PLATFORM CASE STUDIES in ASIA OCEANIA

shaping tomorrow with you
Read about how Fujitsu customers in Asia Oceania have solved their challenges, and the benefits they have achieved from working with Fujitsu.

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"We were impressed by the comprehensive services offered by Fujitsu and the responsiveness and attention-to-detail provided by its services team. Throughout the whole process we are confident that we are in capable hands."

Fergus Tooher, Vice President, Information Technology, ThyssenKrupp Elevator AG, Asia Pacific
ThyssenKrupp Elevator Asia Pacific

ThyssenKrupp Elevator is one of the world’s largest manufacturers and operators of passenger transportation systems, with customers in more than 150 countries. As one of the world’s leading elevator companies, it offers innovative and energy-efficient products such as passenger and freight elevators, escalators and moving walks, passenger boarding bridges, stair and platform lifts as well as tailored service solutions. Headquartered in Germany, ThyssenKrupp Elevator Asia Pacific is the regional office supporting business operations in China and Korea, with a dense network of offices and branches offering installation, modernization and service businesses for its complete product range.

Challenge

■ In-house IT infrastructure was unable to cope with growth in data and user demand
■ Additional infrastructure investment led to overloading during daily operations
■ Internal IT team was unable to maintain fixes and the system was not prepared for potential disasters
■ Low satisfaction rate among internal users due to slow SAP system response and poor storage performance

Solution

■ Consultancy and migration for SAP from UNIX to virtualized platform based on FUJITSU Server PRIMERGY RX300 and FUJITSU Storage ETERNUS DX440
■ Infrastructure as a Service (IaaS) at Fujitsu’s data center in Hong Kong enabling ThyssenKrupp Elevator to consolidate its applications and centralize the management of factories
■ 24/7 on-site management at ThyssenKrupp Elevator regional headquarters, saving the hassle and resources of migrating the system at the initial stage

The benefit

■ Unparalleled performance improvement of 30 to 50 percent
■ Efficient transition from legacy operating system to Fujitsu’s high-performance virtualization platform took less than four months
■ A well-defined capacity planning and roadmap for three to five years to flexibly upgrade the system to meet future business needs and increasing user numbers
■ Able to manage the projection of IT budget with flexible cost structure
■ Reduced hardware maintenance costs
■ One-stop shop consultancy that fit the business needs of ThyssenKrupp Elevator Asia Pacific
■ Reliability, availability, service quality and user experience are greatly enhanced

Products & services

■ Private cloud infrastructure with flexible cost model for on-demand SAP hosting services
■ SAP migration services from legacy UNIX to FUJITSU Server PRIMERGY RX300 and FUJITSU Storage ETERNUS DX440
■ Infrastructure as a Service (IaaS) hosted in Fujitsu’s world-class Hong Kong data center
■ Managed services: SLA management, capacity management, change management, incident management and problem management
■ IT Helpdesk, system monitoring and data center operation
»All in all, it was a great experience working with Fujitsu’s team of experts, and we look forward to enjoying the long term benefits from our new ICT systems and data center services.«

Mr. Richard Chen, CEO, Core Pacific – Yamaichi
Core Pacific - Yamaichi (CPY) is a comprehensive financial conglomerate with deep roots in the Greater China region. Since its inception, it has focused on providing a broad range of financial services to the region, including global securities and futures brokerage, fixed income investment, wealth management, corporate finance, underwriting and placement, financial advisory, asset management, and other investment-related professional services.

Headquartered in Hong Kong, CPY has grown to over 300 professional staff and regional offices in Beijing, Shanghai, Taipei and Los Angeles, providing extensive global exposure and powerful networks worldwide.

Challenge
- Ensure financial services IT and telecommunications systems remain operational to support the needs of traders and analysts
- To cope with business growth, enhance ICT facilities and minimize impact from external factors such as building maintenance
- Move ICT infrastructure off-site to accommodate increasing demand for new equipment
- Manage complex migration of extensive communications network and IT infrastructure that must adhere to regulatory requirements

Solution
- One-stop-shop solution including; consultancy, and project management of data center co-location; Unified Communications; core low latency network plus WAN; system integration, migration services; and ongoing maintenance
- Infrastructure systems including FUJITSU Server PRIMERGY RX200, RX300 and FUJITSU Storage ETERNUS DX100 are co-located in dedicated server rack cage in data center managed by Fujitsu
- Cost effective, high availability Unified Communications solution implemented with site-to-site fail-over for operational continuity
- Consultancy on modernized PABX and legacy telephony system to IP-based solution and data/voice consolidation, with enhanced features such as voice recording to comply with legal regulations

