

To achieve these goals, Pershing developed its own proprietary communications and data processing system, which was designed to accommodate high order volumes while also delivering customized information. The cornerstones of Pershing's technology are reliability, efficiency and flexibility, which is why Pershing also ensured at the outset that its systems were designed to be able to link electronically to other systems or services for further processing or redistribution of information.

Rogan determined that what Pershing needed was a reliable system that would accommodate the desk's current average of executing five million shares per day for correspondents and approximately 250 major institutions. His requirements also included the capability to integrate easily with the organization's

proprietary communications and processing systems.

Says Rogan, "What we were looking for was a system that would link with ours and streamline the execution process for our customers as much as possible. We were also especially looking to eliminate the re-keying of data so we could free up our human resources to focus more intently on our customers."

The Solution

To get the job done, Rogan sought out Thomson Electronic Settlements Group (Thomson ESG), which was just then introducing OASYS™, now recognized as the leading electronic trade allocation and acceptance service. Thomson ESG's open systems philosophy and the use of industry-standard relational databases and open messaging standards enables Thomson ESG services to be used on a modular or combined basis, or in conjunction with other proprietary or vendor systems. This philosophy was a perfect fit with Pershing's requirements.

This compatibility led Pershing to become one of the first clients to pilot OASYS. With OASYS, Pershing's correspondent brokers were now able to electronically transmit trade details and allocations to

Pershing, eliminating the need to use the phone or fax. Also eliminated was an extra step of re-keying information, thereby reducing transcription errors. Trade details and allocations could now be accepted or rejected on the same business day from a single point of access, ensuring that all details were correct prior to settlement.

Competition wasn't an issue in Pershing's decision to invest in OASYS. "There wasn't much in the way of product out there," says Rogan. "Thomson found a unique market niche and has serviced it well."

Rogan and his group were particularly pleased with Thomson ESG's willingness and ability to tailor the products to meet their specific needs. "I had the opportunity to work with Thomson to refine the product, and it was terrific," Rogan states.

Rogan worked with Thomson ESG to add the "Broker of Credit" field, a feature required by Pershing as a clearing broker. "We needed to be able to receive trade details and allocations from our institutional clients and forward them to any of our more than 650 broker/dealers," Rogan says. "OASYS can now do that."

While the benefits of OASYS were obvious, Pershing wanted a more seamless link to address its

processing speed requirements for its significantly increasing transactions volumes. Together, Thomson ESG and Pershing developed a host-to-host interface so that OASYS is now linked directly to Pershing's mainframe. This interface makes use of OASYS' import/export feature so that trade details flow automatically between Pershing's system and OASYS. In this way, processing speed is enhanced and data is captured at source, eliminating re-keying.

Although Pershing adopted OASYS when the service was only first being introduced, Pershing was already familiar with the quality services provided by Thomson ESG. At the time, the company had experienced several years of quality service while using Thomson ESG's ALERT®, the global database and standard for the communication of delivery and account instructions.

Says Rogan, "ALERT was the only product of its kind when it was first offered in 1984. We saw the value of the system right away, and were pleased to be able to offer it to our clients as part of our overall services. The database functionality especially appealed to us because it was a way for us to reduce re-keying of settlement instructions." ALERT electronically sends and receives new or updated account and delivery

instructions among trading partners, providing Pershing with the capability to ensure access to comprehensive global information for precise and complete communication using ALERT's standardized formats.

When ALERT is linked with OASYS, broker internal account numbers (BIAs) that have been cross-referenced with investment manager internal account identifiers can be automatically appended to the allocation message, further streamlining the post-trade settlement process. This was just the type of integration Pershing needed. By combining the OASYS service with ALERT, Pershing was able to provide the post-trade processing capabilities its clients required in a more seamless fashion.

Rogan sees being able to offer OASYS and ALERT as part of Pershing's overall service package to its client as a huge plus. "I felt it was necessary to make my strategic alliance with Thomson and it has worked out well for both companies," says Rogan.

A feature of OASYS and ALERT that the Trading Services Group appreciates, in particular, is that the two services have shortened their work day. "It's been good for morale. In the past, everyone stayed until 8:00 p.m. every night. Now we

have a rotating schedule, and people are able to leave at 4:00, 5:00 or 6:00 p.m., depending on whose turn it is to stay late," Rogan notes.

"It was the efficiency of the services—OASYS and ALERT—that attracted us. The world is coming to a T+1 environment, and we want to be ready for it," says Rogan.

