

The XenData logo is written in a white, cursive script font.

Your Digital Assets
Preserved | Accessible



Solution Brief:

Using a XenData Archive with Metus MAM

Metus MAM is a scalable media management system which is well proven with over 4000 installed users distributed around 50 countries. Users include TV stations, telecoms companies, webTV, IPTV operators, corporations, educational institutions, video production companies, media archives, houses of worship, government, military and security agencies.

Metus MAM was first integrated with XenData archives in 2006. Today there are many users around the world using a Metus MAM combined with a XenData archive. This Solution Brief describes the functionality of the integrated solution.



1. Introduction

Metus MAM is a scalable media management system. Its asset management and transcoding tools help workgroups catalogue, share and protect every asset and project, and optimizes every file for use. It is well proven with over 4000 installed users distributed around 50 countries. Users include TV stations, telecoms companies, webTV, IPTV operators, corporations, educational institutions, video production companies, media archives, houses of worship, government, military and security agencies.

A Metus MAM integrates well with XenData archives based on an SX-10 Archive Appliance or an SX-520 Series Archive Server. The compatible XenData systems scale from a single LTO drive to large multiple-petabyte systems with robotic libraries. The Metus integration uses a combination of XenData's file system interface and a XenData API. This gives a tight integration that includes excellent management of offline LTO and optical cartridges.

2. Metus MAM

Metus MAM is the flexible, affordable, integrated Media Archiving and Transcoding Software Suite for a wide range of requirements. With over a decade of continuous improvement, Metus MAM has broad functionality. It is a client-server based system made up of several types of client and server side components.

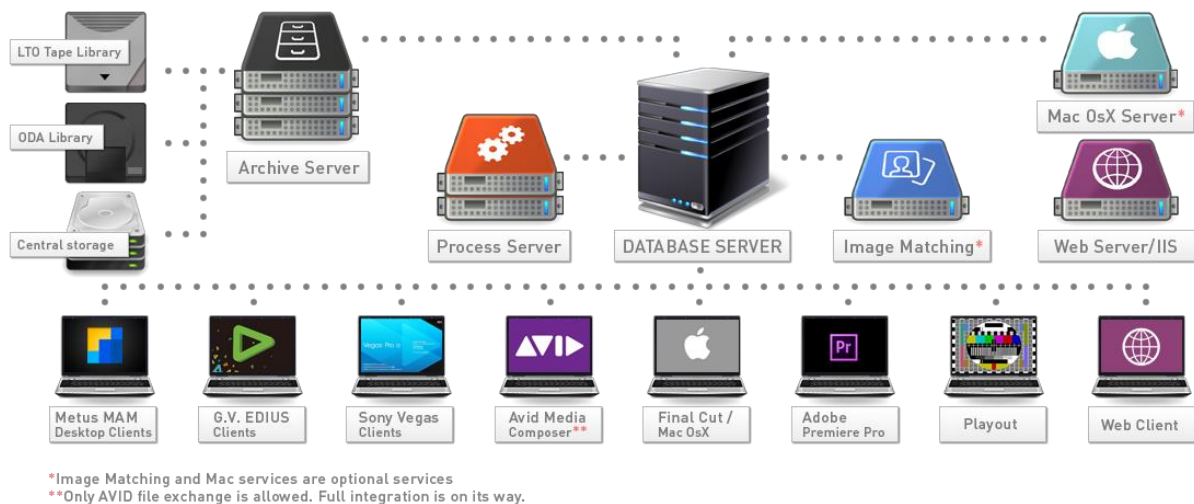


Diagram: Metus MAM Architecture.

METUS MAM Desktop Client

This is the “business end” of Metus MAM, where the users see and interact with the system. It is used generally by power users who wish to use all of the functions of Metus MAM, like transcoding, cutting, joining, and editing clips in addition to basic functions like importing, browsing, and searching. Users with admin rights also configure and administer the system from the Desktop Client. The Desktop Client also includes the Media Asset Viewer, which is a customized player application used to play the assets in normal, fast, slow, reverse speeds, mark points and regions on the assets with metadata, choose and mix between audio channels and mark in and out points.



