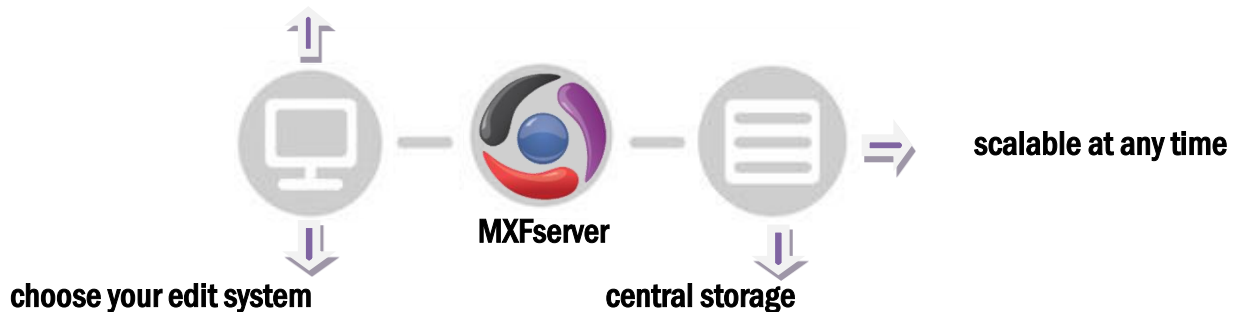## THE NUMBER ONE MEDIA PLATFORM WITH FREEDOM OF CHOICE

With MXFserver you can run Avid® , Final Cut Pro®, Grass Valley® EDIUS® and Adobe® Premiere® Pro all on one media platform. **So one server for all systems Windows® and Mac® and also one storage for all.**

Adobe   grass valley   EVS   axle   Avid® Media Composer® Pro Tools®

flexible at any time

MXFserver

scalable at any time

choose your edit system   **central storage**

Re-use, migrate or mix NLE's, storage or Mac® /PC systems now or later.

MXFserver is the heart of broadcast and postproduction workflow needed for ingest, editing, play out, archive, managing storage, users & projects and connect to MAM systems. MXFserver is just only software that runs on a Windows server® in combination with any storage of your choice.

MXF virtual projects editing

CENTRAL STORAGE

virtual   original

MXF containers
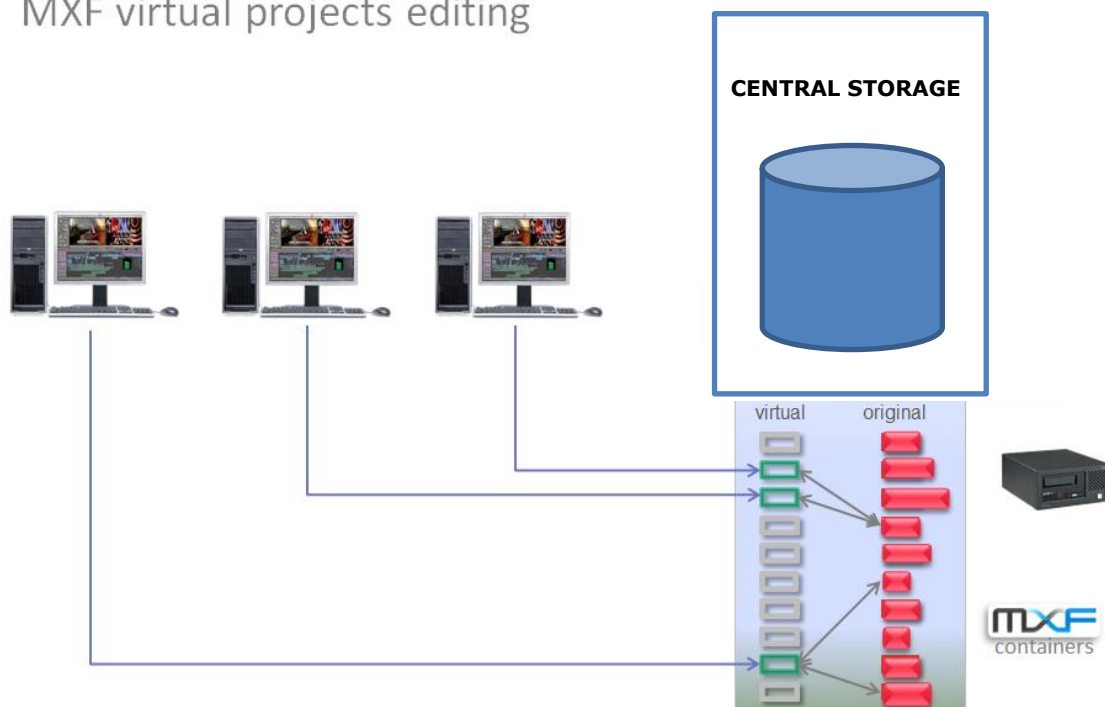
With MXFserver you never work with the original media. MXFserver creates **virtual workspaces** so that way using MXFserver in your workflow will guarantee that you'll never have corrupted files, or an unwanted deletion of media.

In order to provide redundancy and/or load balancing MXFserver software can run on multiple servers concurrently with the possibility in the MXFclients to look at multiple servers.

EDIT EASY, FAST AND SECURE WITH BINLOCKING

MXFserver software connects regular Non Linear Edit (NLE) systems (Avid® Media Composer®, Pro Tools®, Final Cut Pro®, Grass Valley® EDIUS® and Adobe® Premiere® Pro) to standard IT, including all the benefits like bin-locking, project sharing, switching, merging and connecting multiple projects simultaneously. All these features can be performed without conversion, transcoding, consolidation or copying the media.

The biggest advantage of the MXFserver compared with other systems is that it is a nonproprietary system and therefore doesn't work with proprietary index and database protocols. **Due to its open structure all media can easily be accessed, transferred, managed and exchanged without the use of additional software.** Connection to the media is based on virtual workspaces and therefore fast and safe.

For use with and compatible with:
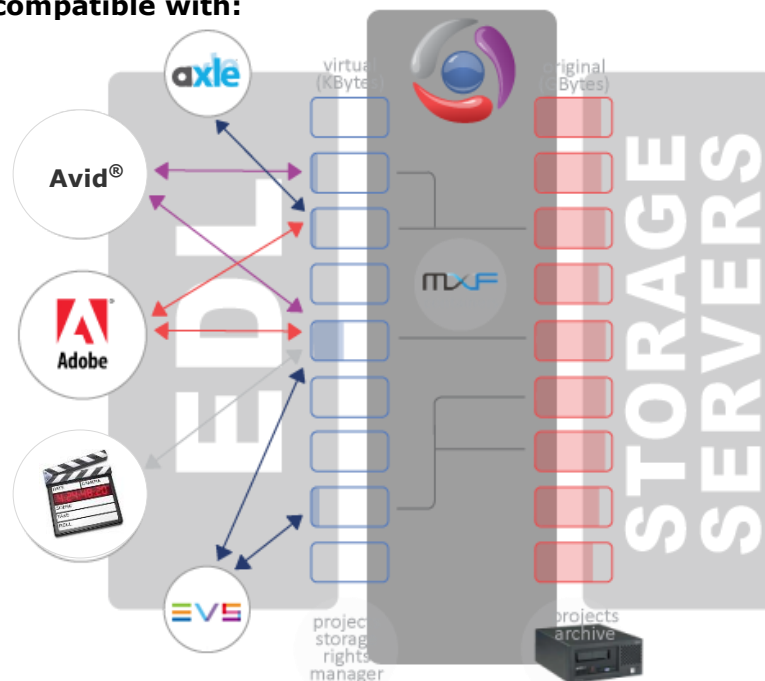
Project Based: Create projects and add metadata, media, pictures, music, documents etc. Ingest media directly into the project with the MXFserver file based and live capture functionalities. Connect a main project for editing and connect sub projects to share files/music/media from. Go with **multiple people in multiple projects** because of the **MXFbin-locking system**. Merge multiple projects into one project. Delete media on clip level or do storage housekeeping per project. Search on all project details, project status, bins, clip names and last saved bins.

MXFserver supports all MXF, Quicktime and GO-Pro formats.

MXFserver offers its own **ingest platform** that handles file based ingest for common formats and devices like the XDcam family, P2, AVCintra, Quicktime and many other file based formats. File import with Adobe Prelude®, Avid®, Airspeed, EVS, Harmonic® Spectrum™ & MediaDeck™, MOG-Speedrail, Telestream®, Pipeline™ or restore directly from archive. Because of MXFserver you can be ingesting and editing at the same time and even use your ingested files directly like **growing files.**

MXFserver changes nothing to Avid® Media Composer®Avid®, Symphony®, Avid® Adrenaline™, Pro Tools®, Final Cut Pro®, Grass Valley® EDIUS® and Adobe® Premiere® Pro. It is compatible and works with MXFserver so it just expands your collaborative editing workflow.

You can create your **own templates** suitable for your workflow.

MXFserver can **archive projects** to a single LTO drive or by using TSM to a range of LTO robots.