The Results

Today, Trading Services Group staff have been freed from daily manual reporting tasks and are instead engaged in developing new opportunities. The group has doubled the number of transactions it handles daily to 8 million, while maintaining an affirmation rate (the rate of trades completed accurately) that is 2 to 3 percent higher than industry averages.

The OASYS/Pershing interface enables Pershing's correspondent firms to affirm or reject allocations with their institutional clients in a standard format throughout the day. Pershing receives intra-day electronic transmissions of trade details and delivery instructions for their correspondent brokers via the link with OASYS.

"As far as processing ease, we would not be anywhere near as efficient if we didn't use OASYS. And it has allowed us to expand our human resources as our

business has grown. But instead of handling day-to-day processing functions, the staff is freed up to work on special opportunities and clients' problems," says Rogan, noting that the need for manual labor—re-keying of data as *the* prime example—is made obsolete by this service. The use of an open-systems approach helps Pershing's clients to serve their customers more efficiently, Rogan believes. "Our clients are now able to get real-time updates on the status of their trades, which greatly reduces the risk of error, miscommunication, and failed trades, resulting in lower credit risk."

Other features that the Trading Services Group appreciates are the relative ease of training and the continuing accessibility of Thomson ESG for support. "After two or three sessions, our people were comfortable using the products," says Rogan. "It's been a win-win situation for everyone."

"With OASYS and ALERT we offer a more efficient way to process trades with virtually a zero error factor," says Rogan, explaining that not all clearing brokers can provide this quality service.

Thomson ESG's services are helping Pershing to continue working towards its goal to continuously upgrade and streamline its processing with new technology, and to

eliminate as many manual or re-keying portions of its processes as possible. This ensures Pershing is keeping up with the technological advancements of its clients, as well as providing them with the most state-of-the-art services available.

Future Plans

Pershing is continuing to build upon its success of providing the OASYS and ALERT services to its clients with upgrades to both services. "We are working towards complete automation and seamless processing," says Rogan. "Thomson ESG's Direct services are a step in that direction."

Thomson ESG's ALERT-Direct and OASYS-Direct services will provide Pershing with dedicated, on-line connections between its host system and the OASYS and ALERT hosts. The connections for these services are always on-line, automatically and immediately transferring the OASYS and ALERT trade information for seamless processing. Both services have been developed so that they can be adapted to virtually any in-house system configuration. Pershing is taking particular advantage of this feature by planning on employing both services over a *single* dedicated line, with zero loss of performance.

Pershing is also looking to ALERT-Direct to automate the company's account opening process. Today, that process takes between 90 seconds and five minutes. With automation that time will drop to 15-30 seconds. The current process involves the re-keying of client's names and addresses into Pershing's internal systems. ALERT-Direct will eliminate re-keying by attaching the account information and settlement instructions to Pershing's proprietary names and addresses.

Pershing will also greatly enhance the level of services it provides to its correspondents with seamless and simultaneous access to OASYS-Direct. With OASYS-Direct, Pershing will be able to provide multi-user access to OASYS for correspondents from its own system. This means that the OASYS service can be tightly integrated with Pershing's clients' systems—both broker/dealer and investment manager clients—for straight through processing of OASYS transactions.

"All of our automation efforts are working towards preparation for T+1, and eventually, straight through processing," says Rogan. "Our plans for employing ALERT-Direct and OASYS-Direct are significant steps towards preparing to offer those efficiencies to our clients."

Thomson ESG

Thomson Electronic Settlements Group (Thomson ESG) is the worldwide leader in providing paperless trading solutions for the automation of post-trade operations in the global securities market. Thomson ESG has gained market leadership through innovative technology, open systems based on financial industry standards and superior client support. Thomson ESG services are used in 30 countries for domestic and cross-border trading. Thomson ESG supports over 2,700 clients from 12 offices located in major financial centers across the globe.

Thomson ESG is part of Thomson Financial Services (TFS), a leading provider of quality financial information, research, analysis and software products to the global investment and corporate communities. Part of The Thomson Corporation, a \$7.5 billion company based in Toronto, TFS employs more than 4,500 people in 40 offices worldwide.

Thomson ESG

Automating the world's post-trade automation

ALERT®

The global database and standard for the communication of delivery and account instructions

OASYS™ (for equities & fixed income)

The leading electronic trade allocation and acceptance service

OASYS Global™

The worldwide electronic trade allocation and confirmation service

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