Screenshot: Metus desktop client

METUS Archive Server (MAS)

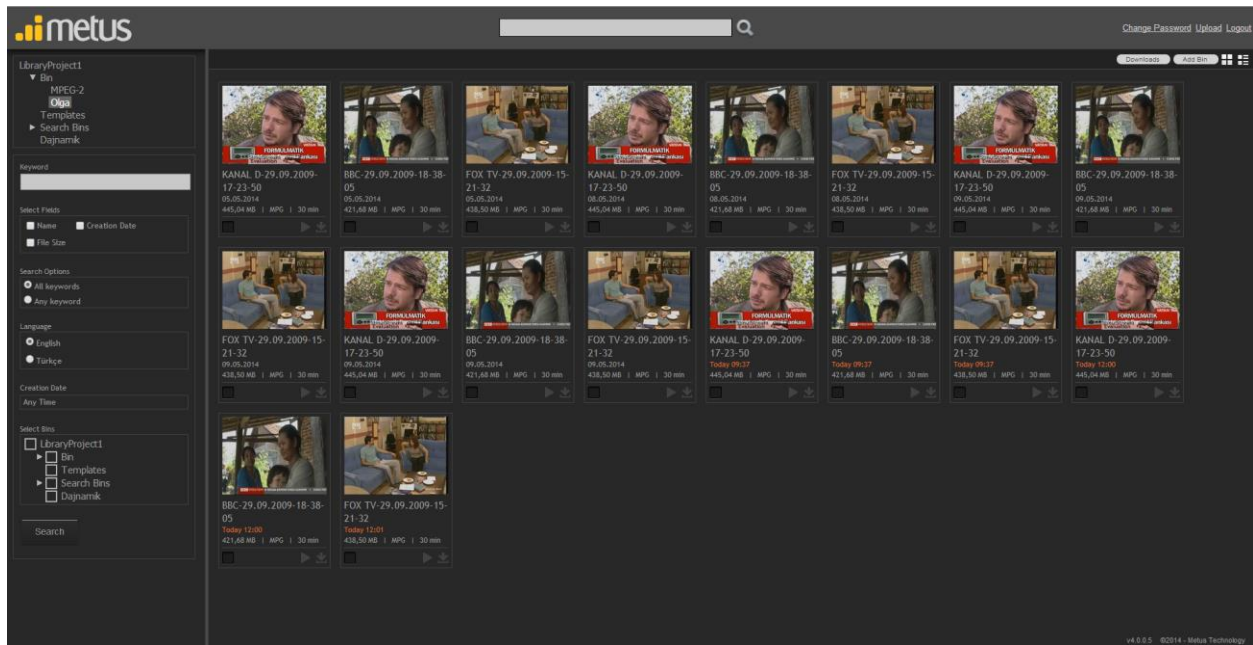
MAS is the server side component that is the glue which holds the system together. It manages the storage repositories that are defined in the system. MAS sits between the clients, the database, and the other server side components and regulates the media and data traffic. It manages media traffic, in accordance with the security levels of the assets and access rights of the users and handles the archiving process (of moving and distributing the imported files between defined storage repositories) and delivers the file path to the client, with the necessary access level enabled.

METUS Process Server (MPS)

If MAS is the brain, then MPS is the engine under the hood of a Metus MAM system. It handles all the multimedia processing that goes on inside a MAM including transcoding between the supported file formats, creating low resolution proxy copies of assets for network and web based playback, trimming files and retrieving cut sections, cutting and joining files and sections of files, audio channel mapping, remapping and embedding, packaging to TS and adaptive bitrate VOD formats and more ...

METUS Online Web Client and Web Server (MOL)

In addition to the Desktop Client, Metus MAM can also be accessed and used by a web client that can run inside all popular web browsers and from all operating systems. This lightweight client does not have all features of the desktop client, yet it allows users to import video files, enter metadata, browse the archive and play the proxy files.



