



# **METUS MAM**

## **USER'S MANUAL**

*Version: 3.6.0.8*

# Preface

Dear Metus customer,

Thank you for purchasing our product! We would like to assure you that you have chosen the most cost effective and versatile MAM system on the market. As always, we are trying to stay close to our customers' needs, making sure they all receive adequate support and satisfaction. Your opinion about our product is an exceptionally valuable source of information to us. The ease of working with the Metus products results mainly from the suggestions and comments of our current respected customers. This manual is structured into several sequential chapters, each aiming to ease the installation, fine tuning and use of our products. We hope you'll enjoy working with it, and we are anxiously looking forward to receiving your feedback.

Please send your questions, suggestions and assistance requests to [support@metus.com](mailto:support@metus.com)

General feedback: [info@metus.com](mailto:info@metus.com)

Helpdesk fax number: +90 212 320 8827

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# Overview

**Metus Mam** system is designed to be easily used by everyone. A special training course or deep knowledge in computers is not strictly required. Anyone with basic computer knowledge will find using **Metus** modules as easy as 1-2-3. Moreover, all modules share the same visual and logical concept in order to minimize mistakes and confusion. Thus, we hope to make the operator's learning process even easier – once acquainted with some of the modules the others should look quite familiar. In order to fully utilize the system's potential we recommend you to read carefully the following subchapters. Each chapter is related to a particular module and describes its workflow and specifics in detail.

The underlying sections will give you enough information to succeed in getting all the tasks done. In case something is not clear enough, please examine the "FAQ" section at **Metus** website: <http://www.metus.com> – the answers of almost all questions that might arise during operation can be found there. Our support team will be at your disposal in case you have specific questions or a non-typical problem.

Do not hesitate to contact us at [support@metus.com](mailto:support@metus.com)

**NOTE:** The features described below may vary from system to system, depending on the hardware used. This user's manual contains a description of all possible features. Please, contact your dealer and describe your needs, so you could be advised properly

# CHAPTER 1 - INSTALLATION

**Metus Archive Server** supports Microsoft Windows Server 2003 and Microsoft Windows 2008 Server operating systems. **Metus Process Server** supports Microsoft Windows Server 2003 and Microsoft Windows XP Pro operating system. **Metus MAM Client** supports Microsoft Windows XP Pro, Microsoft Windows Server 2003 and Microsoft Vista operating systems.

It is required to have database infrastructure for running the **Metus MAM Server**. The supported types of databases are Microsoft SQL Server 2000, Microsoft SQL Server 2005 and Oracle.

**NOTE!** See **Appendix 1** attached to this manual for hardware recommendation.

**Metus MAM system** is protected by a dongle (the security key plugged to a USB port). All the licenses for running the system (number of local clients, servers' licenses and so on) are coded on one dongle only. The dongle is red and its type is network. The driver needed to be installed is HASP License Manager.

## 1.1. Installation of the Operating System

**1.1.1.** For the machine where the **SQL Server** will be installed, **minimum 100 GB** of disk space should be allocated for operating system (System disk)

**1.1.2.** All drivers should be installed properly.

**1.1.3.** For the server that MAS (**Metus Archive server**) will be installed, an IP address should be given either manually or automatically.

## 1.2. Installation of the License Manager

**1.2.1.** Plug the dongle to a USB port and open the *License Manager* folder.

**1.2.2.** Execute the **License Manager.exe** file on PC that the dongle is plugged to.

**1.2.3.** On a third screen, during the installation, you will be asked to choose the working type as *Application* or *Service*. Here you choose *Service (nhsrvice.exe)* and click next.

**1.2.4.** Ensure the option *Install/Update* is checked. Finish the installation without any more changes.

## 1.3. Installation of the Microsoft SQL Server 2005

**1.3.1.** **SQL Server** may need *Windows Installer 3.1* and *DotNetFramework*. Both setups are in Requirements-folder in the CD supplied.

**1.3.2.** **Start SQL 2005 Standard Installation** by double-clicking *Setup.exe file*.

**1.3.3.** In the *End-User License Agreement window*, accept the agreement, proceed with *Next* and then start the installation by clicking *Install*.

**1.3.4.** Proceed with *Next*.

**1.3.5.** Proceed with *Next* in *Microsoft SQL Server Installation Wizard screen*.

**1.3.6.** After the *System Configuration Check process*, proceed with *Next* if check is successful.

**1.3.7.** Installation will go on copying some files in screen below.

**1.3.8.** In *Registration Information screen* fill the *Name* and *Company* fields, and then click *Next*.

**1.3.9.** In the window where you select the components to be installed, check at least *SQL Server Database Services, Analysis Services and Workstation Components* boxes and then click *Next*.

**1.3.10.** In the next window, you can install a default instance or you can specify a named instance. We recommend you to choose *Default Instance*. If you choose a named instance you will input sql server name in Metus as computer name\instance name format. However, if you choose default instance then you will input sql server name in Metus as computer name.

**1.3.11.** In *Service Account selection* screen, check *Use the built-in System account* option. Check all the options in the *Start Services at the end of setup group* and proceed with *Next*.

**1.3.12.** In *Authentication Mode* screen, *Mixed Mode* must be checked. Type a password for SA user. It is recommended to set a password you don't forget as you will need it to create project in **Metus MAM** later. Please, note that in **Metus MAM** you do not need to connect SQL Server using SA user. You can use any predefined user. However, in that case that user should have at least **dbcreator** permission. It is recommended to use SA user for creating projects in **Metus MAM Client**.

**1.3.13.** You must select the language in *Collation Settings* screen. Select the language you want to use **Metus MAM** in and uncheck all other boxes.

**1.3.14.** Proceed with *Next* and in last screen, start installation with *Install* button. The *Setup Progress* may proceed a long time – just wait it.

#### **1.4. Installation of the Microsoft SQL Server 2008**

Followings are step by step of how to install Microsoft SQL Server on Windows 2008 Server. The installation steps are the same for both 32-bit and 64-bit OS.

After you installed the Windows 2008 server, please make sure that you install all drivers and did all windows update. Recommended version is Windows 2008 standard edition with latest SP.

### **Recommended hardware configuration**

SQL Server performance is critical in Metus Mam system because all Mam operations are done on SQL Server database. Therefore the better the SQL server configuration, the better the overall Mam performance.

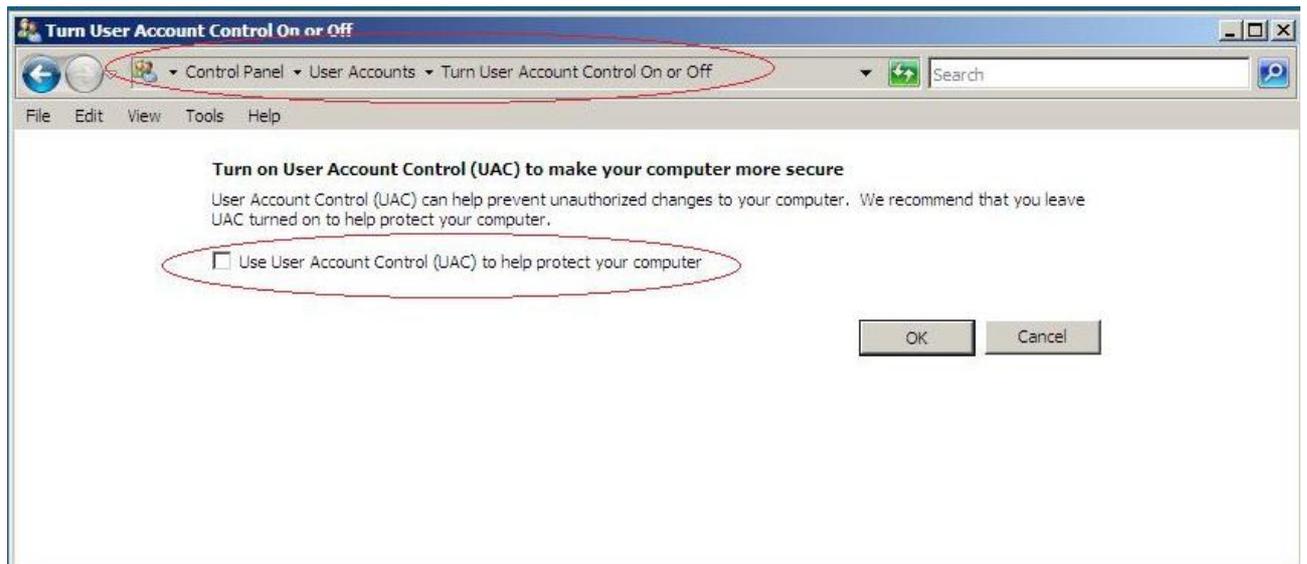
**OS** : Windows Server 2008 standard edition 64-bit with latest SP.

**CPU** : i7 CPU

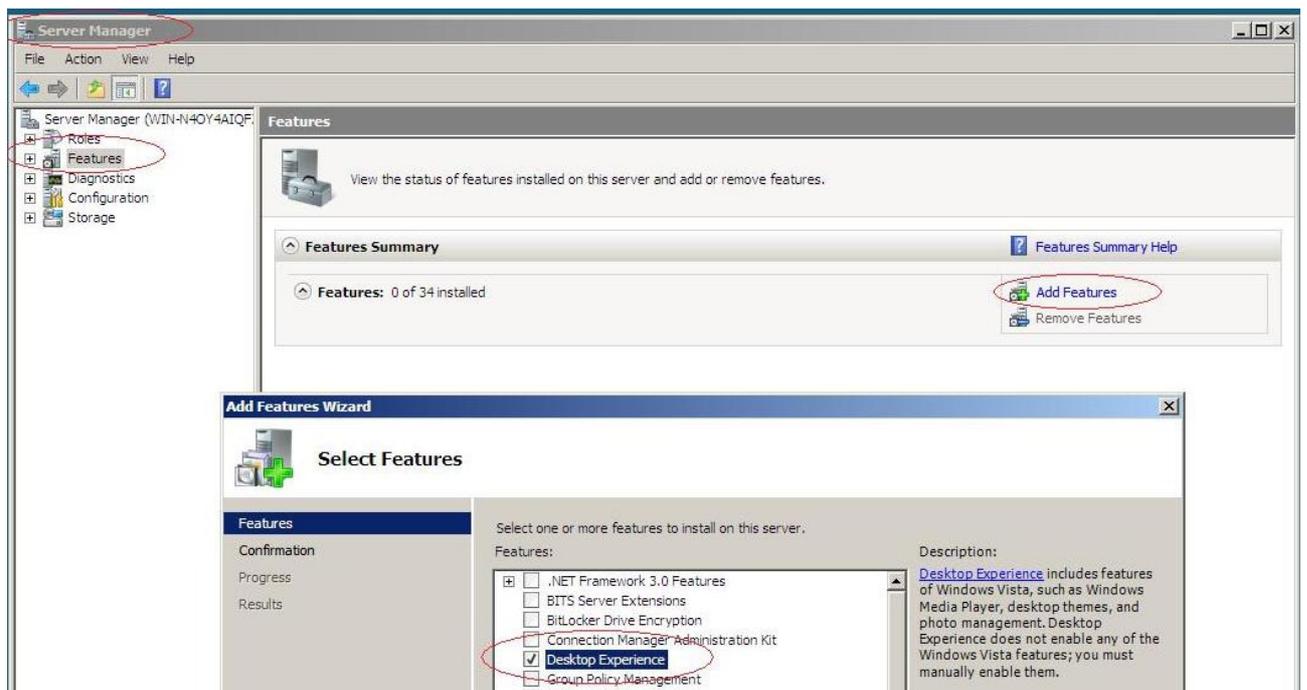
**RAM** : At least 8GB of RAM for 1-5 Clients. 12GB of RAM for 6-10 Clients. 16 GB for 10-20 Clients. The more the RAM the better the performance.

**Disk** : System disk and Database disk should be physically separate disks. Database disk should be at least 80GB and Raid1 configured.

Make sure the UAC (User account control) is **disabled**.



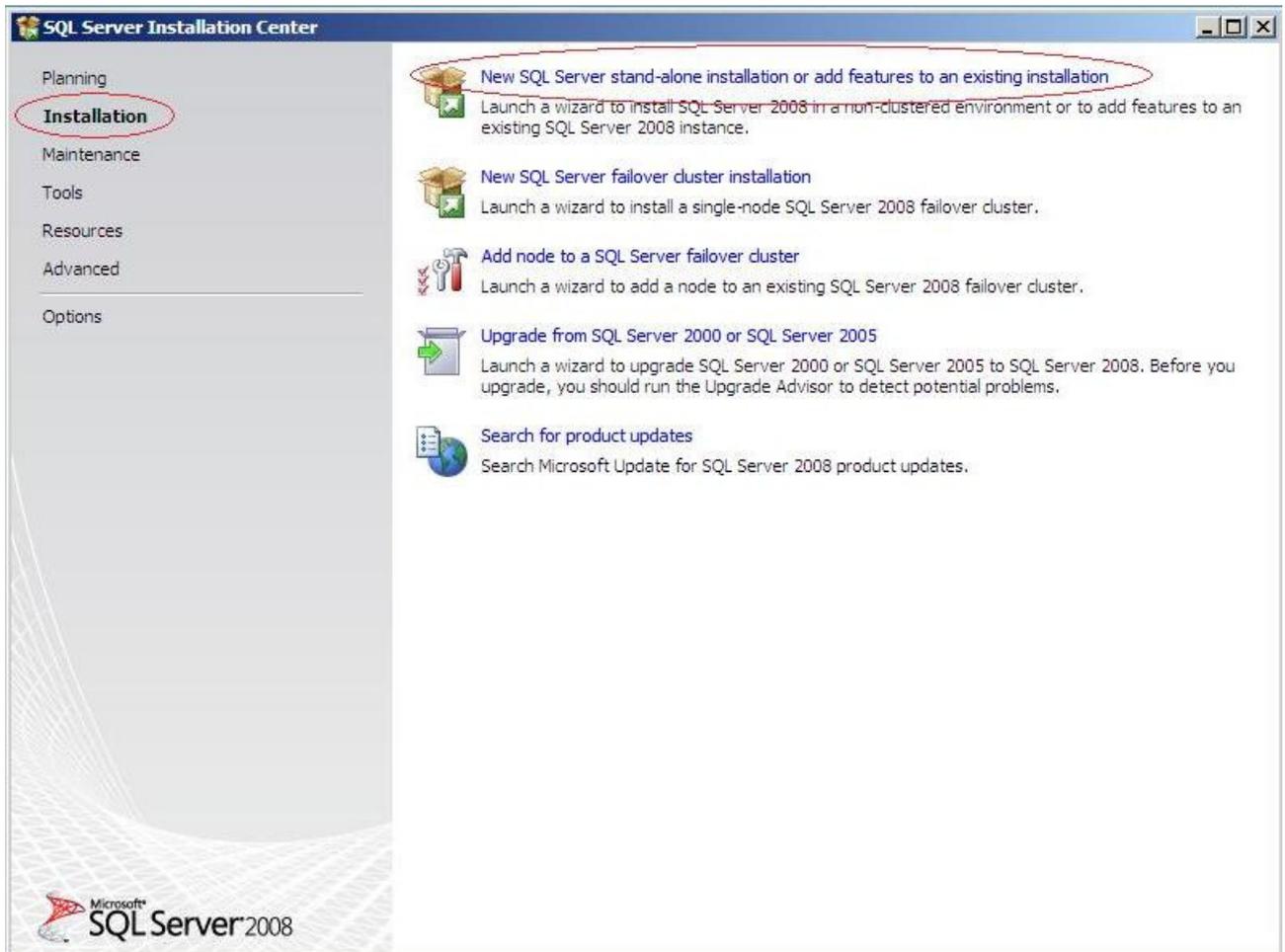
1- **Enable** desktop experience from Server Manager-> Add Feature.



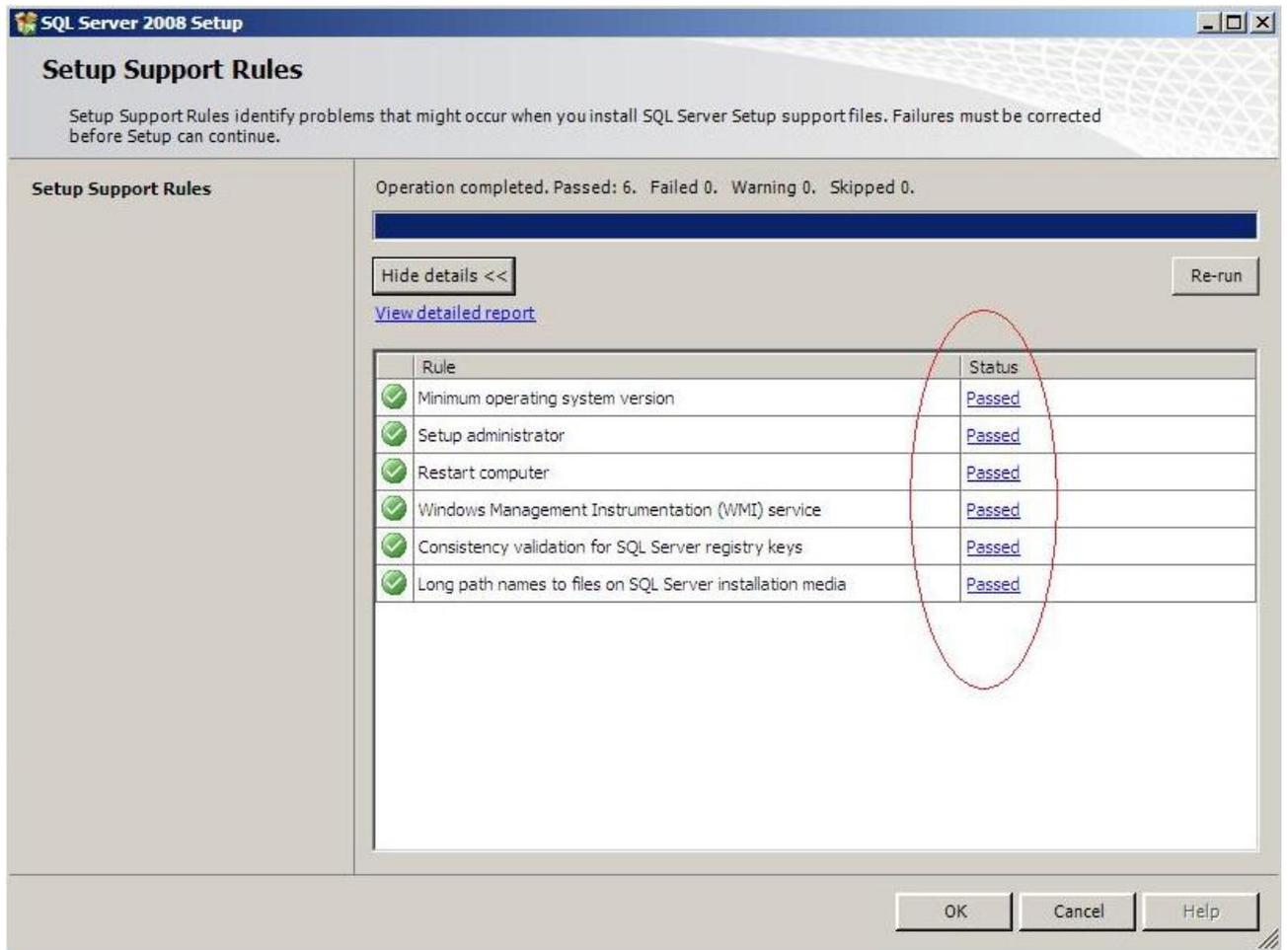
Restart the server. After restart, the installer will continue configuring this feature. You will see the below confirmation.



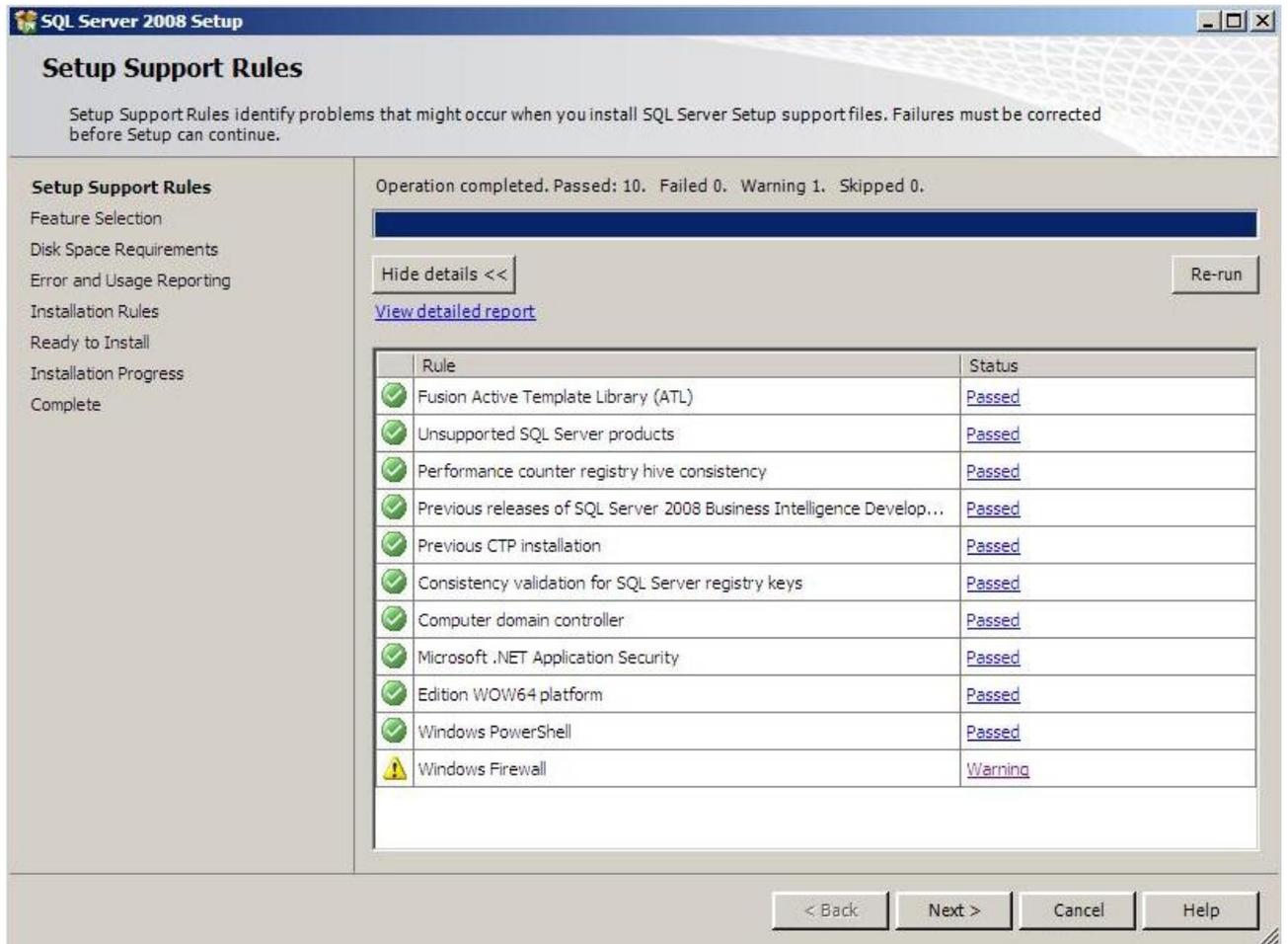
- 2- Run the SQL Server 2008 setup from the DVD. Click the Installation menu from left side. Click the first option (New SQL Server stand-alone installation or add features to an existing installation).



3- Make sure that all rules are passed.

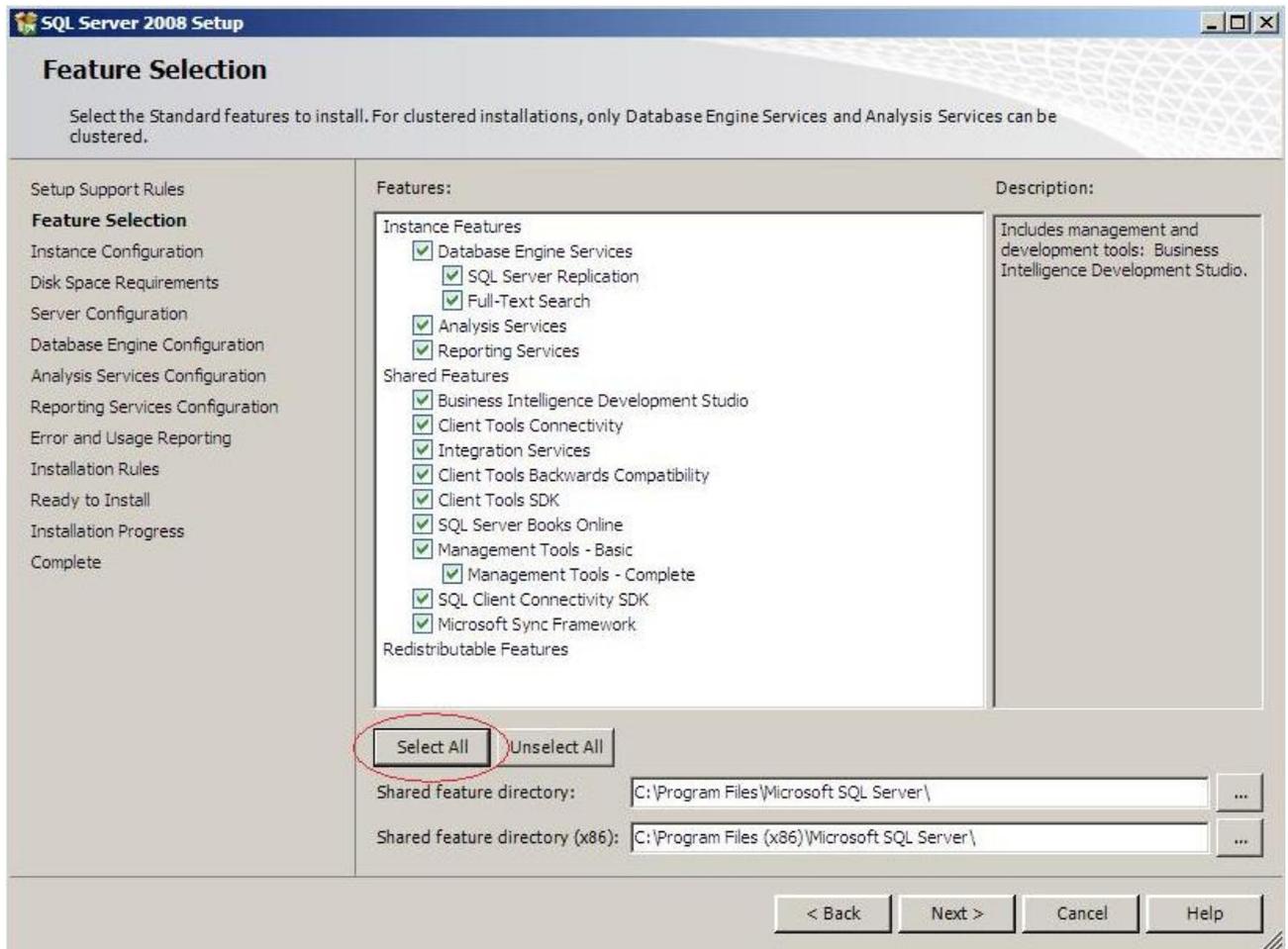


- 4- After you click Ok, Setup will start installing the setup support files. Failures must be corrected before Setup can continue.



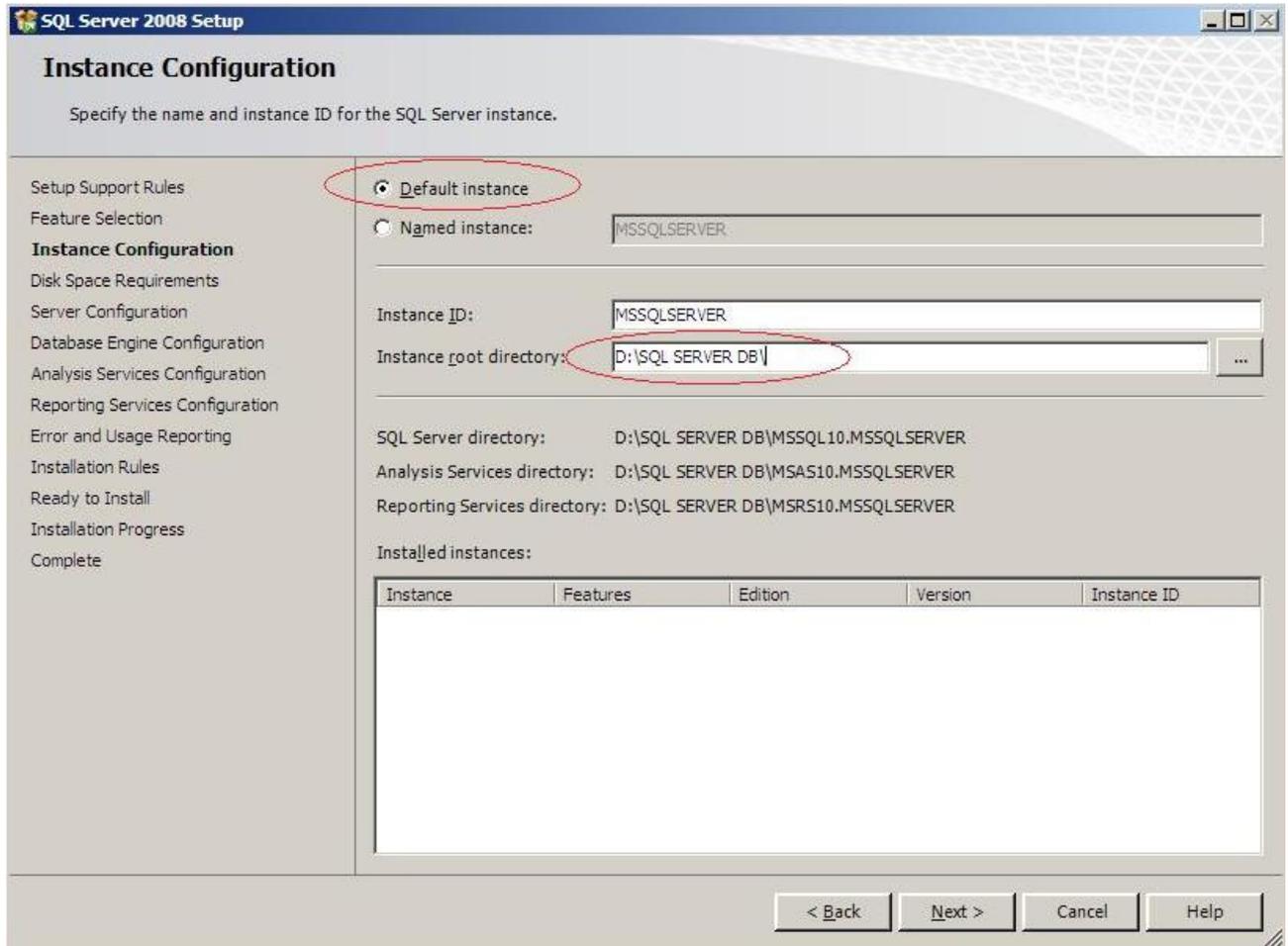
If you get windows firewall warning you can configure it after the installation. So, if this is only the warning, you may continue. Click next to continue.

5- In the coming Feature Selection windows, click **Select All** to check all features.



Click Next to continue.

- 6- Choose the **Default Instance** from options. For the instance root directory choose the **separate physical disk** that you will use it for SQL Server database.



Click Next to continue.

- 7- From the server configuration page, click the button **Use the same account for all SQL Server services**. Choose **NT Authority\System** account. Change start up type to **Automatic** for all services.

**Server Configuration**  
Specify the configuration.

Setup Support Rules  
Feature Selection  
Instance Configuration  
Disk Space Requirements  
**Server Configuration**  
Database Engine Configuration  
Analysis Services Configuration  
Reporting Services Configuration  
Error and Usage Reporting  
Installation Rules  
Ready to Install  
Installation Progress  
Complete

Service Accounts | Collation

Microsoft recommends that you use a separate account for each SQL Server service.

Service	Account Name	Password	Startup Type
SQL Server Agent	NT AUTHORITY\SYSTEM		Automatic
SQL Server Database Engine	NT AUTHORITY\SYSTEM		Automatic
SQL Server Analysis Services	NT AUTHORITY\SYSTEM		Automatic
Sql Server Reporting Services	NT AUTHORITY\SYSTEM		Automatic
SQL Server Integration Services 10.0	NT AUTHORITY\SYSTEM		Automatic

**Use the same account for all SQL Server services**

These services will be configured automatically where possible to use a low privilege account. On some older Windows versions the user will need to specify a low privilege account. For more information, click Help.

Service	Account Name	Password	Startup Type
SQL Full-text Filter Daemon Launcher	NT AUTHORITY\LOCAL S...		Manual
SQL Server Browser	NT AUTHORITY\LOCAL S...		Disabled

**Use the same account for all SQL Server 2008 services**

Specify a user name and password for all SQL Server service accounts.

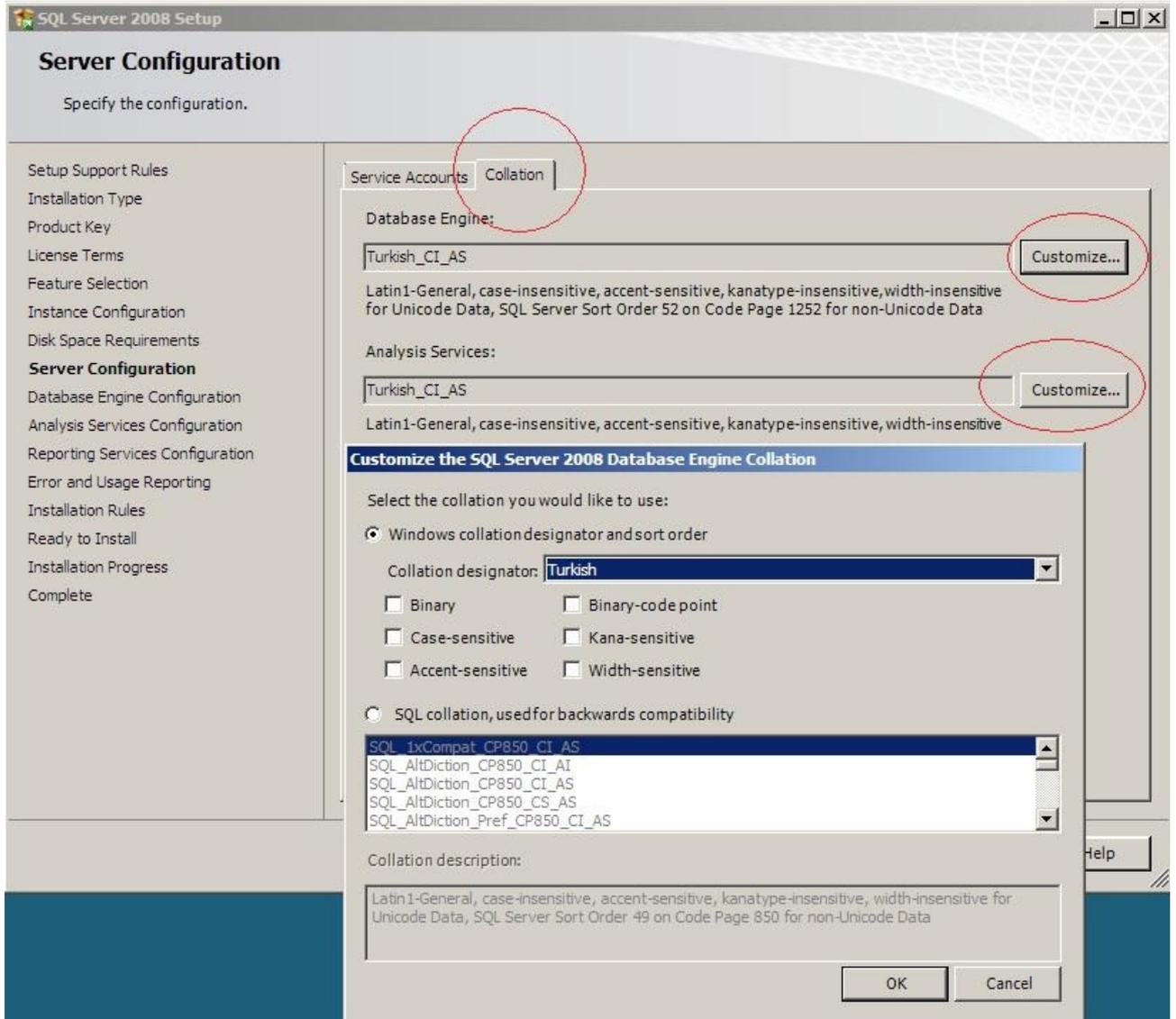
Account Name: **NT AUTHORITY\SYSTEM** Browse...

