

Case study Nihon Shurui Hanbai Co., Ltd.

» With the high reliability of Fujitsu M10 servers and the use of robust Fujitsu data centers for remote backup, we successfully delivered the service levels we had targeted.«

Mr. Kanji Onishi, General Manager, IT Department, Nihon Shurui Hanbai Co., Ltd.



The customer

Country: Japan

Industry: Wholesale of Liquors and Foods, Import and Export

Founded: 1949

Website: http://www.nishuhan.co.jp/en/



The challenge

Reliable servers to deliver secure and dependable services is a never-ending task. However, the vendor support for the previous system was poor and had concerns over the slow response times. Business continuity considerations made it essential to establish an infrastructure that can cope with a major disaster.

The solution

The new Fujitsu M10 servers delivered a dramatic improvement in the response of the entire system, cutting the time to run overnight batch jobs by 50%. The company was also able to provide more reliable cloud services with disaster recovery processes that utilized two data centers operated by Fujitsu in separate locations. By consolidating servers using server virtualization, they also succeeded in reducing the number of servers by 80%, and a 15% reduction in operation and administration costs.

The customer

Nihon Shurui Hanbai Co., Ltd. (Nishuhan) is a food wholesaler with one of the largest product ranges in Japan, including alcoholic beverages. The company's finance, distribution, and logistics are managed by its core business system, Nishuhan Advanced Information System (NAIS). The system is used for Electronic Data Interchange (EDI) transactions with supplier and retail partners as well as among internal departments with more than 10 million transactions per month. Nishuhan has also led the industry by shifting its core business systems into the Cloud, making its NAIS as a Service (NaaS) available to alcoholic beverage wholesalers throughout Japan since 2011. The service is currently used by eight companies (300 business users), with plans for further expansion. As Kanji Onishi, General Manager of the IT Department at Nishuhan, said, "NaaS provides customers with enhanced functionality while enabling them to significantly reduce costs, time and effort for the development and operation of their own information systems."

As the number of NaaS users, customers, and suppliers has grown, NAIS has become a mission-critical system with the potential to impact a large number of organizations. Nishuhan decided to upgrade their previous UNIX system to ensure that it could continue to provide dependable and secure service for NaaS into the future.

The challenge

Makoto Matsumaru, Deputy Manager of the IT Department, described the challenges by saying, "If the servers go down, it halts dispatch and other activities not only here, but also at the other companies that use NaaS."

With the growing diversity of consumer preferences driving up the annual transaction volume, another critical consideration was to consistently provide high-speed service. As Mr. Onishi said, "We handle approximately 300,000 products, and the number of transactions has risen steeply in recent years. When server processor utilization reached 100% of capacity during daytime online processing, it caused the order processing to take longer. And completing the overnight batch jobs to generate invoices had always been a battle against time."

As part of the NAIS upgrade project, Nishuhan conducted comparative testing of server products from a number of vendors. This led to the

selection of the Fujitsu M10 servers as the platform that would support their business and those of their partners.

The solution

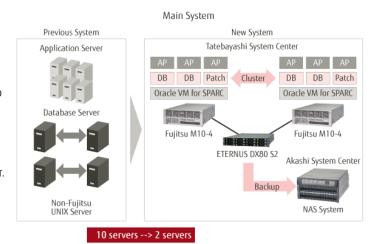
A key factor in the decision was the peace of mind attained with the combination of highly reliable servers and robust data centers. Norihiro Maruyama, a Deputy Section Manager in the IT Department, said, "The Fujitsu M10 fully satisfies our reliability criteria for mission-critical systems, including full redundancy at the hardware level."

They chose the Fujitsu Tatebayashi Data Center to host their servers. Mr. Onishi said, "While we looked at more than ten different data centers, we concluded that Tatebayashi had the best quality in Japan for reasons ranging from its comprehensive security to its resilience to natural disasters provided by its location as well as by its construction." Nishuhan also sought to enhance reliability further by adopting a higher level of redundancy. Disaster recovery measures were implemented by using remote backup, with storage hosted not only at the Tatebayashi Data Center in western Japan, but also at the Akashi Data Center in eastern Japan.