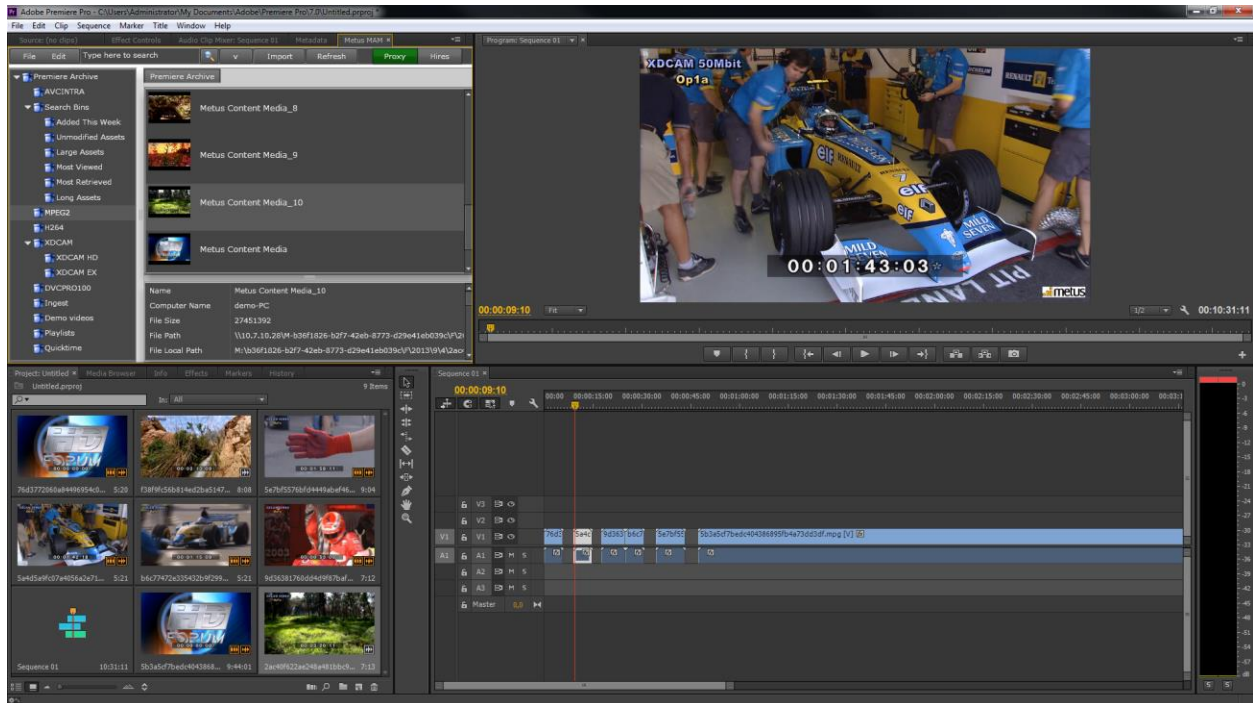
Screenshot: Metus web client

METUS Image Matching Server (MIM)

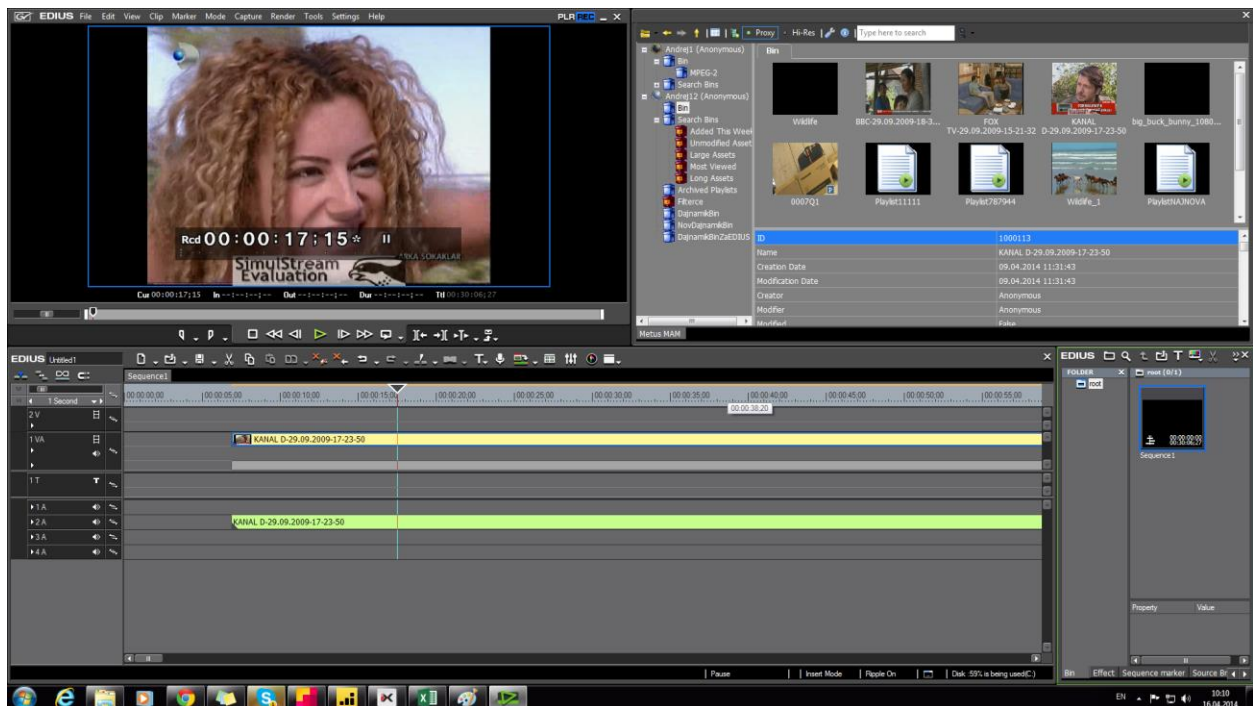
This optional server component, allows users to search a picture frame among all images and video files in the archive and display results in order of relevance. The image search is based on a custom algorithm that analyses the multimedia files in advance, calculates the visual information and writes it into the database. The image matching is then performed at the database level, allowing thousands of hours of video to be searched and compared in seconds.

