

# Case Study EASYCARD Corporation

»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 customer

Country: Taiwan, ROC Industry: Smartcard service

Founded: 2000

Website: www.easycard.com.tw



# The challenge

- The amount of data transaction 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

# The 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 customer

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.

The company established a new milestone for electronic transportation payment systems with the use of non-contact IC cards, initially on bus services in Greater Taipei areas, Taipei Metro, and payment of parking fees at parking lots run by Taipei City Government. The scope of application for the EasyCard is currently being extended to the use on Maokong gondola service, admission to Taipei Zoo, non-reserved seats on Taiwan High Speed Rail, designated sections of Taiwan Railway, intercity bus services, Taipei River Cruise, and small-amount purchases at designated stores, to offer greater convenience to users.

In the future, EASYCARD Corporation will continue to integrate more services and extend the use of its EasyCard to other transportation systems, payment of governmental fees, admission to parks and scenic areas, and various other services. Its ultimate goal is to allow people to travel around Taiwan with only one card.

# The challenge

This year is the 15th year of EasyCard establishment. In addition to electronic ticket service; EasyCard adds payments function for small transactions. Users grew from 20 million to 50 million by 2014 and the usage continues to grow over 20% every year. EasyCard implements new IT devices and reframes the plan every year in order to respond to the expansion of the business. In recent years, the amount of data transactions greatly increased. With the existing UNIX system, it is going to meet a bottleneck in the system in the near future.

LINUX systems are predicted to surpass UNIX systems in a few years as LINUX system's technology and market is growing. The new generation of Intel® Xeon® processor E7 v2 family also offers RAS which has the same performance as UNIX. EasyCard decided to transfer its system from UNIX to LINUX to improve its system performance.

## The benefit

- FUJITSU Server PRIMERGY RX4770M1 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

However as its business categories rapidly increase and more servers are required; it adds huge operational cost to EasyCard, causing a large challenge.

## The solution

Fujitsu provided new generation multi-processor PRIMERGY RX4770M1 servers featuring Intel® Xeon® processor E7 v2 family to improve performance efficiency.

Active-Active function with combination of cluster software ensures transactions of overall payment system and establishes the continuous operation from the hardware to the application.

Fujitsu's SE team worked with EasyCard's DBA team for construction and migration tests for system, application and database. The process went smoothly with the best performance index results. EasyCard decided to virtualize the system in order to minimize TCO for the expansion of new business categories. Fujitsu provided 1U/2U server, RX200S8/RX300S8 featuring 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.

## Products and services

- FUJITSU Server PRIMERGY RX4770M1 x 2
- FUJITSU Server PRIMERGY RX300S8 x 26
- FUJITSU Server PRIMERGY RX200S8 x 3

"The strong relationship we have built with Fujitsu over 10 years has given us the confidence in them as a reliable partner. Fujitsu provides high-quality service, equipment, and an excellent service team for us to deal with business smoothly. We hope to continue the relationship with Fujitsu and look for the solution for our rapid business expansion," concludes the Manager of IT division, EasyCard.

## The benefit

The up-to-date technology of FUJITSU Server PRIMERGY RX4770M1 improves performance and efficiency, while the business and operation continuity is ensured by active-active clustering. EasyCard's transactions of the overall payment system and its future expansion are now secured.

Moreover, the TCO of expanding business scope can be minimized through virtualization, which also gives EasyCard an business advantage.

Most importantly, the operation bottleneck is eliminated by adopting the most advanced PCle 3.0 I/O. Stable operation is guaranteed while boosting system performance.

# **Conclusion**

Fujitsu provided high quality and high performance hardware. The comprehensive support and advanced technology know-how has earned trust from EasyCard as a reliable partner. Fujitsu would be listed as a potential partner to provide solutions for server replacement and server consolidation for the virtualization. Fujitsu continues to support the development of EasyCard through latest technology and experience.

## Contact

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