RELIABILITY, FLEXIBLE AND COLLABORATIVE EDITING

NON Proprietary, Open Structure:
All media files, project data, bins and settings are collected per project in one container, which makes the media easy to access, manage, transfer and archive. Working according to this project based procedure improves editing performance, guarantees full continuity of editing and results in:

* A small index per project
* Simply move of projects/items
* Not only media in the project container but also pictures, shot lists, music, metadata etc.
* Quick response
* Less defragmentation
* Quick partial retrieval

The containers are shown as separate Windows®-based directories, so the IT manager can easily monitor, move and manage the media.
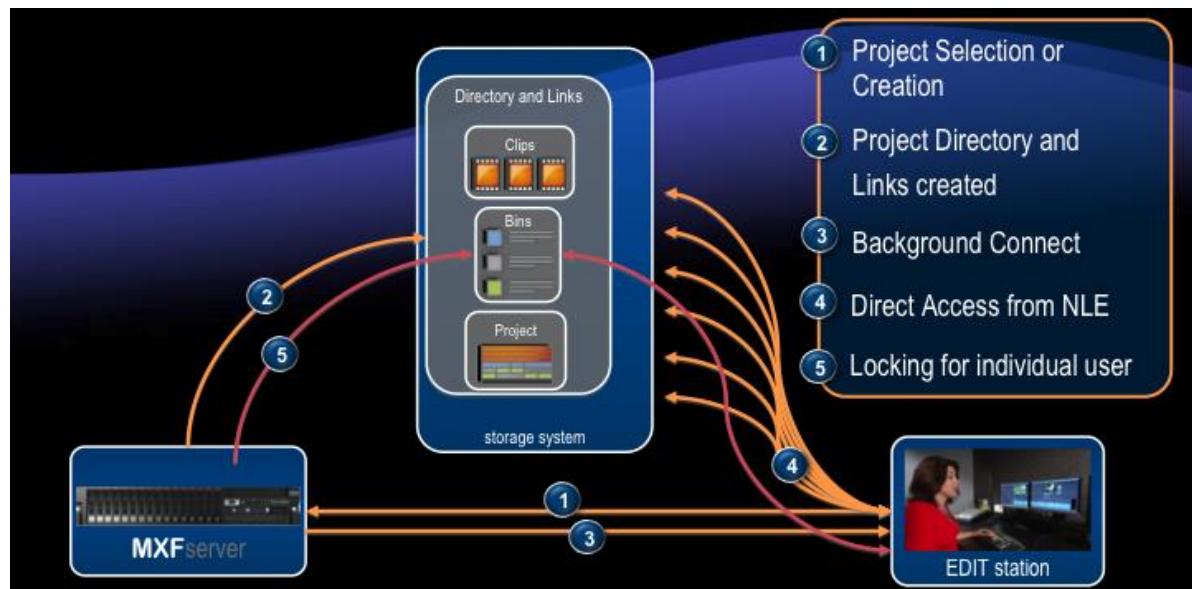
1. When you have logged in MXFserver with your personal details, MXFserver knows which information and media you are allowed to see like Business Units and what kind of actions related to your function you are allowed to do with this information and media. At this point you can compare MXFserver as a police agent. You select the NLE you like to edit with and connect the project you like to work in.

2. MXFserver will create a virtual workspace just the way the NLE like's to see it. For example Avid® likes to have the "Avid MediaFile" folder. Because of the virtual workspace the NLE's feel at home and will perform just the way you are habituated.

3. When you push the edit button the NLE will start.

4. You can start editing directly pointing to the real media on the storage, that way using MXFserver in your work flow it will guarantee that you never will have corrupted files, or an unwanted deletion of media.

5. With the MXFserver bin-locking system you can lock bin's to make changes.

Workstations (**Windows® and Mac®**) have direct access to storage in a controlled environment.

To have access to the system all users have to log in. According to assigned user permissions the MXFclient interface will show related buttons and features.
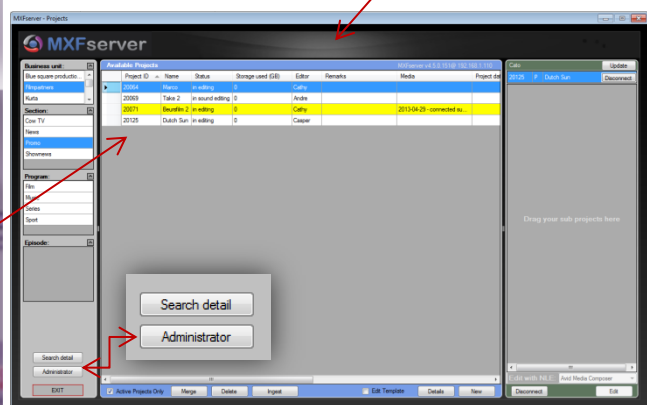
Administrator interface:
Only the administrator has the option to configure the company structure, storage quota, storage limit alarms, users, functions, rights. This interface has a dashboard function to monitor activity on the network and overviews of used/free storage space.

Login Interface:
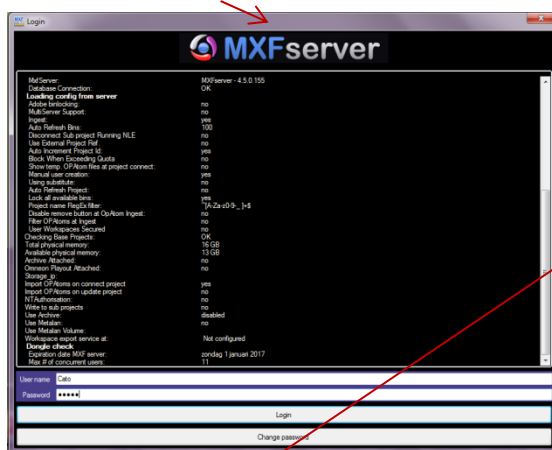
Project User Interface:

User interface:
In the user interface projects can be created, connected, edited, filtered, searched, (de)activated, merged and deleted. The user can only perform these actions within the business units for which the user has related rights.

Bin-locking interface:
Complete collaboration requires more than just sharing media files, which is why we designed our storage solution to include the sharing of project files. Our bin-locking system allows editors to instantly view copy or revise the work of colleagues. Example: selecting Avid® as a NLE, connecting a project and pushing the edit button the MXFserver Bin-locking commander window will show which bins are locked by who and on what edit station. **Green bins** you can write in, **red bins** you can read and steal media from and **grey bins** you can lock them for yourself, you can read and copy media from.

CATO-PC
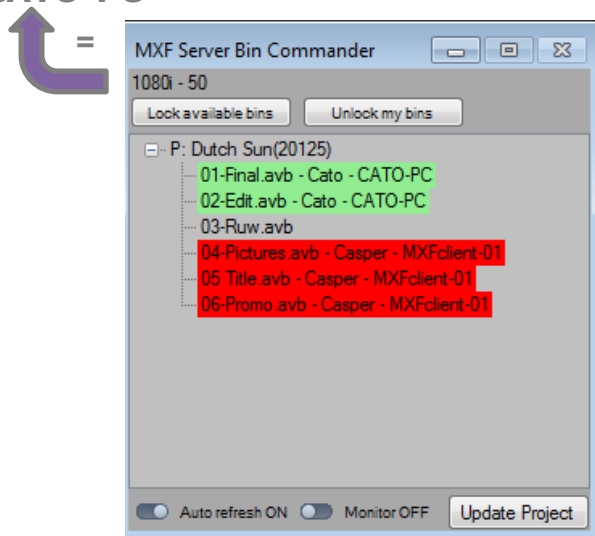
Casper-MXFclient-01
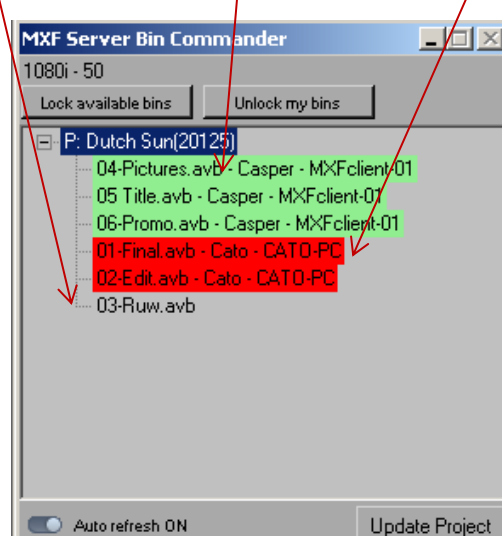
MXFserver

MXFserver works on Ethernet and Fiber channel connected, and will manage the use of GB per Business Unit. Log in as an administrator, set up and control a company (hierarchical) structure by creating, editing and managing business units, sections, programs and episodes. You also can have only one or two layers structure so only Business Units for example. This enables you to securely separate customers content and projects. MXFclient runs on Mac® and Windows®.

User (Mac®) interface:
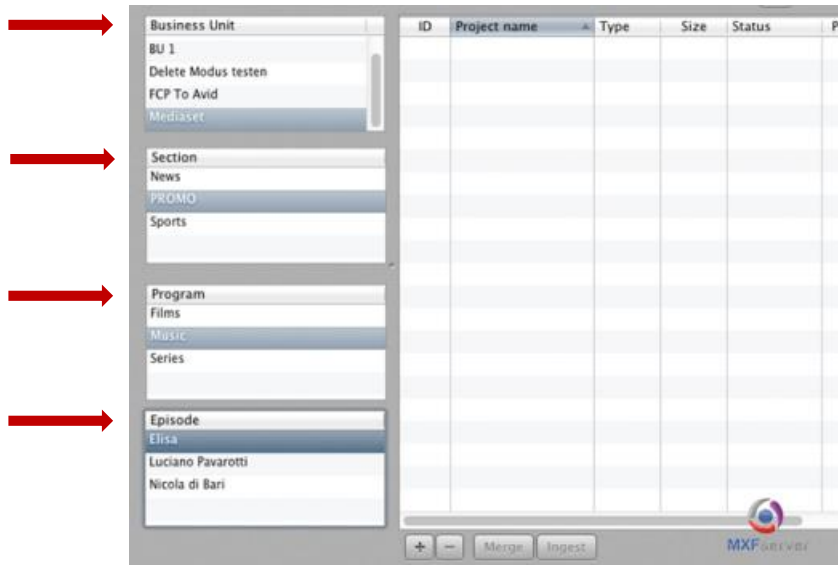
Administrator (Windows®) interface:
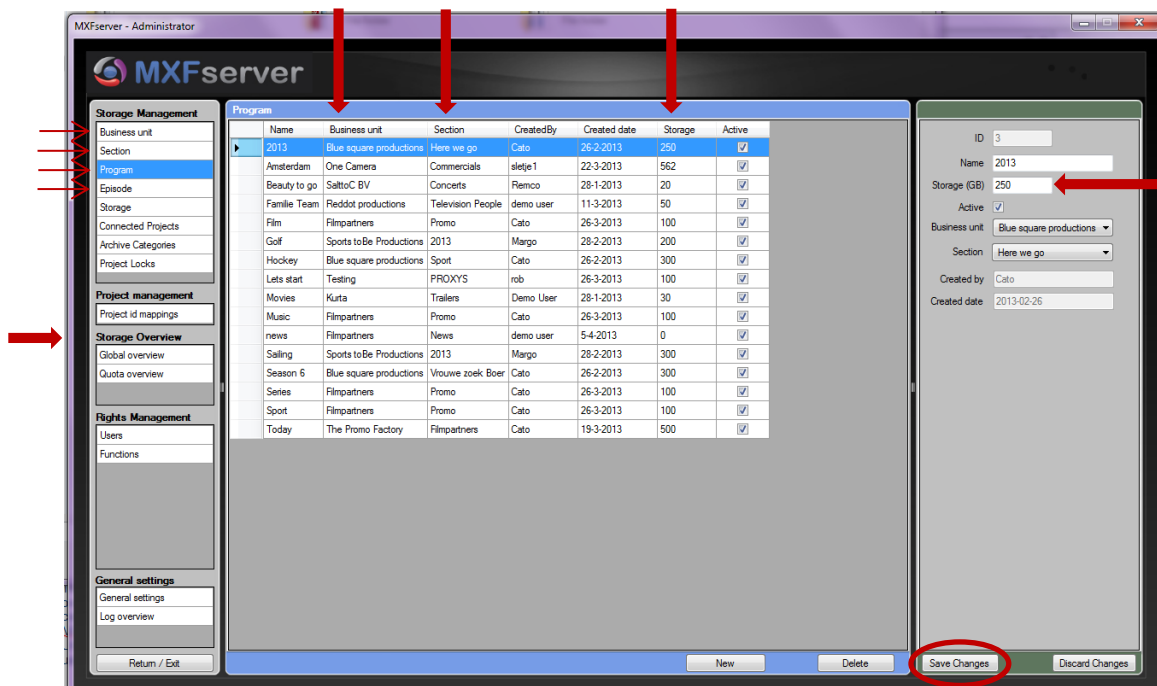
**Redundancy and easy migration operating alongside current Avid® ISIS® systems.
Standard Ethernet and state of the art Fiber support up to serial 40 gbps.**

