

Case study

NAVINFO Co., Ltd.

»The high performance, flexible and efficient Fujitsu Storage ETERNUS DX series provides NAVINFO the ideal storage platform to accommodate rapid data growth«

Mr. Zhang, Project Manager, NAVINFO



The customer

Country: the People's Republic of China
 Industry: Public
 Founded: 2002
 Employees: 1000+
 Website: <http://www.NAVINFO.com.cn/>



The challenge

NAVINFO Co., Ltd. is China's leading provider of digital map and related services. For NAVINFO, the accumulation of data and effective data management are essential to the business. However, with rapid business growth and an increase in demand for more accurate and timely information, NAVINFO faces challenges with ever expanding volumes of data and risks associated with data loss. NAVINFO recognized a highly reliable IT platform with high I/O performance would be necessary to continue to provide quality services to its customers. The platform would also need to be flexible enough to expand with future business growth, and at the same time remain cost effective in optimizing storage investment.

The solution

NAVINFO selected the Fujitsu Storage ETERNUS DX440 S2 solution, connected to the FC SAN network made up of 2 Brocade switches via the FC redundant link. The solution, which already demonstrated high performance during its SPEC benchmarking (evaluation for overall system performance), was implemented into the customer's data center following a strict POC study for compatibility with other vendor products. NAVINFO identified Fujitsu Storage ETERNUS DX440 S2 as the best fit for its business needs.

Customers

NAVINFO Co., Ltd., headquartered in Beijing, is China's leading provider of digital map, dynamic traffic information and vehicle network services. It is also the first Chinese map producer to develop a commercial application for dynamic traffic information. With over 10 years' experience in map navigation production, NAVINFO has led the Chinese market for 9 consecutive years, and has controlled the Chinese mobile phone map market for 5 consecutive years with over 50% market share. Additionally NAVINFO is a leader in Personal Navigation Devices, Location Based Services, Internet Based Map Services, Traffic Information Services and Intelligent Telematics Services.

The challenge

NAVINFO now offer services to companies in 22 cities, including Beijing, Shanghai, Guangzhou, Shenzhen, Hong Kong and Macau. NAVINFO also provides services across almost all major international automotive manufacturers in China including Toyota, Honda, Nissan, Benz, VW, and GM. However, with rapidly growing needs for accurate and timely data, the company is facing a number of key challenges:

Data security

NAVINFO holds China's largest high-quality digital map database, and as of August 2011, had collected map data covering over 2.32 million km's of road. This detailed map data, spanned 2,847 counties, cities and districts nationwide, with more than 13.5 million Points of Interest (POI) matched to the road network. For NAVINFO, this data is a critical part of its business. However data loss became a serious risk as the large amounts of data were getting more and more difficult to store and manage. NAVINFO recognized a highly reliable IT platform with high I/O performance would be necessary to continue to provide quality services to its customers.

Ever expanding data

Based in Beijing, NAVINFO established a system that collected, updated and distributed digital map data across the whole country. The system was constantly updated with real-time traffic data and comprehensive geographic information based on static map data. This allowed various users to access digital map information quickly from their mobile phones, computers or GPS devices. However, as data was continuously collected, updated and distributed, NAVINFO knew their storage requirements would differ depending on the type of data and how frequently it was accessed. As such, NAVINFO realized they needed a flexible and scalable data storage solution.

The benefit

- Increase system reliability and ability to seamlessly manage and protect data during rapid growth
- Increase system flexibly to scale with business data requirements
- Increase data management efficiency with storage tiering
- Improve energy efficiency and data center operations with environmentally friendly green IT products

Products and services

- FUJITSU Storage ETERNUS DX440 S2
- Brocade Fiber Channel Switches



The solution

Based on NAVINFO's requirements for high I/O performance, high reliability and high scalability, Fujitsu proposed the ETERNUS DX440 S2 storage system to support backend operations at the data center. With an incredible MTBF (Mean Time Between Failure), ETERNUS delivered NAVINFO the reliability they required. And having achieved an outstanding SPC benchmark result, ETERNUS DX440 S2 demonstrated its proven performance. After completing a strict POC for compatibility, NAVINFO decided Fujitsu Storage ETERNUS DX440 S2 was the best fit for its business.

The benefit

High performance, reliability and compatibility

The ETERNUS DX400 S2 series with Intel® Xeon® processors is purpose-built for data centers and virtualized environments. ETERNUS series' leading architecture provides NAVINFO with outstanding performance. The system's ability to easily support and integrate with other vendor's solutions was vital for NAVINFO to store and access large and various data seamlessly.

Scalability and flexibility

The major design principles of ETERNUS DX are its compatibility and modularity. For NAVINFO, the ETERNUS system was able to support their need for a capacity-intensive environment, while at the same time, its non-disruptive capacity upgrades, ensured they could simply add disk space to scale up when the business required it. The combination of this and ETERNUS DX's flexibility ensured NAVINFO could develop and implement a cost effective storage structure. With the continual rapid growth of data, ETERNUS DX formed a highly optimized balance between cost performance and capacity.

Green IT products for Corporate Social Responsibility (CSR)

Due to China's significant business growth, Corporate Social Responsibility (CSR) has become increasingly more important for all enterprises in China. One of NAVINFO's core objectives in the renovation of its ICT system was to reduce energy utilization and pollution by using the ICT environment to operate the GPS solution and car network system. As the extremely energy efficient Fujitsu Storage ETERNUS DX solution is equipped with a compact design and an ECO-mode (hard disks automatically shut down after a defined idle period), NAVINFO not only reduced energy consumption, but heat generated in the data center as well. In doing so, NAVINFO achieved its CSR goals with a greener data center environment.

Conclusion

NAVINFO strives to provide a better driving experience for motorists with complete Intelligent Transport System services. The CEO has a clear vision for the company, to become the number one provider of fully integrated Intelligent Transport Systems in China. Specifically NAVINFO wants to expand into new markets by strengthening existing digital map services, focusing on Big Data utilization and provide better services that leverage existing digital data content. With the implementation of ETERNUS DX, NAVINFO created a high performance, highly reliable, flexible and scalable storage platform that is building a solid base for future growth.

Contact

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