The benefit
- Increased network performance ensuring service stability and continuity
- Migration completed within four months without interruption to normal operations
- Reduced TCO with holistic consolidation of hardware including server, storage, network and unified communications
- Increased ICT speed and quality systems leading to accelerated business growth and enhanced user satisfaction

Products & services
- Consultancy and project management of complex data center migration
- Ongoing data center co-location and managed services
- Infrastructure solutions:
  - FUJITSU Server PRIMERGY RX200
  - FUJITSU Server PRIMERGY RX300
  - FUJITSU Storage ETERNUS DX100
- Consultancy for PABX and legacy voice recording systems upgrade
»Implement server virtualization for academic administration system with Fujitsu Blade Server PRIMERGY.«

Joung Young Im, Section Chief of the Operation Management Team, Information & Computing Center
Wonkwang University is located in Iksan, Korea, and was established in 1946. In accordance with its founding principle “Great opening of matter, let there be a great opening of spirit”, Wonkwang University has served as a pioneering private school in the advancement of Korea’s modern education system combining knowledge and morality. In particular, it is firmly committed to developing talented people with strong character and specialized knowledge across diverse fields including Asian and Western medicine and areas of IT. Since its introduction, Wonkwang University has become a leading private school for medicine, dentistry, oriental medicine, pharmacy and law.

Challenge
Wonkwang University initiated a server virtualization project to resolve IT challenges including; service failure during enrollment period, lack of space in the data center, inefficient system resources and reduction in IT budget. Wonkwang University verified the server virtualization through benchmarking tests and implemented a system integration project based on virtualization in three stages.

Solution
Wonkwang University chose FUJITSU Server PRIMERGY BX900 S2 with Intel® Xeon® Processor for its excellent system reliability, redundancy and scalability. The blade server provided an optimal platform for integration of the University’s academic administration system, and for implementation of a reliable virtualization environment that could facilitate infrastructure expansion and rapid turnaround after outages.

The benefit
- Reduced number of racks from 18 to 2
- Replaced 125 existing servers with 41 blade servers
- Minimized data center operational costs
- Improved the University’s IT service for users via introduction of the self-developed integrated information system

Products & services
- FUJITSU Server PRIMERGY BX900 S2 with Intel® Xeon® Processor
- FUJITSU Server PRIMERGY BX920 S3 / S4 with Intel® Xeon® Processor
- FUJITSU PRIMECENTER M1 Rack
»Fujitsu’s family of PRIMERGY servers delivered a powerful and flexible data center solution that allows us to perform complex scientific calculations, reduce the risk of critical data loss and lower our overall TCO.«

Laksana Tri Handoko, Deputy Head of Department of Engineering Science, Lembaga Ilmu Pengetahuan Indonesia
Lembaga Ilmu Pengetahuan Indonesia

Lembaga Ilmu Pengetahuan Indonesia (The Indonesian Institute of Sciences or LIPI) is a non-departmental research institution, established on August 23, 1967. LIPI is one of five non-ministerial Government Institutes under the State Ministry of Research and Technology of Indonesia. With a goal to become a world-class scientific institution, LIPI is responsible for carrying out national scientific research to enhance Indonesia's national economic competitiveness and to develop innovations that strengthen the growth of governance and civil society that is built on the foundation of science principals and a code of ethics. LIPI also acts as an independent source of advice and information on topics related to national policies in science and technology.

**Challenge**

- Increased reliability and data security for high-speed scientific calculations and processing, and greater system performance for faster research results
- Improved compatibility and scalability to accommodate future expansion of the rapidly changing IT environment, achieved with Fujitsu’s family range of PRIMERGY servers
- Eliminated downtime following implementation
- Reduced TCO utilizing the compact Fujitsu Server PRIMERGY, saved space in the data center and improved power efficiency

**Solution**

The family range of FUJITSU Server PRIMERGY systems underpin a powerful and flexible data center solution that allows LIPI to perform complex scientific calculations, reduce the risk of critical data loss, offers high scalability and a low TCO.

