

HOW LUXEMBOURG STOCK EXCHANGE MAKES PROGRESS



MEETING MARKET DEMAND

The Luxemburg Stock Exchange (Bourse de Luxembourg-BdL) is the major European listing center for corporate bonds. The reasons for its leadership are clear. It handles 28,000 international bond issues representing 60% of the international bond business. It lists 6,500 investment funds in nearly 20 currencies as well as 200 Global Depository Receipts from issuers in emerging countries. And, in 2004, when its order volume exploded, the stock exchange implemented innovative technology to remain the leader and grow.

At the heart of its innovation is Progress® Sonic® ESB, a messaging-based enterprise service bus that simplifies the integration and flexible re-use of business applications within a service-oriented architecture (SOA). The Sonic ESB provided the responsiveness and flexibility the exchange required to meet market demands. With the Sonic ESB, the Luxemburg Stock Exchange improved information



CHALLENGE

Meet growing market demand for real-time trading information both from internal sources and from customers, partners, and regulators

SOLUTION

Fast, standards-based, distributed integration of heterogeneous internal and external systems using the Progress® Sonic® ESB

BENEFIT

Shorter time to market for information, better customer and partner service, tighter regulatory compliance

processing and communication across heterogeneous platforms and data formats, including internal systems that provided its competitive edge.

TRADING IN INFORMATION

Begun in 1929 as a limited company, today the Luxembourg Stock Exchange has two markets, Regulated and Euro MTF. Information exchange is essential to its business as the leading trading exchange for corporate bonds. The exchange has two core activities: data acquisition and data distribution. It receives data for trading and regulatory compliance. It also sells data to Reuters, Bloomberg, and other customers as a major commercial activity.

The Luxembourg Stock Exchange has achieved its success through state-of-the-art IT. The exchange prides itself on its own, internally-developed trading, listing and market information systems, including two information portals, www.bourse.lu and www.cclux.lu. These systems give the organization a strong competitive edge. To maintain this advantage, the IT department employs more than 90 people to develop and manage the exchange's infrastructure and applications.

The IT group faced a new challenge in 2004; a number of local and foreign operators began to act as market makers using FIX gateway. Market traffic in information increased dramatically. Making data available for customers, partners, and Luxembourg and European Union regulatory authorities—in different formats and at the time they expect the data—was paramount to keep its competitive edge.

FLEXIBILITY AND FAST RESPONSE

To give an adequate and efficient response to these market demands, BdL needed to decrease its time to market while providing greater flexibility, both inside the exchange and for its market partners, customers, and regulators.

“Reactivity and flexibility are keywords in today's businesses. This especially applies to stock exchanges,” said Bernard Simon, Head of the IT department at the Luxembourg Stock Exchange. “With the two types of core activities we have it is easy to imagine how the type of data and the

formats can be very heterogeneous. To create homogeneity, we needed to automate our processes and to set up an IT architecture in which all the different technologies we work with could efficiently communicate. We were looking for a solution that would help us to interconnect all these technologies using new standards such as Java, XML, JMS, etc.”

After a proof of concept, the Luxembourg Stock Exchange chose Progress Software. “The solution needed to be able to roll out the services and to manage them within our existing workflows,” explained Bernard Simon. “Sonic ESB is the only platform that offers just that type of solution. Progress Software was the first company to present this concept: a middleware managing service without the heavyweight solution of EAI. But of course, the fact that BdL was already using Sonic as a middleware platform and that the proposed solution was and is still standard-based were equally decisive, because it meant that it could be run on the existing technology. Exactly what the exchange needed!”

SMARTER, FASTER, EASIER

With the standards-based Sonic ESB, the Luxembourg Stock Exchange now has a more flexible IT infrastructure as well as an increased level of reactivity to enhance data acquisition and data distribution,” said Alain Wiard, Territory Manager at Progress Software Benelux.

IT professionals at the exchange were able to integrate various services (e.g., for data extraction, transformation, and real-time data monitoring and product dissemination) using the existing workflows that had been developed in-house. As a result, the right data and information can be immediately sent to and received by the right person, be it a client, an institution or an employee in the right place, at the right time.”

Thanks to the automation of its processes with Sonic, the Luxembourg Stock Exchange is now able to respond more quickly and more easily to the growing demand for large volumes of market data both at the acquisition and the dissemination end. The exchange can now provide its customers with real-time information and processing statuses and comply more easily with the various Luxembourg and EU regulations. Sonic ESB has

also led to an optimization of the exchange's IT investments and development and has eliminated any redundancy in the IT infrastructure.

"By automating the processes of acquisition and diffusion, the exchange decreased its time to market while providing greater flexibility, both inside the exchange and for our market partners, customers and the authorities," said Bernard Simon. "We are confident that our improved IT infrastructure will ensure our competitive edge by, among other things, reducing the time to market that is so crucial."

PROGRESS SOFTWARE

Progress Software Corporation (NASDAQ: PRGS) is a global software company that enables enterprises to be operationally responsive to changing conditions and customer interactions as they occur. Our goal is to enable our customers to capitalize on new opportunities, drive greater efficiencies, and reduce risk. Progress offers a comprehensive portfolio of best-in-class infrastructure software spanning event-driven visibility and real-time response, open integration, data access and integration, and application development and management—all supporting on-premises and SaaS/cloud deployments. Progress maximizes the benefits of operational responsiveness while minimizing IT complexity and total cost of ownership.

WORLDWIDE HEADQUARTERS

Progress Software Corporation, 14 Oak Park, Bedford, MA 01730 USA
Tel: +1 781 280-4000 Fax: +1 781 280-4095 On the Web at: www.progress.com

For international office locations and contact information, please refer to:
www.progress.com/worldwide

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