



Digital Video Archive Solutions

Powered by XenData Software

At Last... Affordable Digital Archives

Until recently, an automated digital video archive was expensive and required highly proprietary solutions. Consequently, most video archives still consist of shelves of Beta, VHS and DV tapes, making video assets much less accessible and hence less useful than they could otherwise be.



Today, even a large digital video archive can be fully automated at a reasonable cost using a robotic data tape library attached to a Windows server running XenData software. The solution meets the demanding requirements of the broadcast industry and other professional video applications.

Industry Standards Protect Your Investment

Digital video archive solutions that run XenData software are totally non-proprietary, conforming to IT industry standards throughout. Our commitment to standards means that a digital video archive running XenData software delivers the following:

Standard Windows File System Nearline disk, nearline tape and offline tape cartridges are presented as a Windows logical drive letter. Video files are written to and retrieved from the archive as though from a standard magnetic disk drive. The digital archive accepts all file types, for example MPEG, AVI, MXF and presents them in a Windows file system.

Industry Leading Tape Formats The physical tape format may be LTO, DLT or SAIT- the leading formats in the IT industry.

Tape Interchange File Format The file format used to write to the tape is the industry standard TAR. This ensures that files may be read by a wide range of third party utilities and applications.

Network protocols The software is optimized for standard Windows network protocols and FTP file transfers.

Industry standard file security The file server integrates fully with the Microsoft Windows security model, based on Active Directory. This makes it easy to ensure that video file access is limited to authorized users.

Our strong adherence to industry standards means that the digital video archive will seamlessly interface with your changing standards-based digital infrastructure.

Accessible Multi-Tiered Storage

Many video facilities effectively have only two tiers of storage: very expensive 'On-Air' storage and video tapes held on the shelf. By introducing a digital video archive with multi-tiered storage into a video facility, its operations are transformed. The digital archive is a key element that enables the storage, cataloging, searching and retrieval of massive amounts of video media.

A digital video archive running XenData software enhances the tier 1 'On-Air' storage and replaces video tape with additional tiers of digital data storage:

- Tier 2 Nearline magnetic disk arrays
- Tier 3 Nearline data tapes held within the robotic tape library

XenData software also manages data tapes that have been exported from the tape library, creating a fourth offline tier of storage. This can be used for very infrequently accessed video files.

Archive Server Configuration with Single Tape Library	Data Tape Library (Tier 3: Nearline data tape)
File Server with RAID running Windows 2003 & XenData Software (Tier 2: nearline RAID) FC or SCSI	Offline Data Tapes (Tier 4)
LAN	
 Video Servers, NLEs, Digital Asset Management systems, etc.	

XenData Software Functionality

The use of a standard Windows file system interface means that the archive is easy to implement within your overall system architecture. Furthermore, it means that multiple applications can be simultaneously writing to and reading from the archive. Additional functionality includes:

File Transfers at Many Times RealTime Video files are transferred to and from the archive over the network at many times real-time. High speed transfers minimize workflow bottlenecks which is especially useful in broadcast facilities. The solution is optimized for FTP and standard Windows network transfers.

Partial File Restore for All File Types The solution supports partial retrieval of large video files of all types. When partial files are requested, the tape is driven rapidly to the beginning of the required section and only the requested fragments of a file are retrieved.

Manages Nearline Disk, Nearline Tape, and Offline The administrator defines policies for RAID caching that can be tailored to the different file types and folders. For example, proxies may be retained permanently on nearline magnetic disk while high resolution video files are held only on data tape.

Data Protection via Tape Replication The software automatically generates replica tape cartridges that may be exported from the library for off-site retention. The system can be rapidly rebuilt from tape in case of disaster recovery.

Scalable from Terabytes to Petabytes

Digital video archives running XenData software are scalable in so many ways. The software supports both scalable tape libraries and multiple libraries. If the library hardware can be expanded by adding extra tape cartridge slots, the software is easily upgraded to manage the extra capacity. Alternatively, an additional tape library can be added to increase the archive capacity.

XenData software supports up to 64 terabytes of magnetic disk cache and an unlimited number of tape cartridges that are held offline.

XenData software will manage a wide range of digital video archives. For example, when configured with the appropriate capacity of tape library and magnetic disk cache, the solution meets the needs of an organization with a small archive of only 1,000 hours up to those of a large broadcaster with over 100,000 hours of material.

For further information, please visit www.xendata.com or contact:

XenData USA: +1 925 465 4300 XenData UK: +44 1223 370114