**The benefit**

- Increased reliability and data security for high-speed scientific calculations and processing, and greater system performance for faster research results
- Improved compatibility and scalability to accommodate future expansion of the rapidly changing IT environment, achieved with Fujitsu’s family range of PRIMERGY servers
- Eliminated downtime following implementation
- Reduced TCO utilizing the compact FUJITSU Server PRIMERGY, saved space in the data center and improved power efficiency

**Products & services**

- FUJITSU Server PRIMERGY RX200 S7 with Intel® Xeon® Processor
- FUJITSU Server PRIMERGY RX300 S7 with Intel® Xeon® Processor
- FUJITSU Server PRIMERGY RX350 S7 with Intel® Xeon® Processor
- FUJITSU Server PRIMERGY CX400 S1 with Intel® Xeon® Processor
- FUJITSU Server PRIMERGY CX270 S1 with Intel® Xeon® Processor
Fujitsu provides us with a flexible and cost-effective solution to scale up our infrastructure to further accommodate our present and future business in the media industry.«

Ravinder Mawa, Chief Information Officer, Surya Citra Televisi (SCTV)
Surya Citra Televisi (SCTV) is the leading media company in Indonesia. Founded in 1990, SCTV has achieved many accolades such as Asian Television Awards, Far Eastern Economic Review as Top 200 Leading Company in Asia Pacific, and Panasonic Awards. SCTV broadcasts in 240 cities and reaches over 175 million audiences nationwide. It is the first media company in Indonesia to fully adopt a digital platform to broadcast its content since 2008, the same year SCTV started its partnership with Fujitsu. In 2014, SCTV managed to achieve the top audience share in Indonesia.

**Challenge**
Surya Citra Televisi (SCTV) is one of the earliest media companies to focus on delivering digital content. SCTV started digitizing content several years ago and has converted more than a thousand hours of digital video playback since. Its continually growing library generates the need for high capacity and scalable storage. As every department needs to access content daily, they needed to minimize working hours in order to share the network.

**Solution**
Fujitsu provided a high capacity storage solution for digital content management. Digital content is stored in Fujitsu storage to be broadcast through digital media channels.

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<td>Better form factor with minimum space consumption</td>
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<td>Better redundancy options, e.g. power supply and network</td>
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<td>Single management system that enables IT team to monitor three storage systems in two locations simultaneously</td>
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»The complex requirements regarding SAP HANA appliances are fully adhered to by following SAP’s Gold Template. Fujitsu was able to fulfill all BSH requirements to be awarded the contract for the complete project.«

Stefan Klie, Director, Information Technology Department, BSH Home Appliance Holding (China) Co., Ltd.
BSH Home Appliance Holding (China) Co., Ltd.

Country: China
Industry: Manufacturing
Website: bsh-group.cn

BSH Bosch und Siemens Hausgeräte GmbH is the largest manufacturer of home appliances in Europe and one of the leading companies in the sector worldwide. Located in Nanjing China, BSH Home Appliances Holding (China) Co., Ltd is a foreign direct investment of BSH AG. It is responsible for the factory management and development of four home appliance brands in China including Bosch and Siemens. With the data center located in Nanjing, BSH China is responsible for BSH’s IT system operation and maintenance throughout the Greater China region (including Southeast Asia).

Challenge
To meet rapid business growth, BSH China must overcome an IT bottleneck that has occurred due to massive data processing requirements. As a result the existing IT infrastructure prevents effective decision making. BSH China needed to implement a new IT platform for faster data processing and to improve business management efficiency. BSH decided to introduce SAP HANA into their current IT environment and needed a strong system integration vendor with the capability to drive system performance improvements.

Solution
BSH China planned to move all their SAP systems onto the new HANA platform. CRM was the first system to be switched over to HANA and acted as a pilot for the whole project. After evaluating the existing system and IT infrastructure, Fujitsu China recommended BSH China take a single node approach using FUJITSU Server PRIMERGY RX600. Furthermore to minimize system failure and downtime, the HANA system replication feature was also included as part of the whole package.