Password: \_\_\_\_\_

OK Cancel

< Back Next > Cancel Help

- 8- From the collation panel choose the correct language, this is very important. Otherwise you cannot find words with language-specific characters.

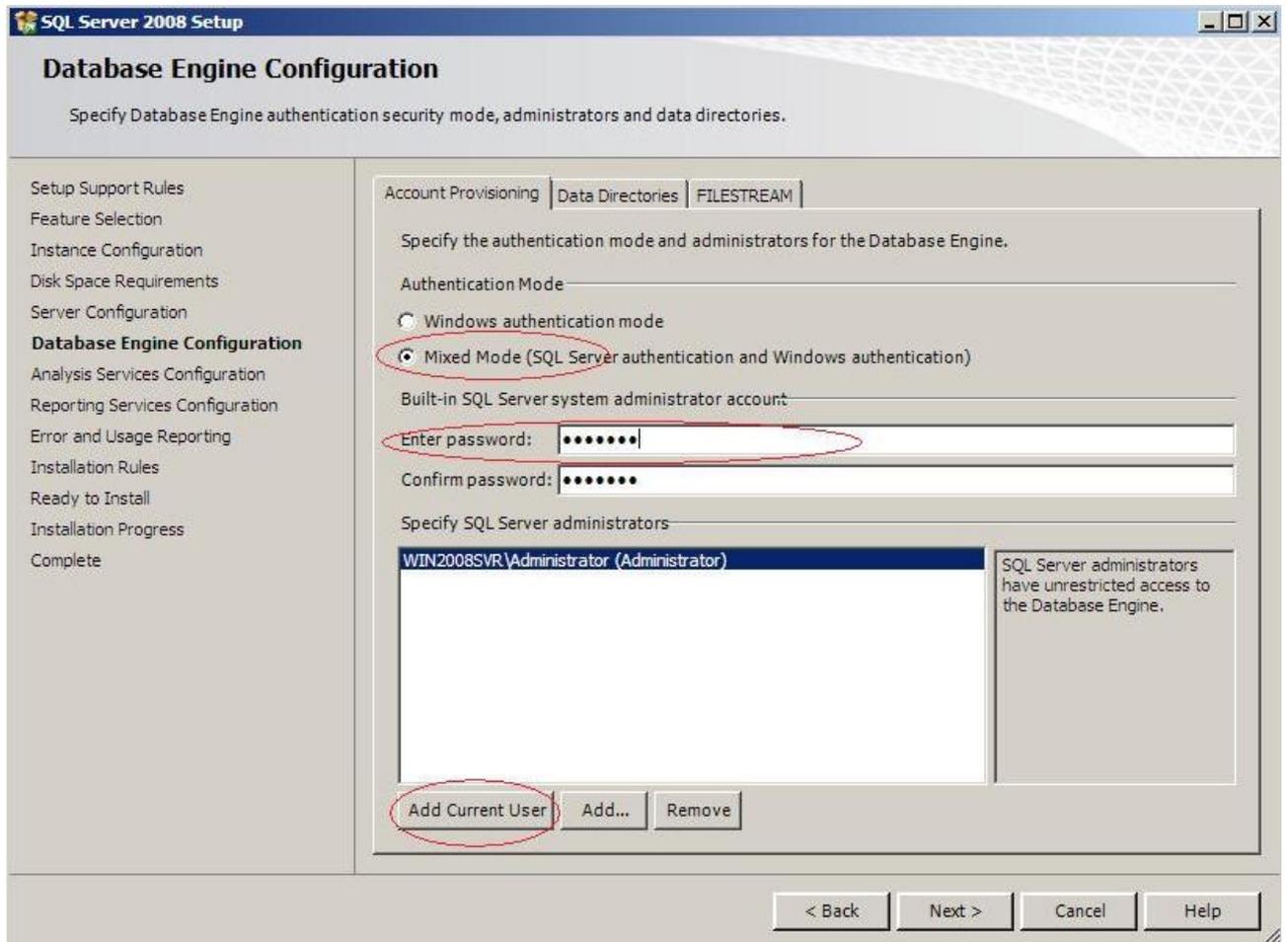


Click Ok to close the collation window.

Click Next to continue.

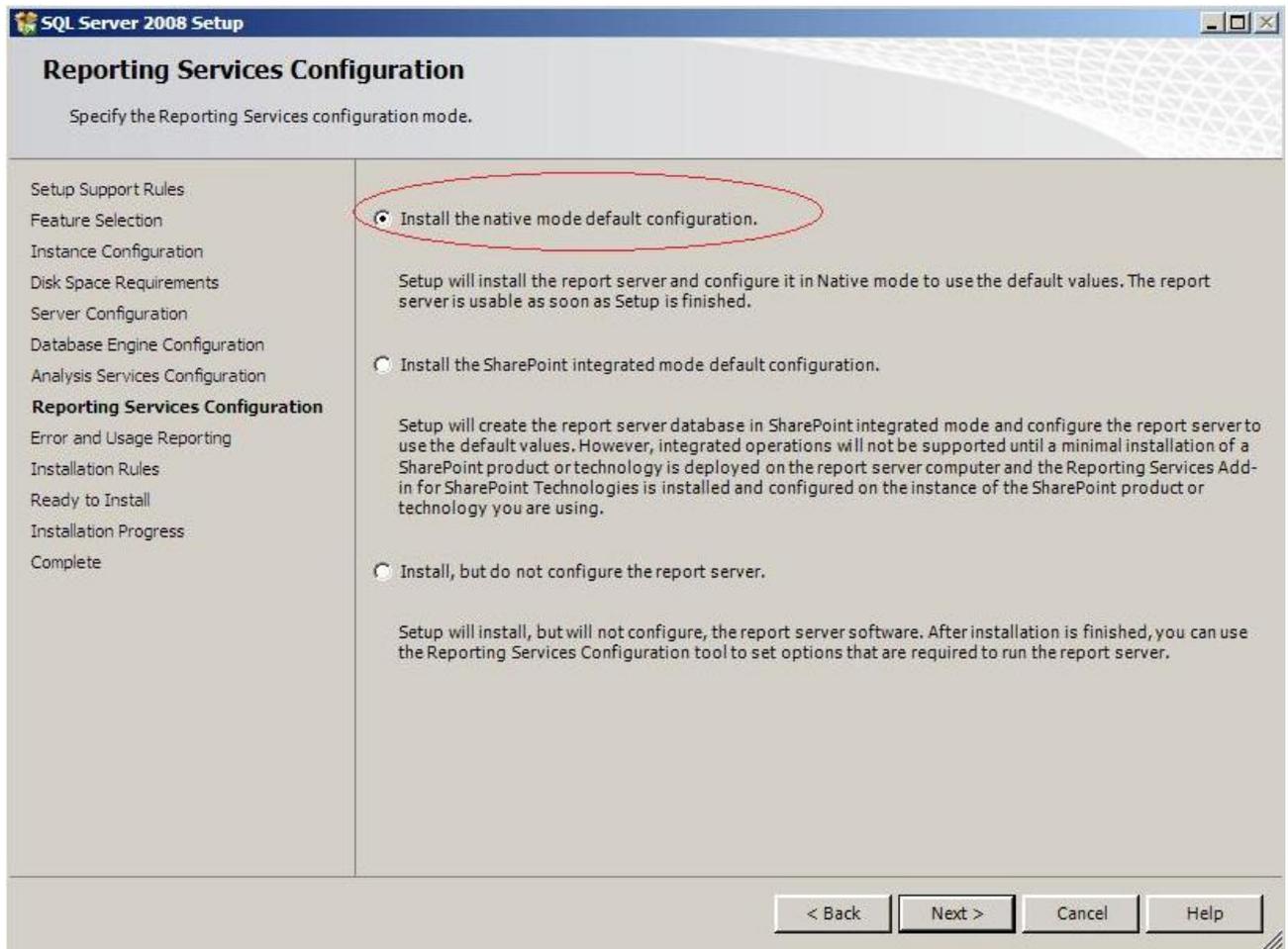
- 9- Choose mixed mode from the option and enter a **password for sa user**. Please note this password because this password and sa user will be required when you create Metus projects.

Add Current User for SQL Administrators.



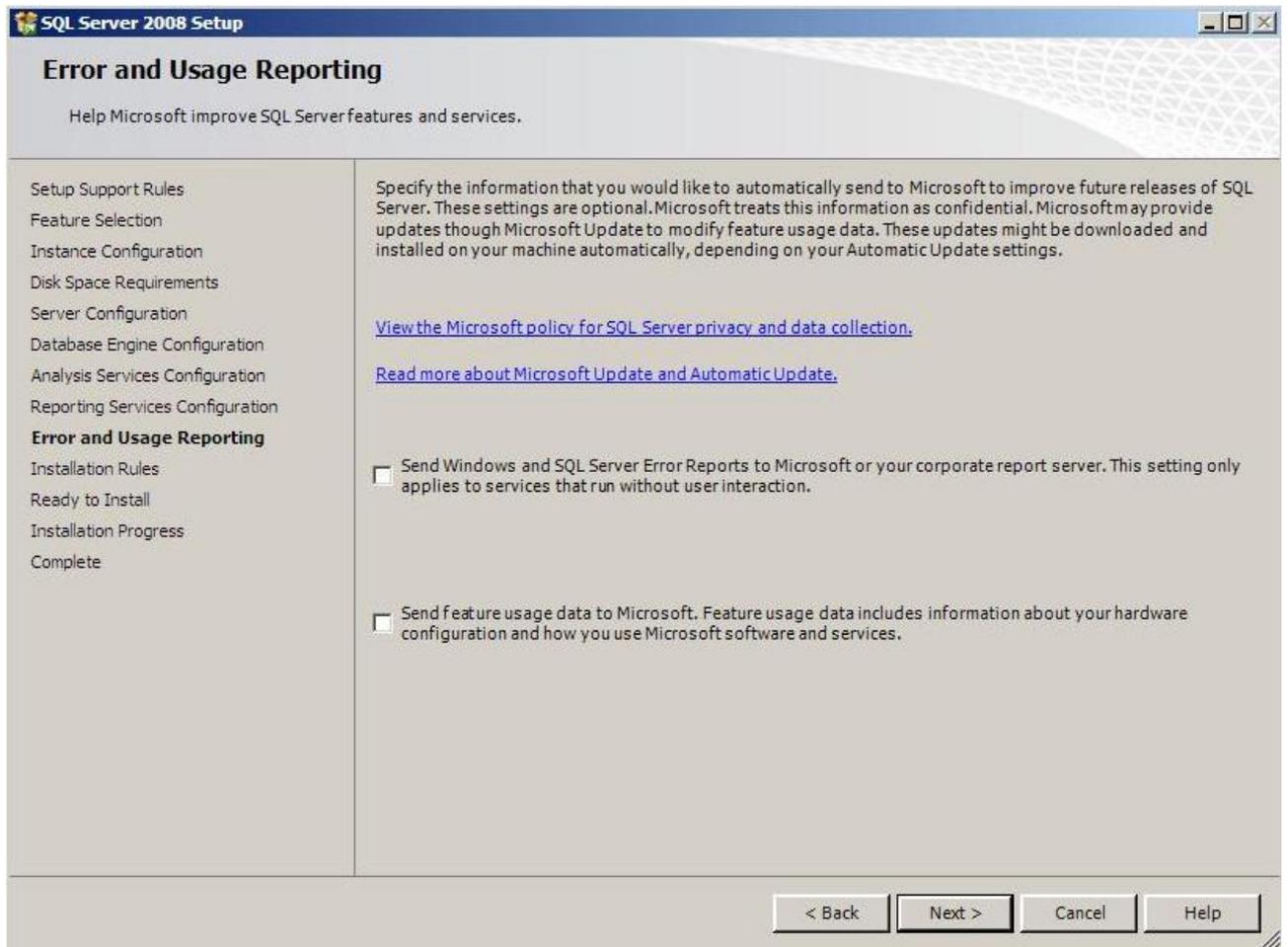
Click Next to continue.

## 10- Choose the **Install the native mode default configuration** option



Click Next to continue.

11- You don't need to check those options.



Click Next to continue.

12- Click Next if all rules are passed.

The screenshot shows the 'SQL Server 2008 Setup' window with the 'Installation Rules' tab selected. The window title is 'SQL Server 2008 Setup'. The main heading is 'Installation Rules'. Below the heading, it says 'Setup is running rules to determine if the installation process will be blocked. For more information, click Help.'

On the left side, there is a navigation pane with the following items: Setup Support Rules, Feature Selection, Instance Configuration, Disk Space Requirements, Server Configuration, Database Engine Configuration, Analysis Services Configuration, Reporting Services Configuration, Error and Usage Reporting, **Installation Rules**, Ready to Install, Installation Progress, and Complete.

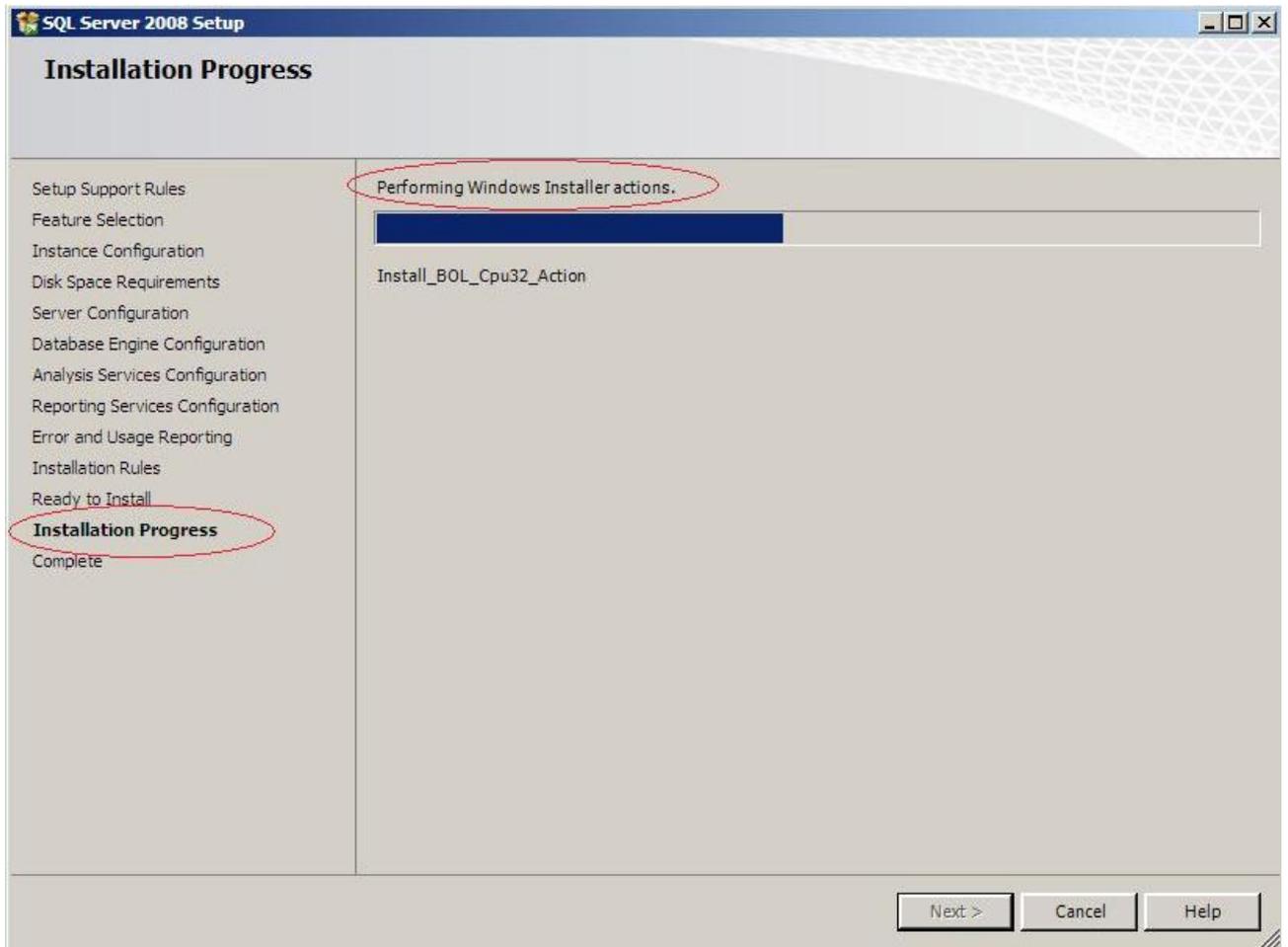
The main area displays the following information:

- Operation completed. Passed: 11. Failed 0. Warning 0. Skipped 0.
- A 'Hide details <<' button and a 'Re-run' button.
- A link to 'View detailed report'.
- A table with two columns: 'Rule' and 'Status'.

Rule	Status
Same architecture installation	Passed
Cross language installation	Passed
Existing clustered or cluster-prepared instance	Passed
Reporting Services Catalog Database File Existence	Passed
Reporting Services Catalog Temporary Database File Existence	Passed
SQL Server 2005 Express tools	Passed
Operating system supported for edition	Passed
FAT32 File System	Passed
SQL Server 2000 Analysis Services (64-bit) install action	Passed
Instance name	Passed
Previous releases of Microsoft Visual Studio 2008	Passed

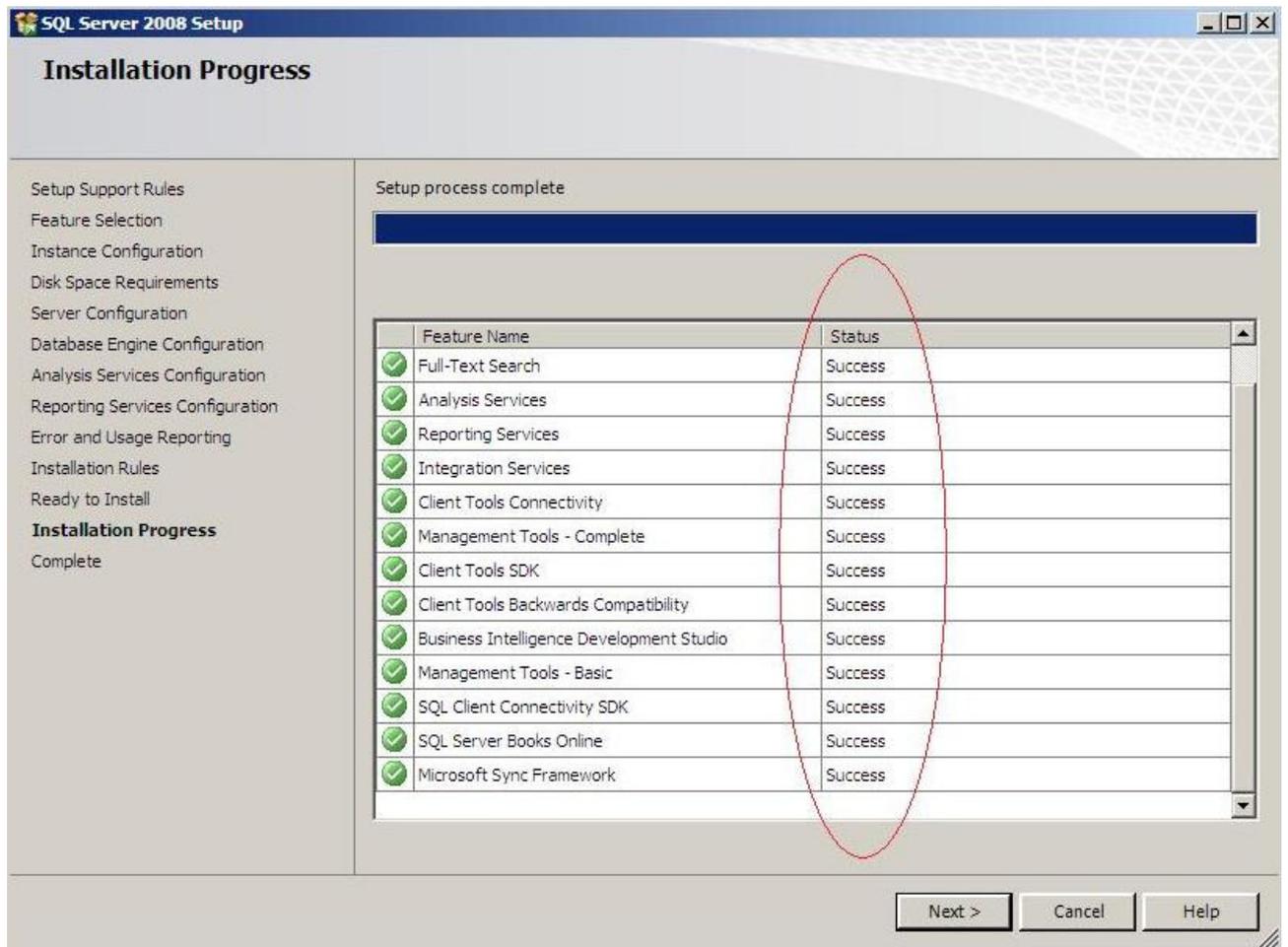
At the bottom of the window, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'. A red oval is drawn around the 'Status' column of the table, highlighting that all rules have passed.

13- The Installer will progress a while.

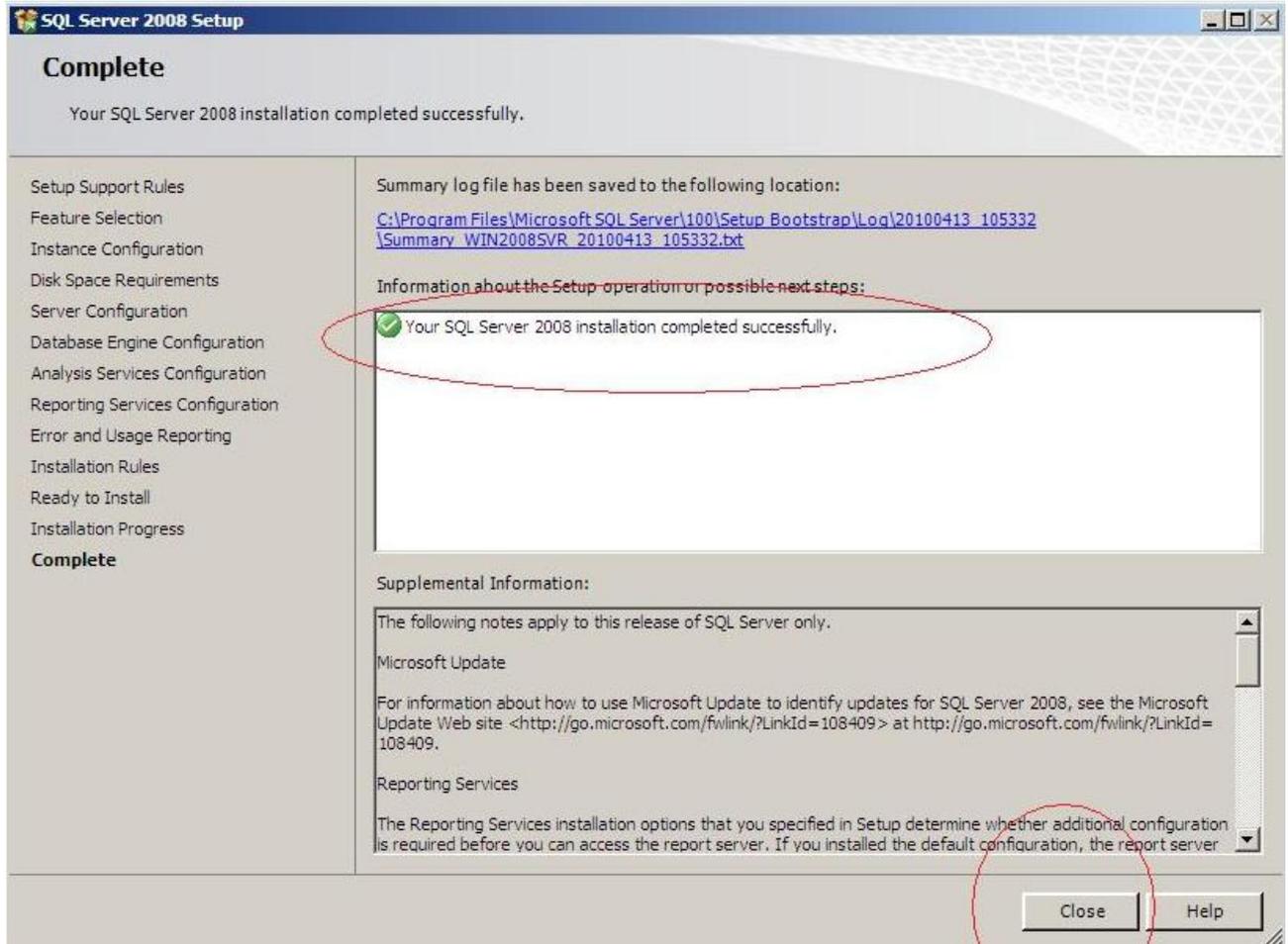


After the installation performed, click Next to continue.

14- Click Next if all installation is succeeded.



15- SQL Server 2008 installation successfully finished. Click close to complete the installation operation.



### **1.5. Installation of Metus Archive Server (MAS)**

MAS setup must be installed and running for archiving files. Follow the steps below for the installation.

**1.5.1.** Before the installation *.Net Framework 3.5* and *VC++ 2005 Runtime* must be installed on your computer. Both setups are in the Requirements-folder in the supplied CD.

**1.5.2.** Execute the **MAS.msi** installation file involved in the CD on the computer you will use as Archive Server and follow the instructions on screen.

**1.5.3.** On Service Login window, if your computer is connected to a workgroup, input **computer name\username** and if your computer is in a domain, input **domain name\username** in username field. In the password field, you must input the password for the given username.

**!!! The user entered into this field must have Administrator privileges!**

**1.5.4.** Click **OK** on Service Login window to finish the installation

### **1.6 Installation of Metus Process Server**

To make some process such as transcoding your video files to other formats and creating proxy, **MPS (Metus Process Server)** must be installed on your system or on a computer connected to the network.

**1.6.1.** Before the installation, *.Net Framework 3.5* and *VC++ 2005 Runtime* must be installed on your computer. Both setups are in *Requirements*-folder in the installation CD.

**1.6.2.** Execute **Metus Process Server.msi** file on the computer you will use as a **Process Server** and follow the instructions on the screen.

**1.6.3.** In the *Service Login window*, if your computer is connected to a workgroup input **computer name\username** and if your computer is in a domain input **domain name\username** in username field. In password field, you must input the password for the given username. The user entered in this field must have administrator privileges. Click OK to finish the installation.

### **1.7. Installing of Metus Image Matching Server**

For using image matching feature, the relevant server and matcher services must be installed. Also assets must be indexed. Indexing is performed by MPS, and picture searching and matching are performed by MIMS and MIM.

**1.7.1.** Before starting the installation be sure that *.Net Framework 3.5* and *VC++ 2005 Runtime* are installed on your computer. Both setups are in *Requirements* folder in the CD.

**1.7.2.** Execute **Metus Image Matching Server.msi** file and follow the instructions.

**1.7.3.** In the *Service Login window*, if your computer is connected to a workgroup, input **computer name\username** and if your computer is in a domain input **domain name\username** in username field. In password field, you must input the password for the given username. The user entered this field must have Administrator privileges!

**1.7.4.** Click **OK** in the *Service Login window* to finish the installation.

### **1.8. Installing of Metus Image Matcher**

This is the engine for making the image search. It is installed on the same machine where the MIMS is installed. The installation is run through the **Metus Image Matcher.msi** file. Run it and follow the instructions.

### **1.9. Installation of Metus Service Starter (MSS) – not compulsory**

In case of MAS and MPS or any other Metus services stop for any reason, MSS Service must be installed to start other services automatically.

**1.9.1.** Before installation, *.Net Framework 3.5* must be installed on your computer.

**1.9.2.** Execute “**MSS.msi**” file in supplied CD on computer by double-clicking and follow the instructions.

### **1.10. Installation of Metus MAM**

**1.10.1.** *DirectX 9*, *.NetFramework 3.5*, and *VC++ 2005 Runtime* must be installed on your computer. *VC++ 2005 Runtime* and *.NetFramework 3.5* are supplied in the CD. The installation of *.Net Framework 3.5* will take a long time; just wait until it is completed.

**1.10.2.** Double-click “**Metus MAM.msi**” file and follow the instructions.

**1.10.3.** After the installation you will see a Metus MAM shortcut icon on your desktop. Run Metus MAM by double-clicking the icon.

**1.10.4.** A window asking username and password will appear. This window shows the Windows account which you will use Metus MAM with. Input windows log-on user name and password and check “Remember me” check-box.

### **1.11. Installation of Metus Online Web Server (MOL)**

**1.11.1.** *IIS 6.0* and *.NET Framework 3.5* should be installed on the machine which Metus Online web server will be installed onto.

**1.11.2.** Then double-click *InstallAspNet.bat* file in Requirements-folder and follow the instructions.

**1.11.3.** Double-click **MOL.msi** and follow the instructions here.

**1.11.4.** Right-click on MOL folder located in “C:\Inetpub\wwwroot\MOL\” and click “Properties” to open Properties window. Remove the “Read Only” check to leave unchecked. Click OK. Select “Apply changes to this folders, subfolders and files”.

**1.11.5.** Right click the MOL folder and click “Sharing and Security...” to open the sharing and security window. On Security tab add everyone user and give full-control permissions. Installation of MOL finishes.

### **1.12. Sharing a Metus Archive Project in Metus Online.**

**1.12.1.** Open a browser and type the following into the address bar: “http://localhost/mol/a\_main.aspx”. Metus **Online Administration login page** will open. Type admin for the username and admin for the password to login.

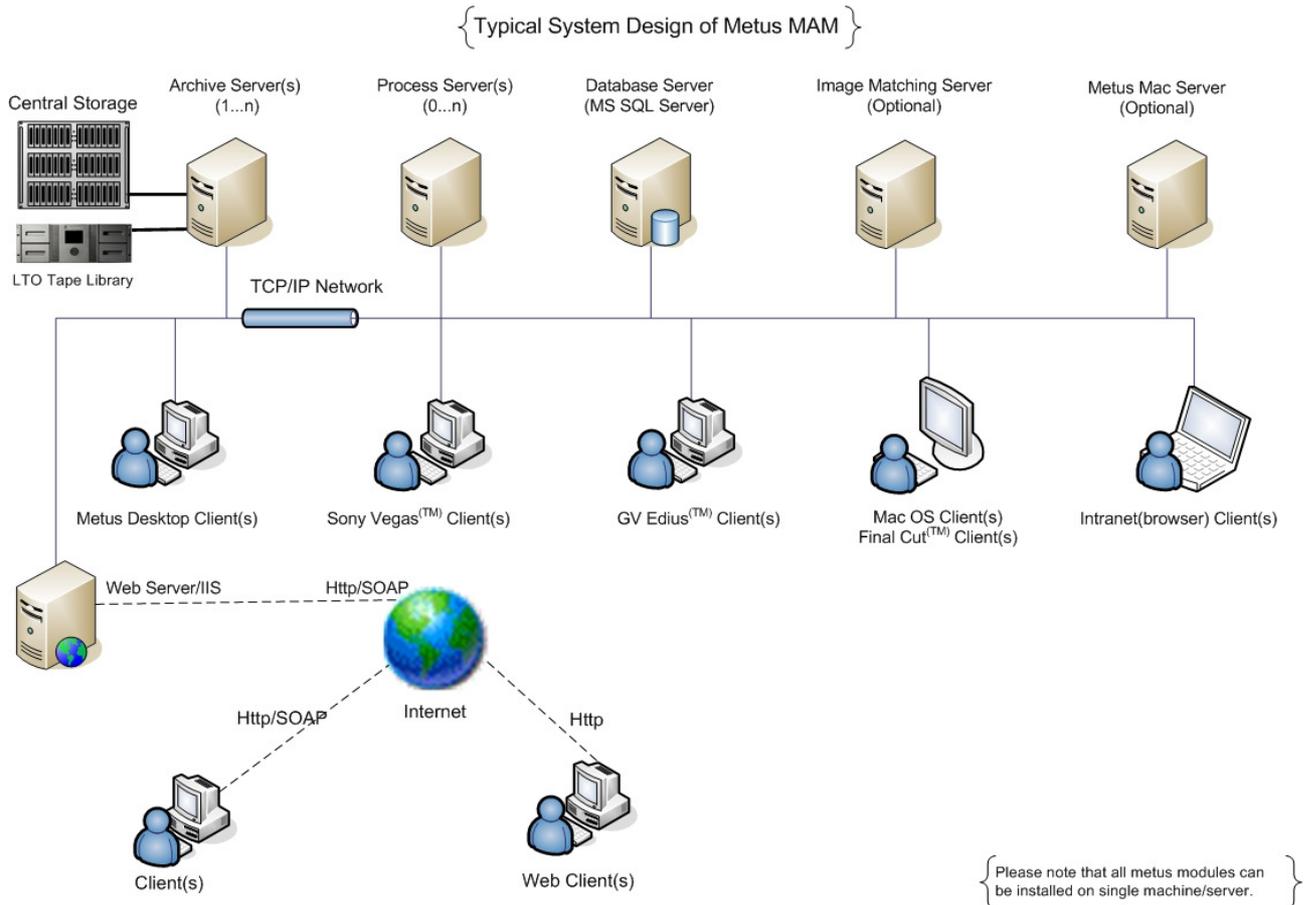
**1.12.2.** From the menu at the left side of the page select **Shared Projects**. Select **Add New Project** to share any archive project. Browse to the project \*.map - file. The map file must be placed in a shared folder.

**1.12.3.** Open a browser and type the following into the address bar: <http://localhost/mol/> (the address that must be typed in the address bar, generally is: http://<Metus Online Server Name or IP >/mol/). A page with list of shared projects will open. Select the project you want to log into.

**NOTE!** For a step-by-step installation (shortcuts included), please refer to **Appendix 2 - Installation Guider**.

# CHAPTER 2: BASIC TERMS AND GENERAL INFORMATION

## 2.1 Typical System Design



## 2.2 Asset

This is the object created from a file. The asset doesn't exist physically. It is a virtual object. Different assets can be created from one file only.

The asset is created in the **Metus MAM** software by adding any media object (video file, audio file, picture file, documents, tape cassettes, books, etc.) and some attributes such as metadata, category, proxy and storyboard related to this object. The asset's appearance in **Metus MAM** is such as in the picture shown here.



You can play the video files within an asset (double-click the camera sign). You can create multiple asset versions from one file, rate it, etc.

- "**S**" defines if the file has a **storyboard** or not. When the letter "**S**" is highlighted, it means that the file already has a **storyboard**.

The **Storyboard** is a sequence of pictures (frames), taken out from the video movie file. This can be considered as the video summary presented in pictures. The specified frame can be recreated each time depending to time range and scene changes. The frame also shows the TC on which it is placed in the movie-timeline.

With the storyboard's help, the user can get a previous knowledge of the video even without viewing it. Also, if the file is not accessible, it is possible to have a general info about its content. In another scenario, after long time not using the material and forgetting its content, it can be reminded just by quick overview of this sequence.

- "**P**" specifies if the file has a **proxy** or not. Logically, the highlighted "**P**" means that the file has a proxy.

The **Proxy** is

- a lower resolution copy of the master (original) file used in the project;
- it is created by the Metus Process Server in any format wanted (transcoded to);
- logically, the resulting file takes less storage space.

The proxy is used mostly in *Server/Client*-based workflows. It is used in order to avoid bandwidth problems. And because it is faster, it is often used in workflows when tape library archiving is used.

- "**I**" stays for **Index**. Indexed files are the ones which are created indexes by the MPS.

- "**C**" defines if the video file is cut (a clip). A clip is the part cut between the **Master In/Out points**.

- "**Thumbnail**" is the main picture on the screen (here, the car). The thumbnail is usually an explanatory picture taken from the video content and put as a general preview icon of the asset.



