Software-defined storage for business automation software developer

4x increased storage performance with ZFS-based Open-E JovianDSS

Software developer ReadSoft

is a global provider of applications for automating business processes. The company's software extracts information from business documents such as invoices, forms, claims, and orders, whether they are electronic or paper, and uses it for automated document sorting, information matching against ERP systems, and approval workflows.

Challenges

ReadSoft was using Open-E DSS V7 as fast iSCSI storage in VMware cluster environments for all research and development data (testing, backups, etc.). With Open-E storages located in Hamburg, Frankfurt, Stockholm, Malmö, Helsingborg and Copenhagen they could easily manage the server infrastructure.

As the company's R&D requirements rapidly grew, the IT environment needed to be refreshed. Although Open-E DSS V7 met all their expectations, the company now required much higher performance. The new storage system was supposed to be a proven solution that is exceptionally scalable, easy to set up, and highly secure. Also, any existing single points of failure were to be avoided, especially in regards to hardware RAID controllers.

Solution

Satisfied with the existing Open-E storage, ReadSoft decided to upgrade to software-defined Open-E JovianDSS which is based on ZFS. All of their existing hardware – 21 SANs in total – was replaced with HP DL360 servers.
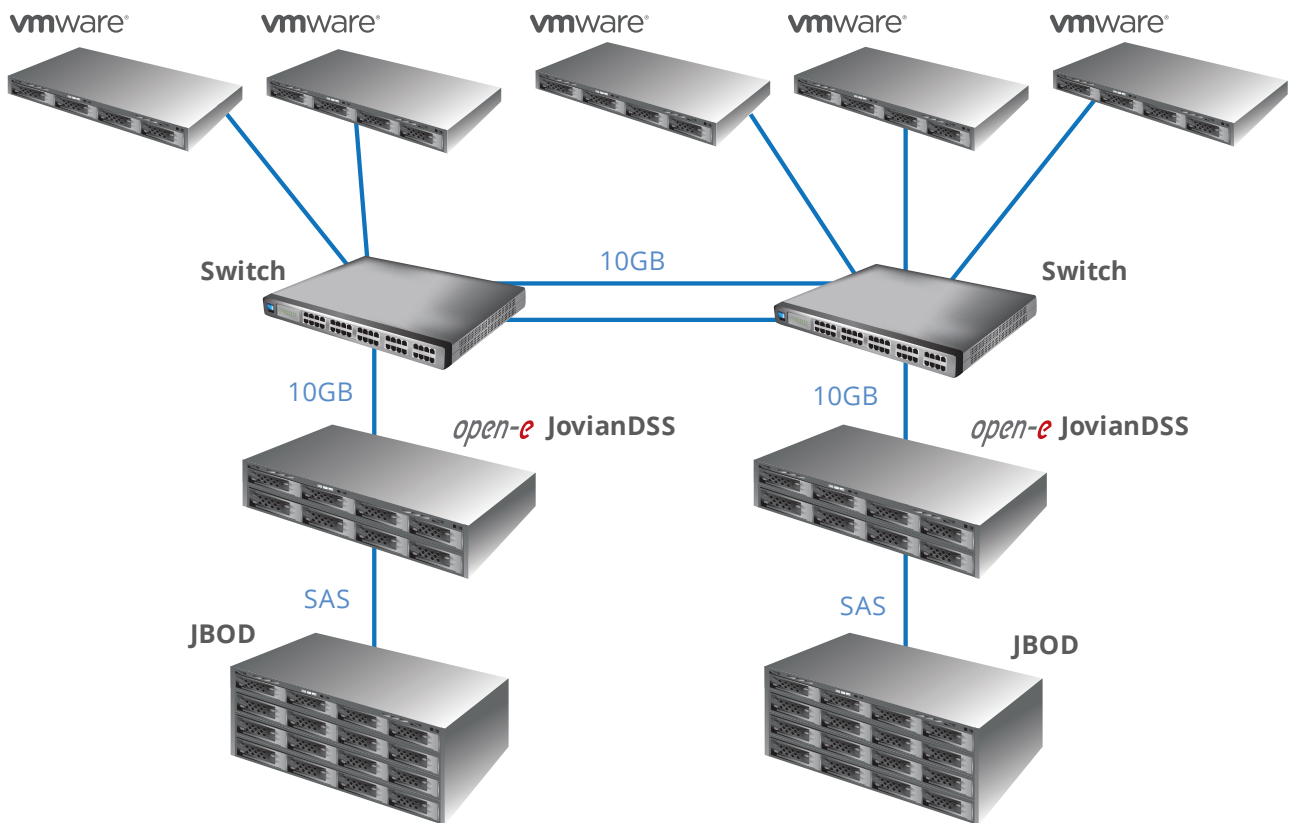
JovianDSS

Thanks to thin provisioning and compression in Open-E JovianDSS, between 60%-80% of extra storage could be gained compared to the physical size of the array. On top of that, ReadSoft's storage administrators now have better insights into SAN and disks. Additionally, they increased efficiency and have a better option for multiple disk problem monitoring. With this High Availability storage environment, the company was able to achieve Business Continuity by aggregating resources into virtual pools in the company's VMware cluster.

Hardware Setup

The storage solution runs on a 10 GB network and the infrastructure includes HP DL360 servers connected with HP d2700 cabinet consisting of 25 SAS 10k rpm disks in a JBOD configuration. ReadSoft uses Intel DC3700 series disks for SSD cache which are mounted directly in the servers.

VMware clients

vmware®   vmware®   vmware®   vmware®   vmware®

Switch   10GB   **Switch**

10GB   *open-e* **JovianDSS**   10GB   *open-e* **JovianDSS**

SAS   SAS

JBOD   **JBOD**

Benefits

Per Eklund, Head of IT at ReadSoft:

"We have been very satisfied with Open-E DSS V7 for many years but after our company and our requirements for R&D were growing faster and faster, we were looking for ways to increase our performance with proven products and relationships. Finally, Open-E released their new software JovianDSS with ZFS on Linux, and the same Kernel as in Open-E DSS V7. With this, we were able to achieve non-performance degradation compression that allows us to store 60 to 80% more on each SAN. Since 90% of requests are running from the cache we achieved four times faster performance than with the old storage systems."

About ReadSoft

ReadSoft simplifies business for organizations of all sizes with applications for accounts payable automation, accounts receivable automation, sales order processing automation, and multichannel mailroom automation. Its on-premises, cloud, and hybrid solutions for document process automation enable businesses to increase their agility by improving customer and supplier satisfaction, increasing operating efficiency, and providing greater visibility into business processes. ReadSoft applications integrate seamlessly with ERP systems from SAP, Oracle, Microsoft, and other business systems. The company delivers solutions and support through its partners in 17 countries. It operates within Perceptive Software, a business unit of Lexmark International. Read more on **www.readsoft.com**

About Open-E

Open-E is a well-established developer of IP-based storage management software. Open-E JovianDSS and Open-E DSS V7 are robust, award-winning enterprise storage applications which offer excellent compatibility with industry standards, and are the easiest to use and manage. Additionally, they are some of the most stable solutions on the market and undisputed price performance leaders. Open-E accounts for over 27,000 installations world-wide and has received numerous industry awards and recognition. Thanks to its reputation, experience and business reliability, Open-E has become the technology partner of choice for industry-leading IT companies. For further information about Open-E, its products and partners, visit **www.open-e.com**