Fujitsu being able to support the entire bundled infrastructure that comes with the data center was another deciding factor. As Mr. Matsumaru said, "The comprehensiveness and speed of Fujitsu support is very encouraging. We are also greatly reassured by their maintenance capabilities; the data center has its own stock of spare parts and is staffed by service personnel who are able to handle hardware problems on the spot. Also inspiring confidence is the extensive experience Fujitsu has with distribution, including assigning System Engineers who are familiar with our industry."

Price performance was a major factor in ensuring that the company's partners can continue to use NaaS with confidence. Usually increasing the number of CPU cores to improve performance increases software licensing costs, but with Fujitsu M10 servers, the licensing costs per CPU core are half that of the previous vendor's servers. This ability to both increase performance and cut costs contributed to Fujitsu M10 being selected. Mr. Matsumaru said, "After assessing of a number of vendors, we concluded that the Fujitsu M10 offered an exceptionally high degree of server consolidation and expansion capabilities. Using the CPU core activation to gradually expand CPU capacity optimizes database license use and associated costs and makes it possible to start from a small scale. The ability to immediately add CPU resources when needed is certainly attractive."

The previous configuration involved a total of ten physical servers; four database servers and six application servers. With the virtualization capabilities of the Fujitsu M10 server, the infrastructure was consolidated into just two servers. Hidenobu Ishizu, a Deputy Section Manager in the IT Department, said, "We utilized the Oracle VM Server for SPARC virtualization software which is included in Oracle Solaris to also consolidate the application servers. Maintaining reliability and availability in a virtualized configuration was a major consideration, and the highly reliable Fujitsu M10 made this possible. Data migration from the previous servers also went smoothly thanks to it being a UNIX-to-UNIX migration."



The benefit

The NAIS system was developed in-house by Nihon Shurui Hanbai. Along with the shift to the Fujitsu M10, they also enhanced usability and operational efficiency by rewriting the user interface in Java. As Mr. Onishi explained, "With the changes taking place in distribution practices, information systems require development speed and flexibility. To achieve this, we are sticking to our emphasis on internal development and working on ongoing improvements."

Conclusion

Nishuhan has overcome processing performance challenges by replacing existing hardware with Fujitsu M10 servers. As Mr. Ishizu concluded, "We achieved major improvements in performance by adopting high-performance processors. This lowered the CPU utilization and improved the response times leading to increased user productivity. It also cut the time required to run overnight batch jobs by 50%, ensuring that day time operations start on time each morning."

The company will be able to respond to future increases in workload through Fujitsu M10 features such as CPU core activation. CPU capacity can be easily increased as the number of their external NaaS cloud customers grows. Rich virtualization functionality in Fujitsu M10 servers also provides the ability to perform further server consolidation with their logistics system in the future.

Mr. Matsumaru said, "In addition to cutting the cost of database licenses by reducing the number of physical servers by a factor of five, we also achieved a 15% reduction in total operation and administration costs despite using dual sites to provide a disaster-tolerant configuration."

The company also achieved its reliability objectives. As Mr. Onishi said, "With the high reliability of Fujitsu M10 servers and the use of robust Fujitsu data centers for remote backup, we successfully delivered the service levels we had targeted. Our intention is to supply our business partners with secure and reliable services on a solid business platform while proceeding with further server consolidation. In the future, we plan to extend our services to our partners' retail businesses by offering analysis of a variety of data on the same platform."

The benefit

- Reduced complexity: Reduced the number of servers by 1/5 by consolidating 10 separate servers (4 database and 6 application servers) into only two Fujitsu M10 servers.
- Reduced costs: Reduced operation and administration costs by 15%.
- Increased performance: Overnight batch time shortened from 4 hours to only 2 hours.

Products and services

- Fujitsu M10-4
- FUJITSU Server PRIMERGY RX200 S7
- FUJITSU Storage ETERNUS DX80 S2
- Oracle Database 11g
- Oracle VM for SPARC
- FUJITSU Software PRIMECLUSTER

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