



Microsoft®



Guosen Securities Building a New BI Architecture with "Innovative Services & Customer First Commitment"

—The Application of Microsoft Business Intelligence Solutions Based on Intel® Xeon® Processor 7500 Series

Success Story

Microsoft SQL Server 2008
Intel® Xeon® Processor 7500 Series
Finance and Securities
Microsoft Business Intelligence Solutions



Business Conditions:

With the surge in securities business, customer service management at Guosen Securities became complex. The original IT architecture was unable to meet the requirements of business development. Therefore, Guosen Securities decided to strategically integrate the original data center and deploy business intelligence solutions.

Solutions:

Supported by Intel and Microsoft technologies and according to enterprise needs, Guosen Securities deployed Microsoft business intelligence solutions based on Intel® Xeon® processors in three stages and gradually created a stable, flexible and scalable business intelligence data center platform. Now, the system is migrated to servers with Intel® Xeon® processor 7500 series as the core, providing a solid guarantee for the further development of the enterprise.

Benefits:

Through the construction of business intelligence data center, Guosen Securities realized a global data view and a unified data access method, which can provide comprehensive and timely data services for data mining and online analytical processing.

Challenges

Guosen Securities Co., Ltd. (hereafter called "Guosen Securities") is a national large-scale comprehensive securities company. It has registered capital of 7 billion and 54 branches in 38 cities across the country. In 2009, Guosen Securities' achievements include No. 3 brokerage turnover of stocks and funds in its sector, No. 1 in the number of business stocks issued of investment banking in industry, and No. 3 in the total amount of underwriting in industry.

With the rapid development of enterprise and the surge in business, IT architecture of Guosen Securities suffered a performance bottleneck. "In 2008, generating a business report was very slow. A report usually takes 2 to 3 hours to complete. The conflict between business and IT architecture has become increasingly prominent," recalled Junling Liu, project manager of Guosen data center. At that time, it is more and more difficult for data processing services and transaction systems to support the business development of Guosen Securities. System efficiency is in urgent need of improvement.

Under this condition, Guosen Securities decided to complete the strategic leap in four years: to optimize existing IT system framework, increase overall operation efficiency, and meet the integration needs of different user groups for the data center. In the comparison of different solutions, the excellent performance of Microsoft Business Intelligence platform based on Intel® Xeon® processors in rapid implementation and stable equilibrium as well as the thoughtful design of the solutions impressed Guosen Securities.

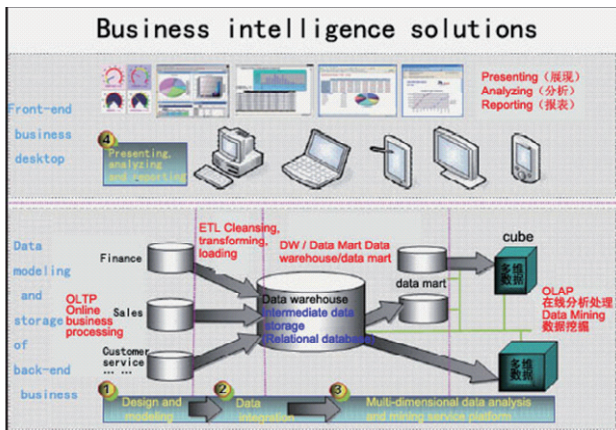
Solutions

Supported by Intel and Microsoft technologies, Guosen Securities decided to implement the plan in several phases: first building Microsoft Business Intelligence Data Center platform based on Intel® Xeon® processors, and then gradually building a stable, flexible and scalable overall business intelligence solution.

The implementation process of the business intelligence solution is divided into three phases. The first phase includes data center construction, data report integration, assembling and summarizing various data within the enterprise to meet basic data query and retrieval requirements. In the second stage, data models and corresponding data reports are set up according to the requirements on customer data, operation management, financial control, business operation, etc. In the third stage, business processes and operation data are integrated to support decision-making and trend prospects so as to define the overall performance and provide deeper operation support for business decision-makers.