Play On Site - In thumbnail mode, a video asset can be viewed by double clicking that asset's icon.

### 2.3. Bin

The **bin** can be considered as a virtual folder – in fact, it acts like a folder, as it is a container for assets (referring to physical files) and subbins (subcontainers inside the upper ones). The Windows operating system's folder-logic is adopted.

We distinguish the following types of bins in **Metus MAM**:

#### - **Generic Bin**

Generic bin is a main container for another bins (no matter what types they are) and assets inside. Absolutely behaving like a folder.

#### - **Dynamic Bin**

This is a bin type that monitors a folder in the network (the so called **Watch folder**) and automatically creates assets (inside this bin) from the files existing in the watch folder.

From the bin's **Properties menu**, the path to the **Watch folder** is given. Once files get inside of it, **Metus system** automatically starts archiving them on the storage, viewing them in the project as assets placed inside the dynamic bin.

The dynamic bin content is always synchronized with the watch folder content.

- **Filter Bin**

It works as a searching criterion. User can create *filter bins* according to his needs. *Filter bins* are appropriate for automation of most used searching criterion.

In the bin's *Properties dialog* you insert the criteria for filter. For example, if the criterion is "Size>1000K", all assets which size is over 1000 K are listed in that bin. The users can add neither assets nor bins into this bin.

When a new project is created, some filter bins are automatically added. These are named *Search bins: Added this week, Unmodified, Large Assets, Most viewed, Most Retrieved* and *Long Assets*.

- **Template Bin**

Template bin is a holder for the user templates. The user can add templates to this bin only. In one project only one template bin can exist. After adding a template in the template bin you apply various metadata to this template. Further on, referring the template to a bin will result in all assets, included into this bin, having these metadata automatically displayed.

If you don't want to use this feature you can disable it from *Project menu, Properties tab -> Others*.

- **Synchronized Bin**

This bin type ensures that the bin contents of projects working on different locations will be synchronized. With settings specified within the bin properties, each of the original media, proxy media, storyboard information and metadata info can be synchronized with the target bin fully or partially. The synchronization is done only in one direction – from the source bin to the target bin.

- **Recycle Bin**

This is the bin to which all deleted assets are transferred in **Metus MAM**. Deleted files are moved to the *Recycle Bin* before permanent deletion. The physical file in the archive is deleted only when it is deleted from the *Recycle Bin*.

## 2.4. Project and Project File

The project is the backbone of the entire system. It consists of assets, bins, physical files related to them, information and metadata; and all this - stored in a database. It is possible to work with a single or multiple projects in **Metus MAM**.

The project is saved in a not big-sized file, saved on the HDD (no matter local or network place) which holds the structure of the entire project in **Metus MAM**. The project keeps all the relationships between the assets and bins, playlists and filter results. Each new project is empty but it has its organized general structure imported with the *Metus* installation.

As the projects in **Metus** are two kinds: *Library* and *Archive* and depending on which one is running on, the file kept as a project file, has extension relevantly *\*.mlp (Metus MAM Project)* or *\*.map (Metus Archive Project)*.

When *Library* project is used, the physical locations of the source files don't change. The user is working directly with the original files from the place he takes them from. The metadata and categories are saved to this file via using their assets in the project.

A little bit similar (metadata creation via the asset objects) but definitely different (archiving

available) are the things when **Archive project** is used. The materials that are desired to be archived are done so either in tape units or other storage units in specified fixed locations. This is done with predefined **Metus Archive Servers** rules – before starting using the files in the project (equal to archiving them on the storage place), the Administrator decides which disks or tape units to use for this purpose. He creates rule for this and MAS starts archiving on the selected disks and tape units, according to the criteria observed.

### 2.5. Starting Page

The names of the recently opened projects, their creation dates and number of connected users are displayed on this page. **Library projects'** names are shown in blue, while **Archive projects'** names are red-colored. You select the project in which you want to work or you can create a new one. During the work, you can revert to this page at any time by selecting **Start Page** from **View menu**.

### 2.6. Project Browser

Lists the bins existing in the project. The **Project Browser** window comes open as default when a project is opened. If it is not opened, you can make it visible by choosing **Project Explorer** option from **View menu**. In the **Project Browser** window all objects are displayed in tree-view. Only bins are shown in this window. Assets are listed in the right window.

### 2.7. Folder Explorer

The **Folder Explorer** is like a classic **Windows browser**. This window lists any video, audio, picture or document files in the computer or the network, which have extensions for the files supported by **Metus MAM**.

**Folder Explorer** opens automatically as the project opens. If it does not, you can make it visible by checking **Folder Browser** option from **View menu**. The files included in the selected folder (or drive) are listed.

By default, the system drive is not displayed in the **Folder Explorer** because usually the operating system installation is there. But if you want to display it, click **Options** from **Tools menu**. Choose the **Files** from left. Check the box **View the system drive** in **Folder Explorer** and then click OK. In order to hide the system drive, you have to uncheck this box.

## 2.8. Fields

A **Field** is the individual item of the metadata structure. The field is the “place” into which the metadata are entered.

**Fields** can be defined on a basis of *File*, *Bin* or *Asset*. Depending on the language in which the project is created, the field description, name or value can be set in this language exactly.

## 2.9. Metadata

This is the data which defines the objects (assets, bins etc.) in the projects, ensures them to be managed and includes their characteristics. It is possible to define “metadata” and to input data as much as required in **Metus MAM**. And later any of these data can be used as search criterion.

With the first setup of software some default metadata fields are provided.

## 2.10. Category

You can assign a **category** for each asset. As understood from the name, it is a structure prepared for categorizing assets which have common properties.

The **category tree** is provided with the system. Additional categories can be added to this tree by the user, depending on his needs and the workflow. To apply categories to the objects selected, the user needs to select the relevant category checks.

**NOTE!** Please, keep attention to the fact that these are not saved as metadata values for some category-field. These are just for quick search by category.

**Example:** on Christmas you need to find Christmas programs, shows, movies and songs. So, just check the category *Christmas* and all these will be filtered. Further on, you can go on with filtering, tightening up the group with the resulting assets to exactly what you need.

## 2.11. Searching

In this window you see four tabs for the each different kind of the search options: **Simple**, **Advanced**, **Category** and **Image**. It is possible to search in accordance with criterion specified within the assets of which metadata were assigned.

## 2.12. Progress Status

This window shows the **progress** and the **completion status** of the processes (archiving, cutting, deletion and proxy-creation) executed or queued by the system. The **progress status window** shows the asset being processed, the process name, progress status, the server process being running, status and message from the relevant server. In order to get rid of the full list with tasks, right-click and select **Remove All Finished Jobs** or just **Remove All**. From this context menu tasks can be canceled, too.

### 2.13. Preview Window

This is the tab visible in the right lower window. You can preview the selected asset in this window and thus avoid opening the assets viewer. Hide/show this tab from the **View** menu.

### 2.14. Playlist Editor

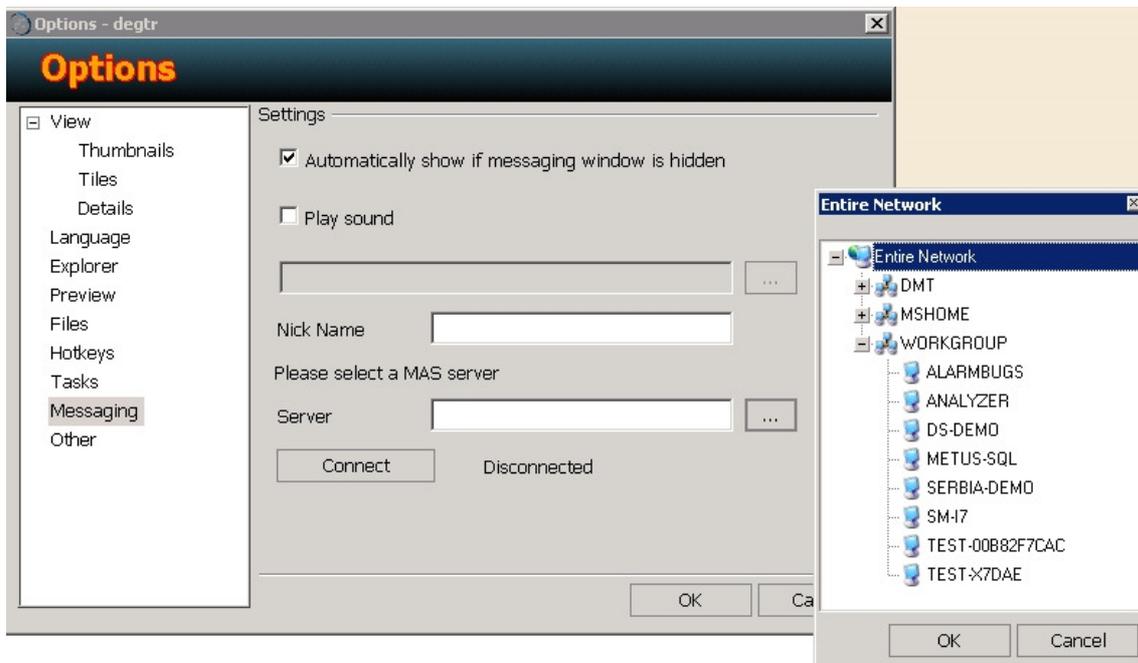
This is a playlist organizer. A playlist can be created in order to prepare assets in the archive for a TV broadcast (for video server). Some external events can be also included. You can transfer this playlist together with the files included to the broadcast server.

### 2.15. Requests

In **Metus MAM**, users can only perform the processes they are privileged for. For a process they don't have permission to run, they make a request. ...Of course, if they are given a request permission.

### 2.16. Messaging Window

**Metus MAM** enables messaging between the users currently online in the network. For that purpose a **Messaging Server** must be selected from **Tools -> Options -> Messaging**.



### 2.17. Users and Groups

In **Metus MAM**, the project manager can create users and groups, and give them rights for reading, adding, editing, deletion and requests in the project. If there is a domain structure, the users can also be imported to the project from the **Active Directory**, too. Thus, the security is completed in accordance with the rights granted to users and groups. This window is accessed by selecting **Users and Groups** from **Project menu**. There is a hierarchic security structure in **Metus MAM**.

### 2.18. Supported Files

This screen displays the supported file formats by **Metus MAM** software in the basis of video, audio, picture, documents and wrappers. It is accessed by selecting **Supported Files** from **Project menu**.

### **2.19. Action History**

It is an analyzing tool enabling the processing in **Metus MAM** in the basis of criterion such as date, user name, action executed, etc. It is accessed by selecting ***Process History*** from the ***Project menu***. The administrator of the project is using it for tracing who, when and how made changes in the project.

### **2.20. Task Administration**

Some tasks can be created and these tasks can be assigned to the users in **Metus MAM**. All these settings are available in the ***Task Administration*** window which is accessed from the ***Project menu***. You can assign various tasks to the users added in the project and later you can monitor the completion status of these tasks. This window is only accessible by the users with administrator privileges.

### **2.21. Project Summary**

The ***project's administrator, project type and name, location*** on the hard disk and ***statistics*** are shown in that screen. It can be accessed from the ***Project menu***.

# CHAPTER 3: QUICK START

## 3.1. Creating A New Project

You need to have a **SQL Server** or **Oracle** installed in the network or on your computer in order to add a project in **Metus MAM**. A new project creation can be started in two ways – either from **File -> New Project** or by pressing the **New Project** button in the **Start page**. No matter which one you choose, here are the following steps (with SQL use):

- In the window which is popping up type the name of the project in the **Project Name field** and in **Location** browse for the target path into which the project will be saved. In multi-user structures, it is important that the location is shared and secured.

3. Choose the project type - **Archive** or **Library** and click **Next**.

4. In the next dialog type the SQL Server's name. Or you can select one from the drop-down list.

**NOTE!** In some cases, your server's name is not listed even you have SQL server installation. Try with typing the server name or add \sqlserver (or \sqlexpress) after the PC name. (Consult your system administrator for **SQL server** name details)

5. Then type "sa" for SQL username (the default one) and the password set during the installation of SQL (installed in **Mixed mode!**). Click **Next**.

**NOTE!** In the **SQL Server** you can create another user instead of **SA** user and use it. (This second option is not recommended for users who don't have required IT knowledge. Also this user must have **DBCreator** privileges.)

6. Finally, click **Finish** in the **Summary** window, showing the path of the project file and the project name.

Your new project is ready!

## 3.2. Opening a Project

In case of the project file is lost, click **Tools -> Open Project Without Project File** option from top menu, choose **SQL Server** and fill the necessary information. Then you can continue to use the existing project. But it is mandatory to add the file extension (.map or .mlp) while naming the project.

When you open the **Metus MAM**, the previously created projects don't open automatically. The very first window is the **Starting Page** and it is listing the recently opened files. You can select and open the project you want from this list. One-click only is enough. If the project you want to open is not listed here, you can find it by clicking **Open Project** from the **File** menu or by clicking the **Open Project** button. Then browse for the relevant map/mlp file.

## 3.3. Users and Groups

You can create any number of users in **Metus MAM** and you can provide them different privileges even on the level of bins and assets. Groups are added for convenience to gather several people f.e. from one department. Usually, in one group you cluster the people supposed to have equal rights. Thus, you apply permissions not for each one of them (one-by-one), but directly to the entire group.

### 3.4. Adding New Bin

- Right-click on an empty field and choose **Add New Bin** from the context menu. Put some bin name, choose the bin type and click OK.

- You can also add a folder from your computer or the network as a bin - choose the **Add Folder As Bin** option from the context menu in the project you work, browse for this Windows folder and click OK. Thus, the selected folder is added in the project as a bin and the files included in the folder are added as assets.

- New bin can also be added via the icon from the toolbar:



### 3.5. Adding New Asset

Adding an asset in a project can be done in several ways:

- **Adding Asset from the Folder Explorer** - Open the **Folder Explorer** window. From its tree-structure find in your computer or in the network files (such as video, audio, picture or document); right-click over it and choose the **Create Asset** option. You can also drag the file to the project.

- **Drag-and-Drop from out of the application** – Just drag the file you want to create an asset to from the **Windows Explorer** to the project you use in **Metus MAM**. Bins occur from folders, assets occur from files.

- **Adding Asset from the Project** - Right-click in the current project and select **Add File As Asset** option for adding an asset. From the menu, you must select the file you want to add as an asset and click the **Open** button.

- **Adding Asset by Toolbar** - When you click the **Add File** button on the toolbar, from the **Windows Explorer** window you can create a new asset by browsing for the file for which you want to create an asset.



**Archive to a project** – archives assets from a library to archive projects. The metadata applied can be transferred, also.

### 3.6. Adding a New Field

1. Select the **Add New Field** option from the menu within the metadata window.

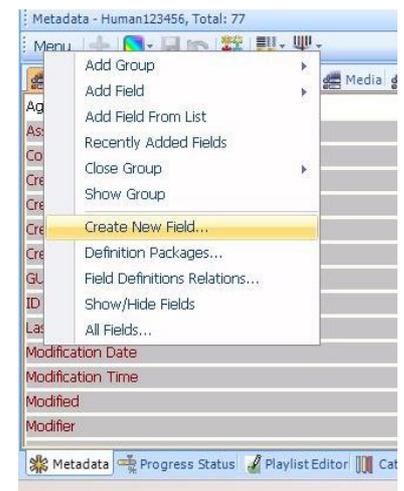
2. From the opening window choose the language you prefer; from the **Parent Field** select the group under which you want to add the field.

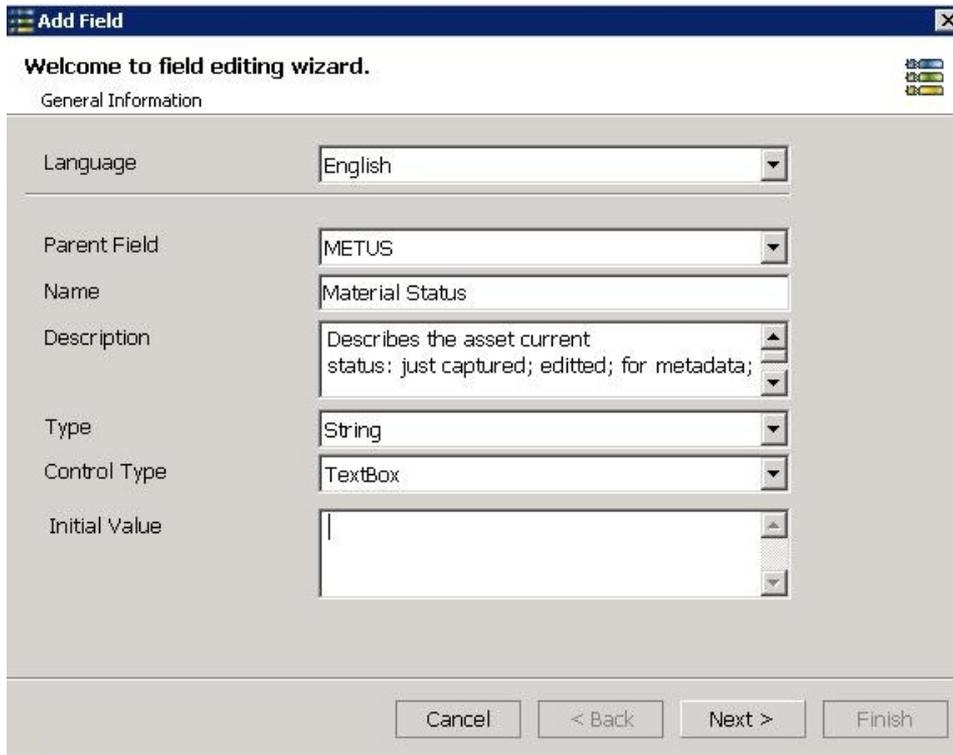
3. In the **Name field** specify how you want to name the metadata field. From the **Field Type**, select the type of the field to be added and its control type.

4. Finally, click **Next** button to switch to **Field Editing Wizard window**. Set here the properties of your field and click **Next** button to continue.

5. Check the boxes according to the object types for which you want the created field to be visible and click **Finish** to end the procedure.

6. You will see your new added field into the metadata window (in the relevant group) after clicking on any asset in the project.

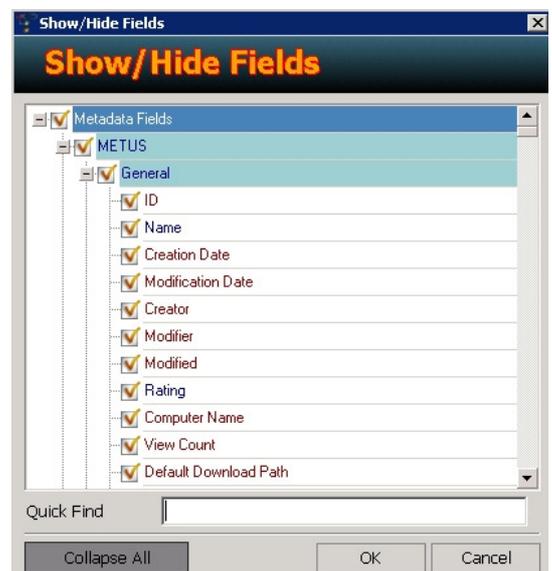




### 3.7. Show / Hide Field

With this setting you can specify which fields will be shown or not in the metadata window in the **Metus MAM**. You can open the window by clicking the **Show/Hide Field** option from **Menu**.

You can filter the fields you didn't want to be shown by typing their name in the **Quick Find** field. Then uncheck the boxes next to these fields and click OK. Thus, those fields won't be shown in the metadata window even they are already applied for the selected assets. This feature is project-based and changes will apply to only active projects.



### 3.8. Adding a New Category

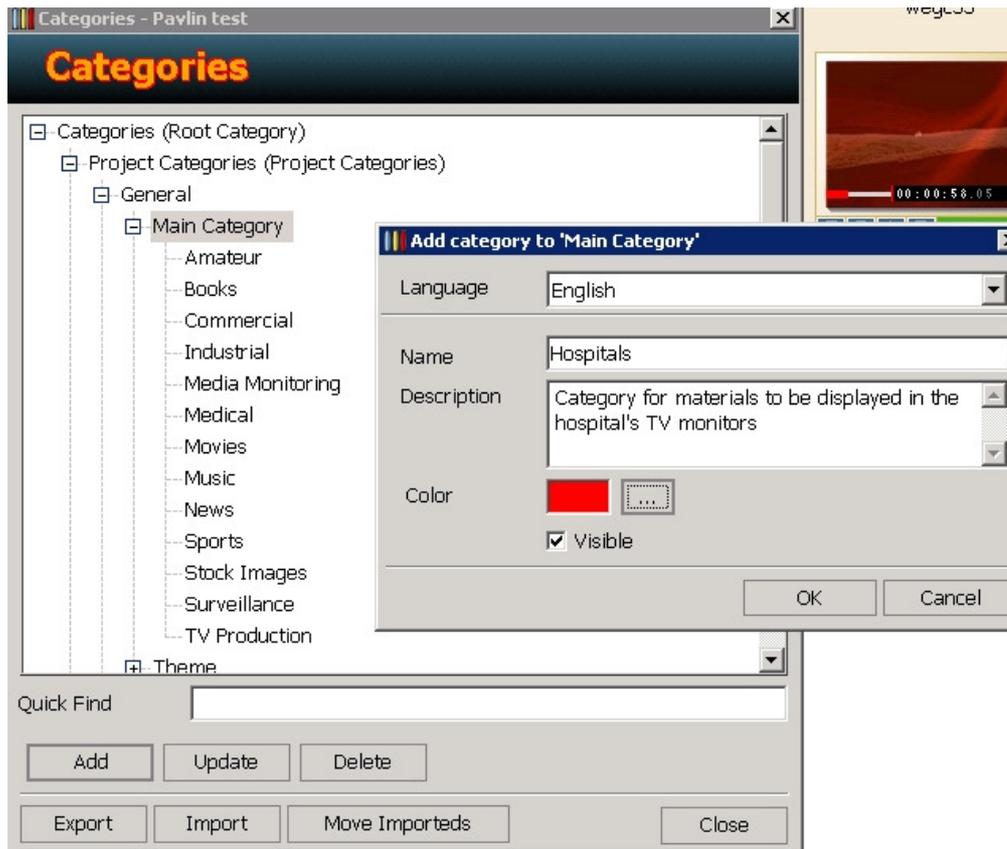
You can add categories previously defined in the **Metus MAM** system by checking them and thus applying them to the objects selected in the project.

You can also create new ones.

1. From the **Category window** invoke the context menu and select **Add New Category**.
2. Chose the **language** you prefer and type the **name** and the **description** of the **category** you want to create and then click **OK**. At your discretion, you can tint your categories. For this, select the color you prefer by clicking the browsing button in the **Color** field and then click **OK**.
3. Finally click the **Close** button.

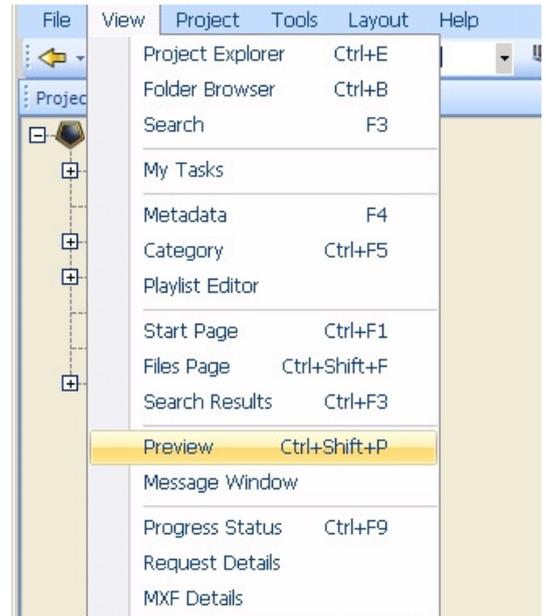
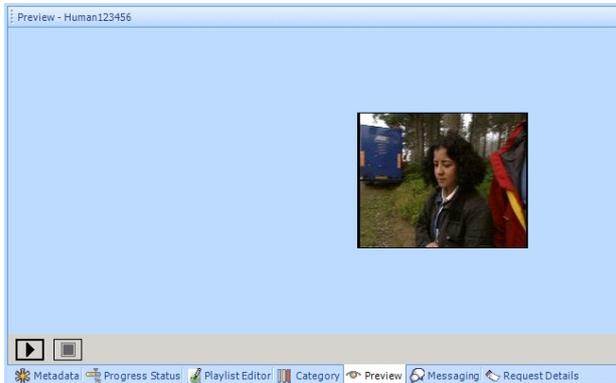
You can also edit or delete some the existing categories.

1. Right-click on the **Categories window** and from the drop-down menu choose **Project Categories**.
2. Select a category or a group of categories and click the relevant button – **Update** or **Delete**.
3. Click the **Update** button in the **Categories** window.
4. Finally click the **Close** button.



### 3.9. Preview

Except in the **Asset Viewer**, you can preview your video materials in the **Preview window** in **Metus MAM**. This window is shown/hidden from the **View menu**.

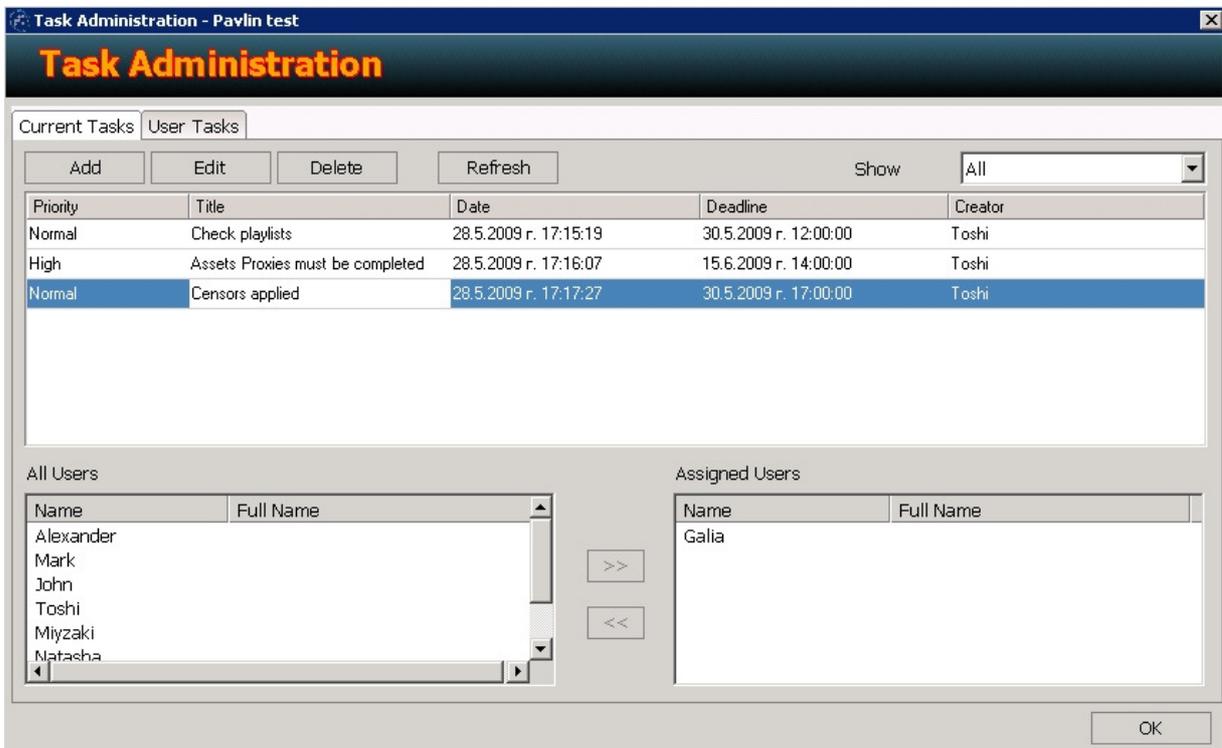


Only proxy files can be viewed on **Preview window** as default. If you wish, you can also view the original file in the **Preview window**. If so, run **Options** from **Tools** menu and from the window appearing choose **Preview**. Then check the option **Play Original File In The Preview Window If Proxy Does Not Exist**. Click **OK**. Now, the original file will be previewed there.

### 3.10. Adding a New Task

The project administrator can assign different tasks to the users in **Metus MAM**.

1. From the **Project menu** select **Task Administration**.

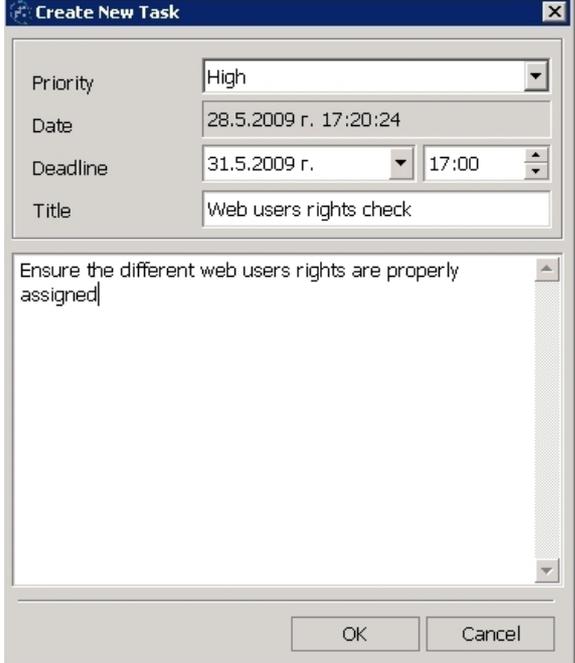


2. Click the **Add** button in the **Current Tasks** tab of the **Task Administration window**.

3. In the **Create New Task** window, set the priority level of the task (in the **Priority field**). There can be also set a day and time the task should expire - in the **Last Deadline** field. Type the title and the description of the assigned task in the **Title** field and below that field, respectively. Creating a date is specified automatically and cannot be changed.

Click the **OK** button to close the **Create New Task** window.

4. From the users listed below, you can select the users to whom you want to assign the new created task and click **OK**. Then the selected users are shown in the tasks-assigned users list.



**Create New Task**

Priority: High

Date: 28.5.2009 r. 17:20:24

Deadline: 31.5.2009 r. 17:00

Title: Web users rights check

Ensure the different web users rights are properly assigned

OK Cancel

# CHAPTER 4 – METUS MAM USAGE

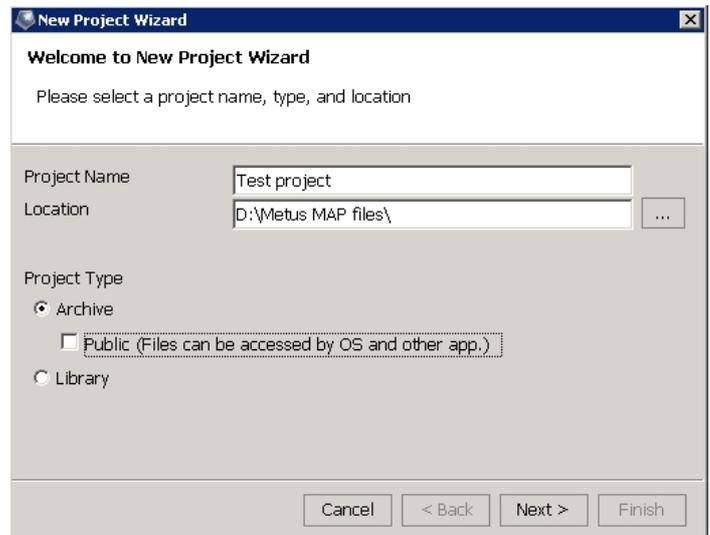
## 4.1. The Start Page

When launching **Metus MAM**, the **Start page** opens. It is giving a possibility either to create a **New Project** or to open an already existing one. The recently used projects are listed on the **Start Page** interface and you just click once at the project you want to open. Another way to open a project is to browse for its map/mlp file as already explained in Chapter 1.



## 4.2. Project Creation

The new project creation is invoked either by pressing the relevant button from the **Start Page** or from **File menu** -> **New Project**. A wizard opens for specifying the settings for the new project. On the first window you are supposed to type a project name, the location where the project will be saved and its type – library or archive. See these types explanation in Chapter 1.



**NOTE!** Please, when creating archive projects, avoid checking **Public** unless you are sure of this is really needed in your workflow. If this check is on, the user can access the archived files via the operating system or via any other application. This can result in files editing or deletion which is not going to be reported to the project database. Thus, all the references and information kept in the database could be messed up. Therefore, each archived file deletion must be done only through the project **Recycle Bin**.

Here is some more information about working with library and archive projects:

**Library Project** - From any video, audio, picture or document file you can create an asset on the local computer or in the network in a library project. Source files are not deleted when created assets are deleted! You can see the original file location by right-click on the asset and choose **Go**

**to place on disk.** But if you change the original file's location, name or path, you cannot access this file from **Metus MAM** anymore.

**Archive Project** - In the archive project, a copy of the original file is created on the archive disk or on a defined tape cartridge. For more information about configuring the archive disks see **Archive Servers**. After that, even if you delete the original file, the file in your archive disk will not be deleted. One of the most important features of **Metus MAM** is that the archived files are not accessible from any program out of **Metus MAM**. The system uses a tunnel created by it while archiving the files and accesses them through that tunnel. If you want to use a file from your archive disk on another location, right-click the asset and choose **Retrieve File**. As a result, a copy of this file will be "downloaded" locally on that machine.

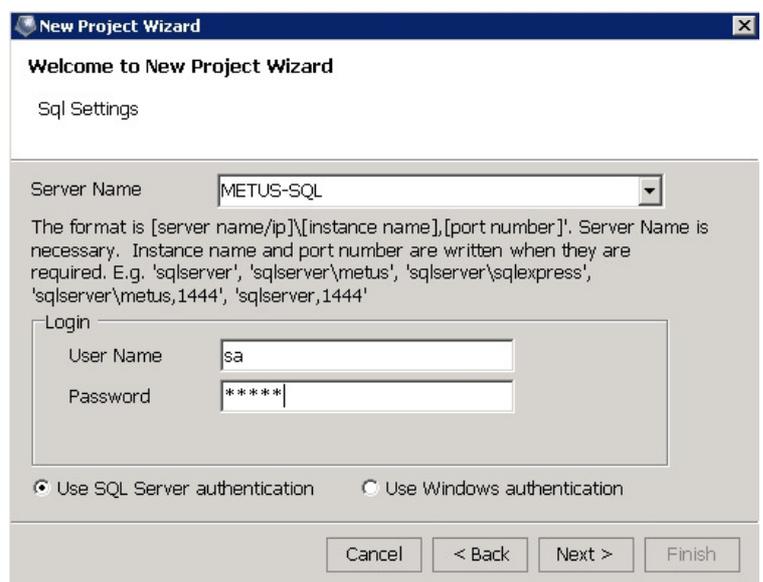
The second window is for choosing the database type – **MS SQL** or **Oracle**. We go on here with choosing MS SQL.

