

# Taiwan Economic Journal Adopts NeoSapphire All-Flash Array 8.5x Performance Improvement for Financial Big Data Analytics

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*Peter Young,  
Director of Information Technology,  
Taiwan Economic Journal*



## Customer Profile

### Taiwan Economic Journal (TEJ)

Taiwan Economic Journal (TEJ) was founded in April 1990 in Taiwan to provide decision makers the best quality, in-depth and timely financial data as well as corporate and financial market information in Asia. Recognized as the most authoritative and reliable source of data in Taiwan, TEJ's business continues to grow with its database now extended to 9 major countries in Asia.

## Challenge

### Existing storage systems cannot handle enormous volumes of financial data

One of TEJ's goals is to provide accurate and timely financial data to accelerate enterprises' decision-making processes. However, with data volumes growing drastically and getting more complex, existing storage systems were creating performance bottlenecks. Upgrading its current infrastructure with high-performance storage thus became a priority for TEJ.

## Solution

### NeoSapphire 3605 delivers sustained high performance

TEJ's original infrastructure includes two Oracle SPARC T4-1 servers; each installed with four Oracle Solaris Zones operating analytics virtual machines. As the amount of data increased, the disk I/O caused a bottleneck and a subsequent slowdown in virtual machine performance occurred. By introducing a new storage system, TEJ hopes to achieve the following objectives:

1. Optimize computing performance to ensure timely delivery of accurate financial data
2. Fault-tolerant systems with robust data protection, delivering instant recovery time objectives (RTO) and non-stop availability

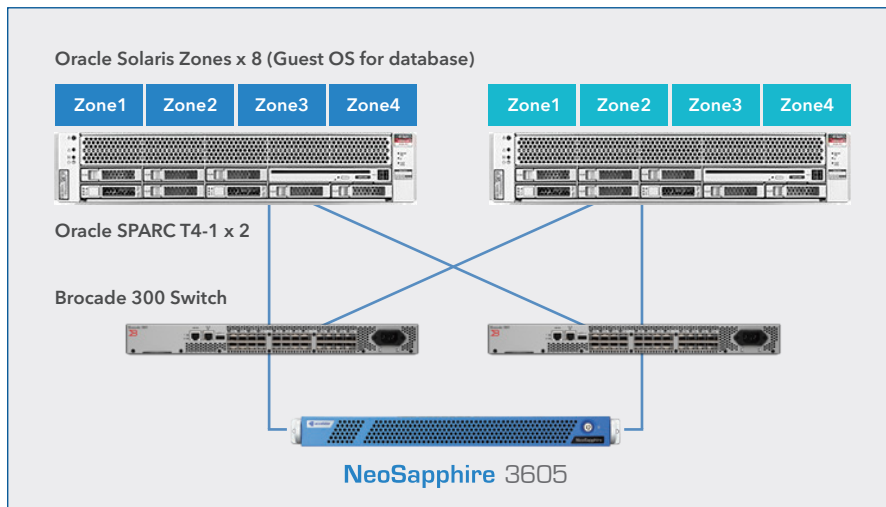
After testing many storage products, TEJ chose AcceleStor's 16Gb/s Fibre Channel all-flash array—NeoSapphire 3605. Powered by the award-winning FlexiRemap® software technology, the NeoSapphire 3605 is equipped with a proprietary data remapping algorithm and Fibre Channel connectivity, significantly

speeding up the application performance while ensuring low latency and high reliability. The NeoSapphire 3605 delivers ultra-high performance of 360K IOPS even at 4KB random writes. It can also be easily integrated with SAN architectures, making it suitable for any mission critical applications. Furthermore, its built-in FlexiRemap® technology efficiently reduces unnecessary write/erase operations and extends SSD lifespan. With FlexiRemap®'s Global Wear Leveling technique, the lifespan of SSDs on NeoSapphire all-flash arrays is 200% longer than those of on conventional RAID 5 arrays. Due to its outstanding performance, stable system platform and relatively low total cost of ownership (TCO), AcceleStor's NeoSapphire all-flash array stood out from other storage products.

## Benefits Introduced

### 8.5x performance improvement for financial big data analytics

Peter Young, Director of Information Technology at TEJ, said "Thanks to the high performance of AcceleStor's all-flash storage solution, the deep computing time is shortened significantly



*Figure 1 : Architectural Diagram of TEJ's system after adopting AccelStor's NeoSapphire 3605*

from 17 days to just 2 days, which not only maximizes our operational efficiency but also helps deliver a consistent high-quality experience for our customers." After introducing the NeoSapphire 3605 to the platform, there was a remarkable enhancement in virtual machine performance. The overall efficiency of data analytics increased by 8.5x, enabling TEJ to deliver accurate financial data in a timely manner while investing ample time on creating value-added services to their customers.

#### **Substantial improvement in overall equipment effectiveness (OEE)**

As the time required to analyze data has been reduced, the equipment performance and operational efficiency have been greatly improved. After upgrading its infrastructure with NeoSapphire 3605 all-flash array, TEJ saw a significant increase in equipment utilization and productivity, further reducing expenditures for new equipment.

#### **Conclusion**

With the rapid development of economy and information technology, the financial and investment industry has gradually moved towards data-driven

business models. To handle increasing data volumes as well as collect and manage data efficiently requires a powerful and stable storage systems with high performance and agile deployment.

"Big data trends continue to grow and drive the need for database platform with higher performance and reliability. AccelStor's all-flash solution offers outstanding performance and stability as well as superior price-performance ratio. Besides AccelStor's technical service team provided timely and first-rate technical support during the deployment of the NeoSapphire 3605. The entire installation and configuration were quite smooth. After introducing NeoSapphire 3605, we see a substantial improvement in the performance and stability of TEJ system." said Peter Young, Director of Information Technology, Taiwan Economic Journal.

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#### **Accomplishments**

- ▶ Upgrading TEJ infrastructure with high-performance storage
  - ▶ 8.5x performance improvement for financial data analytics
  - ▶ Stable system platform with robust data protection
  - ▶ Easy and flexible deployment
  - ▶ Complete and timely technical support
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#### **Products Introduced**

- ▶ NeoSapphire 3605 All-Flash Array
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