MANAGE STORAGE QUOTA DYNAMICLY

The management of storage and quotas can be monitored and controlled in graphical overviews and exported reports up to the 3 levels of Business Unit, Section and Program. You can set the amount of available storage, manage clients, and implement storage quotas. MXFserver generates an Excel file of who has been using what amount of GB from Business Unit to Program level. This can be used for invoicing on storage capacity and to do analyses on storage use.
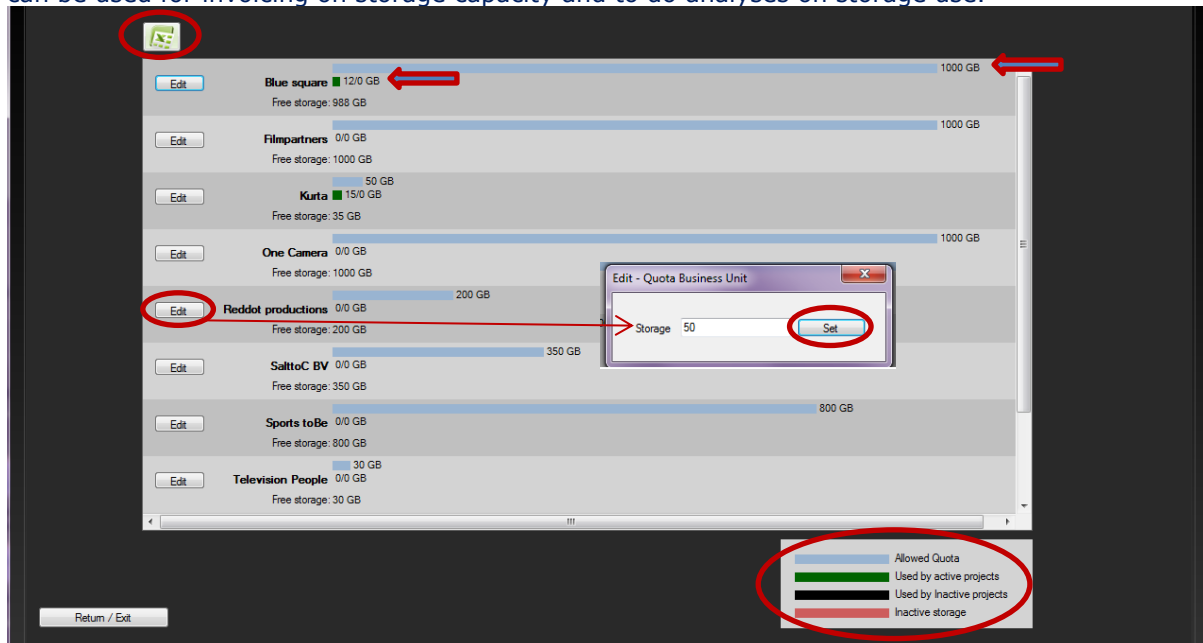
Storage quotas with optional alarms can be set on the top 3 levels (business unit level, section level and program level). These alarms refer to the physical storage and are set for all users. Only when you have reached the **physical storage hard quota alarm**, most of the time set at 95% use of the storage, no one can connect projects or ingest media. Media must be deleted first. The **soft quota alarm** is for example set on 85% and has reached the installed percentage so after having logged in; a message is displayed containing the information that the maximum physical storage is reached, with the exact percentage of the storage that is used. Users are allowed to continue working.
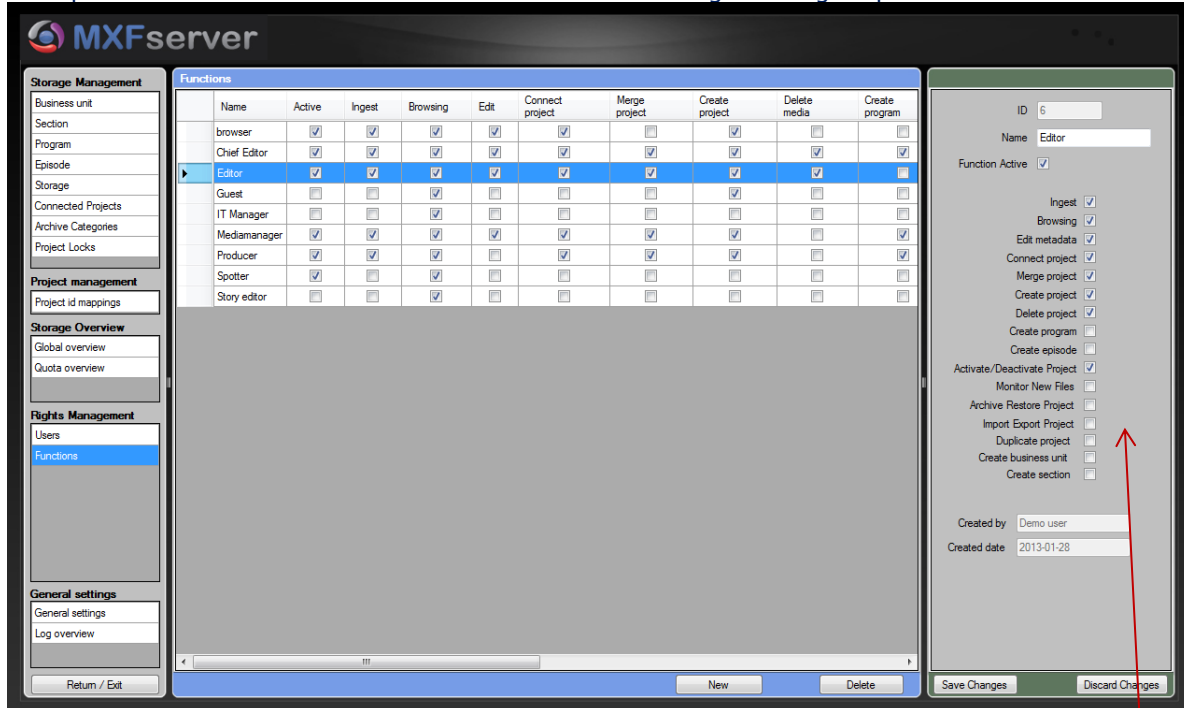

Business unit soft quota alarm is set in a percentage. This alarm refers to the installed quota for all Business units. If a Business unit has reached the installed percentage for quota users will see a dialog box during the connection of a belonging project, which notifies that the quota size for this Business unit is reached and that the administrator must be contacted to increase the quota. The user is allowed to continue to work.

ADOPT YOUR ORGANIZATIONAL MODEL AND WORKFLOW

Permission Management based upon the MySQL database.
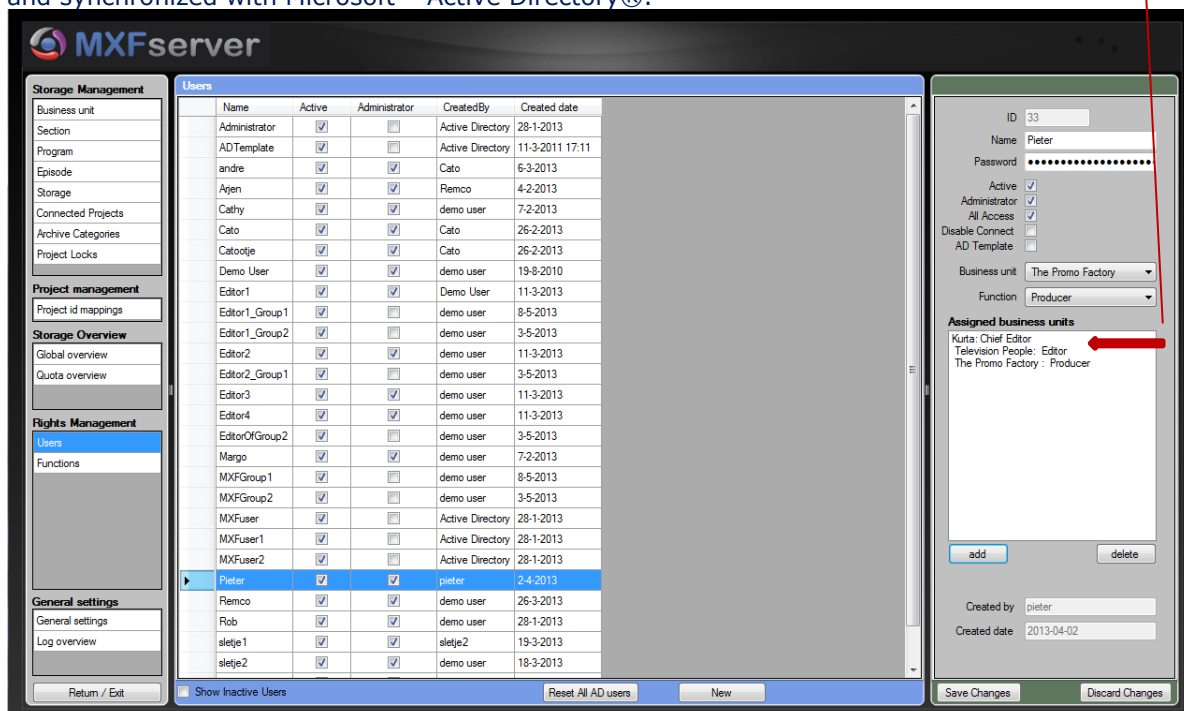
Set up as an administrator user "**Functions**" and selecting fixed rights per function

Setup as an administrator "**Users**" (this can also be set to handle Active Directory® as a client base), giving them passwords and assign users to one or more business units with specific functions. On this way you can link specific permissions to specific users. Users can be imported and synchronized with Microsoft™ Active Directory®.

