

## Allora Helps Luxembourg Stock Exchange Improve Central Data Hub Performance

Major Listing Center of International Bonds, Equities and Investment Funds Simplifies Important Data Flow through XML Transformation

### Overview

Founded in 1927, the Luxembourg Stock Exchange is a major listing center of international bonds, equities and investment funds. With 130 employees, the Stock Exchange supports more than 3,500 issuers from 105 jurisdictions through a modern trading platform. The Luxembourg Stock Exchange has developed specific expertise in listing and trading securities from a wide range of regions.



### Background

A founding member of "XBRL Luxembourg A.S.B.L.," the Luxembourg Stock Exchange has played a pioneering role in the promotion and diffusion of XML standards. XML standards can simplify the exchange and the processing of financial and economic information and have been adopted by the majority of industrialized nations. XML protocols provide a reliable, efficient method of transmission of financial and statistical information for control and supervision procedures.

Luxembourg Stock Exchange's Finesti subdivision, responsible for investment fund information management, today provides a data collection and dissemination platform between the players and the participants of the Luxembourg financial center through XML data flow. Finesti operates a central data hub that supports information collection from fund administrators, promoters and transfer agents. Information dissemination is provided to data vendors, distribution platforms, transfer agents and Central Securities Depositories (CSDs), analysts and regulatory authorities. In the center of the hub, Finesti processes Net Asset Value (NAV) and related data, tax data, fund documents, descriptive data, fund processing passports and regulatory reporting to help service the needs of investors, market participants and market professionals.

### Business Problem

In developing its data management platform, the Stock Exchange realized that the transfer of information through XML was a very efficient, effective and reliable way to solve the problem of collecting data from disparate sources and in different formats, and rationalize it into one format in order to be able to disseminate it to



clients in various ways in a real-time environment. The Stock Exchange created an XML format they call "XML pivot," which consolidates this correlated data for use in their technical environment. In order to be able to manipulate data through this XML format however, they needed a product that could transform data between XML and relational databases, while supporting their business requirements and be scalable, flexible, user-friendly and simple to maintain.

According to Sébastien Gréau, Lead Architect at the Stock Exchange, "In order to inject and to extract the data from our database we had to find an XML data-mapping tool that would manipulate this XML format. No 'home-grown' product could possibly meet our requirements. We chose to evaluate different products, including open source products, and Allora met our requirements and won our proof of concept."

### Platform

The Stock Exchange operates on a fully-virtualized platform.

- A VMWare stack manages the computing environment where applications are deployed and supported on Linux
- Sybase database
- SOA architecture using Sonic ESB for services and messaging on Java

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## **Selection Criteria**

The Stock Exchange searched for a product that could help deploy its XML-based data management project in an easy, manageable way. They wanted to reduce time to deployment, and be as efficient as possible in the use of IT staff time. They were also interested in a solution that could run in a centralized environment, provide a graphical interface and be XML schema-aware.

## **Problem Solved**

Sebastien Gréau and his team conducted an online search for an XML data mapping tool and found HiT Software online. After some discussion with HiT Software, they decided to try an evaluation version of the Allora XML transformation product to do performance tests and consider whether the product could meet their business requirements. "After this evaluation period, we decided Allora was the best choice to solve our requirements," affirmed Gréau.

Allora's graphical interface and Java-based component architecture with thin layers of Java libraries made it easy to deploy in their configuration. Gréau commented, "There is only a small amount of Java code to produce in order to persist the parsed XML file. Allora is XML-schema aware, and we learned that it supports a large list of XML schemas. Also, with Allora, it was easy to manage the mapping files and configuration."

Allora helped the Stock Exchange succeed in implementing the Collecting and Disseminating Hub, which provides functionality such as transformation of collected data, forwarding and enrichment of extracted data, and persistence of that data, all of which is a part of their daily process. Today, the Stock Exchange can respond to a request for a new product in two days, reducing response time by a third.

Finesti recently reported a year-over-year increase in its coverage of fund information. As of the end of June 2009, it reported that it had provided information on approximately 32,000 share classes of investment funds – an increase of over 7% per year.

In October 2009, Finesti reported that its website had provided access to

- 31,900 NAVs (and all related information)
- 41,648 documents (prospectuses, simplified prospectuses and financial reports)
- 644 Fund Processing Passports (FPPs)

## **Major Benefits**

"We particularly liked Allora's user-friendly graphical interface – it's a nice feature and does not require deep Java knowledge to get started. You only need some basic JavaScript knowledge," Gréau summarized on behalf of the team developing the Collecting and Disseminating Hub.

One of the main benefits the Stock Exchange noticed in using Allora was their ability to save time. According to Gréau, "Everyone knows time is money, and we definitely reduced hours of work using Allora." The Stock Exchange had looked at developing a custom solution that was based specifically on their business, but decided that "reinventing the wheel" was not a good use of time and effort, and decided instead on Allora.

Today, through the Stock Exchange's distribution channels supported by the XML pivot format on Allora, data vendors have access to data either on a real time basis or on a delayed basis.

## **Vendor Support**

"I would say we have a very good relationship with Allora's team members," Gréau commented. "Based on our feedback, new features have been introduced in Allora version 6!"

The Luxembourg Stock Exchange has already recommended this product to other companies, who also were looking for an "XML-to-database" mapping tool. They also had the chance to showcase their solution to other departments in their IT infrastructure.