

XenData Archive Series Software

MX64 Edition Overview

The MX64 Edition of XenData Archive Series software manages one or more data tape libraries and magnetic disk cache on multiple Windows file servers to create a highly scalable digital video archive.

September 2007

© Copyright 2007, XenData Limited. All rights reserved.

XenData is a trademark of XenData Limited

Last updated: 17 September 2007

MX64 Edition for High Transfer Rates

The MX64 Edition of XenData Archive Series software is optimized for large digital video archives, meeting the most demanding needs of the broadcast industry. It manages one or more data tape libraries and magnetic disk cache on multiple Windows file servers to create a highly scalable digital archive.

An archive running the MX64 Edition software delivers high data transfer rates by load balancing over multiple servers. Performance may be increased by adding additional datamover servers to the system.

In addition to high transfer rates, the system provides the following key features:

- **Standard Windows File System Interface** The managed tapes appear as a single standard Windows logical drive which means one or more software applications can write to and read from the archive as though it were a standard shared disk-based logical drive.
- **Strong Data Protection** The system provides the option for automatic tape cartridge replication, creating additional copies of each tape cartridge. When full, the replica tapes may be exported from the tape library and held in a secure offsite location. If required, the replica tapes can be quickly imported into a duplicate archive system.

Data Tape Formats

The MX64 Edition supports a range of data tape formats including the market leading LTO format.

	LTO-3	LTO-4
Capacity per cartridge (Native capacity i.e. without compression)	400 GB	800 GB
Equivalent hours recording per cartridge at 25 Mbps	35.5 hours	71 hours
Equivalent hours recording per cartridge at 50 Mbps	17.7 hours	35.5 hours
Maximum Data Transfer Rate in Megabytes per second (without compression)	80 MB/s	120 MB/s
Media Archival Lifetime ¹	30 years	30 years

The 800 GB capacity of an LTO-4 tape cartridge is equivalent to over 71 hours recorded at 25 Mbps or 35.5 hours at 50 Mbps.

¹ 30 years is typical for LTO media. However, for specific brands, please check with your vendor.

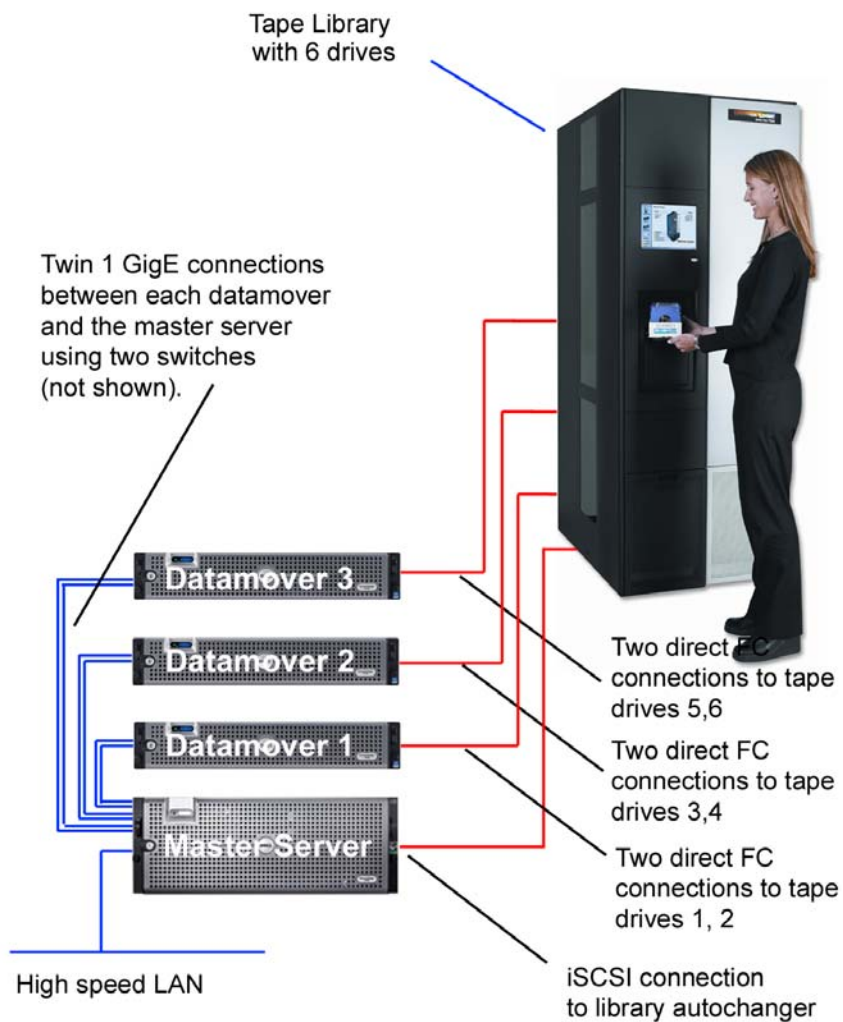
MX64 Edition Archive Configuration

The archive consists of the following components:

- one or more robotic data tape libraries
- a master server running Windows 2003 X64
- multiple datamover servers, each running Windows 2003 X64
- a private network connecting the master server to the datamovers

The master server uses RAM to act as a high speed conduit for files which are transferred between the external high speed LAN and the datamovers. By using multiple datamovers, the load is balanced across multiple servers to achieve high total transfer rates.