MONITOR THE ACTIVITY ON THE NETWORK

Action log:

In these files all user actions (like login, create-, merge-, connect-, delete projects, etc.) are listed by user name, date, time, project name, computer name and IP addresses. More (elaborated) log files can also be checked on the server.

DATE/TIME	Computer name	User name	Project ID	Project name	
23-5-2013 11:03:54	CATO-PC	Cato	0		Logged in
22-5-2013 17:15:33	CATO-PC	Cato	20125	Dutch Sun	Disconnect project:
22-5-2013 17:14:02	CATO-PC	Cato	0		Exit C:\Program Files\Avid\Avid Media Composer\AvidMedi
22-5-2013 16:28:43	MXFclient-01	Casper	20125	Dutch Sun	Connect project
22-5-2013 16:27:32	MXFclient-01	Casper	20125	Dutch Sun	Error: Connecting project, An unexpected network error oc
22-5-2013 16:27:29	MXFclient-01	Casper	20125	Dutch Sun	Connect project
22-5-2013 16:26:42	MXFclient-01	Casper	20125	Dutch Sun	Error: Connecting project, An unexpected network error oc
22-5-2013 16:25:00	MXFclient-01	Casper	20125	Dutch Sun	Connect project

Connected projects:

This overview shows all online connected projects (including Project name, Project ID, User names, Computer-addresses and 'Connected since date') and projects that were not disconnected properly by the user (for instance in case of a system crash). A project can be forced to be disconnected. All locked bins (use for editing) in Avid® projects will automatically be unlocked and available for other users.

Search Detail:

Filter search by all project details (project name, from-to broadcast-, lineup-editing and created date, status, editor, business unit, section, episode, remarks, media, and size in GB etc.). Search for clip name, bin name, last saved bin. In this case there has been searched on status of the project, "in editing". This can be a part of your workflow. At a glance you can see as a sound engineer at which project you can start working. From here you directly can connect, delete or go to the details of a project.

MXFserver

Watch folders rules

MXFserver can be configured to observer one or more watch-folders, to each of which one or more rules can be assigned. These rules are applied to any files that are moved into that particular watch-folder and processed accordingly.

For example, you could create a watch-folder with a rule that matches any file whose name starts with "AB…" and then links those matched files to the defined project with ID 100.

> **Central storage is a requirement to be able to use this function.**

Adding a rule:
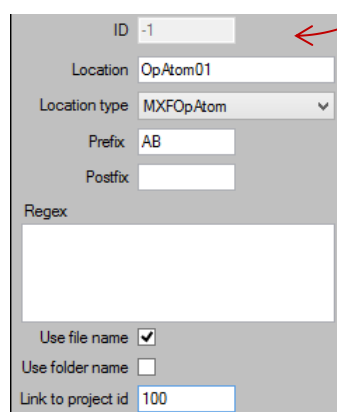
Open the MXFserver client and login with an administrator account. Press the "administrator" button to open the administrator window and select the "Watch folder rules" under "General settings".

Press the "New" button to add a new rule.

When the new button is pressed you can fill out a new rule at the right panel.
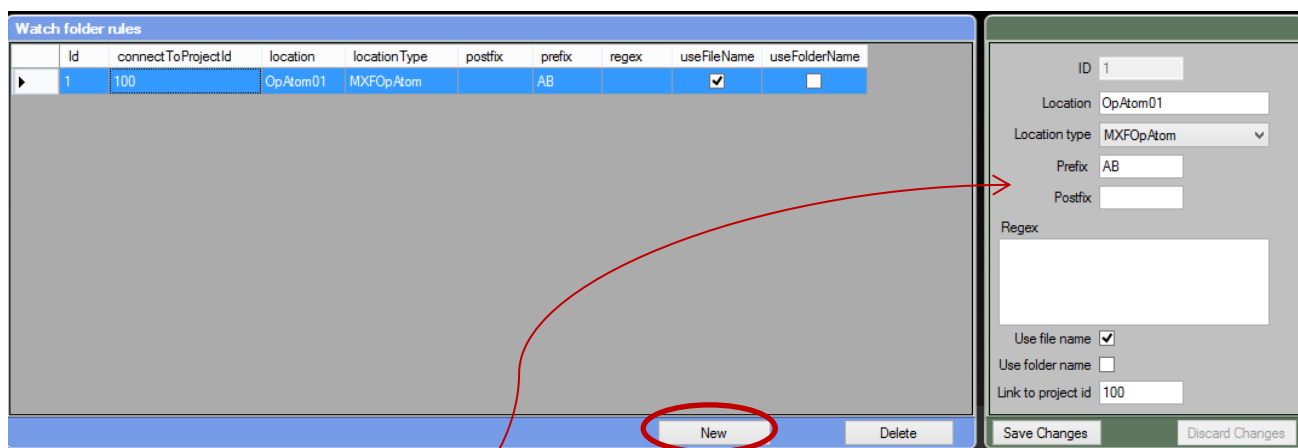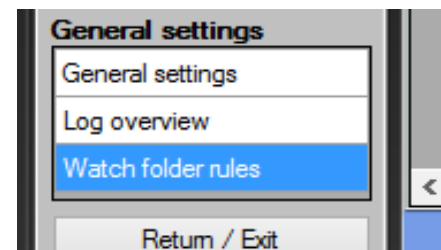
Example:

You want a new watch folder called "OpAtom01" on the central storage where MXFOpAtom files will be dropped by a third party device and where the dropped files starting with AB must be linked into the project with ID 100.

The location is the name of the watch folder in this case "OpAtom01". Select MXFOpAtom as location type. The prefix length must be set with a value AB, because the first two characters must match the result AB to link this file to the project with ID 100.

Press the "save" button to add the rule to your MXFserver workflow and the watch folder is directly created on the central storage.

API FUNCTIONS TO INTEGRATE WITH 3rd PARTIES

MAM Integration:

MXFserver integrates with MAM systems like axle™, Vidispine, Ardendo, FORK and miscellaneous proprietary MAM systems to expand the functionality of your workflow. MXFserver provides an API library with interfacing functionality.

Server = Windows®-Based:

As a Microsoft™ developer we have built MXFserver on standard proven Microsoft™ technology which makes maintenance efficient and accessible. Windows server® 2008 R2 operating system and Windows server® 2012 operating system can connect to any related Windows®-based application for example: Adobe® Media Encoder, Harmonic® Rhozet™ Carbon Coder™, Sorenson Squeeze®, Telestream®, Vantage® and Flip Factory® to enable the transcoding of media files. For easy communication with third party applications MXFserver uses a SQL database and the server can be accessed through the use of standard XML commands or it's SOAP API.

SOAP controlled services

Active Directory compatible/client
Access control
Bin locking
Default projects
User management
Storage management
Reporting
Segment separation option
LTO archiving
Multi server
Multi location server
Web access
Pre edit

EVS XT Access can provide MXF OPAtom growing files which can be used in Avid® Media Composer®.

The file can be served through MXFserver in MXFserver projects, using the regular MXFserver Ingest manager.

The system requirements are:
- EVS Multicam XT 10 or 1101
- XTAccess version 1.16 (general release) or 10.17
- IPDirector 5.99

Test NLE environment Avid® Media Composer® for Mac® OSX.

The XT produces OPAtom files DNxHD (185), based on the libmxf library, and are fully compatible and recognized as growing files.
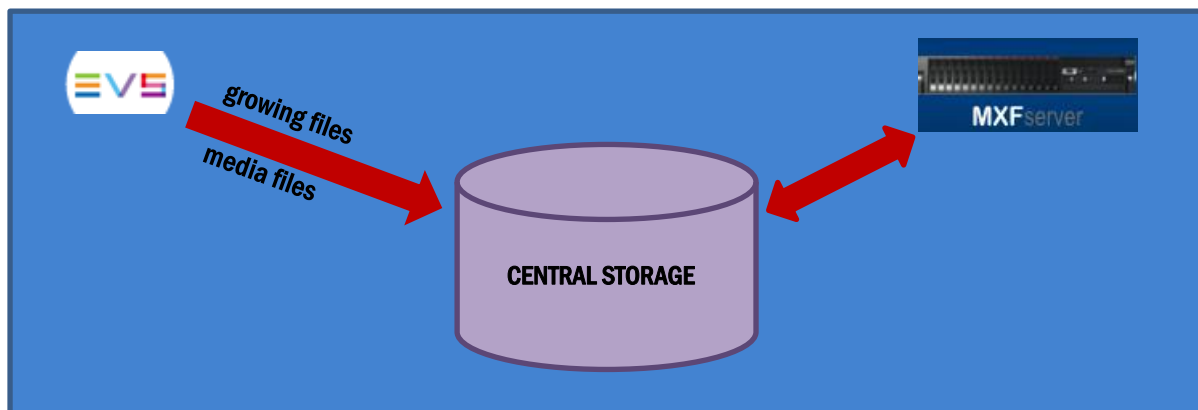
Workflow:
IPDirector should target an **ingest location** on the MXFserver storage.
With MXFserver, the files are ingested using the MXFserver Ingest Manager (MXF Import Files) function.

