



MERRILL LYNCH

HIGHLIGHTS

Company

Merrill Lynch

Industry/Market

Financial Services

Key Business Issues

- Identify non-intuitive industry trends, best sources of new investment, and ways to cut costs and improve profitability
- Turn data in multiple formats from multiple sources into readily usable form
- Scale easily to deal with growth in data and requirements

Business Results

- Repaid investment many times over through increased revenues and reduced costs
- Scaled up gracefully on many occasions
- Met all requirements for robust, enterprise-class system

Configuration Specifics

- Sun™ servers deployed: Three Sun Enterprise™ 4000 servers
- Solaris™ Operating Environment
- Informatica PowerCenter and PowerMart

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Gene Fernandez,

*Vice President of Applications Infrastructure,
Investment Banking Group,
Merrill Lynch*

The investment banking group at Merrill Lynch relies on its data warehouse to help identify non-intuitive market trends and formulate strategies for improving business success. To deal most effectively with the great many disparate sources of data that populate this warehouse, the group selected data integration tools from Informatica.

In Sun Enterprise™ servers, the firm found the ideal complement for Informatica technology since the product combination scales gracefully as a unit and meets all the requirements for enterprise-class deployment. Both the hardware and the software components of the warehouse have lived up to expectations in every respect, helping the firm reap revenue increases and cost reductions that have paid for the warehouse investment many times over.

Using Data Warehousing for Many Business Improvement Purposes

Merrill Lynch is one of the world's best known names in financial services. Merrill Lynch is a leading global financial management and advisory company with a presence in 44 countries and total client assets of about \$1.8 trillion. Merrill Lynch is an undisputed leader in planning-based financial advice and management for individuals and small businesses.

A key division of the company is the investment banking group, whose staff of 3500 is responsible for building business in the capital markets. The investment bank has been the top global underwriter of debt and equity securities eight years running and a leading strategic advisor to corporations, governments, institutions and individuals worldwide.

The division is partitioned into several groups, including one that develops applications using the Java™ programming language invented by Sun™. Another group has been in charge of data warehousing since this technology was first introduced at the firm in 1997. The warehouse is used to spot non-intuitive trends in the industry that help the bank better align its resources to take advantage of revenue generation opportunities.

It also helps identify customers who are most likely to respond positively to attempts to increase their portfolios, as well as pinpointing opportunities to recover expenses, save costs, and improve profitability.

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In order to fulfill all these diverse goals, the group identified a great many sources of necessary data, both internal and external. Internal sources include both packaged and internally developed applications, Oracle databases employed throughout Merrill Lynch, and several legacy environments. Externally, the firm subscribes to the services of Securities Data Corporation and several data, news, and information feeds.

Informatica Transforms Data in Many Formats from Many Sources into Meaningful Information

“With so many sources of such a wide diversity, it was imperative that we employ the right technology for integrating all this data into meaningful form,” said Gene Fernandez, vice president of applications infrastructure for the Investment Banking Group. We were impressed by Informatica and we selected them for our pilot.”

“The pilot bore out our expectations,” Fernandez continued. “Informatica proved they can handle huge volumes of data and a variety of formats and sources, and through complex logic transform this data into information we can easily deal with. Informatica’s solution also has a lot of strong calculation and aggregation capabilities.”

Sun and Informatica Scale in Lock-Step

The group's next task was to identify the right platform for Informatica. "Actually, Sun has become such a standard at the firm that there wasn't a lot of research required," said Fernandez. "All we really had to do was validate that Informatica fits nicely into the Sun environment, and on that score we were extremely pleased. Informatica does an excellent job of making use of the Solaris™ Operating Environment's underlying resources."

Sun Enterprise 4000 servers were the firm's choices—three of them for centers in New York, London, and Hong Kong. Over the years the initial configurations have been scaled up several times—the servers now have eight CPUs apiece, and every time the firm performed a hardware scaling step they found a corresponding scale-up in software performance. "Sun and Informatica are quite a scaling success story," said Fernandez. "The architecture of Informatica's applications is optimized to take advantage of any extra CPU, memory, or disk resources in the system."

"Sun and Informatica also share a focus on enterprise-level requirements," Fernandez continued. "Both companies understand the needs of a mission-critical environment for operations support, backup and recovery provisions, and so forth."

Several-Fold Return on Investment

Now nearly three years into production, the firm's data warehouse has proven to be an overwhelming success. "We've repaid our investment several-fold in incremental revenues and cost savings," Fernandez reported. "Sun and Informatica have lived up to our expectations in every respect, including capabilities, performance, availability, and support. We had one occasion to really test the responsiveness of Informatica's support staff, and they really came through for us. A sister group of ours was trying to do something very non-standard with their software and having trouble. It would have been easy for Informatica to brush them off by saying the software wasn't designed to be used that way, but instead they sent in some developers over a weekend to help them out."

The group next step is to empower its many "nomadic bankers," as Fernandez puts it, by providing them with Internet access to especially compelling findings of the warehouse. "We're still early in the process and haven't made any decisions," said Fernandez. "But we're finding Informatica's developments along those lines pretty compelling, and there's little question we'll continue with Sun technology. Sun has been a standard in this division for a long time, and it's even more of a standard throughout the rest of Merrill Lynch as well."

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