

Case study

H&M Bay Inc.

X-IO Keeps H&M Bay on the Road to Success
with Storage Cluster for VMware

business challenges

H&M couldn't rely on local disk-based storage because it had no business continuity capability in the event of a failure.

The company required a cost-effective solution that could ensure business continuity within a single site while meeting its storage performance requirements.

The solution had to work with Microsoft SQL Server 2008 R2 without degradation because the database application was mission-critical to H&M.

The system had to be easy to manage and use because the company had a limited amount of in-house technical expertise.

solution

Servers

- HP DL590 Servers

Hypervisor

- VMware 5.1

Storage

- X-IO ISE 730 Hybrid Storage Array (2)
- Active-Active Mirroring for ISE

OS

- Windows 2008 R2

Applications

- Microsoft SQL Server 2008 R2
- Microsoft Exchange
- ColdFusion (Java)
- Terminal Servers
- Microsoft Dynamics Navision Accounting



"Once the decision was made, it was very easy. No other company gave us the complete package. X-IO was there every step of the way with an extremely accessible and very impressive solution."

John Walker, IT Manager, H&M Bay, Inc.

introduction

Formed in the early 1980s, H&M Bay Inc. (H&M) stores and transports frozen and refrigerated less-than-truckload (LTL) goods, such as meat, seafood, prepared foods, and deli goods for manufacturers, retailers, and distributors in the United States. More than 30 years later, H&M's focus on customer commitment has allowed it to expand its operations into California, Florida, Indiana, Maryland, Massachusetts, North Carolina, Texas, and Washington.

the challenge

At the core of H&M's operations is a large Microsoft SQL Server database that tracks and monitors every order. This mission-critical database manages cargo for customers, matches it to the correct drivers, and constantly tracks drivers' locations. Without it, H&M couldn't operate. If the SQL Server database went down, operations would be hamstrung. H&M decided it needed a solution to more reliably support its operations and allow for future growth, so it upgraded its entire storage infrastructure.

When the H&M team decided to make the switch from a physical to a virtual infrastructure, it selected an EMC VNX unit. The team had complete faith in the vendor, so it didn't trial the solution before implementing for virtualization. However, after implementation, it became apparent that the performance of the EMC solution was insufficient to underpin H&M's SQL Server backbone and its virtual infrastructure. After enduring much frustration and trying a number of alternative options (e.g., Nimble, Whiptail)—even adding smaller and faster disks, and changing the networking and adding NICs—Walker realized it was time to re-evaluate the market. The company soon met with X-IO.

the solution

The company bought two ISE 730 Hybrid Storage Arrays after testing the X-IO product and finding that it easily addressed H&M's required output. The ISE is ideal for database applications because it can cost-effectively provide high performance for transactions, queries, analytics, and reporting.

As the only true hybrid storage system that uses enterprise solid-state disks (SSDs) and hard disk drives (HDDs), X-IO's Hybrid ISE provides the ideal balance of price, performance, and capacity for H&M's requirements. Combining SSD and HDD into a single hybrid pool of capacity enables X-IO to provide SSD performance at HDD pricing. The Hybrid ISE outperforms systems that are up to 10 times more expensive and provides outstanding total cost of ownership (TCO) by reducing operating costs

business benefits

X-IO's clustering and business continuity capabilities have provided peace of mind to H&M, which no longer has to worry about its storage and can instead concentrate on its core business.

The business is now underpinned by a low-cost, reliable, flexible storage solution with extreme high availability.

X-IO's Hybrid ISE, with its five-year warranty, costs less than a number of other vendors' solutions with three-year contracts.

Full-capacity utilization means H&M can wring every last terabyte out of its storage solution without performance degradation.

associated with management, power, cooling, and data center footprint.

X-IO's Active-Active Mirroring is a significant feature for H&M because it lets the company pair two ISE Hybrid Storage Arrays in a cluster in a single data center and provide business continuity capabilities. All write operations on either side of the pairing are guaranteed to be replicated before the operation is acknowledged. If one half of the pairing is affected in any way, it is invisible to servers through the simple use of X-IO's Active-Active Mirroring with VMware vSphere's native multipathing.

the result

With the help and support of X-IO, installation and implementation of the X-IO solution was a painless process for H&M every step of the way. X-IO also ensured that the solution met H&M's cost and performance requirements.

The Hybrid ISE has given H&M peace of mind and resilience because if access to one of the units is lost, the other will continue to provide high-performance service to the vSphere cluster, automatically and without interruption—much better than the previous storage system with its local disk drives.

Ease of use is another major benefit for H&M. When the units were first installed, X-IO provided a half-day of training for the team that would be managing the Hybrid ISEs. Since then, the team has been able to let the system work in the background, and the only updates have been to the firmware. Meanwhile, the team has been free to focus on other tasks.

"X-IO makes the whole process as painless as possible. It's a really good company to work with. I would recommend X-IO to anyone."

**John Walker, IT Manager
H&M Bay, Inc.**



The Hybrid ISE is designed to repair itself, silently and invisibly, and to run for five or more years with no service events. The five-year warranty is another important differentiator for H&M, as it was cheaper than other storage companies' solutions, which came with three-year warranties.

Performance is another area where the Hybrid ISE has a significant advantage over rival offerings. H&M hasn't experienced an outage since the X-IO equipment was implemented. The products deliver their advertised, rated performance for their entire life cycle, irrespective of whether 1 percent or 99 percent of the available capacity is being consumed.

Other storage arrays can use only 60 percent of capacity before performance starts to degrade.

Along with quality of performance and support, X-IO also makes it much easier to add capacity when necessary, with little fuss or disruption. This capability has given H&M peace of mind as it considers adding more capacity to its storage environment.

John Walker, IT manager, says, "X-IO was understanding of the situation we faced. The sales process was very good, and X-IO came up with a solution that suited us well."