

Coltex, leading European fashion retailer, uses NexentaStor from Inprove to support VMware®



Coltex BV is a major player in the European fashion market with more than 380 stores in the Benelux region of Europe. Coltex is well known for the Steps, Didi, SPS Superstar and Forecast brands. The head office is based in the Netherlands with a total of 1680 employees. In the fall of 2008 they selected NexentaStor after discussions with Inprove NL, a Netherlands based partner of Nexenta Systems with expertise in storage and systems management.

Customer Challenges

The storage management challenges faced by Coltex BV include:

- Retail fashion is extremely competitive and Coltex has grown quickly while retaining a tight control on costs. Because of this the IT staff at Coltex is small, with only 8 people providing most IT support for what has become a major retailer.
- The management of information is critically important to Coltex as it helps them to better respond to changes in the fashion industry.
- Coltex has consolidated their IT infrastructure with the help of ESX server from VMware. They are happy with this decision and believe that the use of ESX helps them save time and money. However it has raised a couple of management challenges.
- Backup and restore windows are getting harder to meet because the exponential increase in the amount of data created on the ESX servers that must be replicated cannot be easily managed with traditional backup solutions.
- The relationship between the ESX servers and particular VMs and underlying storage policies can be difficult to determine without using a NAS with enhancements for ESX management, like NexentaStor.
- Existing backup solutions did not appear to offer the ability to both serve data as NFS to the ESX servers and the ability offer site to site replication.

What is the Solution?

Coltex uses NexentaStor on a Dell PowerEdge 1950 with a SAS attached Infortrend A24S disk array using cost effective SATA disks. The storage is exported from NexentaStor through NFS over Intel 10 Gigabit CX4 copper network interface cards to 3 VMware ESX 3.5 using Dell PowerEdge R805 servers using the same Intel 10GbE NIC's.

Results:

- High performance NFS storage for ESX 3.5 running on Dell PowerEdge 1950 with a SAS attached Infortrend A24S disk array.
- Coltex can have as granular a policy for the creation of snapshots without running out of available snapshots. Ever.
- Multi-level data protection for maximum data integrity and longevity. The next generation check-sum capabilities of NexentaStor and ZFS eliminate silent data corruption, making solutions with large SATA drives safe to use even for Coltex's critical data.
- Inherent virtualization improves performance via **IO pooling** and reduces costs and management effort via native **thin provisioning**.
- Ease of use saves time and allows a relatively small IT team to keep up with the success of Coltex retail brands.
- **Estimated savings of 80% vs. comparable legacy NAS or iSCSI solutions.**



The use of the cheaper copper based 10 Gigabit network cards and HP Procurve 8212zl switch with 10 Gigabit ports is proving to be a very cost effective method of providing increased single transfer throughput over conventional single Gigabit ports.

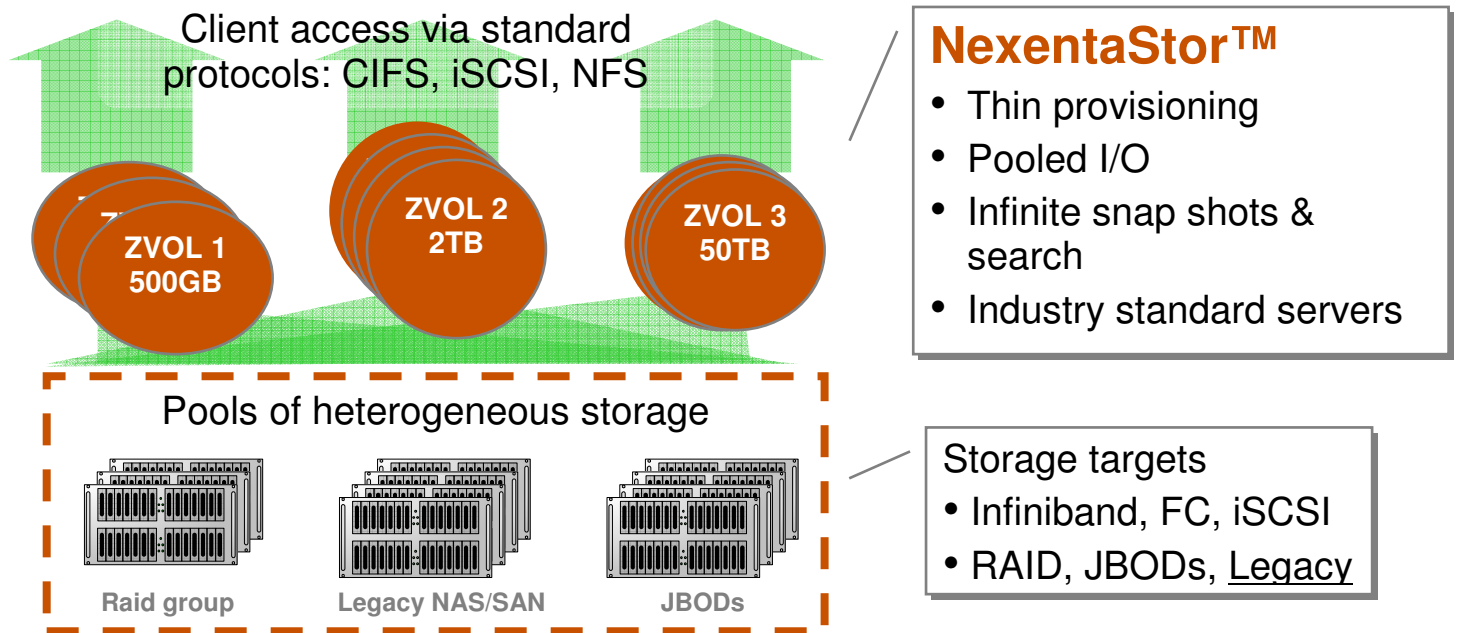
System stress testing during testing provided valuable results. The disks read and write speeds with NexentaStor providing storage to an Ubuntu linux VM running within ESX 3.5 are reported as 200MB/s writes and 350MB/s read and a maximum of 1300 IOPS. These numbers are by no means a maximum as the performance was limited by the underlying Infrotrend A24S disk array and the size of the volume exported. Even during a rebuild of the raid volume the performance was good providing at least half the performance of the optimal case.

“We are quite happy with the performance and ease of use of NexentaStor. The integrated support for ESX and for 10G Ethernet plus the high performance NFS has allowed us to significantly improve the cost / performance of the storage for our ESX 3.5 systems.”

Wilco Nierop, IT Manager, Coltex BV

The use of standard technologies and protocols ensures that NexentaStor is not proprietary with vendor dependencies which hinder low-cost usability over lengthy periods of time. Further, ZFS offers massively scalable storage environments with virtually unlimited number of snapshots and thin provisioning, improving data integrity and ease of use.

NexentaStor performs particularly well behind VMware’s ESX server. In such a configuration NexentaStor shares content to the ESX servers either via iSCSI or NFS and can also provide access to other applications while also delivering a full suite of backup and replication services including limitless snapshots and Boolean search and retrieval of snapshots.



About Nexenta and Inprove

Inprove NL is a leading storage systems integrator operating in the Benelux region. Inprove partners include Sun and Nexenta Systems. More information about Inprove can be found at www.inprove.nl/zfs.

Nexenta Systems, Inc., has developed NexentaStor™, the leading OpenStorage enterprise class storage solution and sponsors NexentaCore, an operating system that combines the high performance and reliability of OpenSolaris with the ease of use and breadth of applications of Linux. Both solutions leverage the revolutionary file system, ZFS. More information about Nexenta Systems, Inc., can be found at www.nexenta.com.