

London Stock Exchange matches buyers and sellers

INDUSTRY

FINANCIAL

BUSINESS APPLICATION

ENTERPRISE APPLICATION INTEGRATION

^{DataMirror®}
Constellar® Hub

The London Stock Exchange (www.londonstockexchange.com) is the United Kingdom's leading stock exchange and the most international of all stock exchanges worldwide. The Exchange provides the markets and means of raising capital for UK and international companies through equity, debt and depositary receipt issues, and gives investors of all types the opportunity to buy and sell shares in the companies of their choice.

DataMirror Constellar Hub can quickly build and deploy interfaces and easily monitor and audit the movement of data between application systems, providing a reliable solution in a shortened development timeframe.

The London Stock Exchange has undergone a huge transformation over the last two decades. It began with the "Big Bang" in 1986 when deregulation and computerization set the scene for a new era of equity trading. The next major event occurred in 1997 with the introduction of Stock Exchange Electronic Trading Service (SETS) – an electronic order book that could automatically match bid/offer prices and execute them against each other. The buying and selling of shares was once seen as the exclusive realm of the rich. But now, thanks in part to the

wave of privatization in the 1980s and 1990s, share ownership has been truly popularized. Consequently, the volume of trades at the London Stock Exchange has grown relentlessly – in 1998, just one year after the introduction of SETS, over £1,000 billion of UK equity trading took place at the Exchange.

The Problem

The Exchange supports its legal and operational responsibilities by matching members' trades with those reported by the buyer or seller. It reconciles these with the information that both counter-parties have reported to CRESTCo, which offers settlement services in the UK. This process checks that the trade information which participants have reported to the market mirrors the transaction that actually takes place when the deal is settled.

In order to satisfy fundamental requirements as a Recognized Investment Exchange and ensure investor loyalty, the London Stock Exchange faced impending pressure to find a more efficient method for obtaining a timely and transparent overview of the behavior of the market. This meant searching for a solution to fully automate the matching and reconciliation of 70,000 UK equity trades per day.

The Solution

While the goal of an automated solution was apparent, the best route to take was somewhat less easy to isolate. Two main factors resulted in

the Exchange's decision to implement DataMirror Constellar Hub.

Because the Exchange's requirements were in constant flux, the criteria continually evolved during the life of the project. CRESTCo's reporting requirements, for example, were regularly updated, which meant that the Exchange would need to alter its data feeds to accommodate this. Members were also able to report their activities to the Exchange in a variety of ways, so a simple off-the-shelf solution would not easily fit the requirements.

As well as being flexible, another requirement was performance. With around a quarter of a million transaction reports a day, the desired throughput could only be achieved by an automated solution that could handle vast numbers of transactions.

Following a detailed assessment of the enterprise application integration (EAI) market, the London Stock Exchange selected DataMirror Constellar Hub to solve the challenge and develop its technological infrastructure in line with constantly evolving business requirements. DataMirror Constellar Hub is a leading Oracle-based enterprise application integration solution that empowers organizations to rapidly integrate any combination of applications.

The Benefits

DataMirror Constellar Hub can quickly build and deploy interfaces and easily monitor and audit the movement of data between application systems,

providing a reliable solution in a shortened development timeframe.

The DataMirror solution currently sits on the Exchange's transaction database. As members' trades are reported to the Exchange, they pass through its IMAS real-time surveillance engine before moving into a powerful database. On the transaction side, the Exchange member sends a transaction report to CRESTCo, which passes through the data server into its Oracle database.

The trade reports and transaction reports are then reconciled using DataMirror Constellar Hub. The next step is to process the information and produce reports. The DataMirror solution analyzes information according to the Exchange's own requirements using "business rules," which are instructions on what to do with each piece of data. Other more detailed information including time of report and report value are used to make the reconciliation with trade information reported to CRESTCo.

In this respect, the Exchange's requirements of the Hub's business rules were very demanding. This has made DataMirror Constellar Hub's flexibility particularly useful. Re-engineering crucial to the London Stock Exchange, for example, can be carried out quickly.

Conclusions

After the implementation and an extensive period of testing the Hub's performance – especially given the tight batch window available for

reports – the DataMirror solution has lived up to expectations. The Exchange now has three Hubs – one for development and testing, one in live operation and one for disaster recovery backup.

Furthermore, the Exchange plans to enter the next phase of evolution with DataMirror Constellar Hub as its data management engine. The flexibility of DataMirror Constellar Hub will allow the London Stock Exchange to expand its reconciliation processes in the future without drastic re-engineering of its existing architecture.



DataMirror software is available on-line at datamirror.com or call 1-800-362-5955

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