A typical archive configuration is shown below:

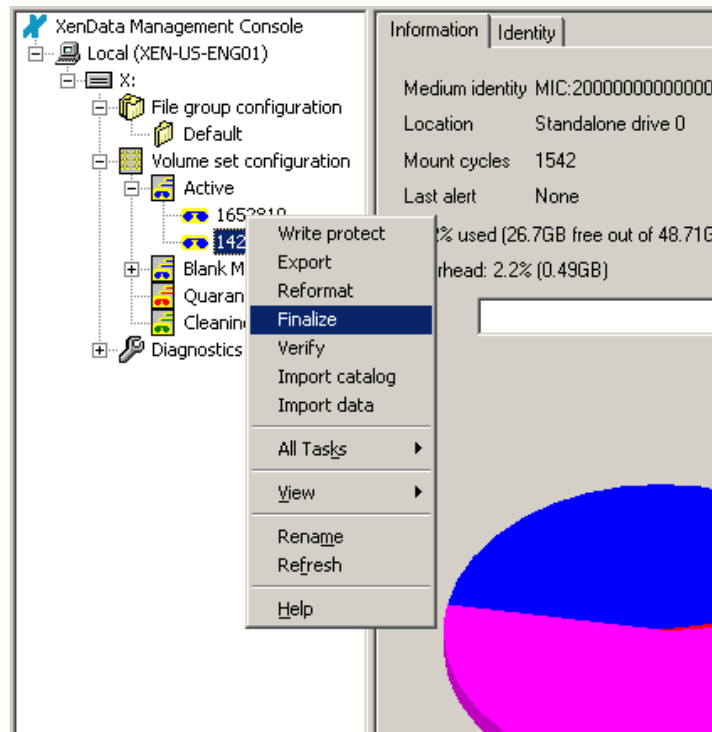


Archive Administration

The physical storage location of files is driven by policies set by the administrator. Options include:

- automatic duplication of data tapes
- setting file retention times on RAID cache
- grouping of files on specified tape sets

Archive administration is performed using the XenData management Console which is illustrated below. It is a Microsoft Management Console snap-in and provides the Administrator with a familiar and easy-to-use tool for system management.



MX64 Edition Features and Benefits

Standard File System The entire archive appears as a standard Windows file system within a single logical drive letter. The solution uses the standard Windows offline file attribute to identify when a file is no longer online. **Benefit:** seamlessly integrates with standard applications and existing network infrastructure without modification.

Microsoft Security XenData Archive Series software is fully integrated with the Microsoft Windows security model, based on Active Directory. **Benefit:** effortlessly integrates with existing security, minimizing system administration.

Automated Tape Cartridge Replication Replication of tape cartridges is automatic and follows the policies defined by the Administrator. **Benefit:** it is easy to generate tape cartridge replicas for off-site retention for data protection purposes.

Offline Tape Cartridge Management The system retains meta-data for offline tape cartridges. **Benefit:** the system supports an unlimited number of tapes 'on the shelf'.

Partial Read of Large Files With very large files there is often a need to read only a portion of the file. For example, this frequently occurs with multi-gigabyte video files when a short clip is requested. XenData software supports partial reading of large files. **Benefit:** enhanced performance when dealing with large files

Multiple Tape Set Support The software allows file groups to be allocated to specified groups of tapes. **Benefit:** the Administrator can group related files together on the same set of tapes.

Open Standard Tape Format Open standard TAR file format is used on the tape, allowing the tape cartridges to be read using third party utilities. **Benefit:** the use of open standards on industry standard hardware ensures the long term availability of data.

Dynamic Expansion of Tape Sets The system will dynamically expand tape sets to meet capacity demands. **Benefit:** this minimizes system administration.

Familiar Administration File policy and tape cartridge management is performed by the Administrator using the XenData Management Console which is a Microsoft Management Console Snap-In. **Benefit:** the Administrator uses a familiar tool for system management.

Highly Scalable Archive Series software supports tape libraries with multiple Petabyte capacities.

Email Alerts Notification of hardware errors or archive system problems is provided by e-mail alerts and / or on-screen messages.

API Available An API is available. **Benefit:** this can be used by developers to obtain tight integration with their applications.

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

USA: +1 925 472 6522

UK: +44 1223 370114

Germany: +49 89 99216 422