This links the files to the TEMP_OPAtom location within an MXFserver project.

When an users connects, he gets the option to import the files to his Avid MediaFiles directory from where they are available using the Media Manager.

Example configuration:
VS Ingest location:
        //MXFS-storage/Ingest/EVS

In mxfserver.ini map the ingest location to:
        //MXFS-storage/Ingest

Map the ingest location to the Windows® or Mac® client:
        Windows®: //MXFS-storage/Ingest -> Drive X:\
        Mac®: //MXFS-storage/Ingest -> /Volumes/Ingest

MXFserver™ & Microsoft™ Active Directory® Integration.

If MXFserver is deployed in an environment managed as Active Directory® Domain, MXFserver can take advantage of this by using Active Directory® to streamline the MXFserver workflow.

MXFserver Active Directory® integration is currently limited to providing the functionality to automatically use User-Accounts/-Credentials from Active Directory® to authenticate users against MXFserver.

In practice this means that when machines (MXFserver and Clients/Workstations) are joined in the same Active Directory® Domain, the MXFserver client software will automatically use the Active Directory® users' credentials for logging users into MXFserver.

For the end user this eliminates the additional MXFserver login step that is usually required by MXFserver, instead, MXFserver client automatically uses the credentials they used for logging into the machine.

For system administrators it makes managing MXFserver users transparent, as it eliminates the need to maintain a separate MXFserver user database.

Note that it is possible that MXFserver and/or MXFserver client automatically make use of additional Active Directory® features, just like any other application running in an Active Directory® environment. It is important to note however, that this can incur problems in how MXFserver Client functions and can cause MXFserver Clients to behave erratically.
Whether any problems will occur, or what those problems will be, is totally dependent on how your Active Directory® domain is setup.

Apart from issues that are MXFserver related, Filmpartners can't provide support for issues caused by your Active Directory® configuration, as this is primarily the responsibility of your IT department.

Filmpartners can also not provide support for setting up your Active Directory® domain, or for any Active Directory® related features other than user authentication against MXFserver that is mentioned above. Please refer to your local IT department in such cases.

CREATE YOUR OWN TEMPLATES
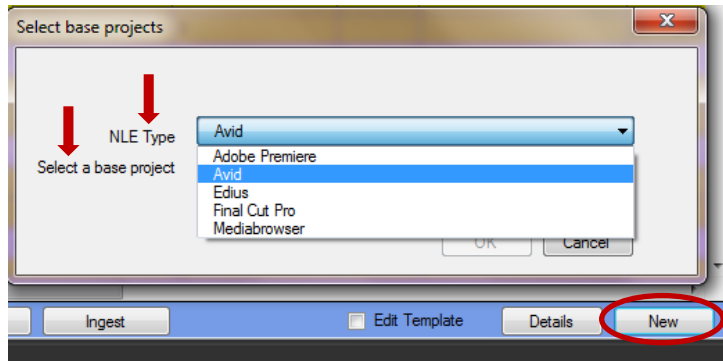
Select base project template: Push the "**New**" button to create a new project. Once selected an editing system (NLE Type), their belonging templates can be selected containing an existing video format/type. Once started up the editing system, all corresponding settings are already made. When you check the "Edit Template" box you will be able to change the based templates.

Create project template: Based on a base template, the user with administrator rights can create project templates in which all kinds of media assets and sequences can be default presented (for instance graphics, bars, tones, music, titles etc.). These project templates are connected as projects and media can be ingested by using the regular Editing Capture/Import Tools, by using the MXFserver Ingest Manager or by connecting other projects as 'sub' projects and consolidate/copy the media to this template project. Project templates can always be connected and the content can always be modified or deleted.

MERGE PROJECTS

MXFserver offers the user the possibility to **merge multiple projects to 1 project**. The media databases and bins of the merged projects are physically moved. Once the separate projects are joined, their media databases and bins cannot be isolated again. When a merging procedure is completed, notifications (the status of the media, the name of the executer plus date and time) are displayed in the project Details ('Media') of all involved projects. During the merging process of projects the media will be moved on the server, the quantity storage remains the same.

DELETING PROJECTS & MEDIA

Delete media and projects information:
Select the project and push the "Delete" button. Delete projects completely from the server by checking the "Delete media and project information" and push ok.

Delete only the media:
Select the project and push the "Delete" button. Check the "Delete only the media" and push ok. If for instance the project media is archived, the material can easily be recaptured again if needed. Once deleted the media files, all bins, master clips and sub clips are still there once a project is connected. The media however is offline. A notification concerning the status of the media, the name of the executer plus date and time is visible in the Project 'Project Details' in the field 'Media'.
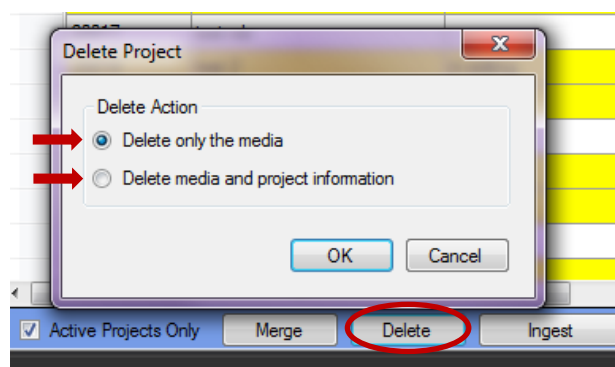
Delete media on clip level:
The user can delete media files within a project by using the **delete mode** (drag the project in the 'main project' area and right mouse click the project). If the delete mode is enabled, the NLE can be launched and the user can delete the files within the NLE or in the virtual workspace. The delete mode can be (de)activated during editing.

INGEST DIRECTLY INTO THE PROJECTS

MXFserver offers its own ingest platform that handles file based ingest for common formats like the XDcam family, P2, AVCintra, Quicktime, OP-1A, OP-Atom, DNxHD and many other file based formats without starting up the editing system. The media will go directly into the project. Just select the files and push "Start ingest".
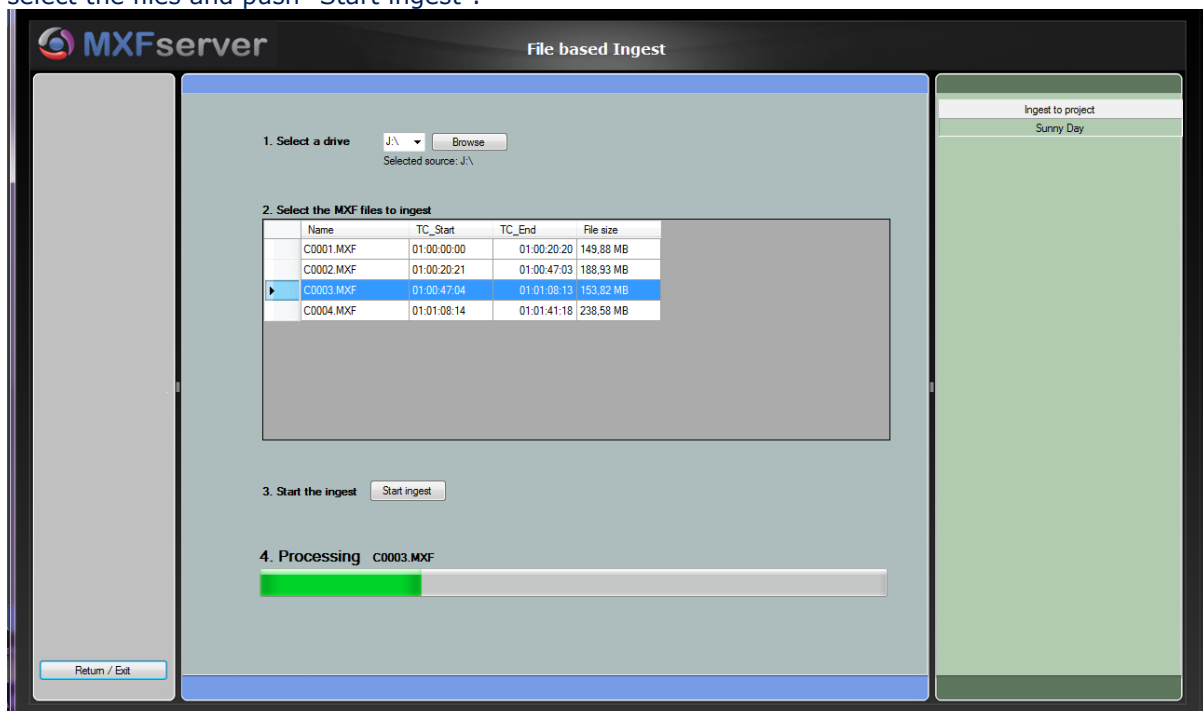
File import directly into the projects is also possible with Prelude®, Avid®, Airspeed, EVS, Harmonic® Spectrum™ & MediaDeck™, MOG-Speedrail, Telestream®, Pipeline™ or restore directly from archive. Because of MXFserver you can be ingesting and editing at the same time and even use your ingested files directly like **growing files.**
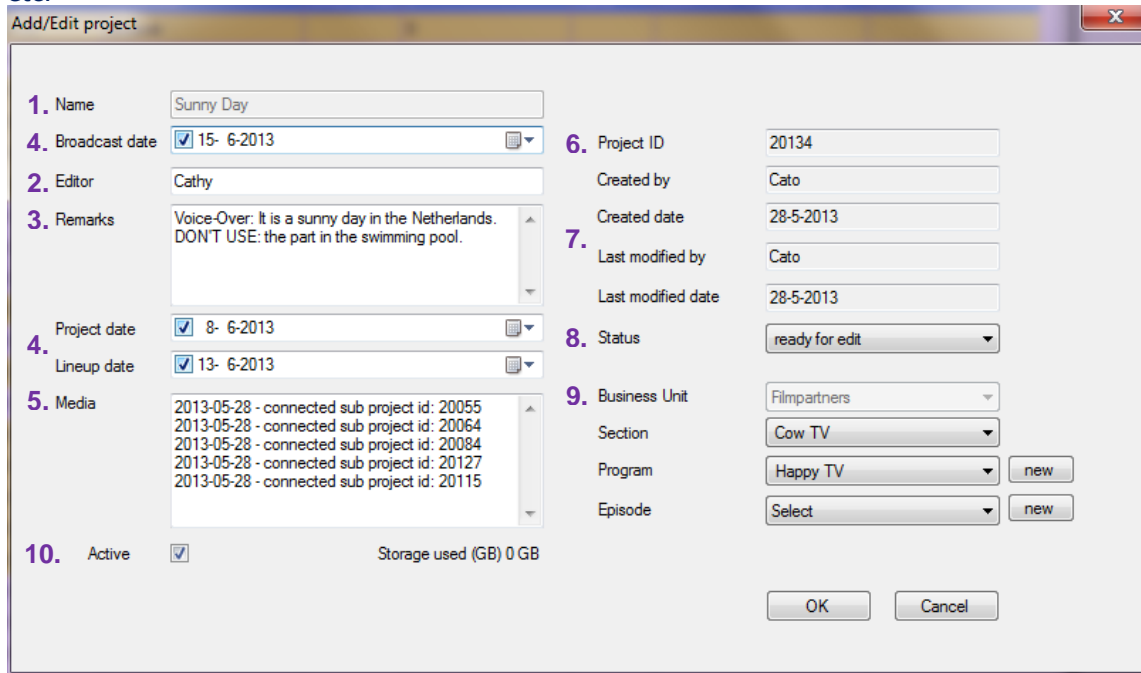
ARCHIVE PROJECTS