The benefit
- Proven success of HANA system pilot provides experience and capability for complete SAP migration to the HANA platform
- Improved decision making and reliability via the Fujitsu HANA System Replication Solution
- Reduced project complexity through comprehensive alignment with SAP’s Gold Template

Products & services
- Fujitsu HANA Appliance on FUJITSU Server PRIMERGY RX600 S6 with Intel® Xeon® Processor
- Fujitsu HANA Appliance Pre-installation Service
- Fujitsu HANA System Fast Deployment Service
»We are very pleased to work with Fujitsu and we enjoy the benefits of its world class products. Fujitsu PRIMEQUEST was the best choice for us to meet the requirements of our business growth.«

Barbara Zhang, Manager, IT Department, Shenzhen Da Chan Bay Modern Port Development Co. Ltd.
Da Chan Bay Terminal One is wholly owned by Da Chan Bay Modern Port Development Co. Ltd. Leveraging a full range of the most-advanced equipment and information technology, it delivers customers continuous service excellence through a full portfolio of vessel-operation and container-related services that exceed international standards. Da Chan Bay Terminal One is managed by Modern Terminals Limited, which has 40 years of experience in container terminal operations in Hong Kong, one of the world’s busiest seaports. Modern Terminals Limited is fully committed to providing a high quality, unique experience to Da Chan Bay’s customers.

**Challenge**

The terminal’s previous Cargo Movement Operating System (CMOS) was unable to handle business growth and therefore Da Chan Bay decided to upgrade to the world leading NAVIS N4 terminal operating system. However as their existing IT infrastructure lacked the performance required to support the new system, it too needed to be upgraded.

**Solution**

Da Chan Bay selected FUJITSU Server PRIMEQUEST for the new infrastructure in order to improve the efficiency of system deployment and business sustainability. PRIMEQUEST has unique RAS features that provide Da Chan Bay with the mission critical reliability and stability needed to support the new NAVIS N4 system which operates 24/7, non-stop.

**The benefit**

- Improved reliability and stability minimizes system downtime
- Efficient system deployment and a reduction in OPEX
- Optimized use of the new NAVIS N4 system

**Products & services**

- 2 x FUJITSU Server PRIMEQUEST 1800E2
- 16 x FUJITSU Server PRIMERGY RX300 S7
»The FUJITSU Server PRIMERGY has become essential to our E-go platform and helps it to continuously break the revenue record thanks to its outstanding stability.«

Yilun Zhang, Manager, IT Department, Suning Commerce
In 1990, Suning Commerce was established in Nanjing, China and is now the country’s largest privately owned commercial enterprise and in the top three privately-run enterprises. Suning Commerce ranks as the largest commercial retail enterprise in China with a brand value of 95.686 billion yuan. Suning is also a top tier enterprise for global home appliance chains with 180,000 employees and an annual sales revenue of 230 billion yuan.

Challenge
- The e-commerce website requires constant operation as any issues can affect customers’ experience and sales performance
- System availability was the first priority as the IT system plays such a critical role
- While there was room to improve energy efficiency and reduce operational expenditure by reducing power consumption, stability for the back-end system needed to be ensured

Solution
- Suning implemented 500 servers to extend platform resources and meet demand for online transactions
- Fujitsu implemented PRIMERGY RX300 S8 16 x 2.5 inch HDD as the base unit with an extremely low failure rate, high performance and reliability

The benefit
- The highly reliable PRIMERGY RX300 S8 runs with an extremely low failure rate, ensuring the E-go platform’s constant operation. The first batch of servers 100% uptime for a full year (24/7 uninterrupted system operation for all tasks)
- PRIMERGY RX300 S8 is equipped with 16 units of 2.5 inch HDD on local storage providing an efficient data processing solution while reducing system costs
- Fujitsu Cool-safe technology enhanced energy-efficiency and reduced energy consumption by over 10%

Products & services
- FUJITSU Server PRIMERGY RX300 S8
- FUJITSU Server 24/7 Gold Service
- FUJITSU Server System Fast Deployment Service
»Fujitsu PRIMERGY servers play a key role for us in driving business growth by providing extremely high performance and quality.«

Huinan Ren, Manager, IT Department, AXA Tianping Property Insurance
Tianping Insurance was founded in 2004 as the first company to offer professional auto insurance in China. Today it is one of China’s biggest insurance companies and a market leader in the field of auto insurance. In addition to auto insurance, the company covers enterprise property insurance, cargo insurance, health insurance and more. Currently it is also striving to become a pioneer in the field of internet insurance. In 2014, Tianping Insurance merged with global insurance leader AXA and has expanded its operations to over 62 branches across China with more than 6,000 employees, servicing 4 million customers.