During the construction of data center, Guosen Securities has to fully integrate all kinds of data centers, report centers, data analysis models and tool centers, and provide a unified and global data view. Data centers built based on Microsoft SQL Server 2005 and Intel® Xeon® processors perfectly achieved the objective of "small investment & big returns":

- **Optimizing financial efficiency and increasing business responsiveness:** With Microsoft SQL Server database and the stable processing capacity of Intel® Xeon® processors, the new BI platform realized efficient centralized management and rapid application of data; system reports and the function of analyzing and displaying the componentized structure of the service platform can help the enterprise easily realize distributed deployment according to its business growth to ensure load balancing and horizontal expansion.
- **Following market trends and increasing sales profit:** The data mining function of Microsoft Business Intelligence and the excellent performance of Intel® Xeon® processors enable sales staff to detect market and customer abnormalities in time through intuitive development curves, seize opportunities and take immediate actions to reduce potential risks of enterprises and boost sales profits.
- **Maintaining customer relationships and improving customer satisfaction:** The integrated customer service management and analysis capabilities of Microsoft Business Intelligence solutions enable enterprises more easily to analyze customers' buying habits and purchasing trends so as to make appropriate customer strategies, strengthen customer loyalty, and improve customer retention.



After the first phase of implementation, the project staff of Guosen Securities felt an obvious enhancement in work efficiency. "The number of daily visitors of our new system is increased by 3 times. The web access efficiency is improved by 1.5 times. The daily maintenance workload is reduced by 2/3.", Liu Junling introduced.

With the technical support of Microsoft and Intel Corporation engineers in the development, testing, upgrade and other aspects, Guosen Securities now successfully upgraded basic data platform from Microsoft SQL Server 2005 to SQL Server 2008 and migrated data center to servers with Intel® Xeon® processor 7500 series based on Intel Nehalem micro-architecture which can provide leading technical support for a stable and effective data center:

- **High-speed Intel® QuickPath Interconnect technology:** is a high-

speed point to point interconnect of processor and processor as well as processor and I/O hub. This technology provides high bandwidth and low latency;

- **Enhanced Intel® Virtualization Technology:** the performance enhancement of Intel® Virtualization Technology will further accelerate the conversion speed of VMs. Intel® Virtualization Technology providing direct I/O connectivity can support I/O hardware-assisted virtualization;
- **Intel® Scalable Memory Interconnect:** This design can improve the memory capacity and increase bandwidth, resulting in 8 times the memory bandwidth of prior generations;
- **Intel® high-reliability technology:** The Intel® Machine Check Architecture (MCA) recovery feature provides automatic detection and isolation of various errors and supports error-recovery functions; In addition, Intel® Xeon® 7500 processor series provide a number of new reliability features to help Guosen Securities maintain data integrity, minimize downtime and enhance efficiency.

Thus, Microsoft Business Intelligence solutions based on Microsoft SQL Server 2008 and Intel® Xeon® 7500 processor series entered each link of Guosen Securities' business chain and promoted the overall growth of business with its stable and efficient performance.

Benefits

By building the business intelligence data center based on Intel® Xeon® 7500 processor series, Guosen Securities achieved a global data view and provided a unified data access method to provide comprehensive and timely data services for other related systems. Successful implementation of the management strategy that takes comprehensive value assessment and process optimization as its main approach thoroughly reforms the management system, which fully prepares Guosen Securities for its strategic development.

Business intelligence solutions based on Microsoft SQL Server 2008 and Intel® Xeon® 7500 processor series provide a solid guarantee for the business development of Guosen Securities. "It is impossible to realize this without the support of Microsoft's business intelligence based on Intel® Xeon® 7500 processor series behind the scene." In recent years, with the gradual improvement of business intelligence platform, Guosen Securities' business is getting bigger and stronger.

Next, Guosen Securities will continue to strengthen its business intelligence construction, for which it proposed two major objectives: first, enriching front-end data resources to enable Guosen Securities' s customers to understand the current investment environment and investment conditions in a timely and accurate manner; second, achieving more than 90% of the data processing in background and doing well in deep data mining and analysis to provide an effective evidence for business development in the future.

For more information about Microsoft SQL Server 2008, please visit: <http://www.microsoft.com/china/sql/2008/default.aspx>

For more information about Intel multi-core processor, please visit <http://www.intel.com/cd/products/services/apac/zho/processors/>