MXFserver can **archive projects** to a single LTO drive or by using TSM to a range of LTO robots. Projects can be archived to external spinning disk environment or LTO 5 and be restored back. The 'Archive' button is enabled in the project details of a project. The administrator has the option to archive the project and remain the files on the server or delete them. After the project is archived or restored notifications (name executer, date and time) will automatically be made in the Project Details 'Media'. TSM: **MXFserver connects to IBM® TSM manager to control large LTO environments**.

PROJECT DETAILS A PART OF YOUR WORKFLOW

Each project has project details that can be added by the user. The metadata can be entered during the creation of a project, but can also be modified at any time, if given the proper rights. All this metadata is also handy for searching specific project details for the benefits of the efficiency of your workflow. Like Broadcast date, status of the project so you know at which level the project is etc.

1. **Project name:** character limitation set at 45 characters. If you rename a project, Avid® and Final Cut Pro® will display the first given name due to their databases.

2. **Editor name:** can be entered in by the user

3. **Remarks:** can be entered by the user

4. **Broadcast-, project and Lineup date:** can be selected by the user.

5. **Media:** remarks can be entered by the user, but also MXFserver generates automatic notifications after processes takes place like the merging and archiving of projects and the deletion of media files of a project (both will show the username, date and time of the executer). Also memorized sub projects are automatically notified in Media.

6. **Project ID:** automatically generated by MXFserver or by customer based application.

7. **Created/modified by and date:** automatically generated by MXFserver after the action.

8. **Status:** The pre select process stages for a project status is divided in 'ready for' and 'in' and refers to ingest, edit, final edit, color- or sound editing, transcoding, play-out, archiving or deleting. Status can be changed by the user any time. (status names can be changed suitable to your workflow)

9. **Company structure:** Each project must be assigned to a Business Unit. Section, Program en Episode is not mandatory. Once selected the Business Unit during the creation of a project, the Business Unit cannot be changed.

10. **(De-) activate projects:** The project can be de-activated if the user has the appropriate rights.

PLAY, COPY AND EDIT MEDIA SAFE BETWEEN PROJECTS

Connect Main- and Sub projects:

To be able to share media between projects, the user can connect multiple projects at the same time in the user workspace. In MXFserver a distinction is made between a main project and sub projects. The first selected project that is dragged to the user workspace to connect becomes 'main project'. If a project is connected as a main project, the user has 'read/write' access to the project: all changes will be saved. All other projects that are dragged to the user workspace to connect become 'sub' projects. There are two possibilities how to handle subprojects in your workflow. **1.** If a project is connected as a sub project the user has **'read' access** to the project. All media belonging to these sub projects can be used or copied into the bins or timelines of the main project. **2.** If a project is connected as a sub project the user has **'read/write' access** to the project. **All projects can be connected as main projects and as sub projects.**
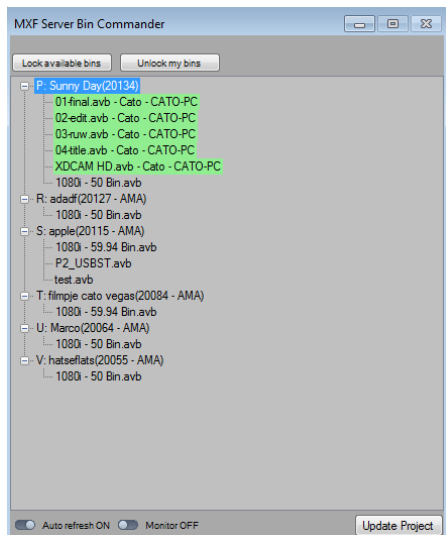
In case of Avid® all bins in sub projects cannot be (un)locked and all bins have to be opened within separately within the NLE conform the Avid® protocol.

In case of Final Cut Pro® and Adobe® all material in sub projects are locked.

With an Apple® operating system there is no limit of simultaneously connecting sub projects. With a Windows**®** operating system you can connect up to 26 projects simultaneously.

The coupling of all these projects is always real time and without export/import or consolidating.

Connecting multiple projects can be done before starting and during the editing process. If the user disconnects a sub project, the used media of that sub project will be offline in the main project. In order to keep the media in the main project online, the user can either consolidate the media to the main project or reconnect the project as a sub project again.

Disconnect Main- and Sub projects:

All the sub projects that do not need to be associated with the main project next time during a re-connection (for instance because you did not use media from this sub project or you used media but consolidate the media to your main project), can be separately be disconnected in the user workspace. Sub project(s) that need to be associated with the main project next time during re-connection (for instance because you have used media and do not want to consolidate) can be memorized by selecting the main project in the user workspace and disconnect it. An option menu is displayed whether **all listed sub projects should be reconnecting next time or not**. If so notifications (of connected sub projects and if a project is main project) are made in all belonging projects 'project Details' Media. Projects stored as 'sub projects' cannot be deleted. They have to be separately disconnected from the main project first. The next time when a 'main' project is connected, the user has the option to automatically reconnect sub projects as well.
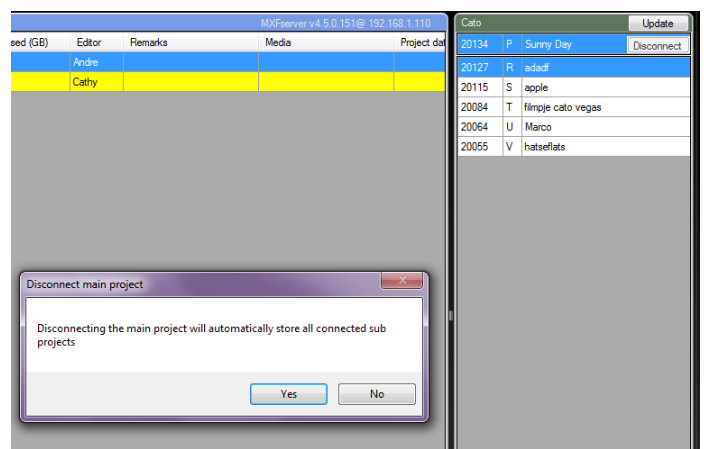
By clicking **Yes** all associated sub projects will automatically be connected. By clicking **No** the associated sub projects will not be reconnected but memorized for the next time.

MXFserver

SHARED EDITING SERVER BASED PLATFORM

Multiple editing clients can work on a virtual workspace that is linked to the original media. **Sharing media without a conflict or copying**. MXFserver instant creates a virtual workspace.

Share 1 project with multiple users:
Avid® and the **MXFserver bin-locking system**
In order to have read/write access to a bin, a user has to lock a bin first in the MXFserver Bin Commander window, before opening the bins in the Avid® project window. By locking bins, a bin owner is also allowed to rename bins, delete bins and move bins in- and out of folders in the Avid® project window in a safe and secure way. A bin can only be locked by one user at the time. If a user locks a bin, his name and workstation will be displayed at the end of the bin name, so that other online users can see who has locked which bins. When you open a locked bin Avid® will give you a warning `the bin is locked. Changes will not be saved`. But you are still able to play sequences, use media and sequences from this bin and bring them into your own locked bin.
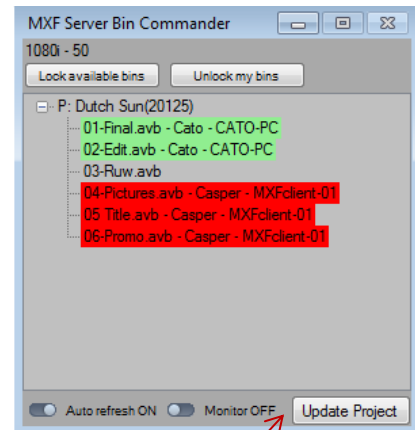
Bins can automatically be refreshed depending on the installed '**auto refresh**' interval time (in seconds) on the server. During a refresh, all new-, moved-, deleted and/or modified bins made by a user are automatically displayed in their own **MXFserver Bin Commander**. The auto refresh works at a local user level. Users will not see the new created-, moved-, deleted and/or modified bins that other online users have made, unless they click the '**Update Project**' button in the MXFserver Bin Commander. If the user does not want the bin list automatically to be refreshed, he can switch the 'Auto refresh' button to off.