Challenge
- The IT system runs a variety of core applications that directly impact business performance and therefore need a reliable vendor to supply a comprehensive range of product solutions
- To establish a reliable foundation for the core business applications, with the focus on server performance, stability and manageability, as well as reducing long-term operational costs

Solution
- A full range of FUJITSU Server PRIMERGY systems were implemented, from entry level RX200 to high-end RX900, to construct its data center and call center facilities
- FUJITSU Server PRIMERGY RX900 S2 was used to replace the old UNIX server used for database operations, and PRIMERGY RX200 S7 was replaced as the web server
- FUJITSU Server PRIMERGY RX300/RX500/RX600 were used to construct a high performance IT platform

The benefit
- PRIMERGY ensures efficient operation of applications, improving time required for testing
- Full line-up of PRIMERGY servers fulfilled all requirements and enhanced management efficiency and reliability
- Tianping Insurance recognized and were impressed with PRIMERGY’s high performance

Products & services
- FUJITSU Server PRIMERGY RX900 S2 x 4
- FUJITSU Server PRIMERGY RX600 S6 x 8
- FUJITSU Server PRIMERGY RX500 S7 x 6
- FUJITSU Server PRIMERGY RX300 S7/RX300 S8 x 30
- FUJITSU Server PRIMERGY RX200 S7 x 20
"We plan to reduce power consumption by 30% by end of FY2013 and 40% by end of FY2014, with a long-term goal of a 70% reduction in FY2015. Our objective is achievable using the High Voltage Direct Current +12V approach and wall-mounted air flow system."

Prof. Morito Matsuoka, Osaka University, The Cybermedia Center (CMC)
Keihanna Datacenter, established as the Ministry of the Environment’s technology verification project, started verification tests on 15th July 2013. The Keihanna Datacenter was built at the Advanced Telecommunications Research Institute International (ATR) on 1st October 2013. The data center operates as part of the Japan Ministry of the Environment’s FY2013 project to ‘Strengthen measures to reduce CO₂ emissions through technological development and verification’, and is equipped with the newest technology for linking DEMS (Datacenter Energy Management System) and VM (Virtual Machines).

**Challenge**
- Reduce power costs with an efficient data center facility
- Include voltage and AC/DC conversion power module for each server
- Introduce new efficient data center operations including effective exhaust heat utilization

**Solution**
FUJITSU Server PRIMERGY RX200 S7 was selected for the Datacenter Energy Management System (DEMS) as its Power Control Unit functionality to improve the energy efficiency via a HVDC (High Voltage Direct Current) +12V power supply and reduce overall TCO.

**The benefit**
- 12 DC power supply improves energy efficiency (AC/DC) to 90%
- Reduce TCO by combining highly efficient intense power supply (HVDC) and direct current power supply compatible server
- FUJITSU Server PRIMERGY RX200 S7 operates in environments over 40°C
- Reduce power consumption by 30% in FY2013 and strive for a 70% reduction in FY2015

**Products & services**
- FUJITSU Server PRIMERGY RX200 S7
»Our partner, Fujitsu Hokuriku Systems, challenged us to achieve our goal with their ICT. They put themselves in our shoes to fully understand our issues, and work in collaboration to solve them. This attitude influenced our decision.«

Tomoya Hayashida, Group Manager, MIS dept. ICT Planning Gr, Administration Marketing HQ
Yokogawa Electric was first established in 1915 as an electric meter research institute. In 1975 it pioneered the development of distributed control systems, which for the first time in the world, could comprehensively control and monitor plant operations and manufacturing. Since sales began, Yokogawa has been recognized in the global market as leading company in its field. The company continues to provide innovative solution services by adding value for customers through activities that support power saving and the development of new energy based on its measurement and control technologies.

**Challenge**

Yokogawa Electric needed to store 10 years’ of data and ensure efficient data management and usability. The data migration needed to be performed securely within a limited time frame.

**Solution**

Yokogawa Electric implemented the integrated FUJITSU Storage ETERNUS DX8700 system to support 10 years’ of storage using automated tiering and effective data utilization.