The third dialog is a consequence of our choice in the previous one. Here we define the SQL settings:

- **Server Name** is the machine the SQL is installed on. Take its name from the drop-down menu which is listing all the computers in the network on which **MS SQL** is installed (add "\sqlserver" or "\sqlexpress" after the name, if needed);

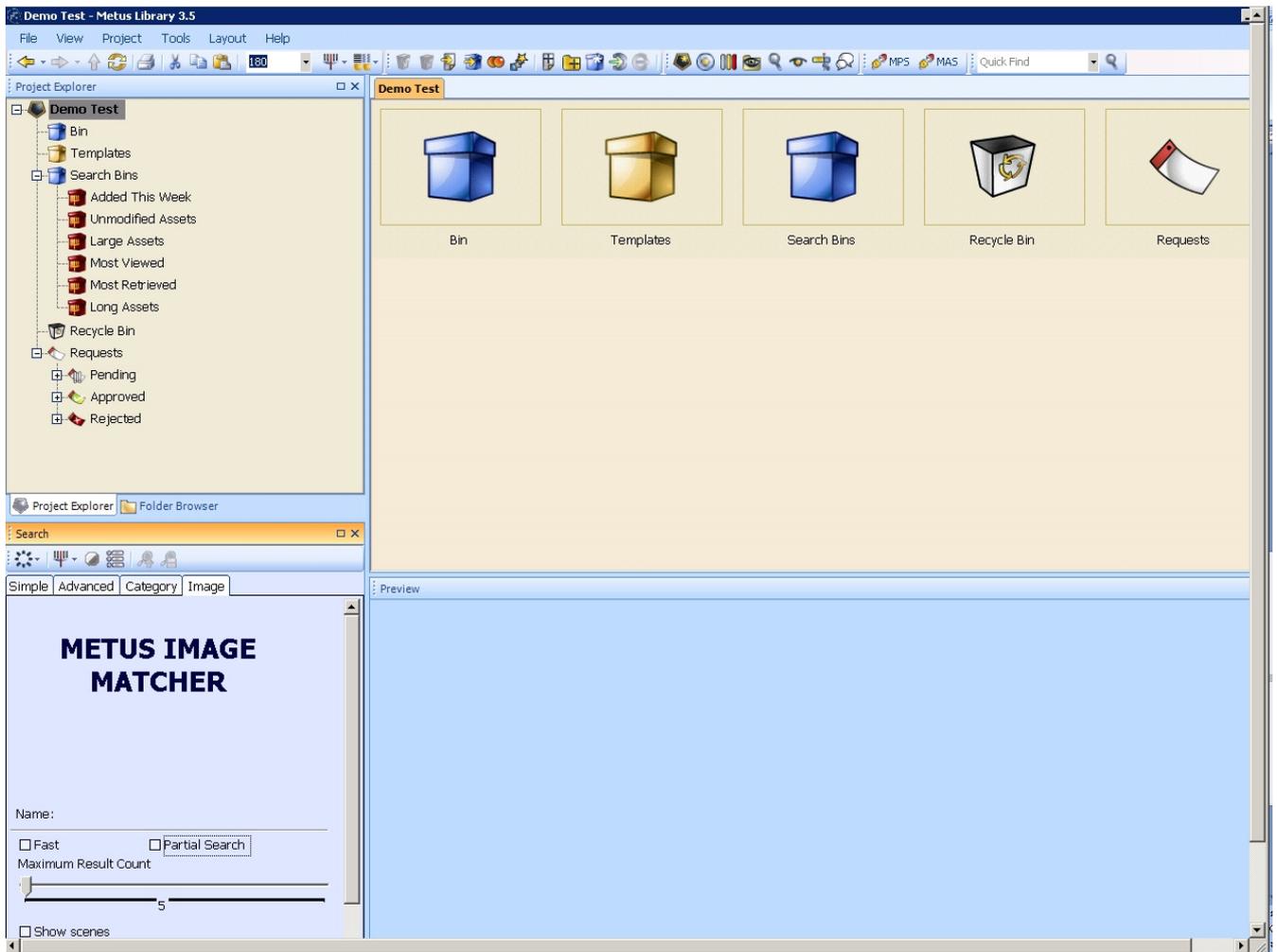
- **User Name** – here we put "sa", which is the SQL database default name. The database must be installed in **Mixed Mode** with some password specified. For username we leave the default one. Therefore, we put here the default username (sa) and the password, already set during the installation. Logically, **SQL Server Authentication** must be left as a choice (due to the way of installing it).

On the next dialog we select **Finish** and **Metus MAM** starts creation of an empty database and the empty structure for our new project. This is the moment the system automatically installs the metadata tree, the project categories and the bins we see when opening the project for first time.



### 4.3. Program Interface

Here is how our new project looks like when we open it for first time:



As we see, it has a tree-structure. Automatically it is installed:

- one **Generic Bin** for adding here our materials
- one **Template Bin** to place here our templates
- one **Generic Bin** is installed to be a container for the six **Filter Bins** placed there
- a holder for the **Requests** which are going to be made
- and of course, the **Recycle Bin**, we already mentioned above.

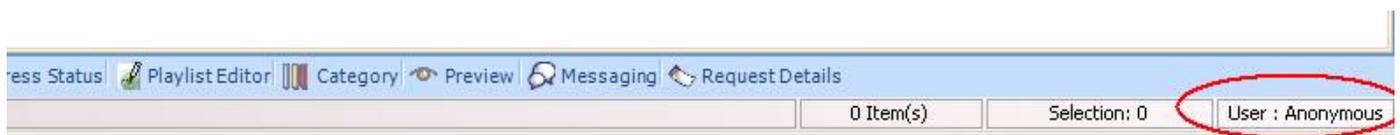
Generally, the interface is divided in four main parts: upper-left, upper-right, down-left and down-right part. This interface layout can be changed as per the user's wishes by drag-n-dropping each one from the windows and the tabs. After ordering them in the way he prefers, he can save this as a new layout from the **Layout -> Save Layout** option. In the **Layout** menu, there are some other layouts, already predefined that can be used as per the user convenience.

The upper-left part shows two tabs: the **Project Explorer** and the **Folder Browser**. The first one displays the project structure; the second acts like a simple Windows Explorer and it is browsing the folders on the local HDD or these, available in the network. If you select any folder, you will see the files included into it in the right side, in the **Files** tab. Right-click on it and you can archive the file to the project, you can locate its place on the HDD/network (a Windows Explorer pops up), etc.

The upper-right part displays the content of the folder or bin, selected in the upper-left part. The down-left part is the one for searching (four ways for search, the last one is optional – we will discuss them in details further in that manual). The last part is the most various one as it consists of 7 different tabs; each one of them can be closed or shown – again as per user’s wishes. These will be explained in details.

#### 4.4. Users and Groups

**Metus MAM**, can work on a server-client based architecture. It is possible to create groups and users having different access levels in **Metus MAM**.



After opening the project for first time, the current user using it is the one who created it. And as there are still no users defined, this user is automatically considered as **Anonymous**. Still he is the only one working with the project; therefore he is its **Administrator**. The user, currently logged in the project, can be seen at the most right-bottom of the page:

In order to increase the project security, a **Project Administrator** must be defined. For this purpose, users must be listed before that.

The users list can be updated from the main **Users and Groups** window, which opens from **Project -> Users and Groups**. Only the **Project Administrator** can access this dialog.

- **Add** button is for adding a new user or group;
- **Remove** button – press it to delete the selected user(s) or group(s),
- **Properties** – changes the properties of a user or group.

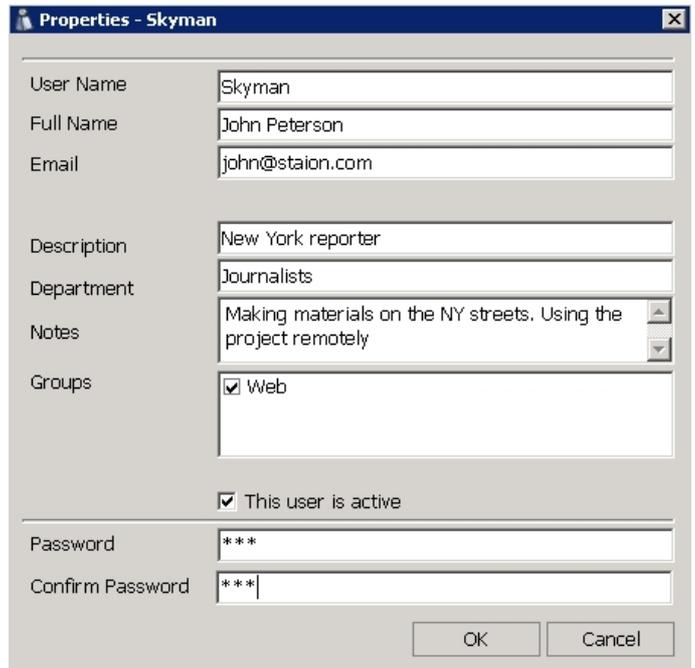
General info about users and groups is mentioned in Chapter 1.



#### 4.4.1. Adding a User

The dialog for defining a new user is very simple and user-friendly. The fields are self-explanatory.

In the **Groups** field you will see a list of all the groups, created for the current project. The one you check is the group to which you make the user belong. Further on, if the Administrator applies some rights to the entire group, all the people belonging to it, will automatically obtain the same rights.



#### 4.4.2. Deleting a User

As already mentioned, from the **Remove** button of the **Users and Groups** dialog.

#### 4.4.3. User Properties

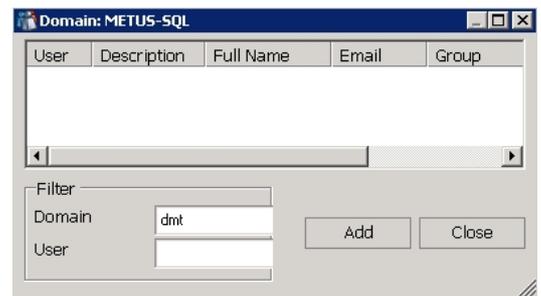
Invokes the dialog with the user's settings applied during adding him. Select the user from the users list and click on the **Properties** button.

#### 4.4.4. Export - Import Users List

You can save the users list you created in .xml format by pressing the **Export** button. You can import this list in other projects you created by pressing the **Import** button there.

#### 4.4.5. Adding Users from Active Directory

If you work on a domain, you can add your users in active directory to **Metus MAM**. For this, click the **Add from Active Dir** button below in the **Users and Groups** window. In the **User** field type the name(s) of user(s) you want to add from active directory and click the **Search** button. When you find the user you want to add mark his name and press the **Add** button. Finish the procedure with the **OK** button.



#### 4.4.6. Adding a Group

After creating the user list, the Administrator can create groups and gather the users into them. When equal rights are given to more than one user, those users are usually added to a group and the rights are applied to the group, totally. Thus, the procedure is simplified by giving rights to groups rather than users individually.

Groups creation is similar to the users one. Just select the second tab – for the groups.

#### 4.4.7. Deleting Group

For deletion, select the group and then the **Remove** button.

#### 4.4.8. Group Properties

The group's summary is seen from the **Properties** button. You can change the name of the group and you can change the users of that group, also.

### 4.5. Security and Authorization

#### 4.5.1. Security Settings for the Project

You can make the security settings as project-based. Thus, these settings will be applied for all bins and assets within that project. I.e. the settings will reflect the entire project.

#### **NOTE!** Administrator

The project administrator is usually only one person. There cannot be more than one administrator for one project. The **Project Administrator** is specified from one place only: **Project -> Properties -> Security -> Project Administrator** field and he is the only one privileged to browse in the security settings and to apply changes there.



#### User's rights

To make the security settings throughout the project, click the **Security** option from the **Project** menu. Press the **Add** button and start adding the users and the groups you want to define permissions to work with the project. If a user belongs to a group, which you are going to define some rights, there is no need to add this user here – he will take the rights from the group level.

The authorization levels and authorities are as follows:

##### a. Read

A user authorized to read can:

- ✓ See bins and assets and navigate around them.
- ✓ See all metadata and categories of bins and assets but cannot change.
- ✓ Play asset but cannot change. (marking in/out, etc.)
- ✓ See asset's storyboard but cannot change.



#### **b. Add**

A user authorized to add can:

Add a new bin, asset or container under a bin if that bin has appropriate authorization.

- ✓ Add any object able to be added under a container if that container is authorized for this.

#### **c. Edit**

A user authorized to edit can:

- ✓ Change bin properties
- ✓ Add or delete metadata to any bin, asset or container
- ✓ Add or delete a category to any bin, asset or container
- ✓ Create a storyboard. Make a thumbnail from the storyboard
- ✓ Edit the asset
- ✓ Mark In/Out
- ✓ Set Master In/Out
- ✓ Set censors
- ✓ Add markers
- ✓ Move assets from one bin to another.

#### **d. Delete**

A user authorized to delete can

- ✓ Delete any bin, asset or container.

#### **e. Retrieve:**

A user authorized to retrieve can:

- ✓ Take an asset from an archive project to a library project.
- ✓ Download a source file of an asset from archive project to the local machine or another one in the network (ex.: PlayOut system, Editing system, etc.). Retrieving to a FTP is possible, too.

#### **f. Request**

A user authorized to request can

- ✓ Ask the system administrator to perform a process if the user is not authorized to run it.

#### **g. Full Control**

This is just a quick check for all the checks below. It acts like full-rights check. Only **Request** is not checked as it is logical that a person, allowed to do everything has nothing to request for. Even though, it can be checked, too, if wanted.

#### 4.5.2. Security Settings for Bins and Assets

In **Metus MAM** the Administrator can give different levels of access rights to bins and assets for the different users as desired. For this: right-click over a bin or asset and choose **Security**; then add the user or the users from the drop-down menu and give rights to these users as desired. If you click **Take Security Settings from Up** option (in the **Security** window), the security settings of the upper bin will be applied to that bin and the assets included in it. Unless something else is specified, this option is valid by default.

#### 4.6. Logging

When a project creation starts in **Metus MAM**, there is still not a user added to the user's list. The system automatically defines the first one creating the project and working with it as an **Anonymous** user. He is the only user of the project and besides, he is its current **Project Administrator**. In the low right part of the interface **Metus MAM** displays always who is logged in the project so that you can see **User: Anonymous** written there.

After a user is defined, he can log into the project with its project account (username and password). Anonymous becomes right-less further on.



Login is done either via closing the project and opening it again (the **Start Page**) or by using the **Login/Logout** buttons from the toolbar. Into the popping-up dialog the user enters his name with which his account is created in the **Project -> Users and Groups** dialog. After the user is logged-in, he can execute only actions included in the permissions allowed for him.

At any time, the user may want to leave the project: he can use the **Logout** button and will be logged off. The project remains open but reported as being used by **Anonymous** again – thus, nothing can be done as **Anonymous** is right-less anymore.

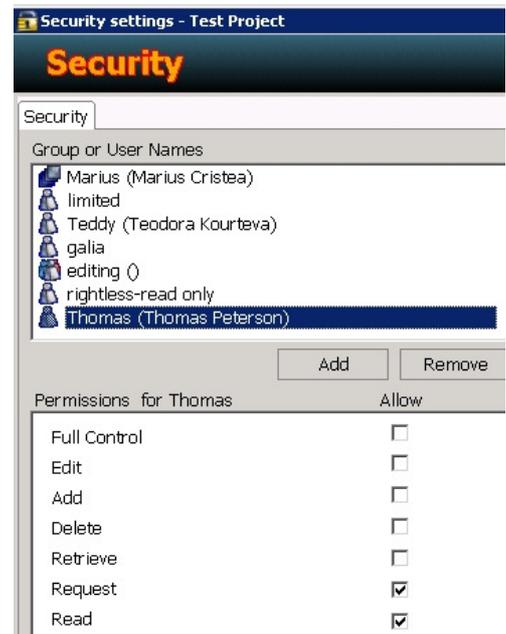
#### 4.7. Requests

**Requests** are created in cases the user wants to execute an action he is not allowed to do. The **Requests** are addressed to the project administrator. He is the person that reads them and up to his disposal he can approve or reject them.

To precisely explain how the **Requests** are working in **Metus MAM**, it is better to example them.

**Example:** In **Project -> Users and Groups** we define a user Thomas (Thomas Peterson). On next step we run **Project -> Security** and for Thomas we allow only two permissions: **Read** and **Request**.

Now using the **Login** button from the toolbar, we log Thomas into the project. Let assume that he wants to rename one asset in the project and to delete another one. He is not allowed to execute these options (renaming and deletion), so when he choose **Delete** or **Rename** from the asset's context menu, a dialog named **Request** pops-



up. Into this dialog the user comments what and why he wants to do – he puts his notes here for the Administrator to read them later. The headline of the dialog displays for what action the request is created: **Rename, Delete**, etc. In the lower part request priority can be selected: **Low, Normal** or **High**. The check **Apply to All** concerns the other requests' priorities – if the check is on, they all will obtain the priority we set here. Let apply **High** priority in our example.

So, finally Thomas created a deletion request for the first asset (**Terminator Trailer**) and for the second one (**Swan**) he created a request to

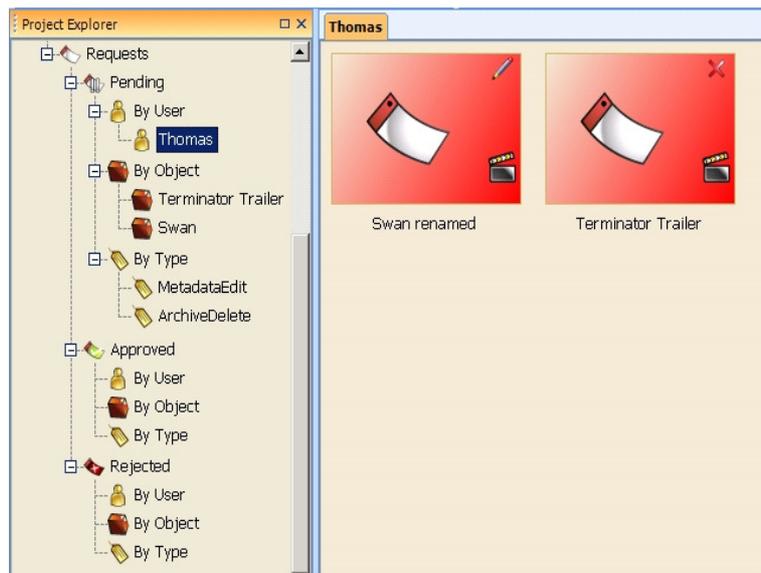


rename the asset to **Swan renamed**. After the requests are created, over the assets appears icon as shown on the screenshot. It means that there is a request about this asset.

When the Administrator logs on again in the project he can see the two assets with their icons for requests. Nevertheless, if he misses to see them, he can understand about the requests from the relevant bin in the project tree – there is a **Requests** bin automatically installed with **Metus MAM**. Until the moment the first requests are created, this bin is empty. After that, all the requests are gathered here for Administrator's convenience.

The **Requests** bin is divided basically in three parts: **Pending** (here are filtered the requests which are still not answered by the Administrator (neither **Approved**, nor **Rejected**)), **Approved** (the assets which the Administrator had approved and thus, been already executed) and **Rejected** (these which running the Administrator canceled and refuses to be ever executed).

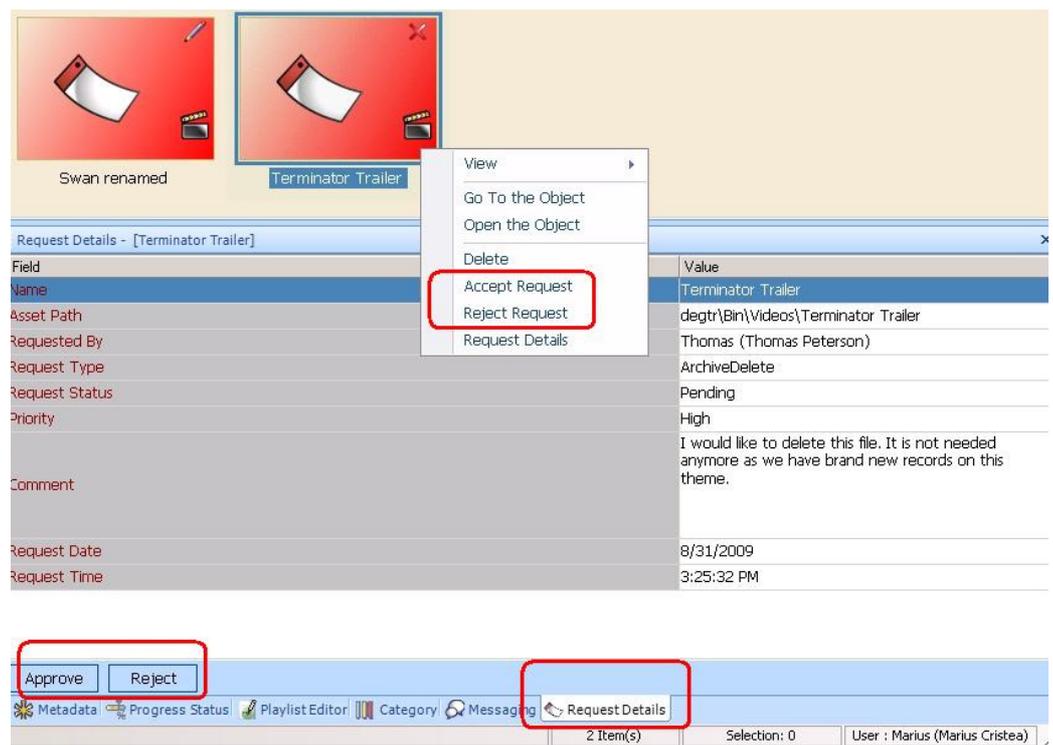
After the request is created, it is listed automatically in the **Pending** part. Requests there can be grouped:



- **by User** - under this node are listed all the users that sent requests to the Administrator. Select any of the users and all the requests created by him will be displayed on right. The pencil over the first asset means that this request is about editing metadata; the X-sign over the second one designates that it is a request for deletion.
- **by Object** - here are listed all the objects from the project for which requests have been created). Select any of the objects and on right you can see what the requests have been created about (what action they ask for);
- **by Type** - under this node are listed actions for which requests have been created – if you select **Metadata Edit**, you will see on right all the requests asking about any metadata change; if you select **Archive Delete** – on right will be listed all the requests asking for some item deletion), etc.

And back to our example. In the **by User** part we see only Thomas displayed. **By object** we have two requests created – for the asset **Terminator Trailer** and for the asset **Swan**. **By Type** we have two actions asking for: **Metadata Edit** and **Deletion**.

Summarizing: there are two requests pending (created by one and the same user - one for deletion, one for renaming). Still there are no **Approved** requests, neither **Rejected** ones.



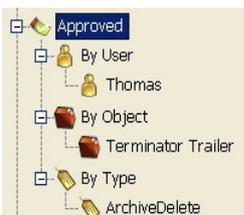
The Administrator can select any of the requests – no matter from which filter – and in the **Request Details** tab (right bottom part of the interface) he will see the details about it – see the screenshot here.

From the **Request Details** tab the Administrator gets more info about:

- the name of the object the request is about (**Name**);
- its place in the project tree (**Asset path**);
- the user who had created the request (**Requested by**);
- what action is the request asking for – deletion, metadata editing, etc. (**Request Type**);
- the status of the request – is it still pending, approved or rejected (**Request Type**);
- the urgency of the request – is it high, normal or low **Priority**;
- the **Comment** directed to the Administrator – the explanation about the need of running this action;
- the **Date** and **Time** at which the request had been created – this is very helpful info in cases when there are a lot of requests and especially when the requests about assets are overlapping (conflicting each other). From this field the Administrator can understand which one is created earlier and which one later.

After the Administrator traces all this info, he can make his decision what to do with the request – to **Approve (Accept)** it, to **Reject** it, to ask (**request**) **more details** about it (to the user that created the request) or just **Delete** this request and forget about it. All the four options can be seen in the request’s context menu. Usually requests are approved or rejected, therefore the quick **Approve** and **Reject** buttons are available at the bottom. To help the Administrator makes his decision, **Metus MAM** provides him possibility from here – the context menu – to **Open the object** (for previewing it) or directly **Go to the Object** in the project area.

Let us say that the Administrator decided to reject the request about renaming and approve the deletion one. He selects the first request – for the asset *Swan Renamed* and chooses **Reject**. He selects then the second asset (*Terminator Trailer*) and **Approves** the request (either from the context menu or via the quick buttons below).



In result of this choice, the **Approved node** is changing– it lists one approved request: **by User** it is Thomas that requested it; **By Object** – it is a request concerning the asset *Terminator Trailer*; **By Type** it was a request about deletion.

the object. As this request is approving deletion, it means that the object has been removed. And if we check we shall find out that the *Terminator Trailer* asset is automatically moved to the **Recycle Bin**, i.e. deleted.



In the moment of approving the deletion request, **Metus MAM** deletes



Due to the choice made by Administrator, the content of **Pending** and **Rejected** nodes is changed, too. The **Pending node** gets empty and this is logical, because the requests being listed here are not pending anymore, so they are moved to the relevant filter node (**Approved** or **Rejected**).

The **Rejected node** structure changes, too – it displays now the request about renaming the *Swan* asset. The Administrator rejected this request, so **Metus MAM** lists it automatically here. Furthermore, the name of the asset is reverted back to *Swan* only. It is not *Swan renamed* anymore (as this was not approved by the Administrator).



#### 4.8. Archiving

Files can be archived in **Metus MAM archive projects** only. When the files are archived, a copy of each file is created in the archive storage. When deleting an asset from an archive project (if the asset is the only one using this archived file), the physical file on the storage is deleted, too. If there are other assets using this file, then the file could not be deleted. The user will be warned by **Metus MAM** so that all assets are deleted until the last one (as per the user wish).

You have to create an archive project and assign an archive server for this project to make a real archive. And there are several ways for archiving files in **Metus MAM**.

Library projects create assets from files but they do not copy file to any storage. Therefore if the physical source file is deleted or moved, the asset refers to that file cannot be played. So, library projects do no archive.

##### 4.8.1. Archiving from Library Project

You can archive from a library project to archive project by drag-n-dropping the assets from the one to the other project tab. This can be done with bins, also.

Another way is to right-click on an asset in the library project and selecting the “**Archive...**” or “**Archive to...**” option. It archives the file to one of the opened (active) archive projects – they are listed so that the user specifies which one. Also, the archiving options can be additionally adjusted.

##### 4.8.2. Archiving by drag-and-Drop from Windows Explorer

You can archive folders as Bins and files as assets by dragging them from Windows Explorer and dropping them into the project area.

##### 4.8.3. Archiving From Archive Project Interface

- Right-click in the project area and from the context menu select **Archive file** or **Archive folder**. A browse dialog opens. Point to where the files and the folders are placed.

- Select the relevant button (**Archive File** or **Archive Folder**) from the toolbar to archive a file as an asset or a folder as a bin with assets inside.



##### 4.8.4. Archiving from the Folder Browser Tab

The **Folder Browser** window displays the physical files in your computer or the network. If **Folder Browser** is not visible, you can make it visible from the **View** menu. The displayed files are shown in the **Files** tab in **Metus MAM**.

- You can select the files or the folders you want to archive from the **Folder Browser** and

drag them to the **Archive Project**.

- You can make the file to be archived in any active (opened) archive project by right clicking the file and choosing the **Archive** or **Archive To** options.

The first one is asking only to which active project to archive. The second provides an advanced dialog for additional settings to be observed during the archiving process. It consists of two parts – left and right. In the left part are listed all the opened archive projects and their bins and sub bins. In the right part is displayed **Archiving options** dialog, which will be explained further in this manual.

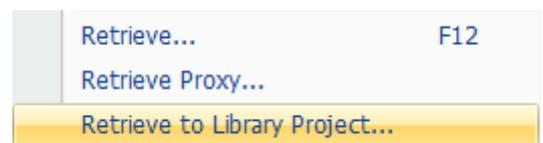
#### 4.9. Deleting Assets in the Archive

Select the asset(s) you want to delete from the archive project and press the **Delete** key on the keyboard or you can use context menu and select **Delete**. The deleted assets are moved to the **Recycle Bin** (temporarily deleted) from where they can be deleted permanently.

**NOTE!** When you delete assets in the archive project, the source file on the storage is deleted, too. Don't forget, it may not possible to recover. Also, the database deletes all the information about this asset and the references to the other objects, too.

#### 4.10. Retrieve

It is not possible to access a file in the archive project from out of **Metus MAM**. Therefore, it is necessary to take the file out of the **Metus MAM** to use it in another application (f.e. NLE editing). Two scenarios are possible – retrieving directly to a folder/FTP or retrieving the file to a library project (which of course is making a local copy of the archived file, too). And also if required; only proxy file can be retrieved too by “Retrieve Proxy...” option.

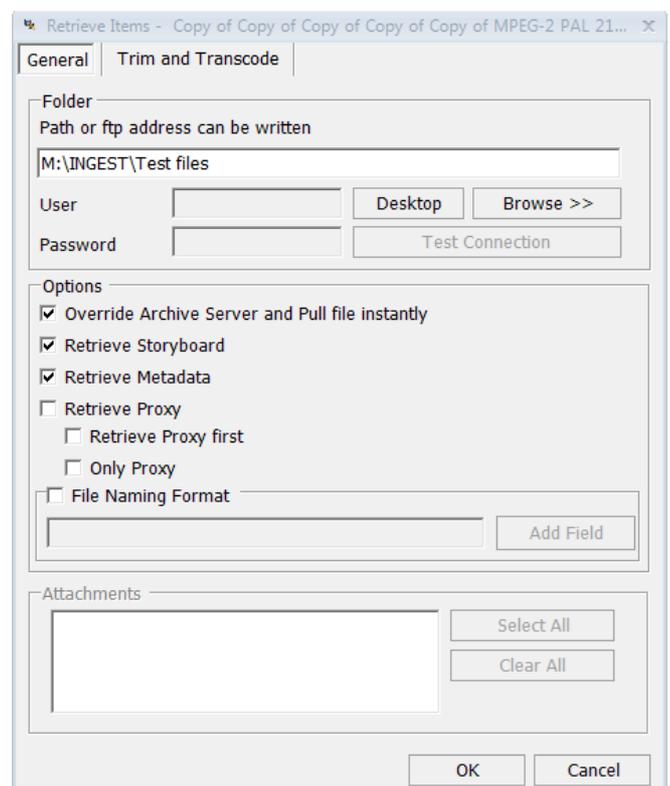


##### 4.10.1. Retrieve to a Local Folder

To retrieve the file to the local machine or any computer in the network or FTP, select the asset, right-click on it and choose **Retrieve**. A dialog opens for specifying the retrieval options:

- In the first text field you set the location to where the file will be saved. There is a button to place the file directly on the **Desktop** – no need to browse for it.

With the **Browse** button a folder can be pointed – choose it either from the network



**(Browse New)** or choose any of the recently used folders.

The file can be copied on a FTP, also. In the text field you define the FTP link. In the **User** field – the user name for reaching it. The **Password** field requires the FTP password. After all the FTP settings are applied, the connection must be checked with the **Test Connection** button.

- **Override Archive Server and Pull File Instantly** – if the archive server cannot access the folder to write into, **Metus MAM** will copy the physical file from the storage by itself.

- **Retrieve Storyboard** – if the asset is created a storyboard, the storyboard will be copied, also. All the storyboard pictures will be saved in a subfolder in the folder where the local copy is saved. All the pictures are separate files, with \*.jpg extension.

- **Retrieve Metadata** – if some metadata values are applied to the asset in the project, they can be copied, too. The copied metadata will be included in one file with extension \*.xml in the folder, set as retrieve location.

- **Retrieve Proxy** – If the asset is created a proxy, it can be copied together with the original file being retrieved. The proxy is placed in the folder specified as a location for the retrieval. Furthermore, you can choose the order for retrieving the file and its proxy - the proxy can be archived before the original file (**Retrieve Proxy First**) and also – you can retrieve **Only Proxy**

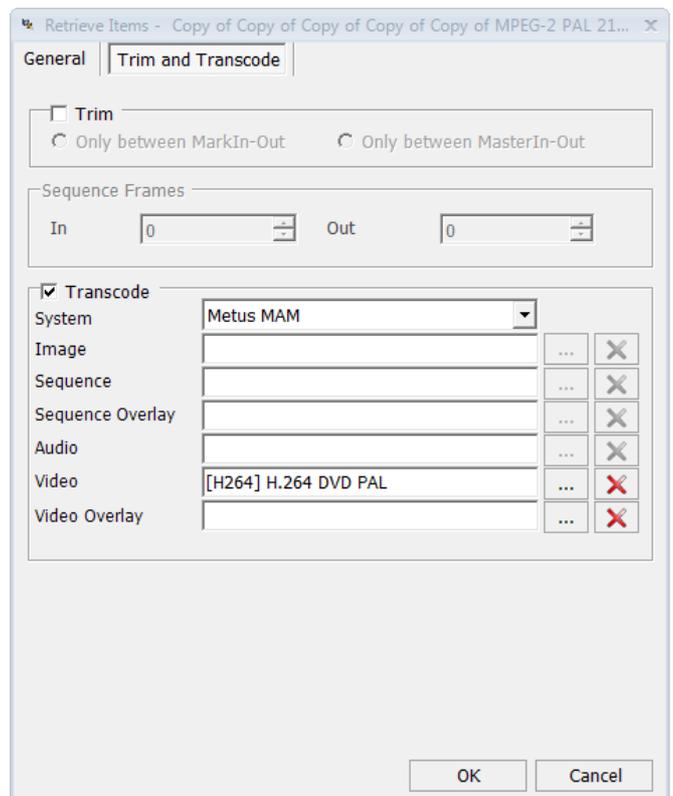
- **File Naming Format** – the place to define the way **Metus MAM** should extract metadata values from the different parts of the filename.

- **Attachments** – If an asset attached with some files, these assets can be retrieved with all or some of their attachment files.

- **Trim** – you can take only a part from the file. Generally, three scenarios are available for retrieving a file: copy the entire file (without the **Trim** check); only the part **between the Mark In/Out points** and the third option is to copy the part **between the Master In/Out points**.

- **Sequence Frames** – If the asset you are trying to retrieve belongs to a sequenced file, you can retrieve it as a whole or you can give

- **Transcode** – the copied file (or the part of it) can be transcoded to a desired format. More information about the Metus System transcoding you can find further in the manual.

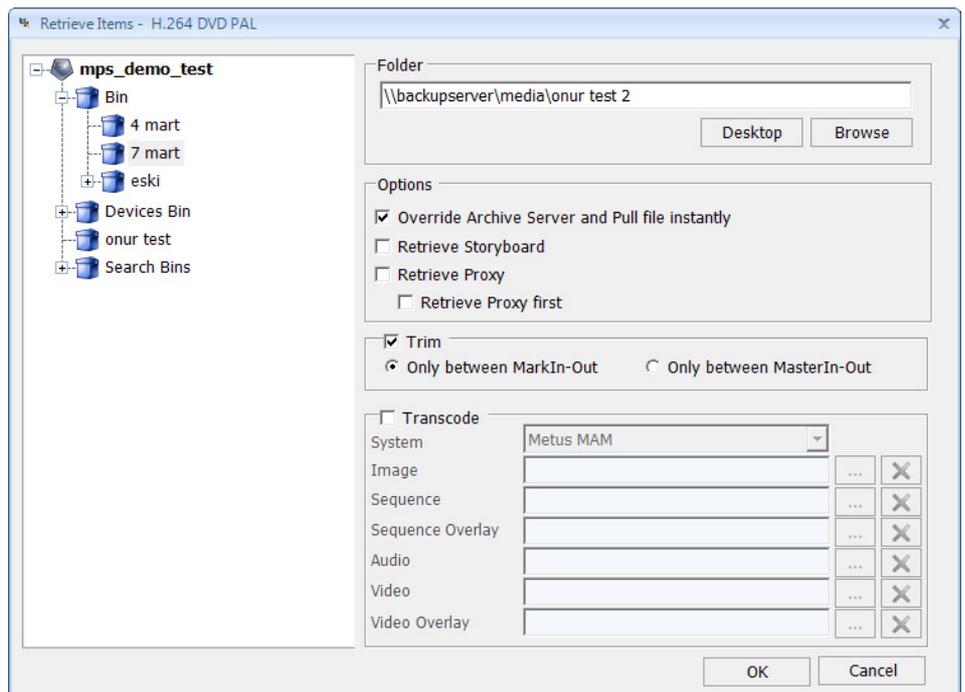


#### 4.10.2. Retrieve to a Library Project

The retrieving to a library project is not only taking a local copy of the archived file, but placing a copy of its asset in an active library project. Therefore, the dialog for retrieving to a library project requires both a folder path for the local copy to be placed and a bin from an active library project to be selected. To make it shorter: here is needed a bin to place the asset and a folder to copy the file. This is the dialog mentioned:

In the left part are listed all the active library projects with their bins and subbins. From there you must choose to which project and exactly into which its bin the asset will be placed (the asset of the file from the archive project – the one being retrieved).

In the right part should be applied the settings concerning the physical file copying. All of them are already explained above.



#### 4.9. Deletion in Metus MAM

Deleting an asset in the project will delete the asset and place it temporarily in the **Recycle Bin**. If you delete the asset from there (**permanent** deletion) the system will delete its metadata, proxy, etc.

If you want to empty a project – delete all its content.

To get free space in the database, delete the non-used metadata fields, custom-created, categories, storyboards, etc.

To fully delete a project, you must erase all the information which the project had generated. Here is a small guider we provide for deletion of **Metus Projects** and database content:

**NOTE!** Please, note that once the content or the database is deleted with backup files, you cannot get back any information.

