FUJITSU

▷ CASE STUDY - PRIMEPOWER

AT A GLANCE

CHALLENGE

> Reduce the long process of calculating interest and posting them in order to hasten preparation of month-end reports.

> Address the inferior performance of an old system particularly in scheduling data archiving and housekeeping jobs to reduce the size of its database.

> Support plans of expanding regional operations and introducing new business lines in equities derivatives and fixed income products by having a robust platform in place.

SOLUTIONS

> PRIMEPOWER 650 Solaris™-based server as production platform to run GLOSS settlement and repository system.

> ETERNUS3000 model 400 storage system to solve its storage I/O intensive problem.

BENEFITS

> Improved systems' performance three times than previous system in running day-end batch process.

> Achieved 80% return on investment (ROI) in choosing PRIMEPOWER server, with significantly lower maintenance service fee within three years.

> Production database size declined by 10%, as a result of the improved archiving and housekeeping performance of the new server.

> Realized their regional expansion plans to support operations in China within the next three years with a highly reliable server.

KGI Asia Limited

KGI achieves 80% ROI by deploying Fujitsu PRIMEPOWER

"We save about 30% in operational cost ... it helped tremendously in improving efficiency of our staff, which means we can provide good customer service."

- Mr Andrew Wu, IT Associate Director, KGI Asia Limited

KGI, a pan-Asian financial services group, is one of the top ten futures brokers in the region, serving more than 500,000 clients in Hong Kong, China, Taiwan, Korea and Thailand. Employing over 2,000 professionals in over 80 offices in the region, KGI provides comprehensive one-stop financial services for both retail and institutional clients.

Operating in a highly competitive and volatile financial business landscape in Asia, KGI has to ensure fast turnaround online and real-time services in managing client investments in the most secure, professional, and highly reliable manner.

THE CHALLENGE

One of KGI's mandates is to provide its valuable clients with the most up-to-date trading information status of their securities and futures orders. However, the Group has been facing tremendous pressure in meeting this critical requirement due to an ageing platform.

Andrew Wu, KGI IT Associate Director, said, "The bottom line is for the customers to get the e-statement showing their latest trading activities first thing in the morning; while the sales team receives the copy image at a later time. It will be very embarrassing if such situation occurs."

Another similar report generation challenge KGI had to deal was meeting deadline in preparing month-end report. However, due to the long process of calculating interest and posting, this process almost takes forever to complete during weekdays.

"With our old Sun Fire E10000 system, we spend almost half day just to calculate interest, thereby delaying reporting jobs and putting more pressure on our staff," Wu said.

The Group's steadily growing securities trading volume also requires an efficient way to manage system administrative jobs. One pressing problem KGI encountered was the scheduling of data archiving to reduce the size of its database - not an easy task to accomplish.

"Due to the drawback of our old system, we had to spend over 30 hours to perform this job over the weekend, which is a tedious and time-consuming initiative. Because our old system had limited memory cache, it cannot handle our memory needs especially when the size of our customer stock record tables exceeds the maximum cache memory it can allocate, resulting in a drop in its overall performance," Wu explained.

Another huge challenge for the company is implementing a contingency plan in case a disaster struck. But with the company's previous DLT back up restore solution, it would take over 12 hours to restore the storage from back up and required three DLT tapes to keep a full backup image of their settlement database. But now one LTO-2 tape is good enough.

"This is absolutely something we cannot afford to happen because it will interrupt our business operations," Wu said.

On top of these challenges, KGI has been eyeing to expand its operations in key Asian markets, particularly China, and expanding its business lines in equities derivatives and fixed income products.

However, to achieve this goal, the company must first be confident that it has a highly reliable and robust platform that can support their expansion plans within the next three years.

KGI had to act fast, else lose its competitive edge in the market. In 2003, although the economic condition in the region did not merit an aggressive IT investment decision, KGI had to find a way and search for another cost-effective solution to enhance their daily trading operations.

THE SOLUTION

When Wu and his system administrators decided to address these challenges last year, his first and main concern was how to help the Group save operational costs, yet have a reliable and high-performance system that could support their highly demanding futures and securities trading environment.

After evaluating several hardware platforms in the market, KGI opted for Fujitsu PRIMEPOWER 650 Solaris™-based server. To test the performance of the server, Fujitsu loaned KGI a PRIMEPOWER server to run production database environment in the machine. After a month of testing the machine's performance and reliability, Wu said they were convinced they have found the most cost-effective system to replace their Sun Fire E10000 server.