Final Cut Pro® and the **locked user project tabs**
For every user that connects a Final Cut Pro® project, MXFserver creates a '**user project tab**' with the user name. All bins, clips and sequences that are created in this tab have 'read/write' access for this user only. For the other users this tab will be locked. They can still see, copy or revise the work of other colleagues but their bins, clips and sequences can never accidentally be deleted or overwritten. Other users can see other user project tabs, because they will be displayed with the annotation (L) and the user name in capital letters behind the project name. To update projects among users online during editing, select the project in de MXFserver user workspace and click the 'Refresh' button.
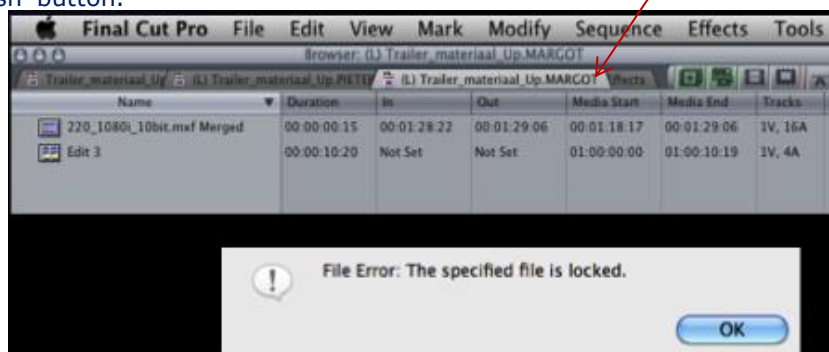
Adobe® Premiere® Pro and the **locked user folders**
For every user that connects an **Adobe® Premiere® Pro** project, MXFserver creates a '**user project folder**' with the user name. All bins, clips and sequences that are created in this folder have 'read/write' access for this user only. To other users this folder will be locked. They can still see, copy or revise the work of other colleagues but their bins, clips and sequences can never accidentally be deleted or overwritten. Other users can see other user project folders, because they will be displayed with the annotation (L) and the user name in capital letters behind the project name. To update projects among users online during editing, select the project in de MXFserver user workspace and click the 'Refresh' button.

SWAP BETWEEN MULTIPLE EDIT SYSTEMS POINTING TO THE SAME MEDIA

Share media within different Editing Systems in different projects: Because MXFserver is project based, all material and data belonging to a project is gathered in one container which receives the unique ID code as a name. During the creation of a project an editing system (NLE), Avid®, Final Cut Pro® or Adobe® Premiere® Pro, must be selected first. All these different types of editing platforms require a unique folder structure. The folder structure how Avid® likes to see it is completely different than the folder structures for another edit system. By selecting the editing system, MXFserver creates the appropriate folder structure within the container. During editing the media ingested in a Final Cut Pro® project will go to a different folder than in case of an Avid® project. In case of sharing media, the user must look up the virtual drive of the connected 'sub' projects and look up the proper folder within the folder structure for opening or importing the media. Native Avid® files are stored in Avid MediaFiles/MXF/ while other media is stored in AMA Pool and Media.
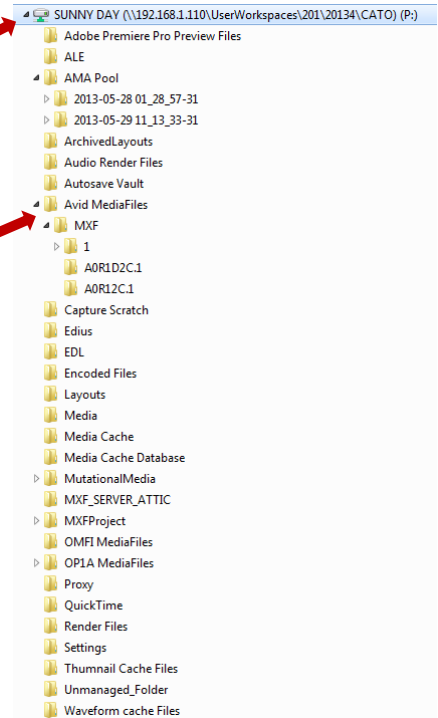
Sharing sequences within different Editing Systems:
By exporting an AAF or XML you can easily share sequences between different edit systems without consolidation or transcoding. Because of the virtual linking in MXFserver you will point to the same media but just through another edit system surrounding.
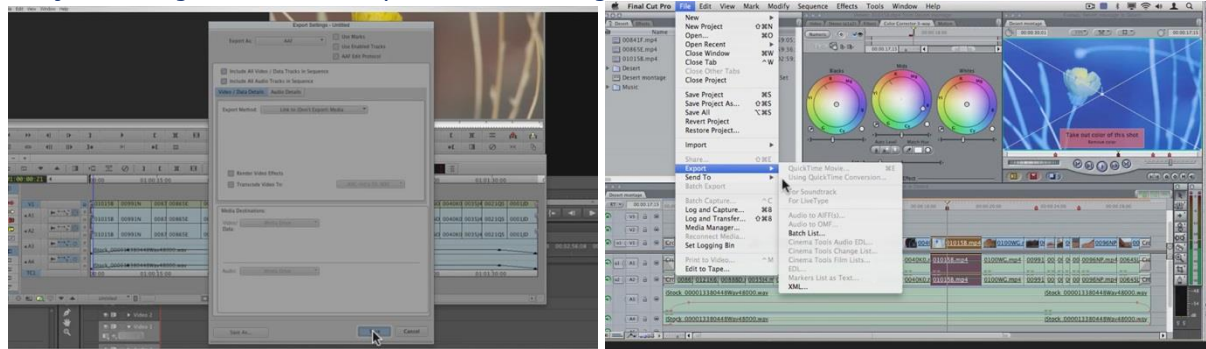
Sharing material with the unmanaged folder: MXFserver added an extra folder in the project directory: the unmanaged folder. In this folder users can save anything (pdf, docx, xlsx, pptx, zip, audio files, video files, etc.) they like and wish to share with other users on project level. In the unmanaged folder users can create subfolders in as many layers as preferred. To have access to the unmanaged folder, a project has to be connected first so that MXFserver creates the virtual drive.

Monitor New Files:
To isolate new incoming OP-Atom files, for instance for the purpose of export, the user can create an Avid® refresh time-stamp during the editing process. If the right **'monitor new files'** is activated in the users Function, the select-button 'Monitor off' will be visible in the MXFserver Bin Commander, during Avid® editing. By switching the button to 'Monitor on' all actions that involves the creation of new op-Atom files- from that point- will be monitored by MXFserver. When the button is switched off, only the new created (monitored) OP-Atom files will be placed in the subfolder 'monitored files' in the MXFserver project directory and can be accessed by the user whenever the project is connected. The monitored files do not have a shared functionality with other online users. They will not appear in other online user workspaces once they start to update the project. The files are only accessible on user level.

PROFESSIONAL MEDIA BROWSING STATION ON ANY PC & LAPTOP

The MXFmediabrowser is a smart-tool that can be used **standalone**, in a **network** or even **remotely** with an internet connection. Journalists, producers and researchers can **browse, spot, pre-select video segments, add comments/metadata** and **output** their **EDL**. Browsers in general are applications used by non-editors, i.e. journalists, producers, researchers that do not have access to an editing client like Avid® Media Composer®, Pro Tools®, Final Cut Pro®, Grass Valley® EDIUS® and Adobe® Premiere® Pro. MXFmediabrowser is a complete file based workflow on any **desktop, laptop** or Windows®–based **tablet**.
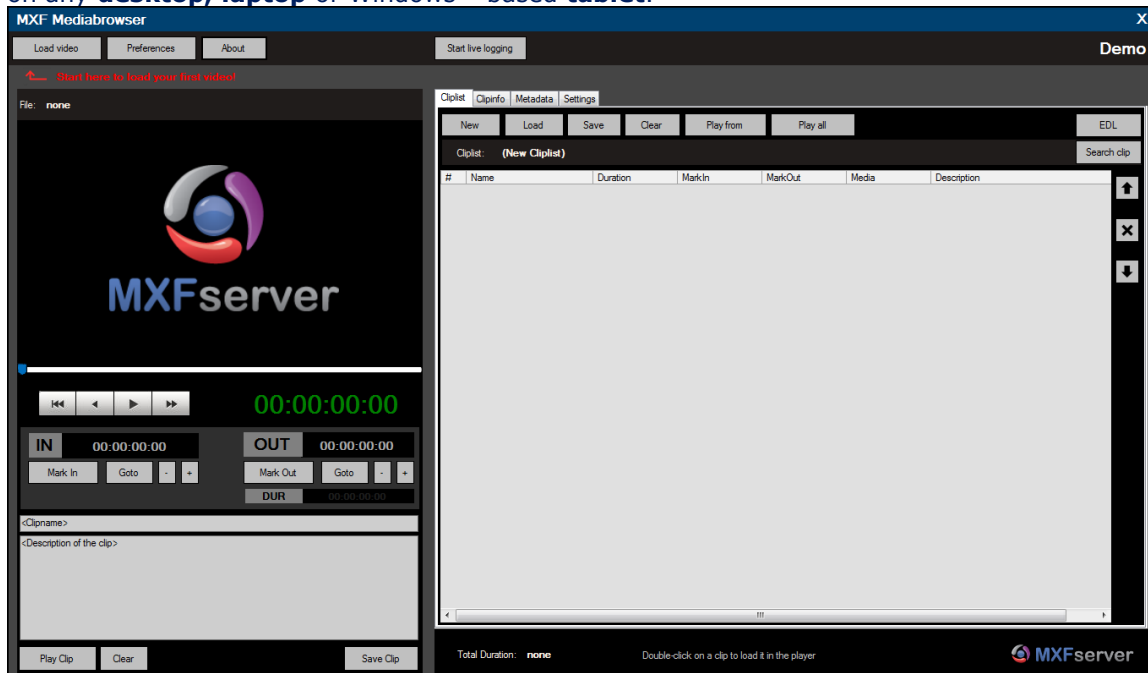
In many cases the original high-resolution media is transferred to **low-resolution** like 'YouTube' quality video so it can be browsed and indexed by a user and accessed over the internet or an internal network. The MXFmediabrowser has an option to work directly with **high-resolution** Sony© XDcam™ 50 Mbit or P2 HD/SD material also for those companies that have defined their workflow in this way.