- 1- Get the **Project GUID** from **Metus MAM** menu **Project -> Project Summary**
- 2- Delete the content archived. You can find it in the folder named with this **GUID**. The folder must be placed on some of the disks chosen in **Project -> Project Properties -> Archive Servers**. Please, note that this folder is a hidden one. To show it, open any **Windows** folder and choose **Tools->Folder Options ->View**. From the list uncheck the option **Hide protected Operating System files** and choose the option **Show hidden files and folders**.
- 3- Delete the project from the database.
  - 3.1 - Open **MS SQL Management Studio (Start -> Programs-> MS SQL 2005-> MS SQL Management Studio)**
  - 3.2 - Connect to the **SQL Server** that the project database is created on.
  - 3.3 - Select the database. It is placed under the **Database** node and the format of its name is like: **ARCHIVE\_ + <Project Name>**
  - 3.4 – Right-click over it and choose **Delete**.
  - 3.5 – In the pop-up window check both **Delete backup and restore history information for databases** and **Close existing connections**
  - 3.6 – Select **OK**.

- 4- Delete the database backup files. By default, the backup files location is **C:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\Backup**. Anyway, you can easily understand which the database backup location is. Just right-click over the database name and choose **All Tasks -> Backup**. The backup location info will be displayed.

#### 4.11. Transcoding

As a great priority over the competitors MAM solution systems, **Metus MAM** provides a powerful transcoding internal tool. It can be used for several purposes, usually concerned with transcoding:

- The materials being archived on the storage (in the moment of the archiving) can be transcoded into a specified format. Thus, the user ensures that all the files he works with will be one and the same format.

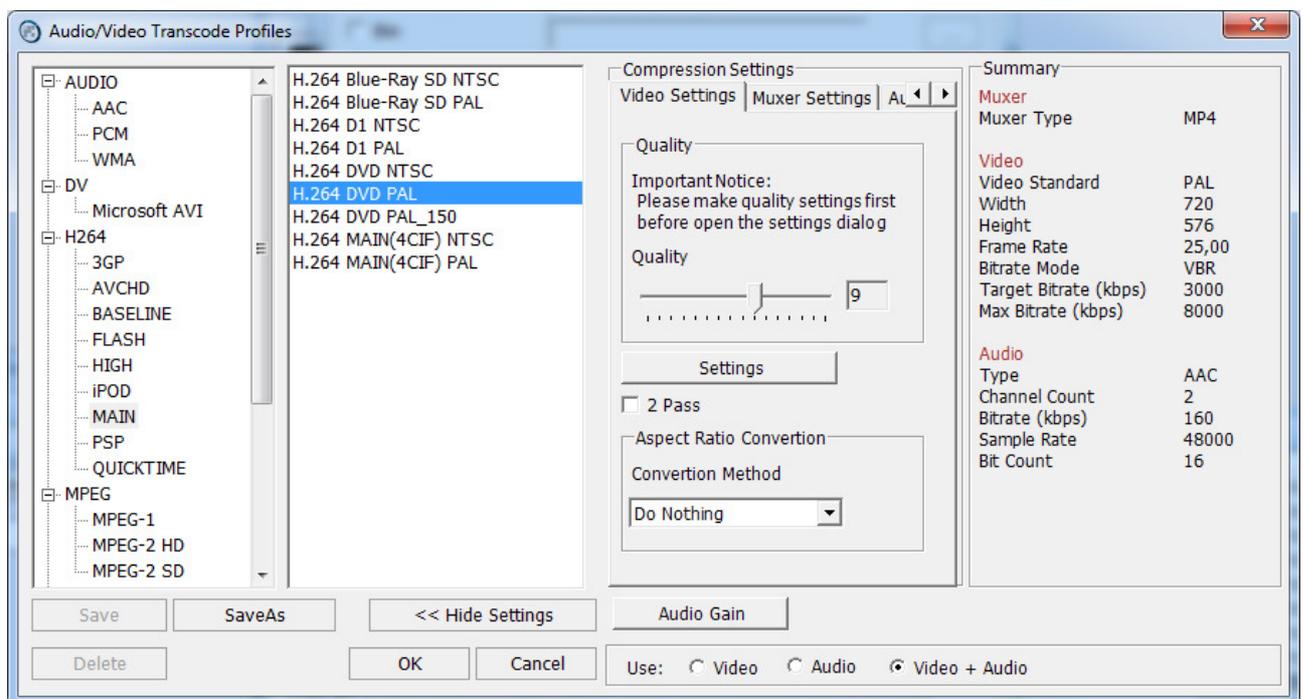
- Any material, already archived on the storage, can be transcoded to a desired format at any moment.

- Files, being retrieved can be transcoded into the moment of retrieval into the format chosen by the user.

- And of course, mostly used is the proxy creation format. Proxy files are created by re-encoding the source file with this internal transcoding tool.

The name of this re-encoding system used is **Metus System**. Run **Tools -> Supported Processes** to obtain more information about the formats supported and procedures possible to be run over them. This information is also available in that manual as **Appendix 3 – Supported Processes**.

If you choose the **Metus System** to transcode any audio or video material, it opens the **Audio/Video Transcode Profiles** dialog which provides the formats you can choose between.



No matter what is the source audio file you can transcode it to AAC audio format or create a proxy into this format. For video formats you can transcode to: H264, DV, Windows Media, MPEG and MXF. Each one of them has its levels and sub formats in **Metus System**.

H264	Main	H264.Main(4Cif) H264.D1 H264 Blue-Ray SD H264 DVD
	High	H264.HDTV 1080i H264 Blue-Ray HD H264 HDTV720p H264 High
	Baseline	H264.CIF H264.Baseline
	3GP	3GP
	AVCHD	AVCHD
	Flash	Flash High Res Flash Low Res
	iPOD	H264 iPOD 640x480 H264 iPOD
	PSP	H264 PSP 480x270 H264 PSP 640x480 H264 PSP
	Quicktime	H264 Baseline QT H264 CIF QT H264 High QT H264 Main QT
DV	Microsoft AVI	DV DVCPPro25 DVCPPro50
Windows Media	WM9	Proxy Wmv
MPEG	MPEG-1	MPEG-1 MPEG-1 VCD
	MPEG-2 HD	MPEG-2 ATSC High MPEG-2 Blue-Ray HD MPEG-2 HD MPEG-2 HDV1 720p MPEG-2 HDV2 1080i
	MPEG-2 SD	MPEG-2 ATSC MPEG-2 Blue-Ray MPEG-2 DVB MPEG-2 DVD MPEG-2 I-Frame 30Mbit MPEG-2 MPEG-2 SuperVCD
MXF	MPEG-2	MPEG-2 HD MXF MPEG-2 SD MXF
QUICKTIME	General	QT Default
XDCAM	XDCAM EX	XDCAM EX 1080i 25Mbps

		XDCAM EX 1080i 35Mbps XDCAM EX 720p 35Mbps
	XDCAM HD	XDCAM HD 1080i 17.5Mbps XDCAM HD 1080i 25Mbps XDCAM HD 1080i 35Mbps XDCAM HD 1080i 50Mbps XDCAM HD 540i 8.75Mbps XDCAM HD 540i 12.5Mbps XDCAM HD 540i 17.5Mbps XDCAM HD 720p 50Mbps
	XDCAM IMX	XDACM IMX 30Mbps XDACM IMX 40Mbps XDACM IMX 50Mbps

If you expand the dialog with the **Show Settings** button you can additionally precise some of the formats characteristics (**Interlacing, Standard, Bitrate mode, Aspect Ratio, Frame rate**, etc) and thus create your own profile you are tending to often use. Save it as your own profile with the help of the **Save As** button. The profile will be listed in the left part of the dialog – below the others, already existing. Just select it each time you need it.

In case that any of the formats provided by the **Metus System** is not enough, you can refer to **Carbon Coder** as an external transcoding tool that can be involved into **Metus MAM**. **Carbon Coder** is integrated fully with the **Metus solution**. Its use is optional; of course, the software must be licensed.

When you want to transcode a file already archived - right-click over its asset and select **Transcode** from the appearing menu. The following dialog opens (as shown on the picture).

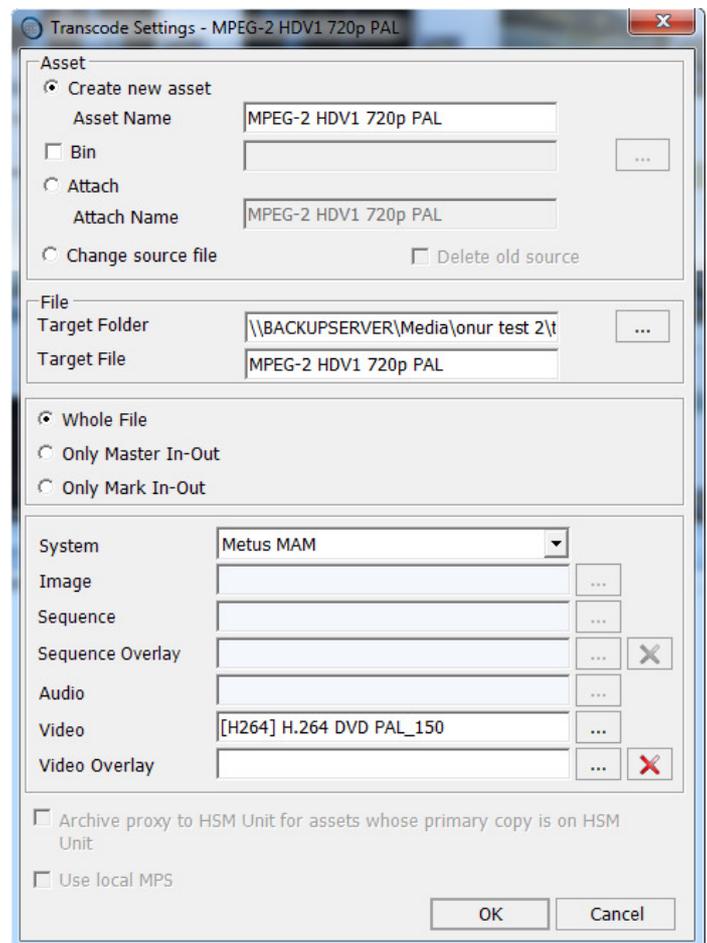
**Metus MAM** needs more information about what to do during the transcoding process running.

**Create New Asset** option is for making a new asset in the project, which will refer to the new transcoded file. If this option is chosen, the name for this new asset must be specified, also in the **Asset Name** text field below. Choosing this option will keep the old asset and its physical file in the project.

**Bin** can be selected to place transcoded file's asset. If a bin is not selected, as default created asset will be placed near the source file's asset.

**Attach** option is for attaching transcoded file to source file's asset. A name can be written for attached file. It's the same name of source file as default.

**Change Source File** means that you can change the physical file the asset in the project is referring to with the new one. I.e. if you



transcode file A of asset A, the result will be that the asset A will remain in the project but its file will not be file A but the new, transcoded file. If you choose this option, there is a possibility for **Metus MAM** either to save both the two files on the storage (file A and the new transcoded file) or to keep only the new file and delete the old one (file A). In the last scenario, the option **Delete old source** must be checked.

In library projects, since it does not archive files physically, a folder path should be written to place the transcoded file physically. It can be local or network. A file name can be written for it or leave it as default which is same with source file.

As you see from the interface, the **Whole File** can be transcoded as well as the parts only between the **Mark In/Out points** or the **Master In/Out points**.

The transcoded file format must be specified in the **Metus MAM Transcoding System**, which is already explained above.

#### 4.12. Asset's context menu options

**4.12.1. Open** – Opens the preview of the asset. This is equal to double-click on it.

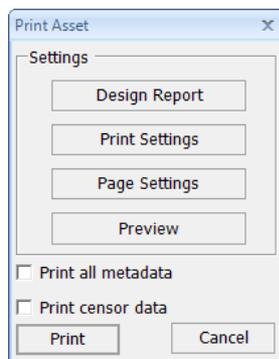
**4.12.2. Security...** - Choose this to limit the permissions of the users for this asset exactly. If you do not apply permissions for separate assets, they take the security settings applied for the bin they are placed into (by default it is set like this). This is already explained above in the part concerning the security settings of the project bins and objects.

**4.12.3. Delete** – deletes the selected asset. Explained above in the deletion-part.

**4.12.4. Cut** – places temporarily the asset in the computer clipboard.

**4.12.5. Copy** – places a temporal copy of the asset in the computer clipboard.

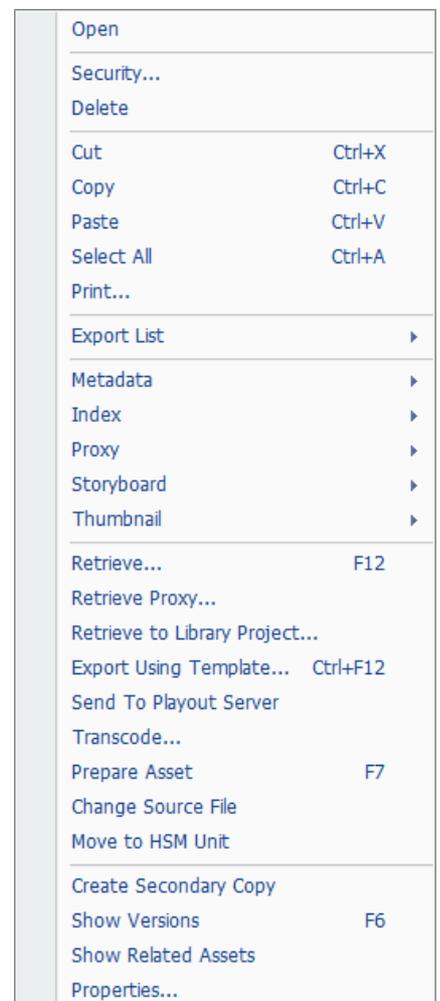
**4.12.6. Paste** – pastes the content from the computer clipboard.



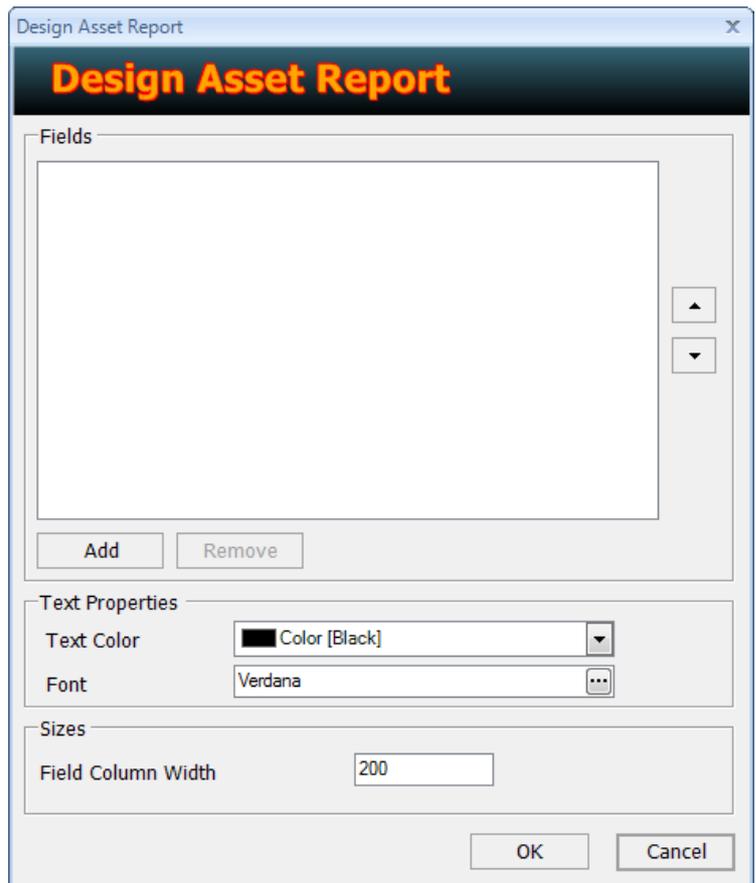
If the asset is cut/copied to another project, this is acting like retrieval – already explained above. If you cut/copy an asset to the same project it just pastes the asset in the chosen bin.

**4.12.7. Select All** – selects all the objects in the current bin.

**4.12.8. Print** – prints a designed asset report on a connected printer and/or in a \*.xps file. When the option is selected, the print window opens:

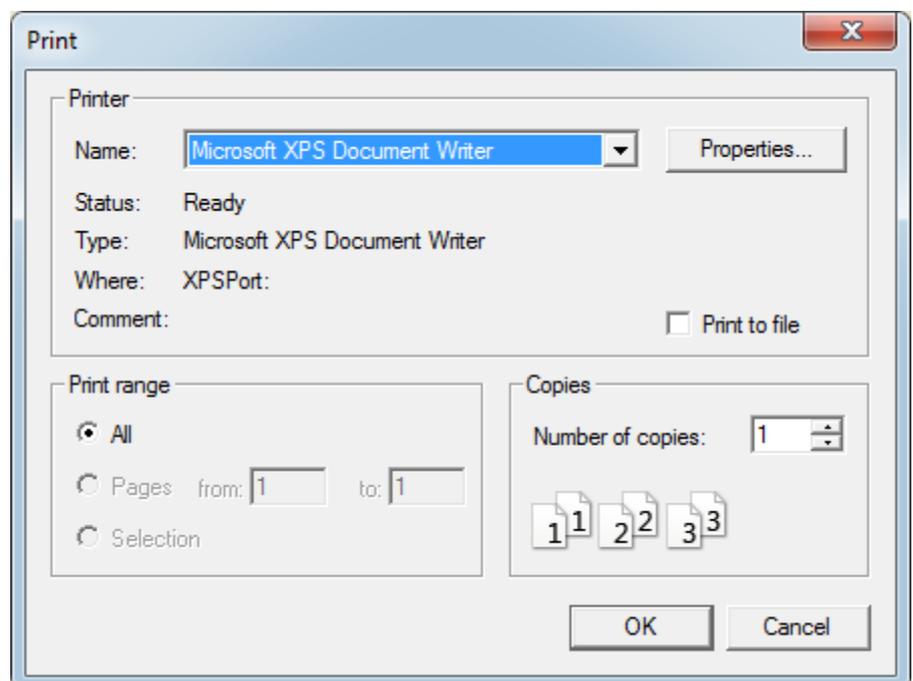


- the **Design Report** invokes the dialog into which you specify which metadata and their values to be printed. You insert the metadata fields choosing them one-by-one with the **Add** button. You can remove some fields which are added but unwanted anymore with the **Remove** button (before that – select them). In the **Text Properties** part you define the text color and the font for the text the report will be written with. The last part is for setting the **Field Column Width**, in pixels.



- **Print Settings** is for adjusting the printers and xps-files the report will be saved to. From this dialog you define which one is the printer you will print on, as well as whether the report will be printed to a file or not (the check). Pressing the **Properties** button opens additional dialog to specify the layout of the report – portrait or landscape and also – the xps setting for the current printer. There is also **Advanced** menu for the paper size to be specified.

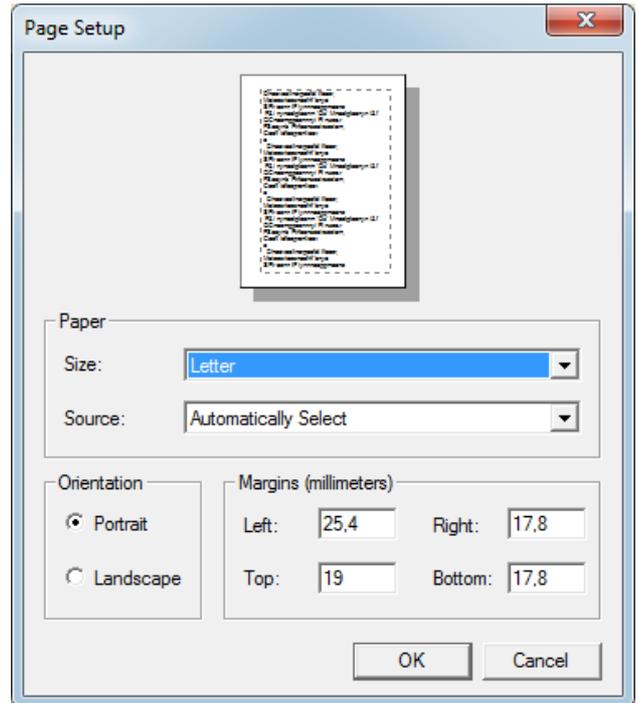
If **Print to a file** is chosen, you will be asked for an output name for this file. Enter some name. The file will be automatically saved with this name + xps-extension and the location you will be asked for after pressing the Print button from the **Print Asset** dialog.



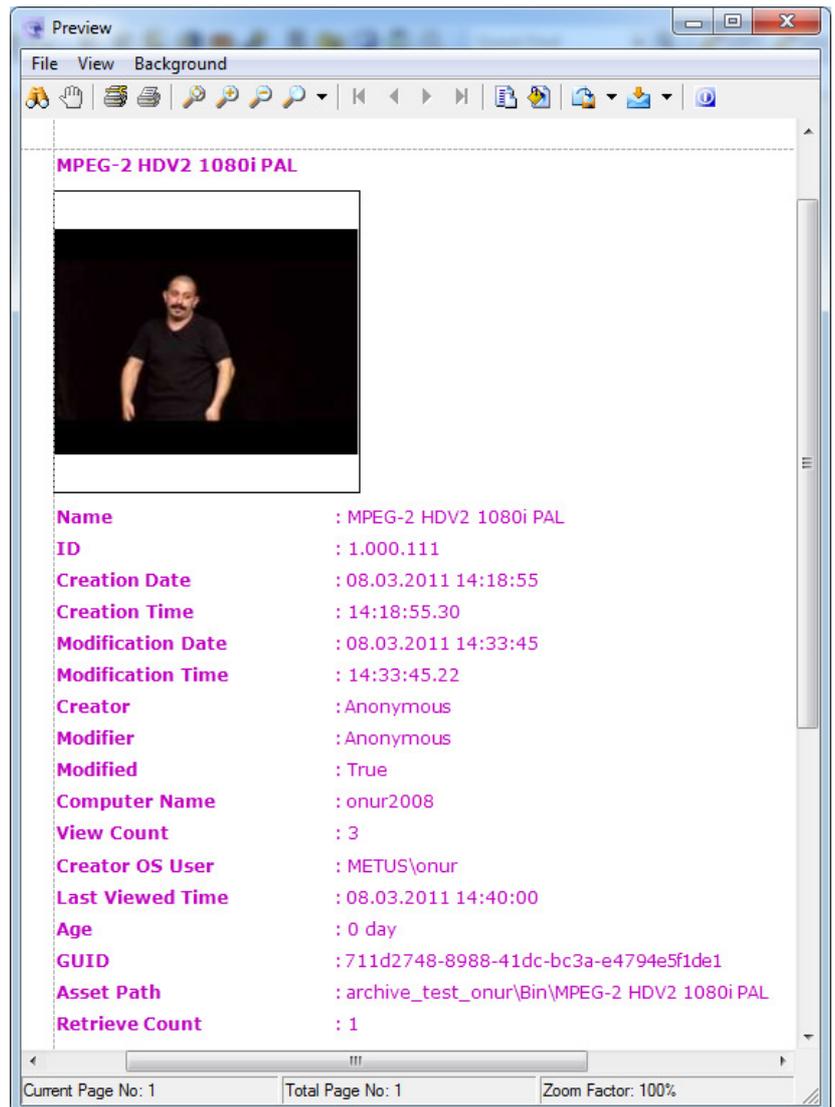
- **Page Settings** opens the dialog to precisely adjust the page settings: the page size and source, orientation (portrait or landscape), the paper margins (in millimeters) defining the left, right, top and bottom points.

- **Print All metadata** is a check to apply all the metadata fields and their values for that asset to be visible in the report

- **Print Censor data** will print the TC in/out points for the moments the material is been censored.



- **Preview** shows how the report will look like.



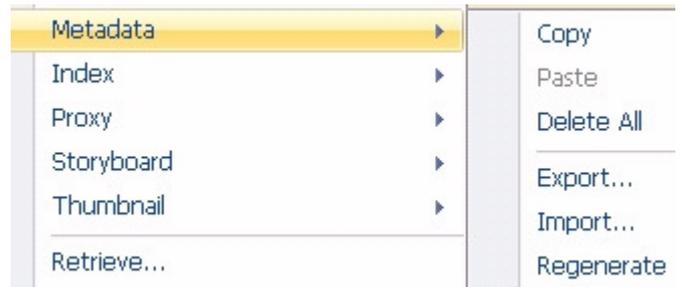
**4.12.9. Export List** – Exports in a xls-file the items from the project depending on the user’s choice:



- **Selected items** exports only the data about the selected assets
- **Current page** – exports the data of all the assets placed on the current page (when you choose to preview a set numbers of assets on a page)
- **All** – all the assets in the Bin

**4.12.10. Metadata**

This menu is for working with the entire group of the metadata values applied for this asset.



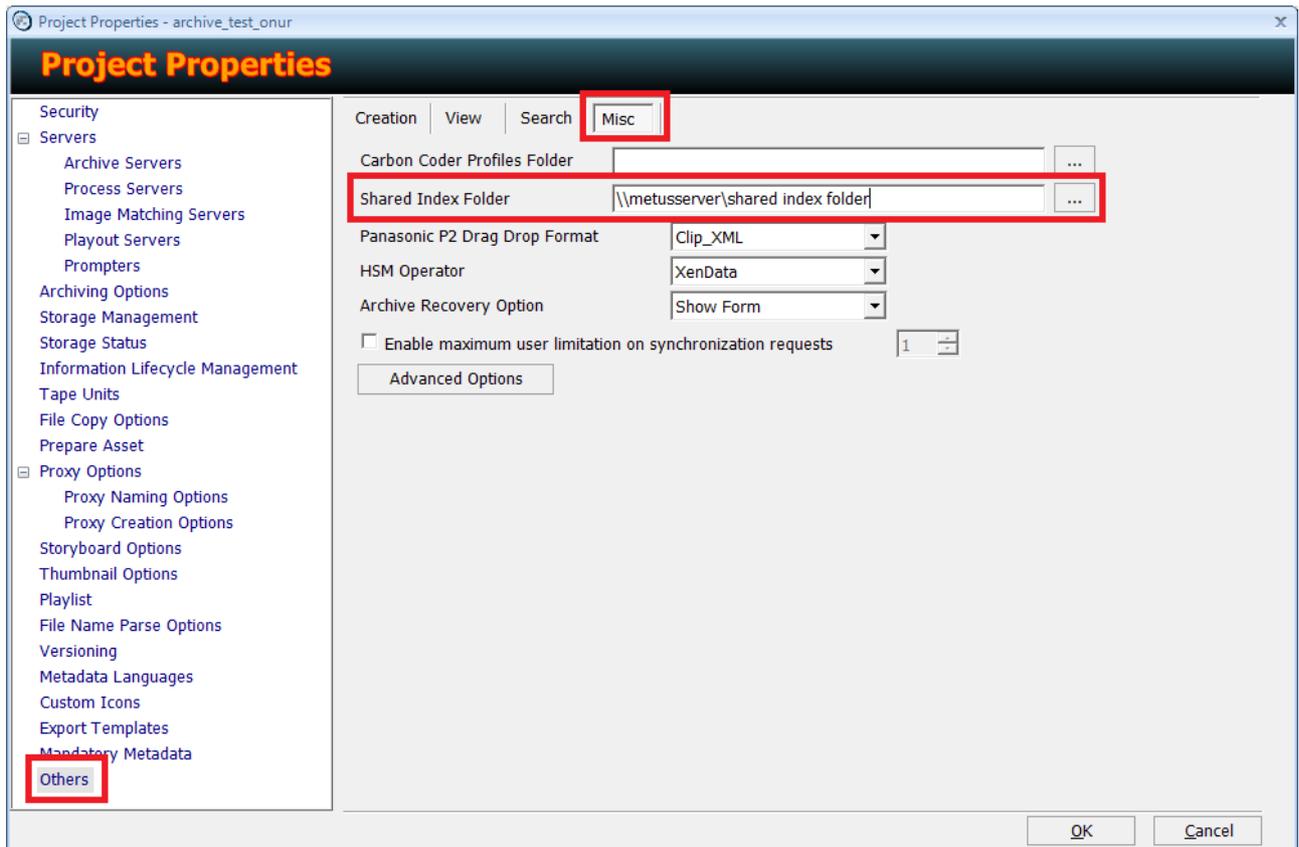
- **Copy** is to temporarily place the editable metadata values in the computer clipboard.
- **Paste** – applies values, pre-buffered in the computer clipboard to some editable metadata fields.
- **Delete All** – Deletes all the editable metadata values.
- **Export** – Exports the metadata in a \*.xml file so that they can be imported by another object later.
- **Import** – For the selected object it imports metadata values from a \*.xml file.
- **Regenerate** – updates the metadata values at some time (when this option is selected). This is very useful in some cases when details, referring to the metadata values are changing (f.e. when the filename is parsed, when the source file is changed and so on).

**4.12.11. Index**

Indexing of the assets is held by the MPS. This is not resulting in some file that you can preview, because this is some kind of internal information for the process server which is helping it to “browse” inside the video content bit by bit (or frame by frame). Indexing is needed for the image search. To say it simply: image searching is done only over indexed materials! Materials, which are not indexed, will not be searched for matches with the image.



To index a material, you must specify a shared index folder before that. This is done from **Project -> Properties -> Other – Misc tab**:



The folder must be shared in the network with all permissions allowed.

After that you can start indexing the materials – either from the **Index menu -> Create Index** or by right-clicking the I-letter on the asset icon and selecting **Create Index**. The progress bar can be watched in the **Progress Status** tab. After the process is completed, the I-letter is highlighted. The indexed file is saved in the shared folder set.

**Index -> Delete Index** deletes the created index file in the shared folder. The I-letter will not be highlighted anymore. The index is deleted.

If you want to index more than one asset – just make multi-selection before that and then go to indexing. If your goal is to index all the materials included in a bin, select the bin -> context menu -> **Analyze -> Index**. All assets within the will be indexed.

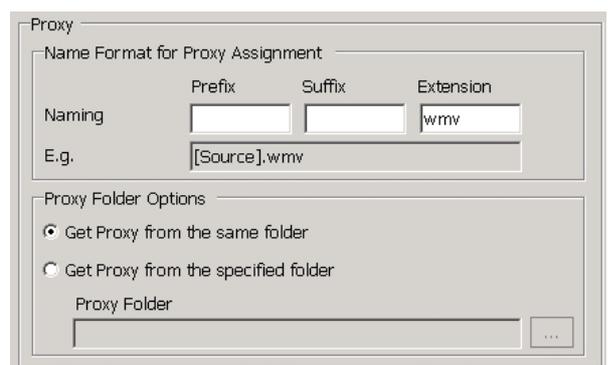
#### 4.12.12. Proxy

As defined in Chapter 2:

The **Proxy** is

- a lower resolution copy of the master (original) file used in the project;
- it is created by the **Metus Process Server** in any format wanted (transcoded to);
- Logically, the resulting file takes less storage space.

The proxy is used mostly in Server/Client-based workflows. It is used in order to avoid



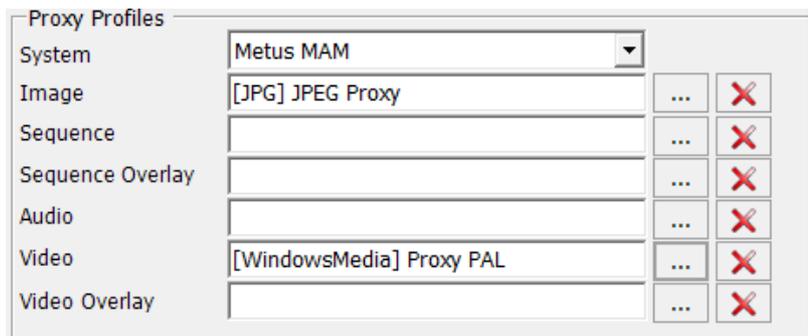
bandwidth problems. And because it is faster, it is often used in workflows when tape library archiving is used.

Shortly said - the proxy is the replacing file of the original one and it is purposed for network use.

The very basic proxy settings can be applied in **Project -> Properties -> Proxy Options**. There are two sections: **Proxy Naming Options** and **Proxy Creation Options**.

The first one is for defining rules for naming proxies, assigned from outside (from a folder) and not created by the **Metus MAM**.

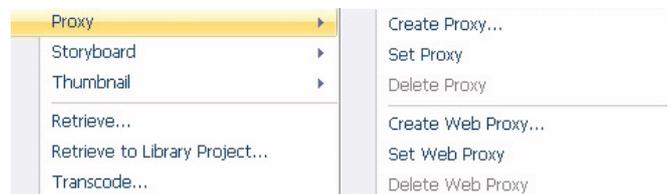
The second section is for applying generally a format into which the proxies will be created. As seen into this part, there are two kinds of proxies – one for local networks and the other one for the web (**web proxy**). The second proxy is usually worse quality due to the fact that working and browsing in Internet is slow. Therefore, the web proxy must be quicker (very low resolution and high compressed).



**NOTE!** Currently, in **Metus MAM** only one proxy is supported – the first one. Web proxies are still not supported. Future implementation is expected.

The dialog for the proxy profiles is already explained in the **Metus MAM Transcoding System** part.

The proxy creation can be run either from the letter “P” (which stays for “proxy”) -> context menu -> **Create Proxy** or from the **Proxy** menu displayed on the picture here.



The proxy is created by the MPS. The progress can be monitored in the **Progress Status** bar as well as on the thumbnail’s preview.



- **Set Proxy** is an option not to create the proxy inside the **Metus MAM** but to assign an existing video file as a proxy of the archived file placed on the storage. A browse dialog opens to point which video will be the proxy file.

- **Delete Proxy** is the option which deletes the proxy file assigned. In result, the letter “P” will not be highlighted anymore

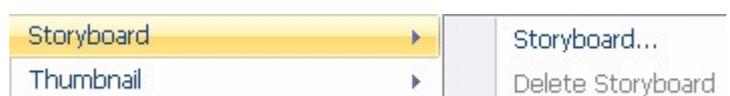
After the file is created a proxy, it can be previewed from this moment either with the original file or with the proxy – a question of user’s choice, as well as administrator’s permissions set.

#### 4.12.13. Storyboard

The storyboard’s explanation and definition is already given in Chapter 2.

The general Storyboard options are defined in **Project->Properties->Storyboard options**

Four creation options only are available when setting these directly through the general options – **Total Frames and Interval** (explained below). The **image size** set here is concerning the



pictures sizes in the storyboard. It can be additionally changed for the different assets storyboard creation. If the **Keep aspect ratio** check is on, these two controls will be locked to each other.

The last check in this dialog is for pictures additionally added to the storyboard content. If the check is on, these pictures will have the same size as the other ones – already placed in the storyboard by **Metus MAM**. Otherwise, the pictures will be imported with their original size.



- To **Create a Storyboard** either right-click on the asset icon's letter "S" (stands for storyboard") or run the creation from the asset context menu -> **Storyboard -> Storyboard**.

