XenData Digital Archives
Video Performance. Built on IT Standards.

Case Study: Outdoor Channel

The XenData system at the Outdoor Channel is not only a scalable LTO archive which fitted easily into the existing infrastructure but also provides rock-solid data protection and has simplified workflows.

Outdoor Channel has been delivering quality outdoor sports programming to viewers for nearly 20 years, reaching 39 million U.S. households – the largest outdoor TV footprint in the country – and is available in more than 45 countries internationally.

As the amount of digital content managed increased, Outdoor Channel began coming against the limits of their NAS (network attached storage) disk capacity. The need to free up their NAS space led them to consider an LTO archive solution. After investigating the options, the Outdoor Channel found that XenData will not only enable them to easily archive several terabytes of content per day, but will also support their growing international channels' needs and provide a cost effective disaster recovery solution.

The Challenge

Integrating an LTO archive solution that is cost effective, easy to use and supports a DR site

The most urgent need was for additional storage capacity. The existing disk-based NAS capacity was getting close to its limit which resulted in workflows that needed to be adjusted to use the least space possible, rather than for simplicity of operations. Endlessly adding more and more RAID capacity was clearly unsustainable with unacceptable associated costs.

User acceptance was a key aspect and it was important that the archive solution was easy to use. After all, LTO is fundamentally a tape technology, albeit totally different to video tape which does not fit well with modern digital workflows. Consequently a straight forward architecture and ease of use were key requirements.

Another priority for Outdoor Channel was to implement simple but reliable disaster recovery.

Thinking to the future, it was also important to have compatibility with a broad range of applications.

Mike Kozdrey, Manager of Engineering at Outdoor Channel

"When we first started talking about the LTO archive system, some people were sceptical because of the tape aspect. But when they got to see how easy it was to use - because you are just dragging and dropping files - the user response has been great."

The Solution

A comprehensive archive and DR solution ready to meet current and future needs
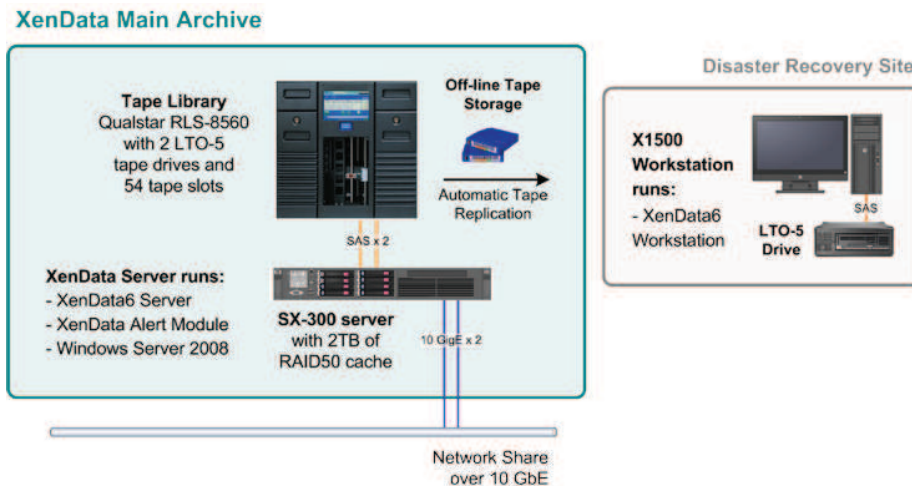
At Outdoor Channel's main facility in southern California, there is a XenData SX-300 Archive Server managing a robotic Qualstar LTO tape library that provides 80 TB of near-line LTO capacity. The Archive Server has a NAS architecture and presents the LTO archive as a network share, with a 10 GbE connection. Writing files to and restoring them from the LTO archive is just like transferring files to and from a disk-based NAS device.

The SX-300 not only manages the LTO cartridges within the attached tape library but also manages offline LTO, effectively providing an unlimited capacity. The SX-300 can also automatically create duplicate LTO tapes for data protection purposes; one cartridge can be retained in the LTO library and the other exported for off-site retention.

Outdoor Channel also has a DR facility in Arizona where XenData's low cost X1500 LTO digital archive system is used in case of need for disaster recovery. LTO cartridges are collected from the main facility in California and warehoused at the DR location on a weekly basis. Tapes received from the main archive are loaded into the X1500 and the catalog read to establish a DR site database. This allows Outdoor Channel to have back-up programming available that they can air should the main center go down, ensuring that programming is never disrupted.

The Results

Outdoor Channel benefited from increased storage capacity, streamlined workflows, and reduced costs

Working with XenData, Outdoor Channel has:

Increased storage capacity The XenData archive immediately overcame Outdoor Channel's urgent need for additional capacity. The current 80 TB capacity of the tape library can be easily expanded by a further 90 TB when required.

Optimized Workflows Having a large archive capacity has helped optimize operations. The Outdoor Channel has been able to restructure and repurpose its disk-based NAS in a way that makes it possible to simplify and improve workflows. The system also reduces the time the network spends converting program files to other formats and makes workflows more efficient for supplying content to Outdoor Channel international channel partners in Europe and Asia.

DR Site Solution LTO cartridges are easily exported from the tape library. The contents catalog of each 1.5 TB LTO cartridge is quickly extracted using the X1500 system in Arizona.

Ease of Use Not only is the system straight forward for the engineering team but the video editors at Outdoor Channel are able to archive and restore directly from their Macs.

Reduced costs XenData LTO Archive significantly reduces storage costs.

Outdoor Channel's Engineering and Operation Team: Robert Southward, Director of Media Operations and Facilities, Mike Kozdrey, Manager of Engineering, Paul Weaver, Vice President of Operations, Robert Nicholson, Senior Engineer, and Nicholas Hambarian, Broadcast Systems Technician

Paul Weaver, Vice President of Operations

"You can store a single show on a HDCAM tape that costs about $60, but you can put 95 to 100 shows on one LTO-5 for about the same or less cost". "Your return on investment is very rapid."

The Future

Broad compatibility and scalability

In addition to expanding the tape library capacity, Outdoor Channel is also planning to upgrade their content management by installing a MAM to comprehensively manage their digital assets. XenData's broad compatibility allows Outdoor Channel to choose among a wide selection of MAMs ranging from small cost-effective solutions to enterprise class systems, selecting the one that best meets their requirements without concerns about compatibility restrictions. The archive will be still available to be used by other applications simultaneously.