"We were impressed with Fujitsu PRIMEPOWER's performance and compatibility with our GLOSS settlement application that we wanted to readily buy the system right after testing it for a month," said Wu.

Part of the Fujitsu solution that KGI decided to deploy was the ETERNUS3000 model 400 storage system to solve its storage I/O intensive problem.

THE BENEFITS

System performance improved three times

Since installing Fujitsu PRIMEPOWER 650 server, which is based on the 64-bit SPARC64 V processor 14.08 GB per second Crossbar bandwidth, KGI has improved systems' performance three times than its previous system in running their day-end batch process. So impressed by PRIMEPOWER's performance, Wu said they decided to convert the server as their production environment to run back office and repository GLOSS system, and switching the old Sun server as UAT platform.

A whooping 80% ROI!

Overall, the company had achieved 80% return on investment (ROI) in choosing PRIMEPOWER server. Specifically this was measured by the significant drop in the maintenance service fee they need to pay over the next three years.

"Our previous system had very expensive maintenance fee, and we experienced vendor lock-in service since most its parts and components were not easy to source. But with Fujitsu PRIMEPOWER, the expense we need to pay for the next three years is less than the fee we need to pay for our old system per year," said Wu.

Shorter man-day in manning shift operations

The PRIMEPOWER's faster and reliable performance was highly beneficial to KGI's shift operators. It saved the company one-man day for system administrative job.

"Our shift operator now only has to monitor day-end job for two hours compared to the usual 6-8 hours previously, it frees them more time to do other tasks," Mr. Wu said.

Database size dropped by 10%

Since deploying Fujitsu PRIMEPOWER, KGI had noticed a decline in production database size by 10%, as a result of the improved archiving & housekeeping performance - a very significant benefit in improving the performance of the system.

"As time goes by, we would have better control of database size, and eventually have better cache memory allocation alternatives to further improving the performance of the system in the future." Mr. Wu added.

Shorter time to handle Ad-hoc jobs

KGI staff's efficiency had improved tremendously in meeting deadlines to prepare month-end reports. This is because calculation of interests which previously took them half day to complete is now done within two hours!

> "*Fujitsu's PRIMEPOWER server and ETERNUS storage solution deliver the leading performance and flexibility for KGI to help mitigate risk, improve overall system and business performance, and increase the company's agility - all part of achieving a proven return on investment in IT infrastructure.*"
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> - Mr. James Pang, General Manager, Sales Department of Information Systems and Services Division, Fujitsu Hong Kong Limited

"PRIMEPOWER shortens the time for all the jobs our staff handles. In the olden days, they had to monitor until they finish. For example, in preparing the UAT, our system administrator had to closely monitor the job for DLT tapes replacement before they can enjoy their weekends, but now that the back up process had been shorten to only 4 hours, they have more free time to do other things," Wu explained.

A 30% savings on operational cost

"We save about 30% in operational cost by opting to install PRIMEPOWER server, and it can reach up to 90% on our third year of leasing the system. More importantly, it helped tremendously in improving efficiency of our staff, which means we can provide good customer service," Wu said.

The Fujitsu server also allowed KGI to create a new development environment without investing on another hardware platform, proving that PRIMEPOWER has the best and lowest total cost of ownership (TCO) in the industry today.

Definitely a smart move

Wu said, without a doubt, they made the right move in switching to PRIMEPOWER 650 server, which offers unique advantages in performance, reliability and serviceability that ensure minimum business interruption and maintenance support.

"We considered two key factors in making the decision: first we were impressed by the service level support provided by Fujitsu, who was willing to lend us the system for benchmark testing and helped us in checking compatibility of the server with GLOSS system. Second, cost-wise I believe our team especially our DBA had performed an excellent job in investigating and evaluating the platform without any prejudice."

KGI plans to introduce more product lines in the coming future, something that the company has been envisioning to do in the past but was deterred due to unsatisfactory performance of its previous system.

"I was not confident to roll out our GLOSS system in other countries then, but now after we switched to PRIMEPOWER, it becomes an option to pursue this regional plan," Mr. Wu said.

Mr. Wu added that KGI now has a reliable and highly scalable platform - the PRIMEPOWER 650 server - that will help them realize their regional expansion plans to support operations in China within the next three years.