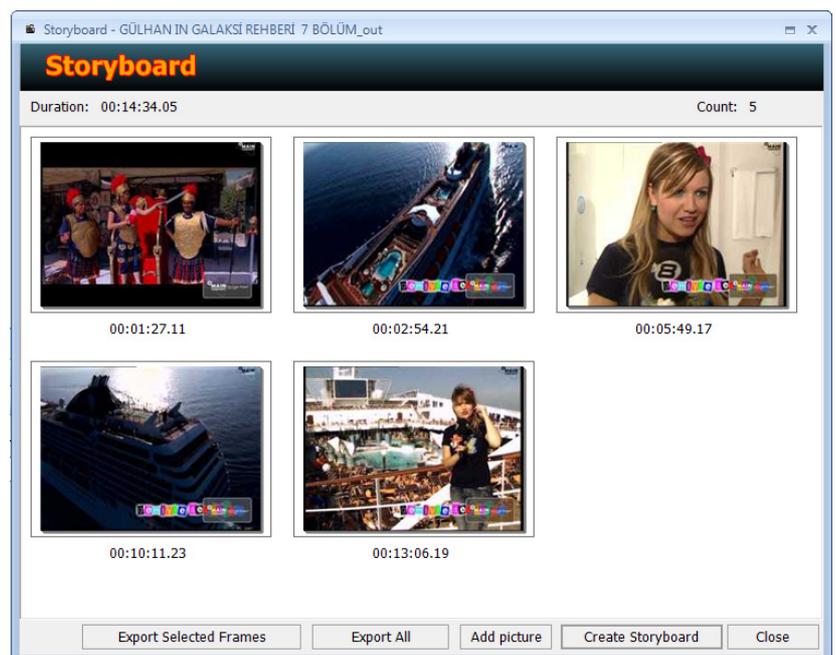
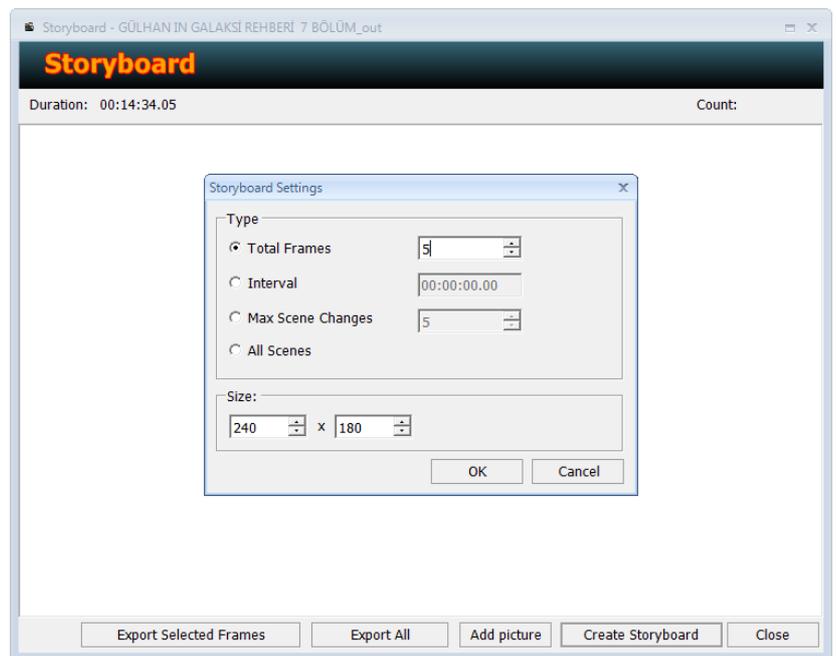
A dialog opens providing four different ways to create the storyboard.

= **Total Frames** – here you set the number of the frames to be included in the storyboard. E.g. if you set here "8", **Metus MAM** will divide the entire video in 8 equal parts and will place in the **Storyboard** the first frame from each part.

= **Interval** – if you choose this option you must apply some time interval, f.e. 10 seconds. This means that **Metus MAM** will take one frame on each 10<sup>th</sup> second from the video material and put it in the storyboard.

= **Max Scene Changes** – if you set here the digit 6, **Metus MAM** will find the six scene changes which are more effectively changing (the six general scenes), i.e. the scenes changes mostly visible by the eye and will take the first frame from each one of them and place it in the storyboard.

= **All Scenes** – Will take the first frame each time the scene is



changing.

= **Size** – the size of the pictures in the Storyboard. From the general storyboard settings can be specified whether these two controls – the width and the height to be locked so to keep the aspect ratio.

- **Add picture** - enlarges the storyboard content by adding more pictures into it. The user selects which pictures to be additionally added via the browse dialog which opens. Pictures are added at the end of the storyboard (after the last picture).

- **Export** – Exporting the storyboard content into one jpg-file in a folder, chosen by the user. All pictures or chosen pictures can be exported by using **Export All** or **Export Selected Frames**. Each frame in the exported storyboard is shown with its TC. The storyboard content looks like this:



In the storyboard window, a separate picture can be selected and from its context menu these can be done:

= **Set as thumbnail** – sets the selected picture to be a thumbnail for the asset.

= **Export** – this picture can be exported as a separate jpg file.

= **Delete** – deletes the selected picture. This is usually applied to black frames and not good-quality pictures.

The **Storyboard** can be created for a multi selection of assets by selecting them and choose **Storyboard -> Storyboard creation**. This will create storyboards to the assets as defined in the storyboard general options.

For all the assets existing into a bin, storyboards are created from the bin context menu -> **Analyze ->Storyboard**.

#### 4.12.14. Thumbnail

The thumbnail general explanation is already mentioned in Chapter 2.

Thumbnail general setting is only one – offset, and it is adjusted from **Project -> Properties -> Other -> Thumbnail**:



The offset format is hh:mm:ss:fr . It presents the moment from which a frame will be “taken” and put as a thumbnail to an asset. This is in order to avoid the black-framed-thumbnails (most of the video materials start with a black frame).

**Thumbnails** can be created in three ways:

- (Multi) select asset(s).

Context menu -> **Create**

**thumbnail**. Thumbnails are created according to the rule, specified in **Project -> Properties -> Other -> Thumbnail Offset**.

- Select an asset and open its video in the **Viewer**. Move the slider over the timeline. Choose a frame from the preview window. Set



this frame to be a thumbnail with the button **Create thumbnail from current frame** or right click over cursor and click **Thumbnail**.

- Open the **Storyboard** of an asset. Select a frame from the storyboard and right-click over it. Choose the **Set as Thumbnail** option (already described in the storyboard section).

The second and the third ways to create a thumbnail are for a separate asset and with them you can choose more proper and explanatory thumbnail.

#### 4.12.15. Retrieve

Already described in section 4.8 (detailed - 4.8.1).

#### 4.12.16. Retrieve Proxy

This is basically same thing with “Retrieve”, just as a shortcut it comes out with settings to retrieve proxy without original file. Therefore, this option can be used when onlt proxy file is needed to retrieve.

#### 4.12.17. Retrieve to Library Project

Already described in section 4.8.2.

#### 4.12.18. Export Using Template

Templateler hakkında bir bilgim yok.

#### 4.12.19. Send to Playout Server

#### 4.12.20. Transcode...

Already described in section 4.10.

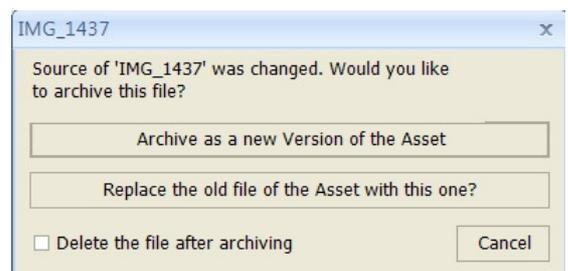
#### 4.12.21. Prepare Asset

As already said above, an asset cannot be previewed out of **Metus MAM**. The preview is done only inside the project with the help of the **Viewer**. But sometimes it is needed the asset’s file to be opened with another application. In such cases, the **Prepare** option must be used.

From an asset’s context menu choose **Prepare**. The **Metus MAM** client machine starts automatically creating a temporal local copy of this file. The process progress can be monitored in the **Progress Status** tab. The temporal copy of the file is placed in a folder, predefined in **Project -> Properties -> Prepare asset**.

After completed, the asset automatically is put an icon named **Ready**. While this icon is on, the assets can be previewed in other applications, out of **Metus MAM** (usually with programs defined in Windows as default for opening the file with). Just double-click the asset and you will see how it happens.

Until the **Ready** sign is on, you can open the file from the local folder with any other application (f.e. NLE Editing software) and make changes into it. As soon as you select to save the changes in the other software, **Metus MAM** understands this and pops up a dialog asking you what to do with the file on the storage. The new edited file (local one) you can **Archive as a new Version of the Asset** (see **Versions** section explanation) or you can **Replace the**



**old archive copy of the Asset with the new one.** Each time you make changes in the NLE software and you press **Save** – this will repeat. Finally, no matter what is your choice, you can select to delete the local file with the option **Delete the file after archiving**.

At any moment you can go back to the project and use the asset again. The **Ready** sign is still here to remind you that it is still referring the local copy. To go back using the archived one, just select the asset, right-click over it and choose **Delete Local Copy** – thus, you start using again the copy on the storage (if you double-click the asset, the file should be previewed in the **Viewer application**).

Please, read also the **Project -> Properties -> Prepare Asset** explanation.

#### 4.12.22. Change Source File

First, take a look in the **Transcode section (4.10)** – the latest explanations (as this is an option from the **Transcode** menu, also).

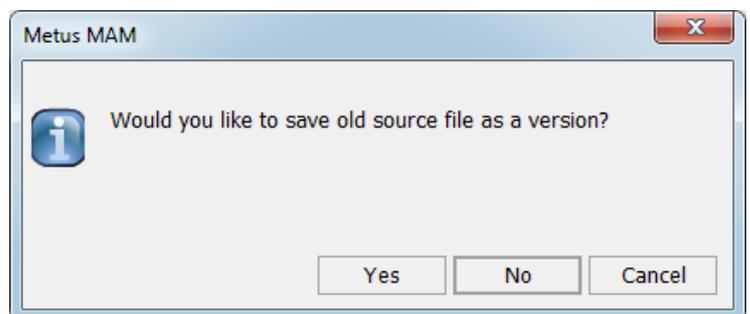
Changing the source file is needed sometimes to replace the source file of an asset. The source file is the file which is opened in the **Viewer** when double-clicking over the asset. This file is placed on the storage. It is the archived file. In some workflows this file is retrieved locally to a client's machine and edited in a NLE program. The edited file is a new copy of the archived file. But it is not placed on the storage – it is placed on the local client's machine. The client can archive it via drag-n-dropping it into the project. But this will create a new archived file (the edited one) on the storage and a new asset in the project. The goal is not this one. The goal is to replace the first archived video (not-edited) with the edited one and the asset must remain the same. Therefore, the **Change Source File** option is available. Choose it and a browsing dialog will open to point the new file. When you select it, the following dialog will open:

This dialog provides the possibility to keep the first copy of the file (not-edited) as a version of the asset. At this version you can revert back at any moment, if you want. (See the **Versions** section further in the manual).

If you select **YES** the version will be saved.

With **NO** you choose to have only the new version of the source file. This will delete the old (not-edited) copy totally from the storage.

**NOTE!** Please, keep in mind, that when you choose **NO** and later try to revert back to this version, the source file will not exist anymore. The asset will become inaccessible and a **"X"** mark will be placed over its icon.



#### 4.12.23. Move to HSM Unit

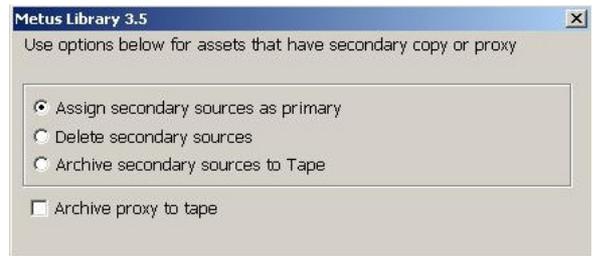
This option sends the source file from the storage to the tape drive (or library) connected to the system. Additional dialog opens asking for any of the options below to be run:

- **Assign secondary sources as primary** is chosen in case that the file being moved to the tape has double copy and you want to make its secondary copy appears as primary

- **Delete secondary sources** will delete the secondary files in order to keep the reference with only the files being moves to the tape.

- **Archive secondary sources to tape** will not only move the source file to the cartridge, but its double copy – too.

- **Archive Proxy to Tape** is the last option in the dialog. It means that the already existing proxy will be moved to the tape, together with the source file being moved.



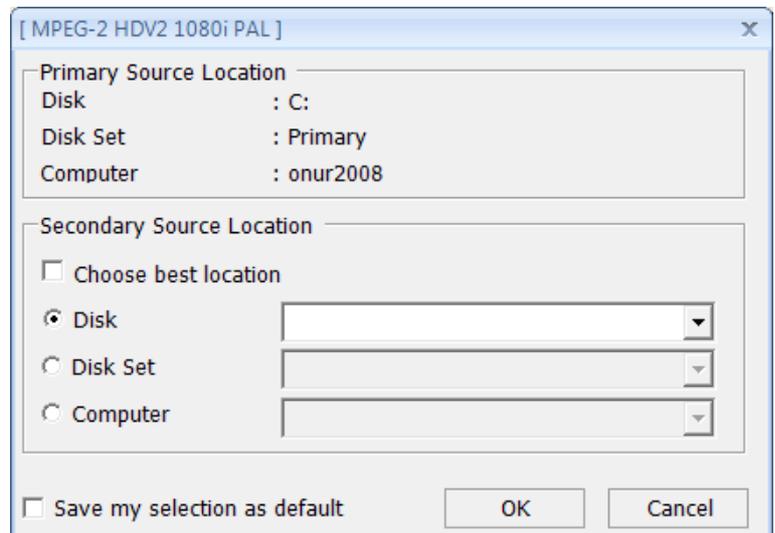
#### 4.12.21. Create Secondary Copy

This is in order to make a second copy of an archived file, for security reasons.

When you select this option the following window opens:

So, you can choose where to save the secondary copy – **Disk** (drives from archive server), **Disk Set** (a disk from the archive storage), a **Computer** in the network.

You can leave the choice to **Metus MAM** by checking the **Choose best location option**.



**Save my selection as default** will always choose the selected location to be a place for keeping the secondary copies.

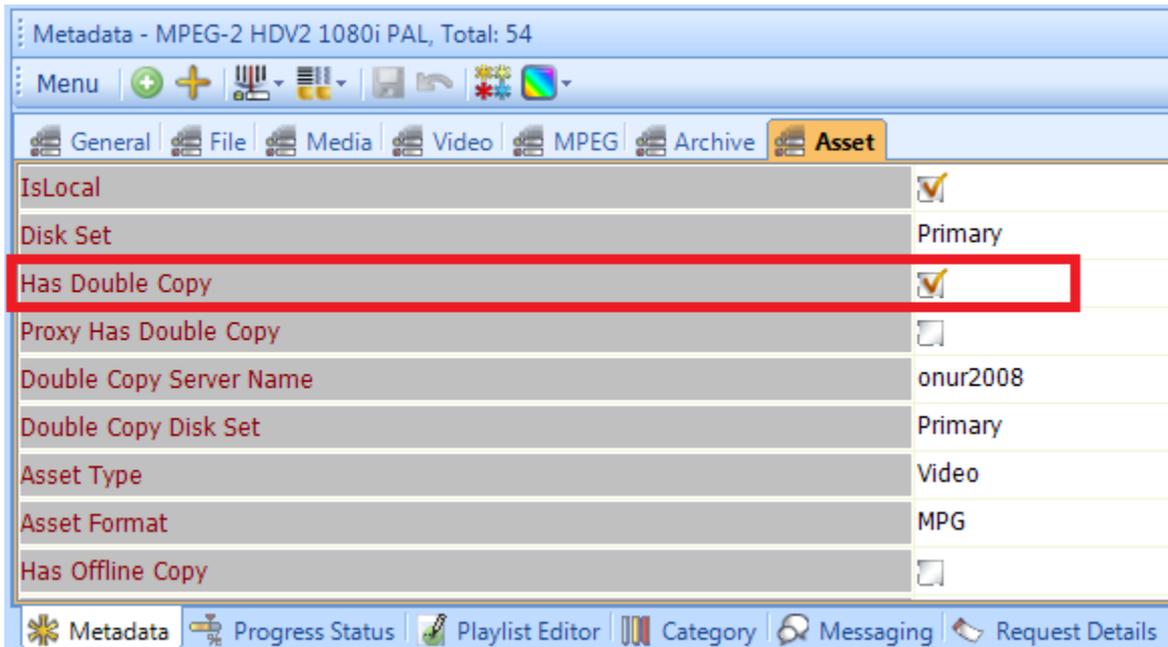
After you apply your choice, **Metus MAM** starts creation of the new copy – it will be named **double copy**:

Once the double copy is created, the asset already has two copies of the archived file to which it is pointing. On its icon additional sign appears – two red dots. Its metadata field "**Has double copy**" is checked on and its context menu changes to the one as shown on the screenshot. At any moment you can delete any of the two copies (either the primary or the secondary).

Object Name	Task	Progress	Server	Status	Added	Message
MPEG-2 HDV2 1080iL	Double Copy	100%	onur2008	Finished	09.03.2011 16:05:36	[Finished Time: 09.03...



**Activate Secondary Copy** will open the doubled copy from its location when double-clicking over the asset, i.e. the **Viewer** will preview the secondary copy. This is used when the first copy is offline. If available, **Metus MAM** just changes the places of the **First** and the **Secondary Copy** – the first one becomes secondary and vice versa.



#### 4.12.22. Show Versions

**Versions** are the separate statuses the asset and the file related go through. When a change occurs to an asset or the related file it is count as a version. These statuses are considered as old information and they are kept so that can be restored at any moment, if required. If versioning option is active for an asset, “V” letter turns on its icon (same like “S”, “P” and so on).

If you choose the **Show Versions** option from the asset’s context menu, it will open a window with all the versions available for the current asset – it reflects all the changes made with the asset and the related file. The older is the version, the upper it is listed. New versions are appended at the end of the list. The first line of the text listed explains shortly what change generated this version exactly.



As seen from the screenshot, you can:

- **Delete** a selected version (this process is applicable only for metadata versions and such, related to the source file)
- **Locate** the asset in the project
- **Revert** back to this version (which will cancel the changes made after it).
- **Show** the differences in the metadata with the previous version.

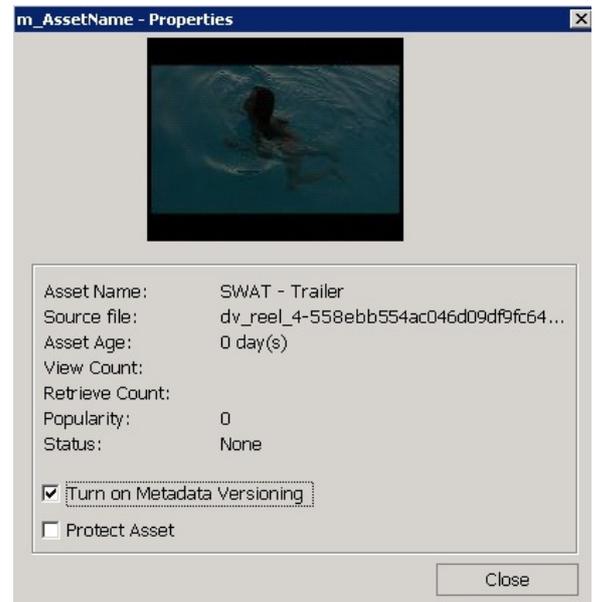
With the **All Versions** check you will preview all the changes made.

If only the **File Versions** check is left on, it will show all the versions related to the asset's file only. A file version is also the change of the source file – if you choose to select the old source as a version. This is already explained above in the manual.

**Asset versions** check will filter only the changes with the asset (f.e. when copying an asset inside the same project. The new asset performs versioning of the old one).

If only the **Metadata Versions** check is applied it will list the versions generated due to metadata changes. To see the **Metadata Versions**, before that you must “tell” **Metus MAM** to log them in this form, also. **Metadata Versions** menu is activated from the asset's context menu -> **Properties** -> **Turn on Metadata Versioning**

**NOTE!** The database may increase seriously when metadata are changing. This feature is disabled by default and should not be enabled, unless it is necessary.



#### 4.12.23. Show Related Assets

Opens in a separate tab all the assets related to the selected one. A related asset can be such which is created as a copy from the current or is the one from which a copy is created (and the current asset is that copy).

#### 4.12.24. Properties

Opens the asset's **Properties dialog** on which some detailed information is displayed. All this info can be seen also in the **Metadata tab** in the relevant fields: **Asset name, Source File, Asset Age, View Count, Retrieve Count, Popularity and Status.**

The **Turn on Metadata Versioning** is already described above in the manual.

**Protect Asset** locks the asset against deletion until this check is on. A shield sign is placed over the asset when it is protected. Only the owner of the protection and the Administrator can unlock the asset.



### 4.13. Metadata in Metus

Here we come to one of the main topics in one media asset management system.

**Metadata** is the information describing everything about an asset or file. This information is loaded in the relevant **metadata fields**. What we put as information in these fields, we call

### metadata values.

In **Metus MAM**, each object has its metadata. These metadata are kept in fields. The metadata are used to classify the objects according to their features and to reach the assets according to certain features during the work. Each project has its metadata fields.

**NOTE!** Metadata fields are editable only by administrators.

The **Metus MAM** installation automatically provides a big tree-structured metadata base. The client can browse into it and use the provided fields as per his needs. The fields are ordered in groups and subgroups.

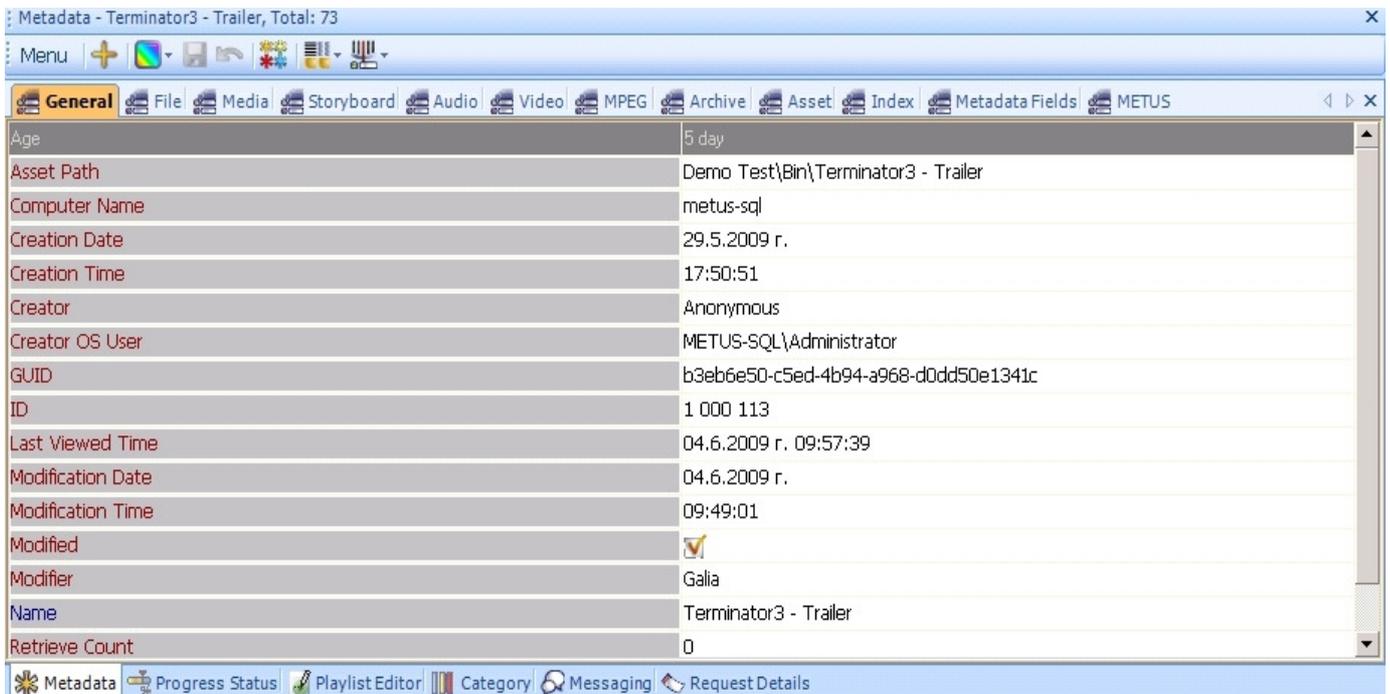
There are some metadata values which are automatically recognized by the system (system metadata) and others that are possible to be manually inserted (describing metadata). For filling up some describing metadata, new fields can be created in addition to the ones already installed with **Metus MAM**.

And one more remark – the fields, which text is red-colored are these that cannot be modified. The values they are loaded in are recognized automatically by **Metus MAM** and cannot be changed. On the opposite, the blue-colored-text metadata fields hold values that can be edited by the user. Such values are **Name, Rating** and so on.

The fields, created by the user, can be edited (according to the permissions given during the creation) and the text in the field can be any color – the user defines this during the metadata field creation.

#### **4.13.1. Metadata window**

In the right-down part of the **Metus MAM** interface, select the **Metadata** window. This is a detailed dialog with a lot of options and menus provided. If the window is not active (closed) you can open it either from the **View -> Metadata** or with the shortcut key **F4**. The dialog is divided in separate tabs. Each tab presents a group with fields, i.e. the fields are divided in tabs as per the groups they belong to.

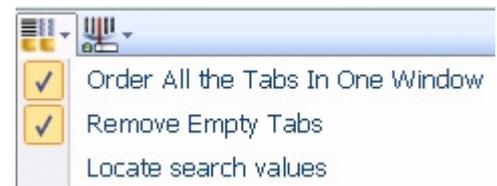


#### 4.13.2. Filtering the Metadata Window

There is a possibility to list all the fields in one tab only. This can be processed by pressing the **Show All Metadata in One Tab** button. To revert back to the old preview – in tabs, just press the same button again.



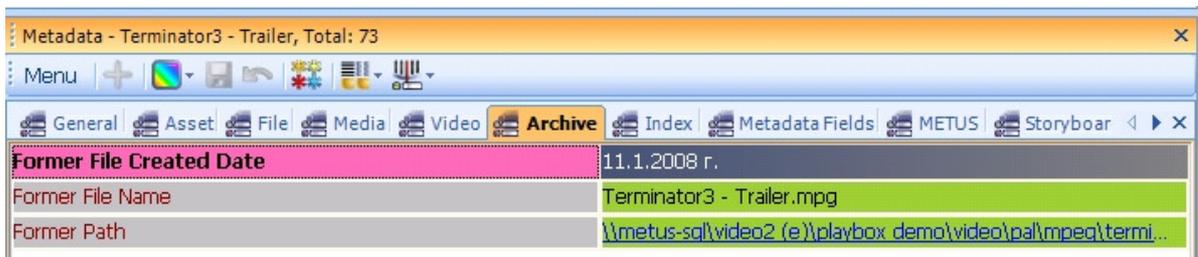
On the other hand, the tabs can be displayed in different windows or in one window (as it is by default). To display the tabs in different windows uncheck the **Order All the Tabs in One Window** option from the menu popping-up from the **Tab Options** button.



The option **Remove Empty tabs** is checked by default and this is in order not to display groups with fields that none values are loaded into.

**Locate Search Values** displays automatically in the metadata tab and marks in green color all the values which answer to a search criteria.

For example, let us search in our project for all the assets which have the word “trailer” existing in any metadata field of the assets. All the results are listed in a separate tab in the project area. This is called **Search Results** tab. If we select any asset from this tab, down in the **Metadata**



**window** we shall see immediately where exactly the match is done – the relevant tab opens.

Furthermore, the fields which are containing the word “trailer” are green-colored:

The last button in the metadata toolbar offers other metadata window filtering options:

- **Show Empty Fields** - When you add a new metadata field and this field is set to come without a value, by default, the field will not be added to the metadata window. Checking this option will make the field appears even without a value.



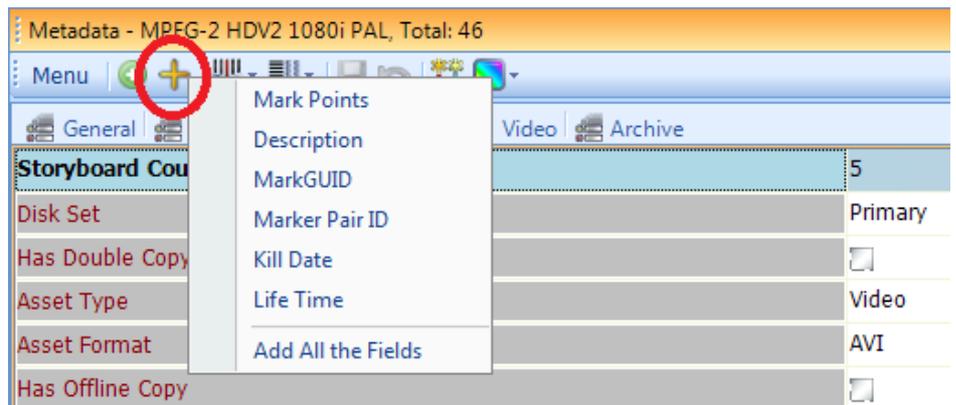
- **Show Default Values** – This concern the system fields installed with **Metus MAM**. Select this option if you want to have these fields visible.

- **Show Read-only Fields** – Displays in the window the non-editable fields, too. The user is previewing them only for getting needed information. No one can change such fields’ values.

- **Show Total Values in Case of Multiple Selection** – This is for values which can be summed. When several assets are marked in the project area, fields like **Duration, Age, View Count**, etc. will

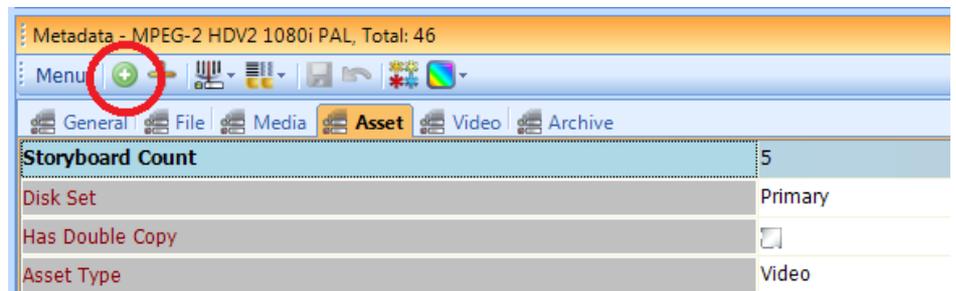
show as a value the result from the sum of the values from the separate assets.

If you select an asset from the project all its metadata are listed down in the metadata window, in the relevant tab (group). Sometimes, it is possible that the metadata field you need to look into, is not displayed in the tab. To quickly add it, just open



this tab and choose the Add button from the metadata toolbar. All the non-displayed fields from that group will be listed so that you choose which one to make visible.

A new template can be applied by “**Apply Template**” button. More information will be explained about templates at the templates sections.



On the picture shown, the **Asset group** is not listing the following metadata fields: **Kill Date, Life Time, Mark Points, Description and Mark GUID**. If you want to see some of these fields just click on it. If all the fields are needed to be shown, then select **Add All the Fields** option.

The next button from the toolbar provides two options:

- **Add or Update Instantly** – checked, by default. This check makes inactive the next two buttons on the toolbar because if it is put, any metadata change you undertake will be applied immediately – without questions. If the check is not put, then you can use the next two buttons on the toolbar.



- **Delete Instantly** – deletes immediately (without asking confirmation) whatever you delete in the metadata fields or values.

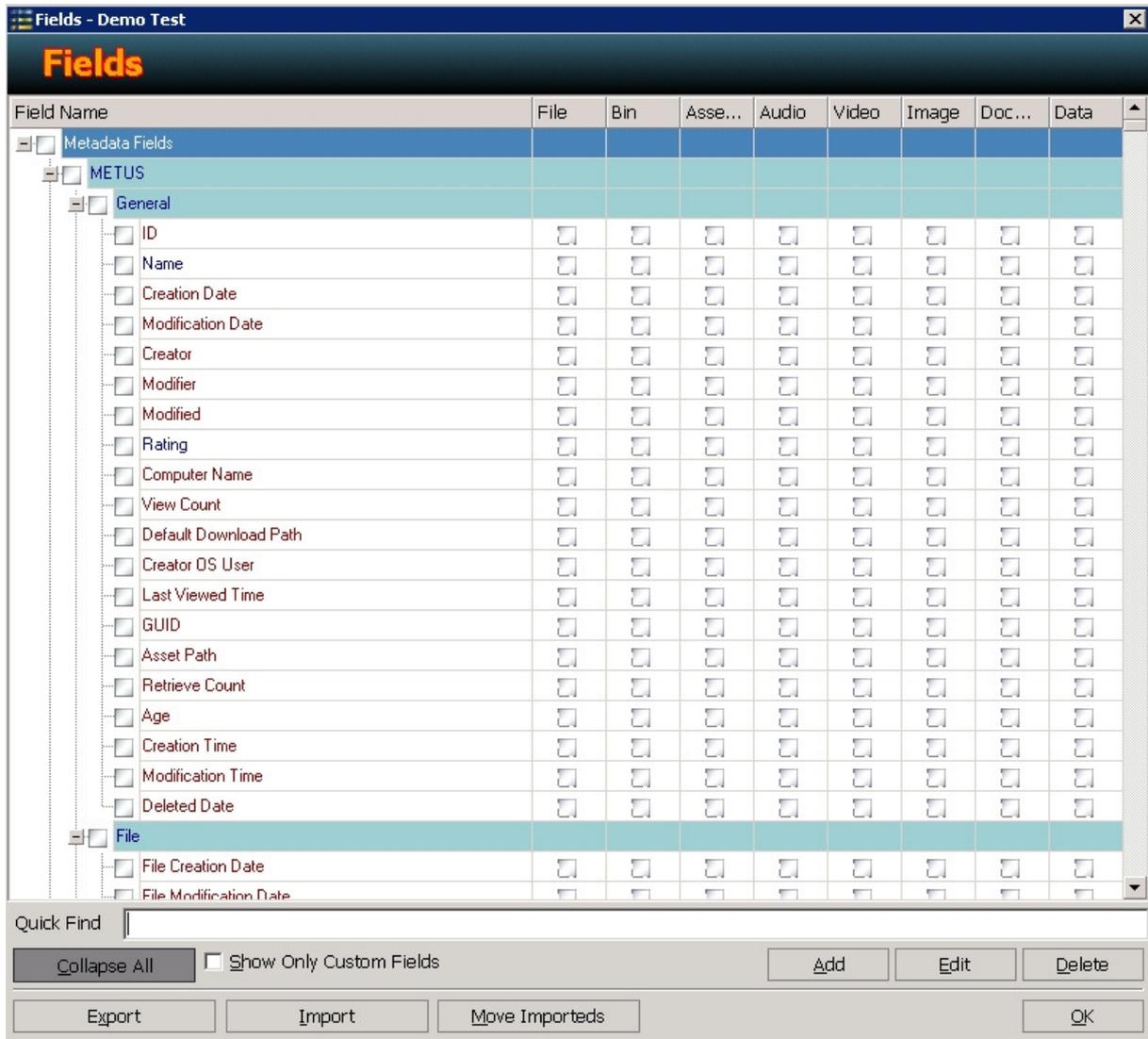
- **Save** – This one is active only if the **Add or Update Instantly** check is not put. Apply the changes you wish in the metadata fields and values and at any time save them by pressing this button. When you save the last changes you cannot discard them anymore.



- **Discard Changes** - This one is active only if the **Add or Update Instantly** check is not put. The last applied changes can be canceled from here. If you **Save** them, you cannot discard them anymore.

### 4.13.3. All Fields (the metadata tree)

From the **Metadata tab** run the **Menu** and select **All Fields**. This will open a separate window in which all the metadata fields are shown (can be opened also from **Project -> Fields -> All Fields**).



You can **Collapse All** the fields to preview the main groups only and go back to the full list by **Expanding All** the fields again. This is convenient for browsing in a separate group - first you collapse all the fields and then you expand the content of this group only.

This is the list of the metadata fields installed with **Metus MAM**. You can create your own fields and add them to this list. The creation wizard can be invoked with the **Add** button. It becomes active after selection of the group into which the field will be created. The next button – **Edit**, is for editing the characteristics of the field selected. Logically, **Delete** will remove a selected metadata field from the list.

The tree is very big and if you need to find some field, you may get lost in scrolling. In order to make this process easier, type some part from the field's name in the **Quick Find** field and all the fields which have this part in their name will be filtered immediately. As more letters you type, as less filtered fields remain in the list.

Another way to decrease the number of the fields displayed is to put the check **Show Only Custom Fields**. It will list only the fields created by the user.

You can load all the metadata fields existing in this tree into a \*.xml file and **Export** them so that they can be imported into another project via this \*.xml file. The **Import** button is loading such \*.xml files into the project, replacing the current tree with the new one, which the \*.xml file brings.

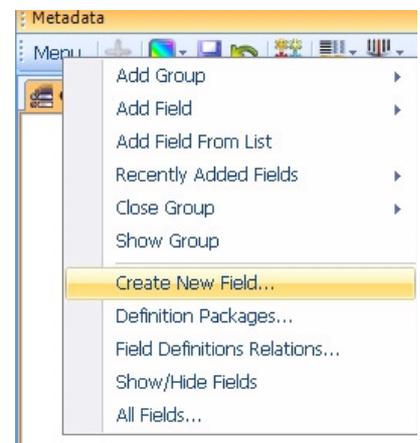
**Move Imported Fields** – Imports in the current project’ metadata tree all the metadata fields coming from outside. These are coming together with any assets from another project being copied into the current one. If the asset has values for these metadata fields (not existing in our project but existing in the other one), the current tree is opened to obtain these fields in its structure, too. Thus, the asset description will not be lost.