**The benefit**

- Highly efficient, reliable and scalable ETERNUS DX8700 S2 is capable of storing 10 years’ worth of data from 10 overseas companies
- The combined automated tiering of ETERNUS SF Storage Cruiser and ETERNUS DX8700 S2, increased operational management efficiency and improved online transaction performance by 20% by reducing costs and providing users with better support for data utilization
- Data migration from multiple storage systems from different vendors was completed within the strict 8-hour timeframe

**Products & services**

- FUJITSU Storage ETERNUS DX8700 S2 disk storage system
- FUJITSU Server PRIMEQUEST (MSCS cluster configuration)
- FUJITSU Server PRIMERGY
- FUJITSU Storage ETERNUS SF Storage Cruiser
- FUJITSU Storage ETERNUS SF AdvancedCopy Manager
- Brocade 7800 extension switch
»We greatly appreciated the support offered by Fujitsu and Brocade in providing seminars and technical guidance, as well as their highly responsive approach to our questions in general.«

Mr. Motohiko Sakata, Business Promotion Division Manager, BSN Information Network Service
BSN Information Network Service

Founded in 1966, BSN Information Network Service (BSN INET) is a leading Japanese ICT service provider, headquartered in Japan’s Niigata prefecture. In 2009, BSN INET began implementing a business plan to provide a new cloud service from their data center, the ‘iNET IMAGE BANK’. Mr. Tomoo Hiroi, Director of BSN Information Network Service’s Business Promotion Division explains: “Rather than providing a general public service, this aims to deliver current customers an extension to the existing ICT services that we support.”

Challenge

BSN INET needed to construct a low cost, scalable, next generation cloud service infrastructure and develop efficient remote backup to enhance DR measures. It required a supplier with proven experience in supporting the implementation of leading edge technologies such as Ethernet fabric.

Solution

BSN INET adopted Brocade VDX2730 and VDX6720 to support the construction of a next generation cloud service infrastructure. Brocade’s highly advanced Ethernet fabric technology helped to optimize virtualization and create an uncomplicated network environment, new to the market, thus integrating an innovative storage solution with the high bandwidth network.

The benefit

- Lower costs with simplified switch operation, increase scalability of Brocade VCS and optimize storage network to increase storage availability
- ETERNUS NR1000 series provides data compression, de-duplication and SnapMirror to create reliable data replication with lower network use
- Strong Brocade and Fujitsu working relationship ensured highly efficient implementation and operational support including responsiveness to general, technical and translation enquiries

Products & services

- FUJITSU Storage ETERNUS NR1000 F2240* Network Disk Array
- FUJITSU Server PRIMERGY BX400 Blade Server
- FUJITSU Server PRIMERGY BX920 S3 Blade Server
- FUJITSU Server PRIMERGY BX Ethernet Fabric Switch (Brocade VDX2730)
- Brocade VDX6720 Converged Switch

*ETERNUS NR1000 F series is a NAS product available only in Japan.
SSD was used for mission-critical data that requires high performance and the conventional HDD was storing minimal accessed data to expand storage scalability. Automated tiering was the solution to these challenges. Fujitsu’s proposal had a good balance of cost and performance.

Yousuke Muroga, Chief of Business System Group, Information System Department, Daifuku Co., Ltd.
Material handling such as storing, transferring and sorting materials is essential in business settings. Daifuku is the world’s leading material handling equipment manufacturer providing solutions for manufacturing, distribution, cleanroom, automotive, aviation and other industries. Daifuku group spreads its own production sites and offices in 20 countries and regions, and its non-Japan sales ratio exceeds more than 60%.

**Challenge**
- Solution for overnight batch processing delay
- Solution to simplify storage management on virtual environment
- Need actual storage performance check before decision making

**Solution**
- Storage automated tiering system using SSD and existing HDD
- Shared template from virtual infrastructure and storage resource pooling
- Fujitsu constructed infrastructure using SAP ERP and VMware vSphere at Fujitsu Trusted Cloud Square Kansai to measure the performance for actual operation

**The benefit**
- ETERNUS DX440 S2 was implemented for higher I/O performance. Storage automated tiering using SSD and existing HDD improved I/O performance largely while keeping the costs low. Batch process has shortened to half compared with the previous system
- Simplified management by creating shared template using pooling of storage resource with virtual infrastructure and ETERNUS SF Storage Cruiser. The templates ease the ERP implementation to overseas branches
- Fujitsu constructed infrastructure using SAP ERP and VMware vSphere at Fujitsu Trusted Cloud Square Kansai to measure the performance for actual operation. The result satisfied Daifuku’s storage performance requirements and was able to confirm the turning point for infrastructure system operation on virtual environment