As an add-on to the MXFserver platform it can handle the **project structure** of this system and can be integrated with MXFserver in several ways, including remote browsing. The MXFmediabrowser can also read from Harmonic© Rhozet™ Carbon Coder™ including time codes and outputs an **Edit Decision List** (EDL) for Avid® Media Composer®, Pro Tools®, Final Cut Pro® and Adobe® Premiere® Pro.

Using intelligent buffering and caching the player is very fast and feels comfortable to experienced editors. It uses mouse control but also the series of **basic shortcuts** from the TV industry. (I,O,J,K,L,Q,W, SPACE,←,→ etc). The audio tracks of transcoded clips are set to 48 KHz samples to have excellent quality. Up to 4 tracks can be monitored together or individually. Clip lists can be stored locally and re-edited many times or revised by other MXFmediabrowser users. It is also possible to **create a clip list**, play the selection and send it to a chief editor for confirmation or remarks. You can export a **XML or AAF** out of the MXFmediabrowser so you can use the cliplist in any NLE like the Avid® Media Composer®, Pro Tools®, Final Cut Pro® and Adobe® Premiere® Pro.

The MXFmediabrowser comes in combination with our **MXFtranscoder** that will transcode ingested files from MXFserver to low-resolution video's used by the MXFmediabrowser. The MXFtranscoder runs on a **separate Server** with minimal specification 8 cores - 2.66 Ghz - 12GB RAM

MXFtranscoder is tested with almost **all video standards**. XDCAM, XDCAM HD, XDCAM EX, P2, DVCPRO50 (.mov wrapper), DVCPROHD (.mov wrapper), RDD9 (.mxf wrapper), Avid OPATOM DNxHD 85, Avid OPATOM DNxHD 120, Avid OPATOM DNxHD 185, Avid OPATOM MPEG 50, Avid OPATOM MPEG 40, Avid OPATOM MPEG 30, Avid OPATOM DV 25.

MXFserver: **version 4.6**
MXFclient: **version 4.6**

Server software: **Windows Server**® **2008 R2** operating system **& Windows Server**®
                        2012 operating system 64bit

Server Specs: **IBM**® *x3650 M4* (Media through the server)
                        -> Xeon 6C E5-2640 95W -> 2.5GHz/1333MHz/15MB -> 3x8GB, O/Bay
                        HS 2.5in SAS/SATA -> 2x IBM® 146GB 2.5in SFF 15K 6Gbps HS SAS HDD

                        Dell™ *R610 or Dell R710* (server as database and client connection to
                        storage) -> Total 8 cores -> 2,66 GHz -> 3x 4GB Memory 1333MHz, Single
                        Rank -> 2x 146GB SAS 6Gbps 15k 2.5" Hybrid HD Hot Plug in 3.5" Carrier
                        Software

Windows client: Windows®–based workstation with Windows XP® 32/64 bit, Windows
                        Vista® 32/64bit, Windows® 7 32/64 bit & Windows 8 32/64 bit

MAC client: Mac**®** 64 bit OS X 10.6 (snow leopard) & Mac OSX 10.7 Lion &
                        OS X 10.8 (Mountain Lion) & OSX 10.9 (Mavericks)

Database: MySQL 5.1 on Windows Server® 2008 R2 operating system & Windows
                        Server® 2012 operating system 64 bit.

Protection: MXF-Dongle

MXFtranscoder: runs on a separate Server! with (minimal) 8 cores - 2.66 Ghz - 12GB RAM

Edit Systems: Adobe® Premiere® Pro CS 5, CS6 and CC
                        Avid® Media Composer® 4 up to 7.0.3
                        Avid® Adrenaline™
                        Avid® Symphony® 6.5.2
                        Avid® News Cutter® 10
                        Grass Valley® EDIUS® 6.5
                        Final Cut Pro® 6 & 7
                        Pro Tools® 8 & 9 & 10 & 11

Optional Systems: After Effects® & Prelude®
                        Autodesk Flame® & Autodesk Smoke®
                        Dalet®
                        DaVinci (f.e. – file exchange)
                        Nitris® DX (Mojo) in combination with Avid® Media Composer®
                        Pyramix 7 and VCube™ 3

Formats: **Avid**®**:** all Avid supported MXF formats.
                        Final Cut Pro®**:** all Final Cut Pro® Quicktime supported formats or MXF
                        through plugin like MXF4MAC, Calibrated and Cinemon® from Sony®
                        Adobe®**:** all MXF and Quicktime supported formats for Adobe**®** Premiere**®**
                        Pro. Mixed formats of MXF and Quicktime can be supported in the same
                        workspace.

File Import: Prelude®, Avid®, Final Cut Pro® 'Log and Transfer' and Sony® Transfer
                        Manager or restore directly from archive.

Ingest Formats: MXFserver offers its own ingest platform that handles file based ingest for
                        common formats like the XDcam family, P2, AVCintra, quick time, OP-1A,
                        OP-Atom, DNxHD and many other file based formats without starting up
                        the editing system.

SDI Import and Edit while ingest:	Airspeed, EVS, Harmonic® Spectrum™ & MediaDeck™, MOG-Speedrail, Telestream®, Pipeline™ and Amberfin™	
MXFtranscoder:	XDCAM, XDCAM HD, XDCAM EX, P2, DVCPRO50 (.mov wrapper), DVCPROHD (.mov wrapper), RDD9 (.mxf wrapper), Avid OPATOM DNxHD 85, Avid OPATOM DNxHD 120, Avid OPATOM DNxHD 185, Avid OPATOM MPEG 50, Avid OPATOM MPEG 40, Avid OPATOM MPEG 30, Avid OPATOM DV 25. Files that are different from these standards could work but this isn't tested at this moment.	

MXFserver product overview:

Product Code	Description	Info
	License MXFserver	
MXF-L-10	MXFserver license for connecting up to 10 clients (min.5 concurrent clients)	
MXF-L 25	MXFserver license for connecting up to 25 clients	Volume discount
MXF-L 40	MXFserver license for connecting up to 40 clients	Volume discount
MXF-L-60	MXFserver license for connecting up to 60 clients	Volume discount
MXF-L-Unlimited	MXFserver Enterprise system (unlimited clients)	Volume discount
	License MXFmediabrowser	
MXF-MBL	MXFmediabrowser Enterprise license (25% of MXFserver suggested end user license price, based on number of MXFserver clients, unlimited MediaBrowser users	There is a minimum price
	Support	**% of total license price**
MXF-1YES	Email software support and updates (1 year) 8% of total suggested end user license prices	8%
MXF-1YOS	Office hours phone/email software support & updates (1 year) (Mo-Fr 09.00 - 18.00h local time) 15% of total suggested end user license prices	15%
MXF-1Y24/7S	24/7 phone and email software support and updates (1 year) 30% of total suggested end user license prices	30%
	Services	
MXF-I	Software Installation per day	
MXF-TI	Training and Instruction per day	
MXF-WC	Workflow / Concept consultancy per day	
MXF-REM	Remote software support per hour	
MXF-Dongle	Dongle to run MXFserver software for each server, max. number of concurrent users will be programmed on this dongle. Shipping costs not included.	

1. Prices in USD and EURO (taxes excluded) ▪ one-off license price ▪ 1 client (SD/HD/2k/4k) is for 1 Avid®, Apple® Final Cut Pro®, Adobe® Premiere® Pro edit workstation or 2 ingest stations.
2. Installation and training is based on day price (travel, hotel, shipping costs are additional)
3. Support price per year (in advance) in % of total of license price (MXF and MXF-MB)
4. License prices and support are based on number of clients
5. Reseller provides 1st line support, FilmPartners 2nd line support
6. Government- and Educational license discount please contact sales@mxfserver.com
7. Multiple year support price on request
8. FilmPartners may change prices periodically

MXFserver software matrix 10 januari 2014:

		Server Component	Windows client	Mac client
Operating System	Windows Server® 2008 R2	✓	-	-
	Windows Server® 2012	✓	-	-
	Windows XP® SP2	-	✓	-
	Windows Vista®	-	✓	-
	Windows® 7	-	✓	-
	Windows 8	-	✓	-
	Mac OSX 10.5 Leopard	-	-	✓
	Mac OSX 10.6.8 Snow Leopard	-	-	✓
	Mac OSX 10.7 Lion	-	-	✓
	Mac OSX 10.8 Mountain Lion	-	-	✓
	Mac OSX 10.9 Mavericks	-	-	✓
Video Editing	Avid® Media Composer® 5	-	✓	✓
	Avid® Media Composer® 6	-	✓	✓
	Avid® Media Composer® 7	-	✓	✓
	Avid® News Cutter® 10	-	✓	✓
	Avid® Adrenaline™	-	✓	✓
	Avid® Symphony® 6.5	-	✓ (Avid® Symphony® 6.5 and higher)	✓ (Avid® Symphony® 6.5 and higher)
	Apple® Final Cut Pro® 6	-	-	✓
	Apple® Final Cut Pro® 7	-	-	✓
	Apple® Final Cut Pro® X	-	-	*
	Adobe® Premiere® Pro 5	-	✓ (version 4.5.0.100 and higher)	✓ (version 4.5.0.145 and higher)
	Adobe® Premiere® Pro 5.5	-	✓ (version 4.5.0.100 and higher)	✓ (version 4.5.0.145 and higher)
	Adobe® Premiere® Pro 6	-	✓ (version 4.5.0.100 and higher)	✓ (version 4.5.0.145 and higher)
	Adobe® Premiere® Pro CC	-	✓ (version 4.5.0.145 and higher)	✓ (version 4.5.0.145 and higher)
	EDIUS® Grass Valley®	-	✓	✓
Audio Editing	Pro Tools® 8	-	✓ (SSD cache drive required)	✓ (SSD cache drive required)
	Pro Tools® 9	-	✓ (SSD cache drive required)	✓ (SSD cache drive required)
	Pro Tools® 10	-	✓	✓
	Pro Tools® 11	-	✓	✓
MAM Integration	axle™	*	-	-
	Vidispine	✓	-	-
	FORK	✓	-	-
	Misc. proprietary MAM systems	✓ custom development	-	-

* under consideration
** for use with Avid® Media Composer® Symphony® addition of DAVE/MacAdmit is required.
***Windows® is a registered trademark of Microsoft™ Corporation in the United States and other countries.