



Tracking Systems Performance at China's Leading Steel Corporation

Industry

Manufacturing

Business Issue

Track and monitor multiple elements to better support quality, business efficiency and productivity.

Solution

SAS solution enhanced monitoring and reporting, improved efficiency and reliability, greater productivity and easy access to management reports.

Shanghai Baosteel Group is China's most advanced iron and steel-making company, and a major importer and exporter of a huge range of products. Its IT subsidiary, Shanghai Baosight Software, was formed in 2001 by the merger of three well-established technology companies.

"Our expertise is used across the business in areas such as consulting, design and implementation, modeling, data mining and business intelligence," explains Haidong Tang, Technical Manager in the Data Strategies department at Shanghai Baosight. The corporation's enterprisewide data warehouse is a key focus. It supports the organization in areas ranging from production planning and management to quality analysis for bar and rod products, production ability and resources, contract placing and delivery cycle analysis. Given its strategic nature, tracking the warehouse to deliver optimum performance, availability and accuracy is a critical activity. With an organizational intelligence solution developed using SAS®, Shanghai Baosteel has been able to improve both reliability and productivity.

Questions and Answers

"Data warehouses like ours are highly sophisticated," says Tang. "It involves various legacy systems and includes multiple data sources; you need effective tracking to answer important questions. For example, did your extraction, transformation and loading (ETL) programs run properly? How is disk space expanding? Are the applica-

tion servers running steadily? Have you picked up error messages in the Web server log? Or have you detected unauthorized intruders? Using 'traditional' methods, tracking all these items can be a very tough task, making it difficult for an administrator. SAS not only provided the ideal means to build our data warehouse, but it's also been very useful in tracking. With SAS, an administrator can organize all the information they need, making it far easier to manage the entire system. And the approaches we've used can be adopted for other similar solutions."

Tracking the Business

Recent years have seen a raft of process improvements at Shanghai Baosteel. For example, development of the data warehouse began in 1999, underpinning moves toward enhanced quality management. "We depended on SAS for a total solutions approach," says Tang. The Web-based system now includes more than 500 gigabytes of data.

"We needed a tracking solution to form an integral part of this system. This would enable all information to be organized together. We wanted to be able, for example, to check the status of operational systems, track speed and performance, audit user access and authentication, and provide integrated reports via e-mail and the Web." Tang and colleagues in the Data Strategies department first decided on the tracking points to use. "We looked at key areas, with the goal of combining all information and providing reports for daily use,"

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Haidong Tang

Technical Manager in the Data Strategies department

says Tang. “These included source systems, data storage, ETL log files, server status, server logs, user access and many other areas.”

The SAS® Solution

SAS reads and analyzes a wide variety of SAS and non-SAS log files. “We can pay close attention to any errors, and see if a particular process was stopped,” continues Tang. SAS also executes system commands, based on the operating system involved and the purpose of the command. Feedback enables further inquiries and analysis, such as checking disk volumes. Short tracking reports are then provided via e-mail. “Integration with our e-mail system via SAS provides a flexible and reliable approach to delivering reports,” says Tang. “It’s easy to keep the reports personal and, if necessary, they can be provided to administrators and other users on a pager or mobile.” Reports are also delivered via the Web. “This makes the reports easy to access, and enables us to manage all reports centrally. We only need to produce one copy of each – looking at server status, for example - and can include graphics and many other features.” SAS is used to schedule all tracking activities required.

“We now have insights into important areas like server status, large data sets, disk expansion and more,” concludes Tang. “We have fully integrated information, and can provide fast access to reports. It’s also easy to add new features to the tracking system if required. In short, we’ve been able to provide higher levels of efficiency and reliability.

“Of course, our SAS-based tracking system isn’t just a tracking system. It’s an important part of the data warehouse infrastructure, and an ‘information mart’ in its own right. Strong and flexible, it provides all the functions we need for monitoring, enabling far more efficient administration and supporting improved productivity. The tracking system has done everything we’ve asked of it.”

About Shanghai Baosteel

Shanghai Baosteel Group Corporation (SBGC) has a production capacity of more than 18 million tons of steel. It provides products for the automotive industry, oil and gas, shipbuilding, food and beverages, household appliances, and even high-temperature alloys for rocket engines. Its subsidiary, Baoshan Iron & Steel Co. Ltd, is among China’s largest iron and steel enterprises, leading the market in cold-rolled and hot-rolled products together with seamless tubes. The annual volume of SBGC steel exports reached approx. 2.8 million tons in 2000, while the total value of imports and exports exceeded US\$1.5 billion. SBGC’s IT subsidiary, Shanghai Baosight Software Co. Ltd, is listed on the Shanghai Stock Exchange and provides research, design, development, integration and maintenance services for computers, automation equipment, network communications and software/hardware. Employing more than 800 people, Baosight’s headquarters are in Shanghai’s prestigious Zhangjiang Hi-Tech Park.



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