

Severn Trent Laboratories puts real-time data warehousing to the test

Commentary by Bill Henning,
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INDUSTRY

ENVIRONMENTAL RESEARCH

BUSINESS APPLICATION

DATA WAREHOUSING



Severn Trent Laboratories (STL) is the recognized leader in environmental laboratory services. The Company provides comprehensive analytical testing services through 31 laboratories, located in every region of the United States. STL is the largest provider of laboratory services in every market including government, engineering/consulting firms, and Fortune 1000 companies. Its employees test samples including but not limited to soil, water, and air for certain compounds their clients are looking for, usually in connection with an environmental cleanup or monitoring situation.

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The Problem

Severn Trent Labs is composed of individual analytical laboratories. The Company has a central Laboratory

Management System (LIMS) running on an IBM AS/400 (iSeries) at the center of their WAN, which services a dozen of their laboratories spread throughout the country. The LIMS is written in RPG and DB2. Each lab specializes in a specific type of analysis, such as air toxins or dioxin testing. Meanwhile, they have a centralized IT group to manage the LIMS programs and data.

“Because of the distributed nature and variety of our business, all employees have their own data requirements, and are in constant need of up-to-date information,” says Bill Henning, Director of Corporate Information Technology for Severn Trent Laboratories in Denver, Colorado. “Rather than make IT an operational programming bottleneck in handling multiple queries and analyses, we decided to put the data closer to the people who use it by creating data warehouses at each lab. The labs also demanded that the data be updated in real-time so that they were always getting the most current information.”

The Solution

During STL’s search for an efficient data warehousing implementation with real-time data replenishment, Gartner Group recommended DataMirror Transformation Server as the best tool for the job. The Company implemented

DataMirror Transformation Server in June 1998, to copy selected data from the AS/400 DB2 database and replicate it in real-time onto SQL Server based data warehouses residing on the local lab servers. It took only six months to get the software installed at all laboratories, and onto their production AS/400.

Transformation Server is a bi-directional replication engine capable of integrating AS/400 based DB2 data in real-time with Severn Trent's Microsoft SQL Server databases running on MS Windows NT/2000. The software is scalable in that it can be used for any number of enterprise business applications including data warehousing, e-commerce, e-Business, data distribution, and enterprise application integration.

Transformation Server offers advanced selection and filtering capabilities, which ensure that sensitive or irrelevant data is filtered out and users have access to only the information they need. The software can also transform and cleanse the data during replication, guaranteeing that the information stored in the data warehouse is in a format conducive to end user query and analysis.

Benefits Gained

Having selected data replicated from the AS/400 to a lab's local SQL Server data store lets each Severn Trent lab query the data without affecting the production AS/400 systems. Using Transformation Server also removes a security concern that the Company

originally had about people using ODBC to access data directly on the production system. As well, the DataMirror solution is more responsive because the data is location – or lab – specific, and only the selection that applies to that particular lab is replicated rather than the entire universe of data.

"Transformation Server helps improve WAN performance in that they now have a steady stream of real-time replication traffic rather than bursts due to large queries run on response time sensitive interactive production systems," says Henning.

Severn Trent employees can access any required data themselves with easy-to-use desktop query and analysis and reporting tools that they are already accustomed to, such as Microsoft Access and Excel. There is no need for extensive training, thereby saving the Company's time and resources.

In financial terms, Severn Trent Laboratories has found Transformation Server to be successful in reducing copy management labor and CPU utilization, as well as in deferring network and processor upgrades. Transformation Server helps to reduce time traditionally wasted waiting for system response.

"The DataMirror solution has unquestionably put power in the hands of the user," says Henning. "We were in need of software that would enable us to easily and seamlessly move and

share data among multiple platforms. We needed to ensure that our business and scientific data would be distributed, effectively managed, and accessible in real-time. DataMirror Transformation Server is unique in that it delivers a replication solution regardless of the business application."

Conclusions

With Transformation Server, Severn Trent employees can now be confident that the data they need is readily available, all day and every day.

"Thanks to the implementation of DataMirror Transformation Server, our employees can now do their jobs thoroughly without having to worry about the technology driving it," says Henning. "Our employees can rely on the data to be kept up-to-date in real-time, thereby making everyone's job a little easier and a lot more organized. Transformation Server helps to reduce time traditionally wasted waiting for system response.

"Our real-time data warehouse implementation ensures customer satisfaction and loyalty. This helps us maintain Severn Trent Laboratories' commitment to environmental leadership, quality and service. Transformation Server has already contributed to the growth of our organization. We expect that DataMirror will continue to contribute to future revenue enhancements."



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

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