**Products & services**
- FUJITSU Storage ETERNUS DX440 S2 disk storage system
- FUJITSU Server PRIMERGY
- FUJITSU Storage ETERNUS SF Storage Cruiser
- FUJITSU Storage ETERNUS SF Storage Cruiser Optimization option
- FUJITSU Storage ETERNUS SF AdvancedCopy Manager
- VMware vSphere
»For hardware selection, we placed importance on the support system and the content of the proposal. Fujitsu’s virtualization proposal with Hyper-V convinced us, and its support system had full contents.«

Mr. Yoshiharu Harada, Information System Department, General Affairs, Nikki Co., Ltd.
Nikki Co., Ltd. (Nikki), founded in 1932, was the first carburetor factory in Japan. For the past 80 years, Nikki has been developing and manufacturing automobile parts, especially engine fuel systems. Various Japanese automobile, track and engine companies are clients for the highly demanded automobile gas component for natural gas and liquid petroleum gas. It also develops and manufactures fuel supply devices and components for industrial/general engine and engine control units.

**Challenge**

- Reduce initial implementation cost to replace lots of information servers
- Simplify virtual environment operation
- Migrate aged groupware servers to user-friendly environment

**Solution**

Nikki Co., Ltd. had 20 information servers, with half operating Windows Server 2003. To sustain the expiration of server support and future usage of external services such as cloud services, Fujitsu constructed a virtual environment with Hyper-V. Two FUJITSU Server PRIMERGY RX300 S7 with Windows Server 2012 Datacenter were implemented with eight virtual machines now in operation. This reduces the cost of hardware and operation workload when installing new servers.

**The benefit**

- Virtualization and consolidation reduced servers from 20 to two, with Hyper-V reducing implementation costs
- User-friendly Hyper-V GUI makes management easier for administrators with or without virtual environment construction experience. Fujitsu conducted technical training to support operation management
- New groupware server was constructed on a virtual environment. The scale expanded to usage of 300 people

**Products & services**

- FUJITSU Server PRIMERGY RX300 S7
- Windows Server 2012 Datacenter (Hyper-V)
»The strong relationship we have built with Fujitsu over 10 years has given us confidence in it as a reliable partner.«

Manager of IT division, EASYCARD Corporation
The EASYCARD Corporation was officially established in March 2000. As the subsidiary of the EASYCARD Investment Holdings Corporation, the total capitalization of the company is NT$700 million, and its main shareholders for the EASYCARD Investment Holdings Corporation are Taipei City Government, Taipei Rapid Transit Corporation, 12 bus companies in Taipei City and New Taipei City, Cathay United Bank, Taishin Bank, CTBC Bank, Taipei Fubon Bank, Mitac Inc., Mercuries Data Systems, China Engineering Consultants Incorporated, Solomon Technology, and other companies. Public-sector stock accounts are about 40% of the total.

Challenge
- The amount of data transactions greatly increased
- Existing UNIX system has limited resources and will meet a bottleneck in the system in the near future
- Expansion of business categories increases operational cost

Solution
EasyCard decided to transfer its system from UNIX to LINUX to improve its system performance. Fujitsu provided new generation multi-processor PRIMERGY RX4770M1 servers using Intel® Xeon® processor E7 v2 family to improve performance efficiency. EasyCard decided to virtualize the system in order to minimize TCO for the expansion of new business categories. Fujitsu provided PRIMERGY 1U/2U server, RX200S8/RX300S8 using Intel® Xeon® processor E5 family with PCIe 3.0 I/O interface which increased performance and I/O interface speed while establishing a stable operation without the bottleneck.

The benefit
- FUJITSU Server PRIMERGY RX4770 M1 improves performance and efficiency
- Business and operation continuity ensured by active-active clustering
- Through virtualization, the TCO of expanding the business scope can be minimized
- The server adopts the PCIe 3.0 I/O interface which eliminates the operation bottleneck while boosting system performance

Products & services
- FUJITSU Server PRIMERGY RX4770 M1 x 2
- FUJITSU Server PRIMERGY RX300 S8 x 26
- FUJITSU Server PRIMERGY RX200 S8 x 3