For each metadata field added to the project metadata tree, it is obligatory to select (during its creation) for what types of project objects this metadata should be applicable – bins, assets, playlists. If it is purposed for assets – you can even choose for what types of assets – video, audio, image or document. This is presented with the checks in the columns on the right.

#### 4.13.4. New Field Creation (Adding a field)

There are three ways to invoke the **Field Editing Wizard** – the one which is helping during the metadata creation

- From **metadata window** -> **Menu** -> **Create New Field**
- From **Project** -> **Fields** -> **Create New Field**
- From the **metadata tree** -> **Add button**



No matter which one you open, the wizard opens and starts guiding you.

 A screenshot of the 'Add Field' wizard dialog box. The title bar says 'Add Field'. The main text reads 'Welcome to field editing wizard.' Below this, there is a section for 'General Information' with several fields:
 

- Language: English (dropdown)
- Parent Field: General (dropdown)
- Name: Status of the material (text box)
- Description: Will describe through where the material had passed: ingested, edited, ply approved (text box)
- Type: String (dropdown)
- Control Type: TextBox (dropdown)
- Initial Value: just ingested (text box)

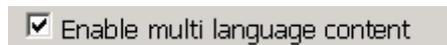
 At the bottom, there are four buttons: 'Cancel', '< Back', 'Next >', and 'Finish'.

The first thing to be specified is the **Language** into which the field will be named and values will be entered. **Metus MAM** is supporting up to six languages for this purpose. I.e. you can enter values for one metadata field in max. six languages.

You define the languages from **Project -> Properties - Languages**. Just open this dialog and click over each language so to rename it to the desired one.

**NOTE!** After defining the languages, you must restart **Metus MAM** so that the system refreshes this information.

To have the possibility to enter values in different languages, when creating the metadata fields, choose **Project -> Properties -> Other -> Enable Multi language content**.

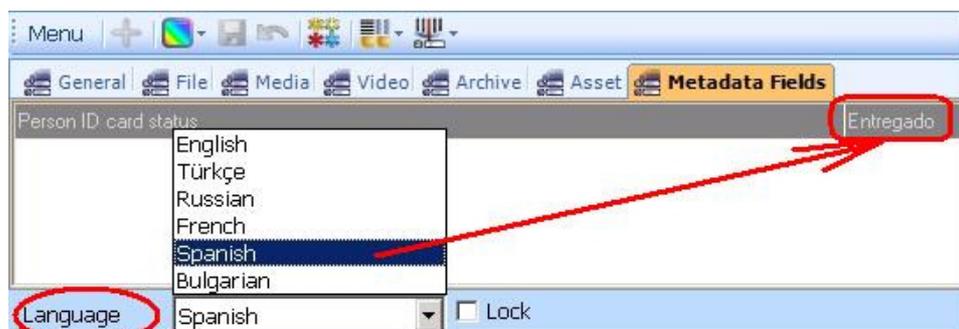


**Example:** Let assume we are going to use the following languages: English, Turkish, Russian, French, Bulgarian and Spanish. We want to create a metadata field named “Person ID card status”. Let say that this refers to whether the person had already obtained his ID card or still not. If he did take his card, then the status will be “Obtained”. In English it will be “*Obtained*”, in Turkish – “*Kazanılmış*”, in Russian – “*Взял*”, in French – “*Reçu*”, in Bulgarian – “*Получил*” and in Spanish – “*Entregado*”.

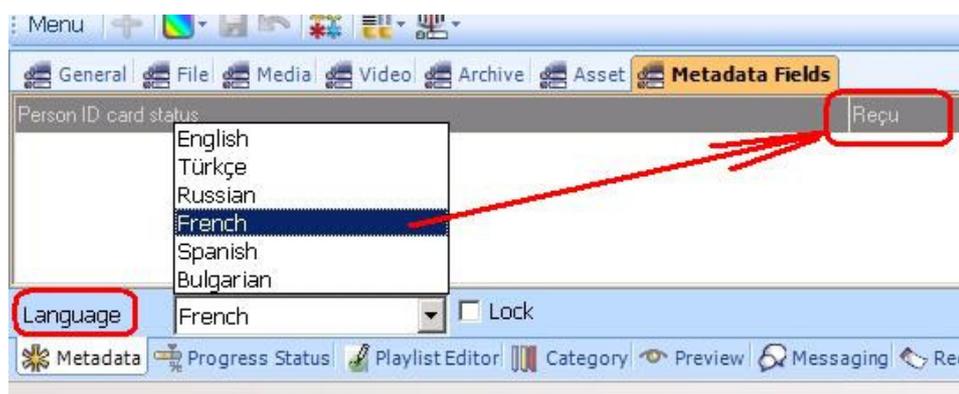
In our project this will be entered like this:

Create the field and choose the language from the so-named drop-down menu at the bottom of the metadata window (you must remove the **Lock check** next to it). Then apply its value in the field. So that whatever language you choose, it shows the value in the relevant language.

In Spanish it will look like:

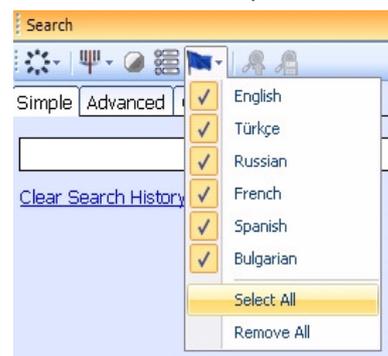


In French it will look like:



The biggest convenience of this is that searches can be made over all the values (no matter in what language you search). I.e. you can search by “Kazanılmış” (Turkish) or by “Взял” (Russian) – the asset will be displayed in the search results tab no matter by what language you search.

Keep in mind, also, that when **Multi language content** is enabled, the search dialog enriches with one icon more – the blue flag for choosing the language. Check here the languages you will search by or even select all of them.



**Description** is the place you explain what is the field purposed for. This explanation will be shown as a hint when rolling over the field in the metadata tree.

**Name** the new field as per your wish and from **Parent Field** specify the group in the metadata tree it will belong to.

The **Type**, **Control Type** and **Initial values** are bounded to each other. So, depending on your choice for **Type**, the **Control Type** list changes each time and relevantly - the **Initial Value**.

**NOTE!** Initial values are not obligatory! If you put some value into this field, it will be displayed by default for any object this metadata field will be applied to.

#### 4.13.4.1. Metadata types

- **Group** - If you want to create a new group (or a subgroup of another one), just choose the upper level it will belong to and for **Type** select **Group**. Further, for your convenience, while you create new assets, you can place them into this group.

- **Boolean** – This is a type for metadata which can be “true” or “false” – only these two values are possible.

= **Checkbox** is the only possible control type for a Boolean metadata. A box corresponding to that field appears in the metadata window. If checked, this box indicates “true” and “false” - if not checked.

- **Date** – This field type enables you to enter date info. The date can be inserted either with the time or without. This is to be specified in the control type field. Two possibilities:

= **DatePicker** will load for values only dates (without the time).

For **Initial value** you can set any date from the calendar appearing. The **Today** check will put the today’s date as initial value. Today’s date is taken from the computer’s system time.

= **DateTimePicker** gives the opportunity to enter not only a date, but time, also.

For **Initial value** you can set any date from the calendar appearing and the time will be 00:00 and cannot be changed.

- **Number** – A type for numeric values.
  - = **TextBox** control type is giving a possibility to put such numbers which include letters, also. F.e. sometimes people use counting like A1, A2, A3, etc.
  - = **NumericBox** is for entering any numeric value.
    - The **Initial value** can be any digit, starting from “0”.
  - = **CalculatorBox** is for values which must be frequently updated according to some calculations. When you select such a metadata in the metadata window, a calculator opens and you make the calculations inside the calculator. The result of these calculations will remain as a value. I.e. the value is calculated in its field.
  - = **DropDown** control type will open a menu to choose a predefined package with values. You can choose only from these definition packages which are categorized to be from number type. **Definition packages** will be discussed further in that manual. Values in metadata fields with drop-down control type are loaded by choosing one of already predefined values.
  - = **ColorBox** puts any color as a value in the metadata field. The color can be either selected from a palette or set via its values for red, green and blue which are added manually.
- **String** – In such control type any value can be added. It is a type for numeric values.
  - = **TextBox** any character (letters + digits) can be set as values for such type in the metadata window. The value will be placed in one row only.
  - = **MemoBox** is the same as TextBox. This control type provides more rows for placing the values. If a MemoBox is selected, the wizard is giving a possibility to define the rows number.
  - = **DropDown** control type will open a menu to choose a predefined package with values. You can choose only from these definition packages which are categorized to be from string type. If you choose the package “Countries” (f.e.) for initial value you can set one of the countries already listed in the package.
  - = **MultiValue** – if this type is applied, for that metadata field in the metadata window, several values can be loaded. You enter the values in the metadata window, in this metadata field, in the place values are entered in, in a form opening for this purpose. Values are entered one-by-one. Finally, you apply them. Even that all these values are entered in one field only, **Metus MAM** can make searches over these values with any of the AND/OR logics. The idea is that some of these values will be entered as values for another metadata field, also.

Example: if we have a field “Stars” with value: “Brad Pitt, Al Pacino, Steven Spielberg, Mel Gibson” and we have another field “Producer” with value: “George Lucas, Mel Gibson, Steven Spielberg”, we see that Mel Gibson and Steven Spielberg are values which are repeating. Sometimes are needed searches for people who are actors and producers in one and the same movie. **Metus MAM** gives the opportunity to make such a search. Thanks to the multivalued control type, we can freely add all the values in the field. Another good example for using this control type is the cases when we need to enter keywords.

= **Checked List** is a type for fields into which several values can be checked. You must predetermine the content for this field in a definition package. Later, in the metadata window, when you click on the drop-down box next to this field, your predefined content will appear as selective boxes. You can set more than one choice for this asset by checking more than one value from the list.

= **Link** –whatever you type here is observed as a web link. It is blue-colored text, underlined. You can access that link by double clicking on the address.

= **E-mail** – A field for e-mails insertion. Double-clicking on this value will automatically open the default e-mail client application in order to write and send an e-mail to this address.

- **Time** – This field type enables you to enter time info.

= **TimePicker** will load for values only time-format values. All the control values are observing the time-format rules.

For **Initial value** you can set any time you wish. For getting the current time from the PC system clock, just put the check **Time**.

- **Text** – This field type enables you to enter characters with no limitation. Text field type can contain any value.

= **MemoBox** is the only control type that can be selected.

**NOTE!** Digits can be inserted but even though they could not be used in advanced search in arithmetical criteria.

- **List** – This is a type allowing the user to enter several describing metadata values in one metadata field only. The control type of the field is not just row(s) but cross-reference of cells, for convenience combined in one single table. Thus, the values are organized in a compact way.

= **List** is the only control type available and used.

Example: Let assume it is needed to apply an asset several IDs, names, creation dates for these value. In that case, the metadata field creation will look like:

The **Add/Remove** buttons are purposed for adding a new field to the list or delete a selected one. Each field added, can be set a default (initial) value, can be set to be read-only and specified to be visible or not. This is to be pointed with the checks in the columns to the right.

**Show Row Count** defines whether the row number will be shown in the table or not.

Column	Default Value	Read-Only	Visible
ID		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Name		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Creation Date		<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Show Marker Out As Column** option enables that marker in and marker out will be showed in same raw but different columns. If this option is unchecked, mark in and mark out metadatas will be showed in same columns but different raws.

In the metadata window, this metadata field content looks like:

Order	City	Country	Address
1	SOFIA	Bulgaria	49 Shipchenski Prohod Blvd. 1111 Sofia, Bulgaria P.O. Box 195 1113 Sofia
2	ISTANBUL	Turkey	Piyalepaşa Bulvarı , Memorial Center A Blok Kat:10, 34384 Okmeydanı, İSTANBUL, TÜRKİYE
3	HATFIELD	United Kingdom	Brookmans Park Teleport, Great North Road, HATFIELD, Hertfordshire, AL9 6NE, United Kingdom

You can enter as much rows as you need with the help of the **Append/Delete** buttons – down in the toolbar.

- **Image** – Values, entered for such type of field are pictures. Can be used for putting here the storyboard (let say if the metadata field is named “storyboard content”. It can be also a little face-picture of a person answering to a field named “photo”, if the asset is related to somebody’s data, etc.)

= **Image** is the only control type available and used.

- **Image List** – Similar to **Image** type. The values in that type are listed in a predefined package from **Image type (Definition packages)** are described further in the manual).

= **Image List** is the only control type available and used. The Definition Package must be selected in the list with the lists already predefined.

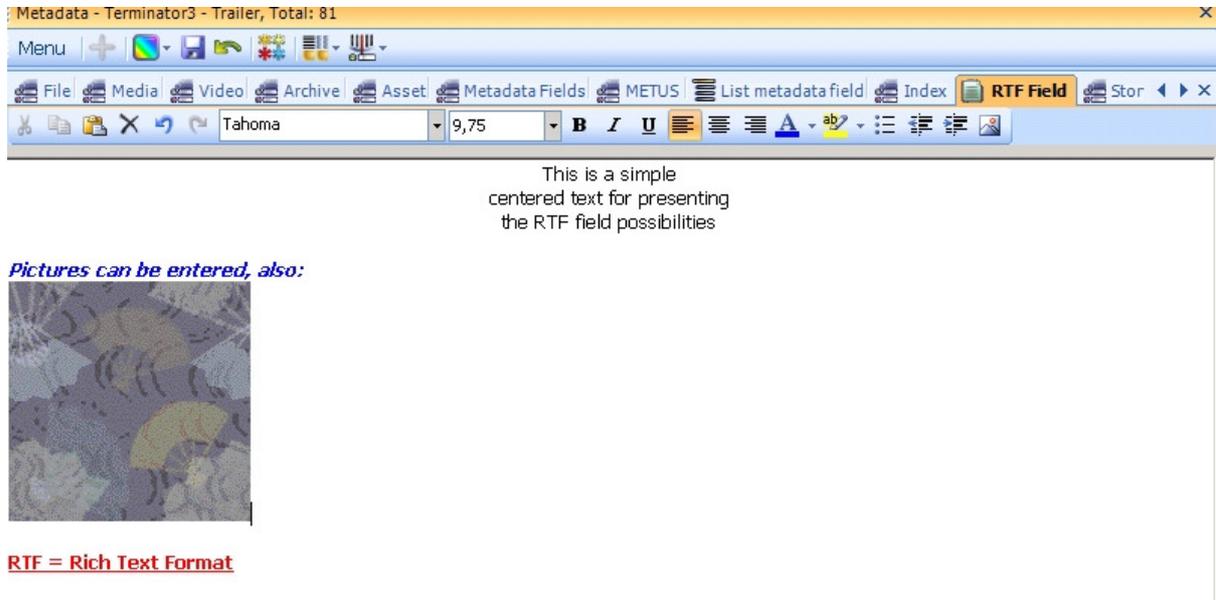
**Image List** values can be used in different scenarios. The main idea is to have a drop-down list with a lot of pictures to choose between, like shown on the screenshot here:



- **RTF** – Stays for “Rich Text Format”. In fields from this type you can enter any rich text content.

= **RTF Editor** is the control type available and used.

When filling values in a field from that type, a simple RTF editor opens so that you can insert text and pictures and make some formatting:



- **Decimal** – For fractions values insertion. On the next page of the wizard, you can set the number of the digits after the decimal point. Can be selected one of four control types:

= **TextBox** - already described;

= **NumericBox** – described above;

= **CalculatorBox** - described, too.

= **DropDown** – described.

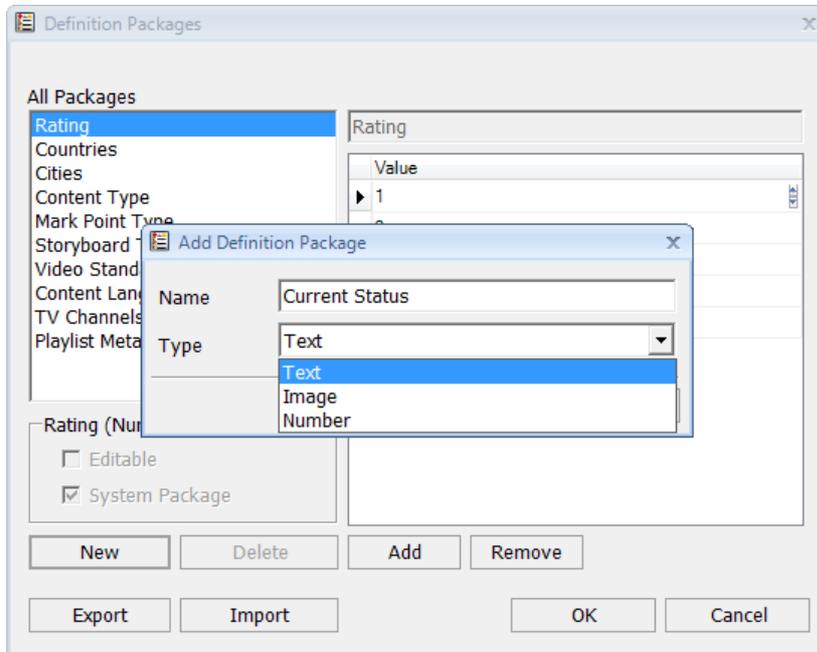
- **Set** – The user selects some fields (already existing) and shows them in one tab only. The tab is named as per the name defined for this set. It is just like grouping metadata fields in one tab (set).

- **Autonumber** – This is a read only metadata field. Starting value and increasing amount can be adjusted from settings. The first asset added to library will be given the initial value for this value. After that, next asset’s metadata will be last value plus increasing amount.

For example, initial value is 4 and increasing value is 3, so first asset’s metadata will be 4, next one 7, next one 10 etc...

#### 4.13.4.2. Definition Packages and Field Definition Binding

Sometimes it is easier to predefine values for some field and then to use these values by selecting them from a drop-down list. It is not only easier and quicker, but also it avoids mistakes when entering the values because the describing metadata values can be messed when entered by different project users. Therefore, the **Metus MAM** offers a powerful option to predetermine such values. This is called **Definition Packages**.



The dialog can be activated either from the **Metadata Window -> Menu -> Definition Packages** or from **Project -> Fields -> Definition Packages**.

All the existing packages are listed in the **All Packages** section. With the installation a lot of packages are automatically obtained: **Rating, Countries, Cities**, etc.

With the **New** and **Delete** buttons you can create a new package or delete a selected one.

If a new creation is undertaken, then a little dialog opens for entering the new package **Name** and its **Type**. You can choose between three types: **Text, Image** and **Number**.

**NOTE!** Later, when you refer this definition package to a new metadata field, this type and the field type must be relevant. I.e. you can not involve a **Text** metadata field with a package which is set **Number** type. Therefore, when creating a new metadata field, the definition packages listed in the drop-down menu (to choose which one to refer to the field) are filtered – in this menu you do not see all the packages but only these which are from a relevant type as per the one set for the metadata field.

In the right part of the window you see the name of the selected package above and its structure – the values defined for it. With the **Add/Remove** buttons you can add new values to the list or delete a selected one. Values are entered in the rows appearing at the end of the list each time the **Add** button is pressed.

**Editable** are the lists that can be changed values (some can be deleted values; other can be added new ones or a combination of both - adding and deletion).

All these predefined lists can be used into the current project only. If you need to use the same packages in another project, there is no need to create them again in the other project. Just export the list from here and import it where needed. The **Export/Import** is done via the homonymous buttons and it is done through \*.xml format.

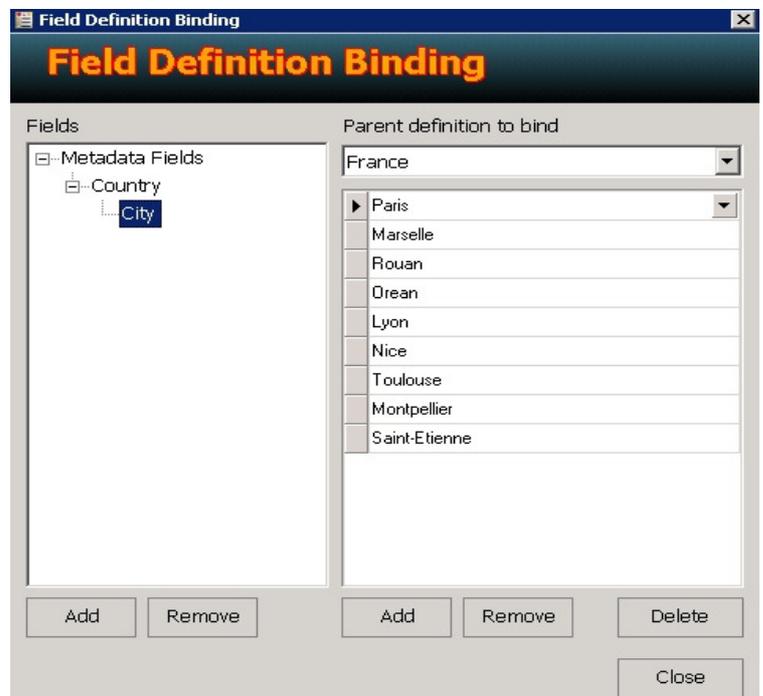
**Metus MAM** is smart enough to get even deeper into the values predefinitions. The proof is the **Field Definition Binding** option. It uses the values from the packages created, binding them one to another.

Example: Let say you have two packages created - "**Countries**" and "**Cities**". Once you enter "France" as a value for country-field, only the French cities will be listed in the city-field drop-down menu after that. I.e. the second field (in this case – city) will filter only the values true for the first field (country).

Of course, before that you should "tell" the system which the French cities are. And this is done via the **Field Definition Binding**.

Into this dialog you must select the **Metadata fields** level and press the **Add** button. The metadata tree opens. Select the **Country** field and add it into this form. Then select the **Country** from this form and again press the Add button to open the metadata tree and time select and add the **City** field.

Thus, you will have **Country** as a level and **City** – sublevel included into it. If you select **City**, in the right part of the window you can select the country from the drop-down menu (the package is predefined) and then for this country you can start listing cities.

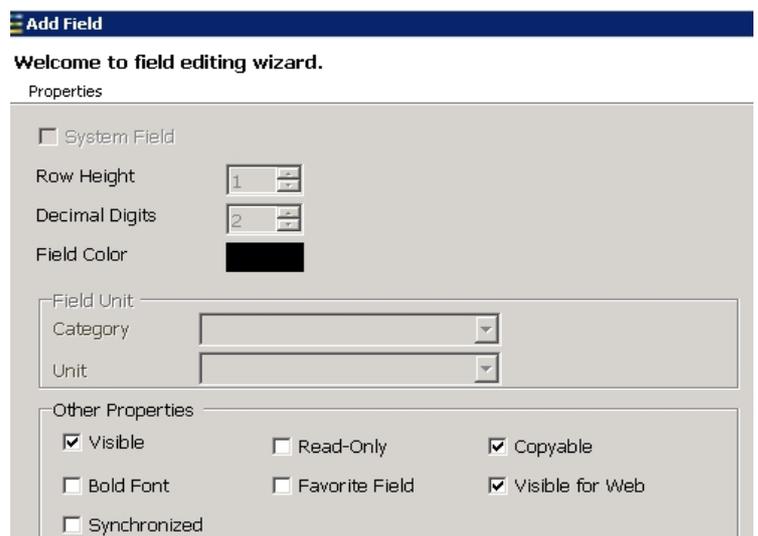


**NOTE!** For user convenience, all the cities you enter in this form will be automatically added to the Cities-package, too.

#### 4.13.4.3. Field Properties

**RowHeight** enables you to specify the height of the row for the relevant field types.

**Decimal Digits** – defines the number of the digits after the decimal point for values entered in a Decimal type field.



**Field Color** – a palette opens to select a desired color. Later, in the metadata window, the metadata field text will be displayed in this color.

**Unit** and **Category** are active only for **Decimal** and **Number** types. These fields are bound to each other.

**Example:** If for **Category** you set **DataSize**, then for **Unit** you can choose from the drop-down menu any value proper to measure data size (bit, Kb, Mb, etc.)

**Visible** specifies if the field will be visible or not in the metadata window.

**Read Only** – if checked, the field won't be available for applying any changes to it.

**Copyable** - specifies if the created field is able to be duplicated or not.

**Bold Font** concerns the way the font of the field's name will be displayed in the metadata window.

**Favorite Field** – marks the field as a favorite one (usually used for mostly previewed fields)

**Visible for Web** – defines should the web users see this field or not.

**Synchronized** – This is a check for the metadata field to define will this metadata field be synchronized with other projects or not. I.e. if we have to synchronize two projects, and the field is presenting only in the metadata tree of the source project, this field will be copied in the tree of the second project, as well (as it is a synchronized type).

**NOTE!** The synchronization is done only in one direction – from the source to the synchronized project. This is not a bi-directional process.

#### 4.13.4.4. Metadata Fields Security



After setting the wizard's second page settings, we go to the next one which is for applying the field's security.

On this page we see the list with all the groups and the users added to the project. For the current field which is been created, each user can be specified right to read, edit or delete the values in the fields. If these permissions are set for a selected group, the users gathered into this group will automatically obtain the same rights.

The example on the picture shows that all the people, belonging to the Web group will have only right to preview the fields and their values. Therefore, Skyman obtains this right only, too.

#### 4.13.4.5. Completing the Metadata Field Creation

To complete the metadata field creation the last page settings must be applied. It is concerning the object for which the metadata field will be visible in the metadata window, by default. Object can be a bin, an asset and/or a playlist.

If you select **Bin**, this field can be added to the metadata window if a bin object is marked in the project area.

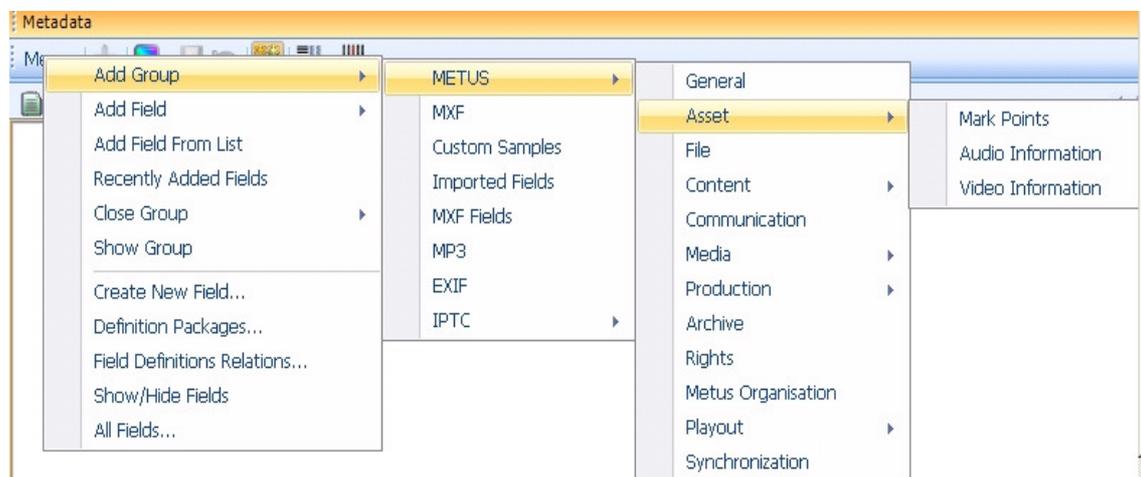
Same is for **Asset**. The checks following specify deeply the kind of the asset. If just **Asset** is checked, then the field will be applicable for all the asset kinds – audio, video, image, document and data.

Logically, the same rule is observed if a **Playlist** object is selected.



#### 4.13.5. Metadata Window -> Menu

The Menu opens several options to choose between when needed.



- **Add Group** is tracing only the existing the groups in the metadata tree one by one as per the level they are placed in, giving the possibility to open this group in the metadata window. The groups are opened in different tabs.

**Example:** If you want to open the **Video Information** group, you select it from menu -> **Add Group -> Metus -> Asset**.

- **Add Field** is acting in the same way listing not only the existing groups but the fields, also, so that you can choose which field to open in the metadata window.

- **Add Field from List** is used in cases when you want to open a field in the metadata window, but you do not remember where this field is placed in the tree. The metadata tree opens and then you must use Quick Find field, described above in the manual.

- **Recently Added Fields** – lists the last fields added to be displayed in the grid.
- **Close Group** – lists all the opened tabs (groups) and you choose which one to close. The tab can be closed also by right-click over it and selecting **Close**.

**NOTE!** This option is working only if all the groups are ordered in separate tabs. If they are ordered in one window, the option is not working.

- **Show Group** – Lists here all the closed groups. You go to this list to open back one.

The last options are already described above: **Create New Field, Definition Packages, Field Definitions Relations (Binding), Show/Hide Fields** and **All Fields...**

#### 4.14. Searching

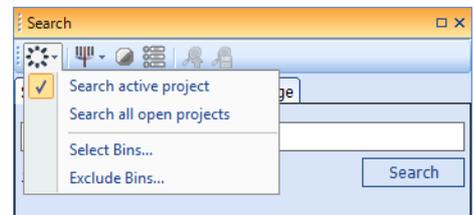
We distinguish four different ways to make a search in **Metus MAM**: **Simple, Advanced, by Category** and by **Image**. Each search is presented in a different tab, and the four tabs – in one window, which is placed in the left-bottom part of the entire interface.



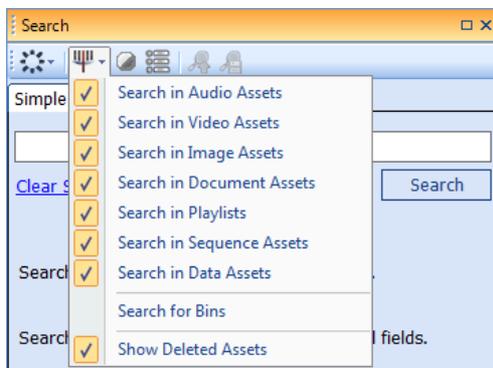
##### 4.14.1. Search Window

The **Search windows** provide six buttons for précising the search process and filter the tasks to be run.

- **Search Locations** - The first one is for pointing the locations (projects and bins) to be searched into. You can choose either to **Search the Active Project** (the current one) or to **Search in All Open Projects**. You can **Select Bins** in which you want search. You can add syb bins into research if you



want also. And with **Exclude Bins** option, you can narrow down searching area.



(deleted assets)

- **Apply Filters** is the second button and it is filtering the objects for which the search should be made. You can search in video assets only or in playlist objects. It depends on the user’s needs. The search can be made also over the **Filter Bins** (search bins) and even in the **Recycle Bin**

- **Exact/Partial match** search button is to determine whether **Metus MAM** will search partially or full-text (by words).

= When you choose the first option (**Partial search**) it is needed to enter some part of the word (f.e. “tra” instead of “trailer”) and the system will list everything which includes “tra” anywhere in its fields. When you search in thousands of assets this may take a long time.

= **Full-text search** is creating a catalogue with the words used in the storage. This takes time. And this time is predefined in the SQL settings. So, whenever you search by full-text, it will need time before showing you the right results. Even that this seems slower, in fact this searching is much quicker because it is not seeking in each metadata field letter-by-letter, but word-by-word.

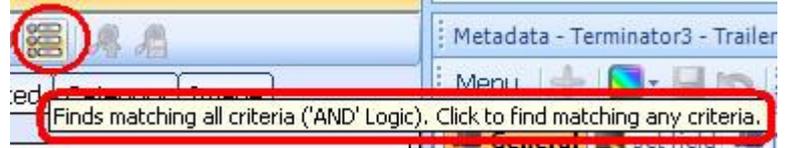
When this button is half-black-half-white then it is searching partially. If it is full-black, it will search the exact full match of the word seeking by.



Example: If we have two assets – *TerminatorTrailer* and *Terminator Movie*:

- partial search for “Term” will give out as a result both the two assets;
- Full-text search for “Terminator” will give out as a result only the second filename as the word “Terminator” is met there. The first filename is one-word only – *TerminatorTrailer* which is definitely not equal to *Terminator*.

**AND/OR logic** button is used in advanced type of search to specify whether all the search criteria must be observed (**AND** logic) or any of the criteria only (**OR** logic).



**NOTE!** When working with these logics, please, keep attention to the previous button status, too. The four combinations of these two buttons statuses can present different results each time.

Example: In the project three of the assets are named like SWAT Trailer (with rating 4), SWAT Movie (with rating 5) and SWAT Making (with rating 2).

=\_If we make an advanced search by “SW” (partial search ON) **AND** we search for all the assets with rating bigger than 3, then the result will be SWAT Trailer (with rating 4) and SWAT Movie (with rating 5) because they observe both the two criteria: have “SW” in the file name (partial search) **AND** their rating is bigger than 3.

=\_If we make an advanced search by the word “SW” (full-text search ON) **AND** we search for all the assets with rating bigger than 3, there will be no results because there are assets including a whole word “SW”. I.e. the search stops even on the first criterion.

=\_If we make an advanced search for any asset which has the word “SW” (or “SWAT”) in its name (partial search ON) **OR** assets with rating bigger than 3, then the result will be all the three assets because all they have the word “SW”/SWAT in the name. In this scenario here, if we assume that there was another asset in the project, named Terminator (with rating 5), it should be listed in the results, too, because its rating is observing the second criterion – rating is bigger than 3 and the searching is run with OR logic.

= Let still keep the new asset in our project - Terminator (with rating 5). If we make an advanced search for any asset having the word “SWAT” in its name (Full-text search ON) **AND** we search for all the assets with rating bigger than 3, then the result will be SWAT trailer (with rating 4) and SWAT movie (with rating 5). These two assets observe both the two criteria – needed because AND logic is used. The other two assets are not listed in the results – Terminator is not answering the name criterion (even the rating is answered) and SWAT Making is not answering the rating criterion (even answering the name criterion).

Search	Criteria	Logic	Listed Results
Partial	SW; rating bigger than 3	AND	SWAT Trailer (with rating 4) SWAT Movie (with rating 5)
Full-text	SW; rating bigger than 3	AND	-
Partial	SW/SWAT; rating bigger than 3	OR	SWAT Trailer (with rating 4) SWAT Movie (with rating 5) SWAT Making (with rating 2) Terminator (with rating 5)

Full-text	SWAT; rating bigger than 3	AND	SWAT trailer (with rating 4) SWAT movie (with rating 5)
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- **Load/Save buttons** are used when an advanced search is processed. This way of searching is adding criteria one after another as search conditions. In order not to add these criteria each time you use the advanced search, some of the search conditions can be saved as a search profile and loaded later directly from this preset. This is a quicker and helpful option.

For the criteria you want to include in the profile, put checks in the most right column. Press the **Save** button from the search toolbar and type a name for the advanced search preset you will create. At any time later you can use this preset, invoking it with the **Load** button – a dialog opens with all the search profiles existing. You can remove any of these profiles by selecting it and pressing the **Delete** button from this dialog.



At any time later you can use this preset, invoking it with the **Load** button – a dialog opens with all the search profiles existing. You can remove any of these profiles by selecting it and pressing the **Delete** button from this dialog.

#### 4.14.2. Simple Search

This is a text-based search over metadata fields. The search can be processed over all the fields so that the result will be observing any metadata field's value or it can be done for metadata fields, predetermined to be searched over. This is specified from

**Project -> Properties -> Other -> Simple Search Options**. By default, the search is done in all the fields, but if you want to limit the search results or you need to search over some fields only, just select them from the second option: **Search Over Specified Fields** and **Add** the fields from the metadata tree which opens. The fields will be listed in that form. Later, when you do not need to search in some of the fields select and **Remove** them from the list. **Save Search Criteria to Action History** option writes down these criteria to action history.



**Metus MAM** is making usually partial-text searches. This is most common search scenarios. However, if you are tending to find exact matches mostly, then put the check **Always Force Full Text Search**.

To search objects in the project use the text field in the search dialog and put the text (word) you will look for. Press the **Search** button. The resulting objects are opened in a separate window, called **Search Results** tab.

**NOTE!** Keep attention to the toolbar's partial/exact match button's status. It is important as the results will be generated as per the way the button is set.

