

Ballou Hosting Intelligence

Web Hosting

Use Case

Storage scalability, virtualization, data recovery/replication, performance, cost

Requirement

New storage infrastructure, performance metrics and solution flexibility

Solution

HA Cluster, auto-sync, NexentaStor™

COMPANY OVERVIEW

Founded by Robert Ballou in 1997, Ballou Hosting Intelligence moved from the United States to Sweden a few years later, and then became part of the Malmo family of companies. Today, Ballou focuses on server operation, Web hosting, cloud computing, virtualization, and storage. In addition, Ballou has been noted as being one of the leading Swedish companies for providing support services.

CHALLENGES

With a newly installed VMware infrastructure, Ballou realized its aging IBM SAN was not providing the performance required and it was rapidly running out of space. Additionally, with Ballou looking to implement several large cloud-based virtualization projects in the near future, the company needed a storage infrastructure with scalability, superior performance, and the ability to manage its increasing customer requirements.

Ballou needed an agile, versatile, and flexible solution, one which would provide enterprise features at a competitive price, yet could handle Ballou's entire 304TB storage infrastructure.

The storage solution had to be easy to use as Ballou did not have in-house IT staff working directly on storage. With so many vendors pushing proprietary solutions, it seemed as if cost alone would bring the entire project to a halt.

Ballou needed to reach out to its technology partners, as well as initiating in-house research, to learn more about the rapidly changing landscape of data storage technology, storage vendors, and business specific performance and support issues.

Ballou was expanding quickly acquiring more clients with terabytes of data. Ballou needed a storage solution not only to protect present day data, but also with the ability to expand with future growth.

NexentaStor + HA Cluster

- 2 x Intel Xeon 2.4GHz Six Core
- 288 GB RAM
- 1 x Dual 10Gbit + 1 Dual 1 Gb NICs
- 1 x LSI SAS2 HBA
- 3 x 500GB Seagate SAS 7200 RPM
- 36 x 1TB Toshiba SAS2 7200 RPM
- 2 x Hot Spare / JBOD
- 1 x 8GB STEC ZeusRAM (mirror)

"By deploying Nexenta, we have spent 75% less than the potential cost of implementing a competing solution from the likes of NetApp. Nexenta has also cut the time spent on storage management by 50%, freeing up additional time, which can be used on other projects."

Daniel Jakobsson
Storage & virtualization specialist
Ballou



SOLUTION

After carefully assessing a number of vendors and solutions, and with support from Layer 8, a Nexenta Certified Channel Partner, Ballou implemented NexentaStor.

With Layer 8, which has more than 35 years of experience within the IT industry, Ballou designed a storage solution based on NexentaStor and high performance ZeusRAM and ZeusIOPS from STEC. The solution has, from the ground up, scalability, flexibility, redundancy, and performance in mind.

NexentaStor was used to underpin Ballou's entire storage infrastructure, including its VMware environment, and to manage a large number of its customers' diverse types of data – from Oracle databases to media files. Ballou now uses NexentaStor in its test environment and for replication so as to create a safe backup of all its data.

Replication

With the addition of two new 45-slot JBODs, one for HA cluster, the other for replication, Ballou was able to upgrade its storage capacity and its data security while maintaining budgetary controls.

Growing by about 3TB per month, Ballou used NexentaStor auto-sync to ease its replication challenges. ZFS functionality allowed Ballou to send and receive unlimited snapshots. Cluster nodes pushed the data to the replication node, transferring only changes after initial replication from previous snapshot.

BUSINESS BENEFITS

With Nexenta, Ballou has been able to upgrade its entire storage infrastructure, not only significantly boosting performance, but also offering a long-term solution to scaling up and scaling out. The overall cost of implementing the Nexenta solution remained well within budget, thereby allowing the company to remain competitively priced.

Nexenta's use of ZFS technology provided Ballou with a massively scalable storage environment, a virtually unlimited number of snapshots, and high granularity, end-to-end data protection.

Nexenta's hardware agnostic, software only approach removed many of the hurdles that Ballou wanted to avoid, such as vendor lock-in, thereby allowing Ballou to grow and adjust in-house appliances (adding more drives) quickly and easily in response to performance requirements, growth, or market demands.

In addition, with support from Nexenta and its partners, Ballou did not need to increase IT staff. The company was able to corral cost controls, which were a significant requirement in the overall plan. Going forward, Ballou has its sight set on several upcoming cloud projects, which it now can aggressively confront with confidence, thereby maintaining and expanding its position as a leading European service provider.