



The Luxembourg Stock Exchange Enhances Competitive Edge of Its Modernized IT Infrastructure

CASE STUDY

THE CHALLENGE

The Luxembourg Stock Exchange (BdL) has two main activity poles: data acquisition and data distribution. The first is necessary by the nature of the Exchange's business, but is also a requirement from local authorities. On the other side, one of the Luxembourg Stock Exchange's crucial commercial activities is to sell its data. Making those data available for customers and partners in different formats and at the time they expect the data is of great importance for BdL. To give an adequate and efficient response to these market demands, the Exchange needed to decrease its time to market while providing greater flexibility, both inside BdL and for its market partners and customers.

THE SOLUTION

To meet these requirements, the Luxembourg Stock Exchange chose to implement a flexible Enterprise Service Bus rather than a weightier EAI-solution. The ESB has enabled the IT-specialists to integrate the various services (extraction, transformation and real-time data monitoring and product dissemination) by using the existing workflows that have been developed in-house.

WHY PROGRESS


After the development of a proof of concept, the Luxembourg Stock Exchange chose to work with Progress Software to automate its IT processes. The main reason was that it needed to be able to roll out the services and to manage them within the existing workflows. The ideal solution to this problem was ESB, and Progress® Sonic ESB is the only platform that offers just that solution. Progress Software was the first company to present this concept: a middleware managing service without the heavyweight solution called EAI. But of course, the fact that BdL was already using the Sonic product as a middleware platform and that the proposed solution was and still is standard-based was equally decisive, because it meant that it could be run on its existing technology.

THE BENEFIT

By automating the processes of acquisition and diffusion, the Exchange decreased its time to market while providing greater flexibility, both inside the Luxembourg Stock Exchange and for its market partners, customers and the authorities.

THE CUSTOMER

The Luxembourg Stock Exchange began to operate as a limited company in 1929 and has gained extensive experience in the listing and trading of securities from many




regions. Today the Exchange has two markets, Regulated and Euro MTF, with 28,000 international bond issues representing 60% of the international bond segment. It lists 6,500 investment funds in around twenty currencies, as well as 200 Global Depositary Receipts from issuers based in emerging economies, and a co-operative agreement with the Euronext exchanges. The Luxembourg Stock Exchange (Bourse du Luxembourg, BdL) is the major European listing centre for corporate bonds.

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 Exchange a strong competitive edge. To maintain this advantage, the IT-department employs more than 90 people to develop and manage the BdL's infrastructure and applications.

The Luxembourg Stock Exchange business contacts are not only their customers, such as Bloomberg and Reuters, but also the regulatory authorities of Luxembourg and the EU. They all have an ever-increasing need of considerable reactivity in receiving and providing data, especially since (2004) when the volume of trade orders at the Exchange exploded as a number of local and foreign operators began to act as market makers using FIX gateway. This continuous growth called for a flexible and efficient IT-infrastructure, where the right information can immediately be delivered to the right person. This can be within the Luxembourg Stock Exchange or externally, with customers and/or authorities.

WHY CHOOSE ESB?

In the world of Stock Exchanges, data and how you deal with it is absolutely crucial. That's why the Luxembourg Stock Exchange's two main activity poles are data acquisition and data diffusion. The first is necessary by the nature of the Exchange's business, but is also a requirement from control institutions like the Luxembourg authorities. On the other side, one of BdL's crucial commercial activities is to sell its data. Making those data available for customers and partners in different formats and at the time those customers expect the data is of great importance for the Luxembourg Stock Exchange. 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 their market Partners and customers.



“Reactivity and flexibility are keywords in today’s businesses and this especially applies to Stock Exchanges,” said Bernard Simon, Head of the IT-department at the Luxemburg Stock Exchange. “With the two types of core businesses 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. Therefore 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 the development of a proof of concept, the Luxemburg Stock Exchange chose to work with Progress Software. “The main reason for this was that the solution needed to be able to roll out the services and to manage them within its existing workflows,” explained Bernard Simon. “The ideal solution for this problem was ESB and 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 called 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 was equally decisive, because it meant that it could be run on the existing technology. Exactly what the Exchange needed!”

SMARTER, FASTER, EASIER

“The Luxemburg Stock Exchange needed a more flexible IT-infrastructure as well as an increased level of reactivity to enhance their two main activity poles,” said Alain Wiard, Territory Manager at Progress Software Benelux. “To meet these requirements, we decided together to implement a flexible Enterprise Service Bus which enables the IT-professionals at the Exchange to integrate the various services (extraction, transformation and real-time data monitoring and product dissemination) using the existing workflows that had been developed in-house. Now, the right data and information are immediately sent to and received by the right person, be it a client, an institution or an employee at BdL in the right place, at the right time.”

Thanks to the automation of its processes with Sonic, the Luxemburg 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 new ESB-platform enables it to provide its customers with real-time information and processing statuses and makes it easier for it to comply with the various Luxemburg and EU regulations. It has also led to an optimization of the IT investments and developments 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 BdL and for their 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.”



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

Europe/Middle East/Africa Headquarters

Progress Software Europe B.V. Schorpioenstraat 67 3067 GG Rotterdam, The Netherlands Tel: 31 10 286 5700 Fax: 31 10 286 5777

Latin American Headquarters

Progress Software Corporation, 8323 Northwest 12 Street, Suite 216, Miami, Florida 33126 USA, Tel: 305-716-1007, Fax: 305-716-0133

Asia/Pacific Headquarters

Progress Software Pty Ltd. Level 2, 194 Miller Street, North Sydney NSW 2060, Australia, Tel: 61-2-9919-7100

For regional international office locations and contact information, please refer to the Web page below:
<http://www.progress.com/worldwide>

© 2007 Progress Software Corporation. All rights reserved. Progress Sonic, SonicMQ and Sonic ESB, are trademarks or registered trademarks of Progress Software Corporation. Any other trademarks or service marks contained herein are the property of their respective owners.

ABOUT PROGRESS SOFTWARE

Progress Software Corporation (Nasdaq: PRGS) provides application infrastructure software for the development, deployment, integration and management of business applications. Our goal is to maximize the benefits of information technology while minimizing its complexity and total cost of ownership.

www.progress.com

PROGRESS
SOFTWARE