METUS NLE Plugins

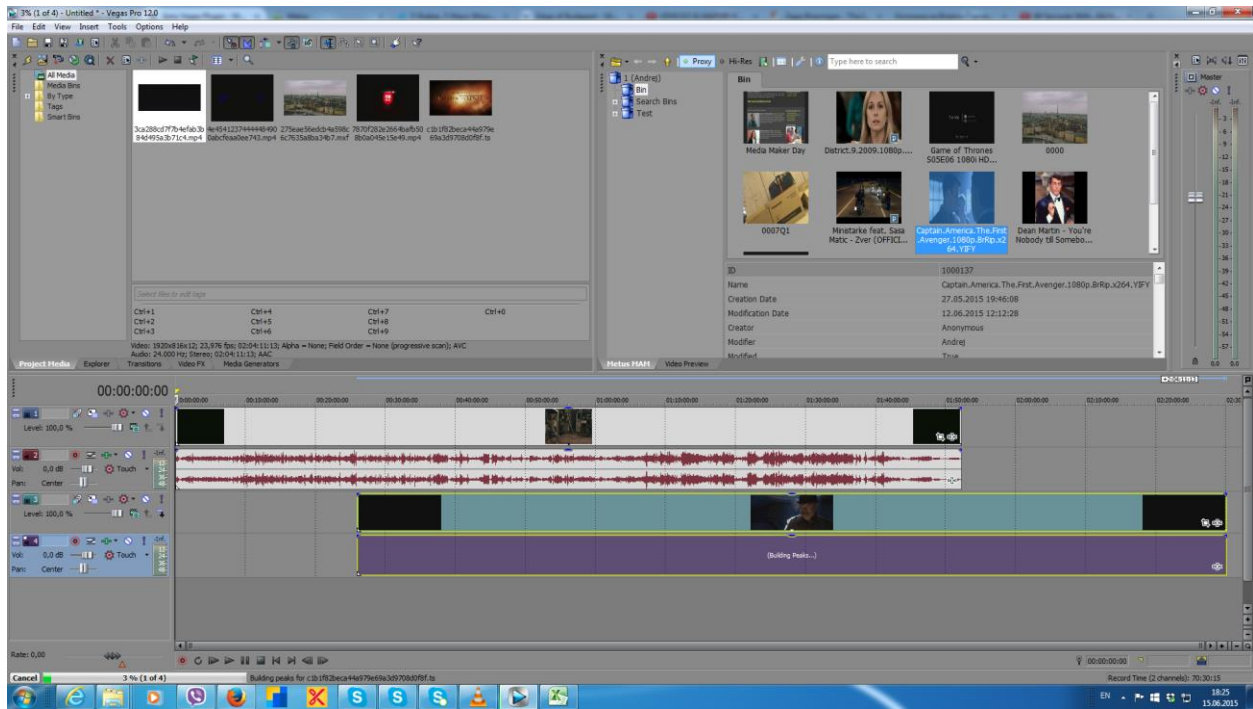
Metus MAM has built-in plugins for Adobe Premiere CC, Adobe Anywhere, Apple Final Cut Pro, Sony Vegas, and Grass Valley Edius. These are opened from within the NLE interface and allows the user to search and browse the MAM project as if he/she were using the Desktop clients. Assets can be played inside the plugin, and dragged and dropped into the timeline. By default, proxy versions of files go into the timeline which means they can be played from network storage without a glitch. After users finish their editing on the NLE, the plugin can switch the files on the timeline to their high-res versions. After the render has completed, the rendered file is imported back into the MAM.



Screenshot: Adobe Premiere with Metus MAM plugin



Screenshot: GV Edius with Metus MAM plugin



Screenshot: Sony Vegas with Metus MAM Plugin

METUS MAC Client and Gateway

Metus MAC Client is a desktop client that runs on Mac OSX and searches and browses the archive and interfaces with Final Cut Pro (FCP). Selected videos can be played in the user interface and dragged to the FCP interface, where upon their proxy versions, together with marker metadata and are added to the FCP timeline. The users, after finishing their edit on the interface, can then swap the proxy versions of the videos for the hi-res versions with a control on the FCP Client. The files rendered from the timeline can be ingested automatically back into the MAM.

3. Compatible XenData Products

The SX-10 Archive Appliance and the SX-250 and SX-520 Series of Archive Servers, have been certified to use in a Metus MAM environment. Both have an easy to deploy NAS architecture. Archive and restore operations are typically performed via a network share using the standard Windows network protocol, CIFS.

SX-10 Archive Appliance



- Cost effective 1U rack mount appliance
- Server class hardware with 32 GB RAM and four core Xeon processor
- Windows 7 64 bit, Professional Edition
- Includes 4 TB disk cache
- Includes two 1 GbE network connections
- Ideal for use with one or two LTO external drives or a small robotic LTO library.

SX-250 Archive Server



- Cost effective 1U rack mount server
- Server class hardware with 32 GB RAM and six core Xeon processor
- Windows Server 2012 R2, Essentials Edition
- Includes 6 TB disk cache
- Spare PCIe slot allows addition of dual port 10GbE card or FC card for SAN connection
- Ideal for managing a robotic LTO or Sony ODS-L30M library with up to two drives.

SX-520 Series of Archive Servers



- 2U rack mount server with up to 12 Xeon cores
- Windows Server 2012 R2
- Includes RAID cache that scales to 100+ TB
- Scales to support Sony Optical Disc Archive (ODA) robotic libraries and 10+ petabyte LTO libraries.
- Server cluster running Windows Server 2012 R2 is also available for high availability.

The XenData archive offers Metus MAM a dynamically expandable pool of LTO or ODA cartridges that seamlessly grows with the user's needs. The integrated system manages an unlimited number of externalized LTO or ODA cartridges, without license fees for the externalized content.

LTO cartridges are written in either the LTFS interchange format or the open standard TAR format. The XenData system may be configured to automatically write replica copies of each cartridge creating backup copies for data protection purposes.

4. Benefits

A XenData archive working in a Metus environment simplifies archive workflows and reduces system complexity while providing a powerful and reliable solution to manage and preserve valuable media assets. Benefits of the combined solution include the following:

1. **Automated Archiving.** Metus MAM automates archiving and restoring operations based on pre-defined ILM (Information Lifecycle Management) rules.
2. **Manual Operation using MAM GUI.** Archiving and restoring can be done manually by the user for a specific asset or assets using the Metus MAM GUI.
3. **Search & Preview.** Archived and shelved assets can be searched for and even previewed using the low-res proxy copies without the need to restore each hi-res video. This helps reduce unnecessary restoration of assets.
4. **Management of Assets on the Shelf.** When a user tries to preview/download an archived video, Metus MAM will automatically restore the file from the LTO or Optical cartridge if the current cartridge is in the drive or library. Otherwise it will let the user know the cartridge name or barcode that has to be imported back into the drive or library.
5. **Asset Reports.** It is easy to identify which LTO or optical cartridge has a specific archived asset. Furthermore, the user can easily obtain a list of assets on each cartridge.
6. **Built in Data-Protection for LTO Archives.** The system automatically creates extra backup copies of LTO cartridges for offsite retention.
7. **High Availability Archive Option.** The XenData SX-525 server cluster configuration provides high availability.
8. **Standards Based Archive.** The XenData archive accepts all file types; writes to LTO in either LTFS or TAR formats or to Sony ODA cartridges in a standard format.

5. Contact Information

XenData

Phone: +1 925 465 4300 (USA), +44 1223 370114 (UK)

Website: www.xendata.com

Metus

Phone: +1 (408) 981-4585 (USA)

Email: sales.usa@metus.com

Website: www.metus.com