If the **Simple Search Options** dialog is left by default, then **Metus MAM** will search over absolutely all the fields in all the objects in the project. Therefore, the result can give any kind of objects. Select any asset in the **Search Result** tab and in the metadata window you can see where the search match is made. The metadata window opens this metadata group where is the field with values, answering to the search criteria. Besides, the words, matching the search one, are marked (this is depending also on how the metadata window filtering is set).

Playlists maybe listed as results, if the search word is included in the name of the file's path. Some video can be included in the results, if this video is set a marker in the **Viewer application** and the marker description is including the search text. Also, text documents can be listed as results if in the content of this material, the search text is available, etc.

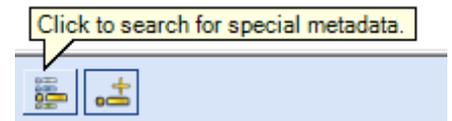
#### 4.14.3. Advanced Search

This type of search is browsing in the metadata values for matching more than one criterion listed in this tab. Criteria are added with the **Add Search Criteria** button down in the toolbar in this window. The metadata tree opens and the fields, over which the search will be made, are selected one-by-one. The **Advanced search** is giving a possibility to search for assets observing all the criteria listed or for assets answering to any of the criteria available. Logically, the second option is giving out more results.

Please, take a look at the above explanation of the **Search toolbar** buttons in order to get detailed explanation and examples about the advanced search.

As a little but helpful addition to the **Advanced search, Fast Advanced search** can be executed. It is a list of presets with criteria added.

Press the button for **Special Metadata Search** and a dialog will open. If you need to find all the video assets, instead of adding a criterion "Asset Type = Video" just select **Asset Type - > All Videos** and all the video assets will be filtered in the **Result tab**.



Take a look at these predefined criteria. To use them, you must know them vaguely. Once get familiar with them, they will be of large use because of the speedy search run from there.

#### 4.14.4. Category Search

This type of search is like filtering the objects in the project by categories. One object can be set several categories (f.e. video, good-quality, music, jazz, love, children, etc.).

Archiving thousands of materials on the storage needs time for browsing into them when seeking a proper material for some purpose in any moment. The **Category Search** is speeding this process by several clicks for the categories needed.

When inserting the objects into the project, they must be categorized. This can be done on a local machine, in a library project before the materials are archived. However, categories can be applied to archived materials, too. This is to be done from the **Category** window available in the right-bottom part of **Metus MAM** interface.

**NOTE!** Only the Administrator can access the category window.

Select the asset(s) and expand the category tree; then start applying the proper categories by checking them one-by-one. That's all about it! For more information about categories creation, please, refer to **Chapter 3 – Adding a New Category** section.

As seen from this window, **Metus MAM** divides the categories in two general groups:

- **Project Categories** - This title contains the categories belonging to this project.
- **Imported Categories** – these are the ones coming with objects taken from another project. These categories can be transferred to the project categories or deleted. The imported categories can be moved to another place in the tree. For this press the button **Move Importeds**.

Anyway, all the categories from any project can be exported in a \*.xml file and imported into

another project.

**NOTE!** The import procedure is replacing the entire tree in the project into which the import is done. Its old tree will be totally deleted!

To find materials from any category, just use the **Category search** window. Expand the tree and check for what you need to find. As more checks you apply as fewer assets are filtered.

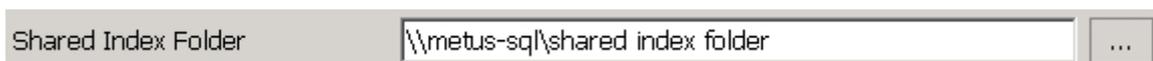
**NOTE!** Please, keep in mind that the values checked for categories are not applied to any metadata field. These categories are only for filter search and they have nothing to do with the metadata fields' values.

#### 4.14.5. Image Search (optional)

**Image search** is an optional feature (additionally paid). This type of search is seeking into each frame of a video material pixel-by-pixel (bit-by-bit) to find color matches with a picture given as a search criterion.

To seek internally in the materials (bit by bit) **Metus MAM** needs these materials to be able to report information about each pixel status. For this purpose, the objects need to be indexed. Shortly said – the system is image-searching only in indexed videos.

To index a material, first you need to create a folder on your machine (or local network) and share it with all the permissions allowed. Later, the indexing results will be kept into this shared folder. After the folder is created, launch the **Project -> Properties -> Others** menu and with the browse button select the folder in the network:

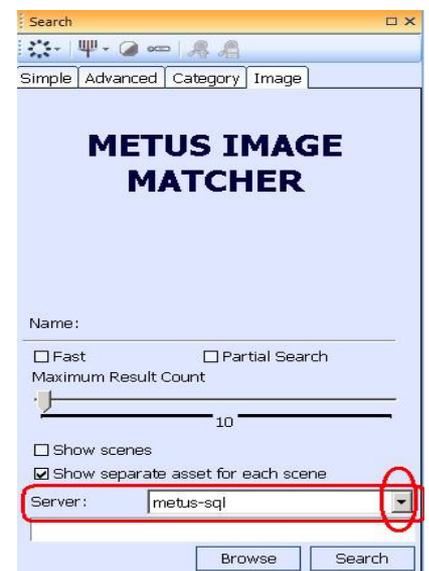


The assets need to be indexed now – multiselect them and create index. Indexed assets can be distinguished by the highlighted “I” on the icon.

Next step is to be sure that an **Image Server** is set. This is the machine onto which the *Metus Image Matching Server.msi* installation is done. (Usually, this is the MPS but can be another PC, also). Set the image server from **Project -> Properties -> Image Matching Servers**. If the server is connected, then its name

will be displayed in the **Image Search** tab, below. If more than one server is set for image search, they will be available in the drop-down list.

Up to now the **Image Search** settings for the entire project are applied. No more settings are needed.



From this moment on, image searches in this project require only one thing: a picture (image) for search criterion. Use the **Browse** button to point where the picture is; select and add it into this dialog. The picture appears replacing the title “**Metus Image Matcher**”; its filename is displayed below.

Depending on the type of the search selected (**Fast** or **Partial**) the picture can be presented relevantly entirely or in blocks with checks. The checks are for choosing which part (block) of the picture to be searched by. Remember, the system is seeking for color matches. So, it's logical - the fewer checks, the more results listed. If **Fast** search is required, the

entire image will be searched for. **Fast** search is equal to **Partial** with all the checks applied. It executes a no detailed comparing; only exact matching. Therefore, the success ratio is lower.

**Maximum Result Count**, **Show Scenes** and **Show Separate Asset for Each Scene** are options with which to define how the **Search Results** tab to display the assets.



Actually, when you double-click an asset in the results-tab, the **Viewer** is opening it and puts a red mark on the frame in the timeline where the best match can be noticed. These marks can be more than one – depends on the **Maximum Result Count** chosen.

**Show scenes** option is available only for video assets (being results). If the resulting marks belong to different scenes from the video material, you can set the system to display the scenes in the asset icon, i.e. the asset thumbnail will be displayed divided in up to four parts – see the screenshot. The top left part is the asset general thumbnail. The top right part is the best match. In addition, in the results tab **Metus MAM** can display each scene as a separate asset – the last option from the dialog.

See also the **Viewer**'s description below in the manual – the **Timeline** menu explanation includes additional options related the results of **Image matching**.

#### 4.14.6. Quick Search

Even not available in the search window, there is another way to search in **Metus MAM**. It is from the toolbar – see the picture.



This one works like a simple search. Type a word in the text field here, hit the **Enter** key and all the assets answering that criterion as per the metadata fields' values will be displayed as results.

#### 4.14.7. Locator

This is a specific type of searching. It is used generally for monitoring purposes. For basic search criterion it uses the value from the metadata field **Record Start Date and Time**. See it in the metadata tree -> **Asset** level.



Run the **Locator** from the **Tools** menu. Here is an example of how it can be used.

Let say in some TV the monitoring records start each day at 3.00 a.m. This means that the **Record Start Date and Time** value will be the current date and the time will be 3.00 o'clock. All the monitoring records are saved on the storage. As time passes by, it becomes more and more difficult to browse them file-by-file and to timeline in their duration.

If you need to check what have been played on (let say) 11<sup>th</sup> of January 2008 at 16:15:00 you must use the **Locator** and enter the **Date** and the **Time** offset according to the start time, i.e. the date will be 11.1.2008 and the time (offset) will be 13:15:00. With



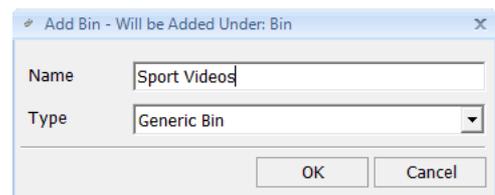
two words - you ask the system what have been recorded 13 hours and 15 minutes after the record started. **Metus MAM** will list in the **Search Results** tab all the assets that answer to this. If you open the asset in the **Viewer** it will place the slider exactly on the moment you are searching for.

If a lot of results are listed in the tab and you don't want to waste time in previewing them, decrease the search results number by adding additional search criteria in the **Locator** dialog. Apply the **Filter** check and enter metadata fields for matching (see **Advanced Search** above).

## 4.15. Bins

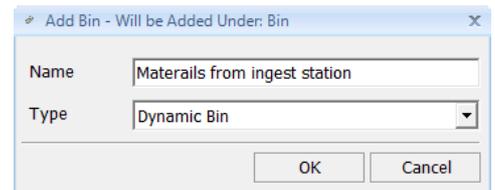
### 4.15.1. Generic Bin

There are several types of bins in **Metus MAM**. The main one is the **Generic Bin** – the holder for subbins and assets. You can add a **Generic Bin** in the project by right-clicking in the area and select **Add Bin**. Enter the name for the bin and select its **Generic Bin** type. In the headline of the dialog it is displayed under which bin the new one will be placed. Inside of such bin you can place assets and other bins – no matter of their type.



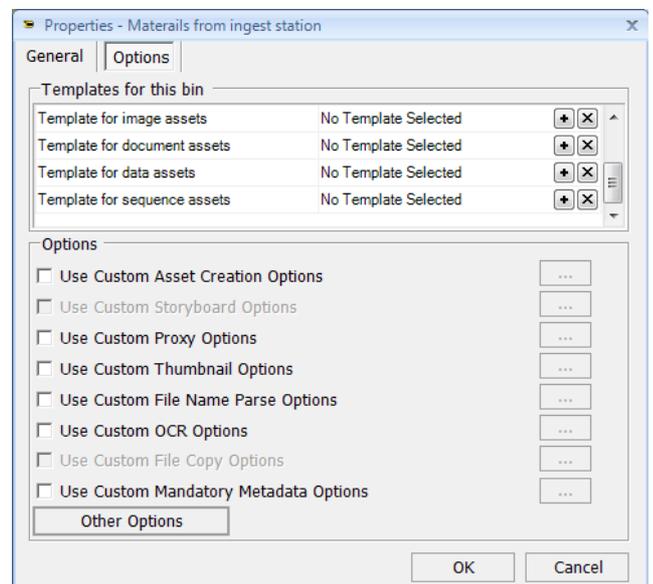
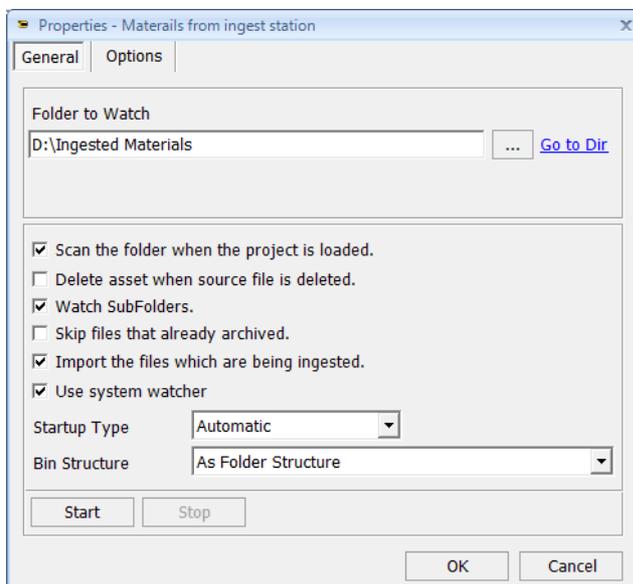
### 4.15.2. Dynamic Bin

This is a bin which is related to a folder in the network. We call it **Watch folder**. The path to the **Watch folder** is defined in the bin's **Properties menu**. **Metus MAM** automatically archives the content of the **Watch folder** and each archived material is created asset in the **Dynamic Bin**. As soon as other materials appear in the **Watch folder**, they immediately start being archived on the storage, too. Shortly said - the **Dynamic Bin** content is always synchronized with the **Watch Folder** content.



Usually the **Dynamic Bin** is used to monitor and archive the content of the folders into which the ingested files are saved. Thus, once the material is captured, it will be archived on the storage without need the user to do this manually through the system.

In this dialog we define which folder will be monitored in the **Folder to Watch** field.



The **Startup Type** of the process can be **Automatic**, **Manual** or when needed – temporarily **Disabled**.

**Automatic** mode will always archive materials after they come into the folder.

**NOTE!** Be sure to press the **Start** button below when starting this option for first time even though it is **Automatic** mode!

**Manual** mode will wait for performing the archiving until the user presses the **Start** button.

When the monitoring in **Manual mode** is already started, it can be canceled with the **Stop** button.

There are six checks below which are very important.

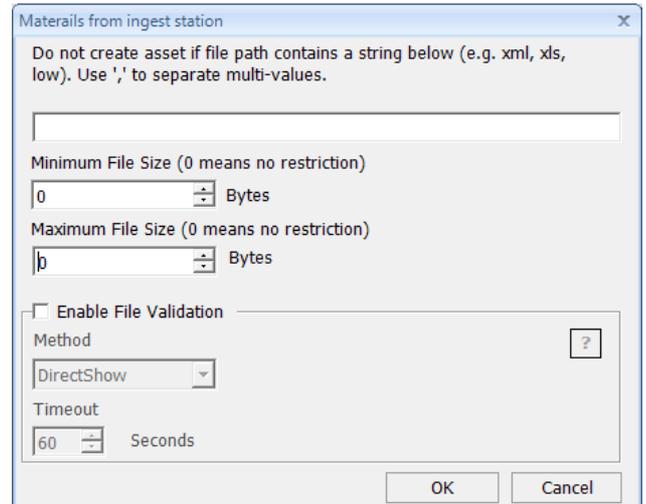
- **Scan the folder when the project is loaded** – will automatically check the folder for new files each time the project is loaded in **Metus MAM**. If there are new files they will immediately start archiving. Logically, this check is active only if **Automatic** mode is selected above.
- **Delete source files after archiving is completed** – concerns the deletion of the files which are placed in the **Watch folder** (the source materials). After they are copied on the server, sometimes the workflow does not need them anymore. If so, check this option so that **Metus MAM** will delete them and thus – sustain some free space in that folder.
- **Watch Subfolders** – defines whether the folders inside of the **Watch Folder** will be monitored, too and their content will be archived.
- **Skip files that already archived** – Be careful when this option is checked. If it is, the files which come in the **Watch folder** and already exist on the storage will not be archived. This may make you think that the option is not working. When the option is unchecked and such files appear in the **Watch Folder**, **Metus MAM** asks about re-archiving as it usually does in such cases.
- **Import the files which are being ingested** – This option enables archiving files which are being ingested and not complete yet. Files archived while being ingested will be showed in their assets with an “ingesting” sign.
- **Use system watcher** – This check enables Microsoft .Net Framework’s folder watching system. If it’s unchecked, a folder watcher mechanism is used which is developed by Metus.

Applying **Templates** for the bin is described in the next section below. Use the “+” button to open the window for a template selection. The “x” sign will cancel using a template, already set here.

The last part of the dialog is to select whether to use some of the **Custom options** or not. All these options are described in the manual in **Project Properties** section -> **Others** and **Archiving Options**. **OCR options** are described in the **OCR** section below.

The **Others** button into this dialog here runs the same dialog as the **Advanced Options** button at the bottom of the dialog in **Project Properties** -> **Other**. See its explanation.

When dynamic bin watches a folder, it waits the copying files to finish. When the copy operation finishes then the dynamic bin starts to archive the file. In order to “understand” that



the copy is finished, dynamic bin tries to open that file with “write” permission. This permission is not succeeded unless the copy is finished.

**NOTE!** While sharing a folder please keep in mind to give the “write” permission as well as “read” permission. Otherwise dynamic bin will not be able to know that the file copy is finished (it will not get “write” permission successfully)

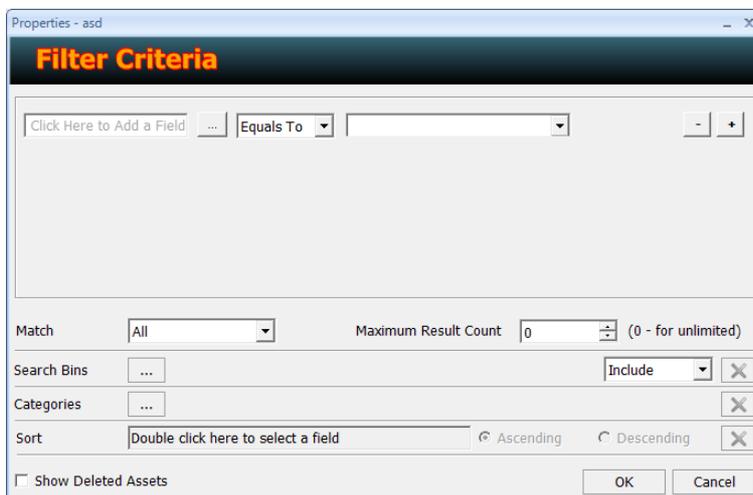
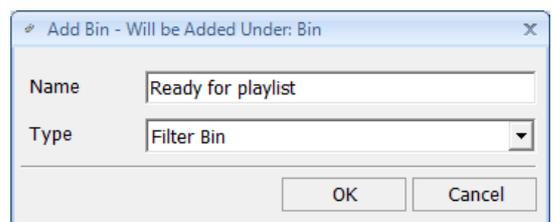
**NOTE!** You cannot add any item (bin, asset) in the **Dynamic Bin** manually like you do in the **Generic Bin**.

### 4.15.3. Filter Bin

This is a bin that filters assets inside according to some criteria. Assets that are filtered here are from **Generic Bins** or **Dynamic Bins**. In fact, nothing can be placed manually into this bin (like we do in the **Generic Bin**). **Filter Bins** act like presets with predefined search criteria. Therefore, they are very appropriate for automation of most used searching criteria. Instead of searching some assets each time, just create **Filter Bins** for previewing them quicker.

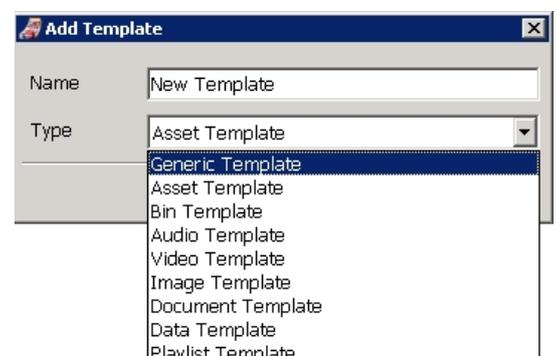
In some workflows **Filter Bins** are used to divide the content as per some criteria – its status (ingested, edited, censored, ready for playlist, etc.), its type (sports, news, music, show, etc) or anything that you may need.

When a lot of users start working with the project and they separate their tasks as per the status of the assets in the project, it is very possible that the users miss some of the assets they must work on. This may happen if somehow the search criteria are not entered correctly. Using **Filter Bins** avoids such mistakes – people from different departments know into which **Filter Bin** to look for their tasks.



When a new project is created, some **Filter Bins** are automatically added. These are named **Search bins: Added this week, Unmodified, Large Assets, Most viewed, Most Retrieved** and **Long Assets**. Take a look at each one’s **Properties** (from the context menu) to get a vague idea of what will be filtered into each bin. Of course, you can change the criteria as per your wish.

For filter bin, any field can be added as criteria, and more than one criterion can be added. If more than one criterion is added, **match all** or **match any** determines the result of filtering. Match all shows only assets that fits all the criteria on the other hand match any shows all the assets which fit any of the criteria. Obviously this will probably results as more assets than match all. **Maximum result count** determines how mann result will be showed in filter bin. It’s “0” as default which means unlimited. It can be limited with any amount if desired.



#### 4.15.4. Template Bin and Templates

This is a container for templates only. Nothing else can be added here. Besides, in one project only one **Template Bin** can exist and it is automatically added to the project tree with the **Metus MAM** installation.

Templates are items purposed for quick metadata applying for different project objects. A template can be **Generic Template, Asset Template, Bin Template, Audio Template, Video Template, Image Template, Document Template, Data Template** and **Playlist Template**.



You can create as much templates as you need – all of them will be saved in the **Template Bin**. Later, when you apply them from the **Bin Properties** dialog you can define for which type of object in the project what type of template to be applied.

Templates for this bin		
Template for bins	Bin Template	+ X
Template for all assets	Asset template	+ X
Template for video assets	Video Template	+ X
Template for audio assets	Audio Template	+ X
Template for image assets	Image Template	+ X
Template for document assets	Document Template	+ X
Template for data assets	Data Template	+ X

**Metus MAM** will affect with values only those types of assets for which templates are set in the **Bin Properties** dialog.

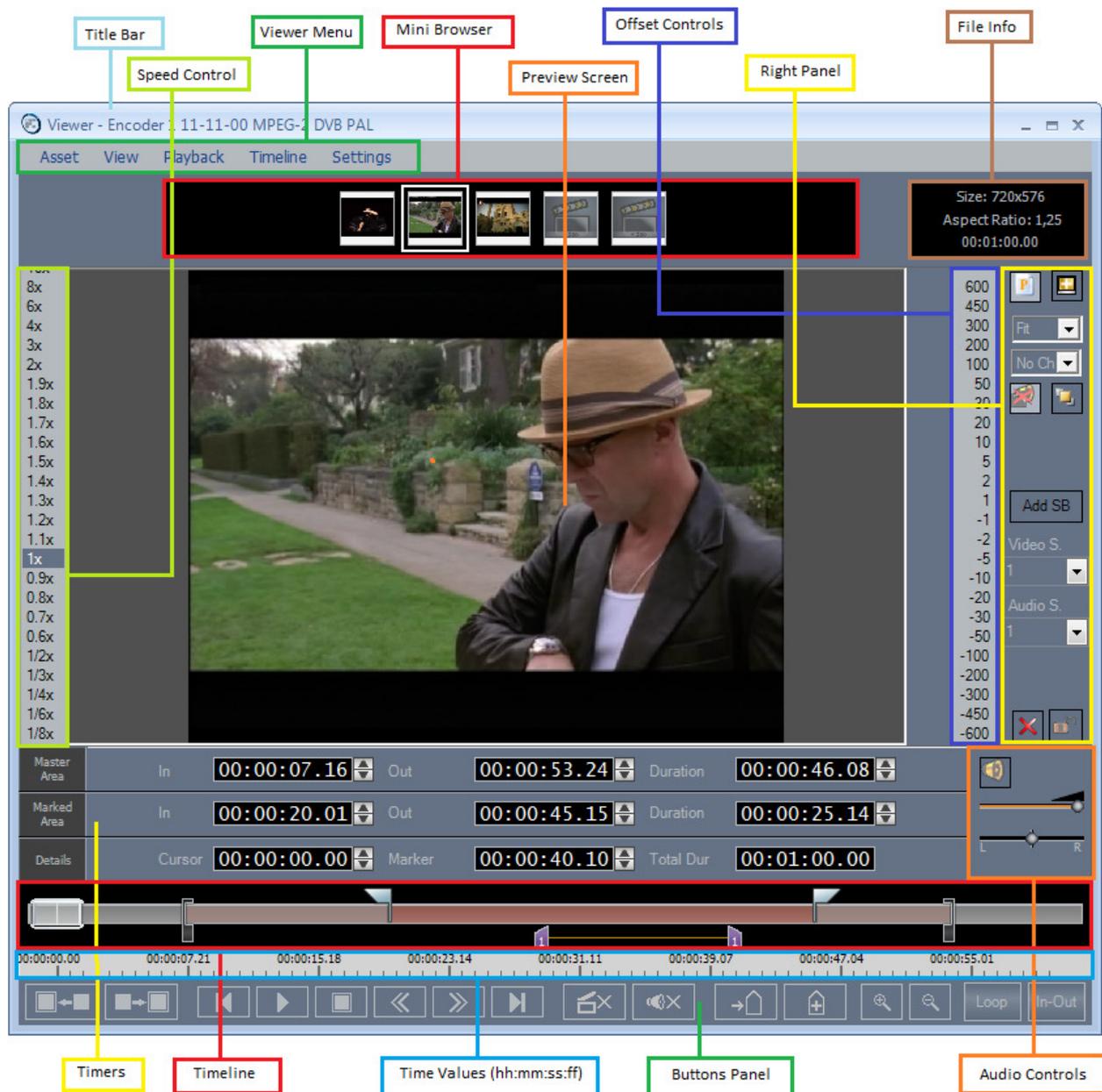
**Example:** If you have a template and you apply it for video assets, then the values which are defined in that template will be copied only to the video assets included in the bin. Audio, data, documents, etc. will not “take” these values in the relevant metadata fields.

At one hand we have different template types, on other hand - applying different templates for different types of objects (in the **Bin properties** dialog). This is because some different-type-assets may take different values for one and the same metadata field.

To apply metadata via the template, you must firstly set the values for the template itself. So:

- 1) Create a template in the **Template Bin** – right-click there and select **Add Template**. Enter a name for that template and choose its type from the drop-down menu.
- 2) Select the template and in the **Metadata tab** below fill the values in the descriptive fields you need (i.e. enter the metadata values for that object).
- 3) Go to the bin you will apply the template and open its context menu. In the **Templates for this bin** section press the “+” button and the **Templates Bin** will open. Select a template from it and apply it. Close the **Bin Properties** dialog.
- 4) Start archiving objects in the bin. For the relevant descriptive fields, all the archived objects must have values equal to the ones defined in the template. Thus, the user avoids typing them manually each time for each object. Please, keep in mind that the values will be applied only to those items that are archived after the template is applied to that bin. If some objects already exist into this bin, they will not be applied values.

**NOTE!** To apply values via templates, be sure that this option is activated from **Project menu, Properties tab -> Others -> Use Project templates when Items are created**. If you don't want to use this feature, disable it from here.



## 4.16. The Viewer

This is the preview application. It helps us open image, audio and video materials and browse in their content. You can start the **Viewer** by double-clicking on an asset or right-click and choose **Open**.

The window is divided in several sections and it provides a lot of options, some of them related to the project menus. The **Title Bar** displays the asset's name

### 4.16.1. Mini Browser

This is the section into which all the assets from the current bin are listed. When the **Mini Browser** gets full, left and right arrows appear at its beginning and end. Press them to browse the assets in the mini browser and seek for a special asset to preview it here. You can also navigate between the objects by sliding the scroll bar below. The currently previewed asset (the selected one) is marked with a white rectangle.

### 4.16.2. Preview Section

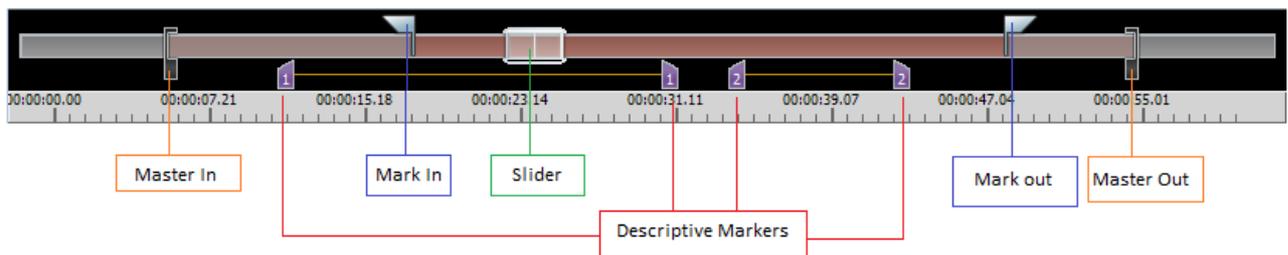
This is the main part as it is the one previewing the material itself.

### 4.16.3. Timeline

It works in two modes. To switch between them, check/uncheck **View -> Show All Items**.

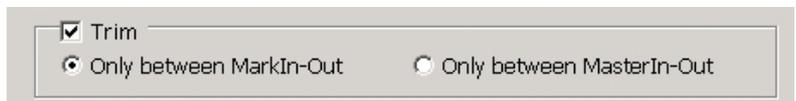
- When a single item is selected and it is an audio or video object, the timeline shows **Mark In-Out**, **Master In-Out** positions, current position (**Slider**), marked points (**Markers**) and **Audio/Video censors** allowing the user changing them.

- When all the items are shown in the timeline they are displayed as different parts divided by white lines according to their lengths. Each part's color may be different according to the object type. For example, the red parts indicate video objects. Also, the object's name is displayed in the timeline as possible as the part's length is allowing. The position cursor on this object can be changed by dragging the **Slider**.



Four cutting pointers can be set in the timeline. Two of them are cutting the inner part (**Marks**) and two of them – the outer part (**Masters**). **Marks** are always inside of the **Masters**. The cutting pointers are not editing the video – these are just markers which are used to select parts of the materials to be retrieved further on – look at the retrieve section above. It is like extracting a part of the video between the pointers.

**Mark-In** and **Mark-Out** specify the beginning and the end of one part (usually the shortest).



**Master-In** and **Master-Out** define another part of the video that can be retrieved. And, of course, video can be retrieved with entire length. Thus, the user can have three options to copy the file locally – entire one, the **Masters** part and the **Marks** part.

For the contents description the system provides **Custom in-out Markers**. Drag the slider to any point in the timeline and right-click -> **Add Custom in out**. This creates two markers as one of them for in and other one for out. And a string appears between them with a different color each time. The markers appear in the timeline under the slider. Double-click over the marker - a dialog opens. You can put here two kinds of describing text – **Description** and/or **Extra Description**.

**NOTE!** Whatever is entered into this field is observed as a metadata value over which **Metus MAM** can make searches, later. This is already mentioned in the **Simple Search** section above in this manual.

The **Time Values** listed below are concerning the total length of the opened material. For longer materials higher values are displayed.

### 4.16.4. Timers

Indicates relevant times for video and audio objects and enables them their modification. These are:

➤ **Master Field**: Displays the duration closed between the **Masters**. If you slide the **Master In/Out** pointers over the timeline, the duration will become shorter and this will be reflected here, in the **Master Field** values. The point to which the **Master IN** marker is

moved, will be presented in the **Master Area IN Point**. Logically, the **OUT** point is relevant to the **Master OUT** pointer. This one works also vice versa, i.e. if you put manually digits in the **IN/OUT** controls, the **Masters** will be moved automatically to these places in the timeline. The new duration will be calculated and displayed in the **Duration** field.

➤ **Marked Area:** The area marked with the **Mark** pointers. **IN** defines the beginning and **OUT** defines the end. **Duration** is the length of the range closed between the **Mark IN** and **OUT** pointers.

➤ **Details:**

- **Cursor:** the position of the cursor (slider)
- **Marker:** the position of any selected **Description Marker** in the timeline
- **Total Time:** the total (real) duration of the material with which it is archived.

#### 4.16.5. Speed Controls

They enable you to select the video and audio preview playback speed. If you want to speed up the preview, just increase the speed from here. If the opposite situation is available – thorough and detailed preview needed, choose a slower preview speed.

For further convenience, when you want to preview a sequence of image objects you can run them in **Slide Show Mode**. For this purpose run **View -> Show All Items** and all the objects will be placed in the timeline. From the **Speed Controls** part you can specify duration (in seconds) for each picture to be displayed during the **Slide Show Mode**. The excluded value **Self** is a predefined in the metadata fields.

Example: If you have a bin with pictures and you want to run them in **Slide Show Mode**, you show all of them in the timeline and select how long each one of them to be displayed on – click the number and each picture will stay in the preview window for these seconds. If you want each picture to be displayed with its own duration, then this duration must be set for that picture in the **Metadata window -> Image Duration** field (in seconds). Then just select **Self** and press the **Play** button.



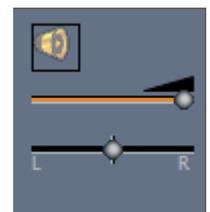
#### 4.16.6. Offset Controls

Available for video and audio objects only. These controls enable a quick browsing forward and backward in the material's length. Concern these as steps with which to jump over the timeline. If you select "2" – this will slide the cursor 2 seconds forward from its current position; if you select "-5" – the cursor will go 5 seconds behind.

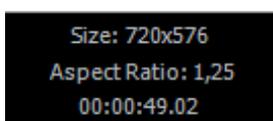
#### 4.16.7. Audio Controls

This section contains the settings for the **Volume** to select the volume level, **Balance** for adjusting the audio left-right balance and **Mute** button to mute the audio of asset.

**NOTE!** Whatever you specify in this section is only for preview. It will not apply the material's content.



#### 4.16.8. Asset Info Section



This section displays additional information about the current material being previewed. Each time you click in this window, it changes the info displayed.

The first time it shows the **TC** embedded in the file if a time code is

involved in the material when being ingested. Also – the **total duration** of the clip.

The next click reports the **bin** into which the asset is placed in the project, i.e. the place in the project tree.

Click once again and you will see the **asset's name**.

**Size, Aspect Ratio and Master Area Duration** are shown the next time you click into this area.

The last info displayed is the **file size (in MB)** and the **Archive date** (when the material had been archived within the project).

#### 4.16.9. Right Panel

Depending on the object type, the status of some buttons here changes from active to passive.

**Use Proxy** button is to determine which file to preview in the window – the original one or the proxy one (pressed button). For user convenience, when the proxy is running on, the word “*Proxy*” is written next to the button pressed.

**Thumbnail** button puts the current frame as a thumbnail of the asset being previewed.

**Fit** drop-down control is to choose the preview size – the preview window also spreads/shrinks together with the video as much as possible.

Preview screen is displayed without change at resolution as a default but this can be changed from right panel. Options are 1:1, 4:3, 5:4, 16:9, 16:10 and 16:11.

If you press the **Always on Top** button, the **Preview** window will be always the active one even if another window is selected. Thus, the user is ensured that while using the **Viewer** application, it will never be lost behind all the other windows opened meanwhile.

**Add SB** button creates a image file of current screen at preview and add this image file to storyboard of this asset.

If you preview a **QuickTime** video (\*.mov-file), in the **Right Panel** a **HQ** (high quality) button will appear. Press it to see the video with better quality.

The **Viewer** can work in **Censor mode**. It is the one to put audio and/or video censors over the timeline. **Enable/Disable sensors** is the button enabling marking audio/video censor parts over the timeline. If **Audio Censor** is selected – the video will be previewed without audio (will be muted). If **Video Censor** is applied – the entire censored part will be skipped. To censor a material, this button must be pressed. When pressed, the two red crosses over it can be seen.

Another thing that must be done is to activate the censor mode from **View ->**

**Censor Mode**. In result, two buttons will appear in the **Buttons panel**: the first one is for video censor, the second – for audio censor. To apply a censor, do the following steps:

- Open the file in the **Viewer**. Position the slider where you want to start the censor.
- Press the relevant button (audio or video censor).
- Drag the slider over the timeline to the point where the censor must finish. Drop it there.
- Release the **Audio/Video censor button** pressed.

If the censor applied is a video one, the entire marked part will be dark-colored and when previewing the file, this part will be totally skipped. If audio censor is applied, the part will be grey-colored and will be muted only (no sound) – the video could be previewed.



**Metus MAM** can make searches for censored materials. Also, the metadata fields report info about if an object is censored or not.

**Video** and **Audio Streams** is for additional information about the file being previewed. If multi-audio file is loaded, you can select which audio stream to preview from the drop-down menu (f.e. if these are different languages you choose which one to hear while watching the running video).

Any changes maden can be reverted by **Discard All Changes** button which has a red (gray if no changes have maden) X symbol.

**Lock the Viewer Against Changes** button obviously locks the asset and prevents any changes (e.g. marker placements or deleting them etc...). Asset is still can be watched and slider can be moved.

#### 4.16.10. Buttons Panel

It contains playback, editing and navigational button groups.



##### Navigating Buttons

##### Playback Buttons

##### Marker Points

These buttons and their functions are as follows:

#### a. Navigating Buttons

- **Previous Clip**: Selects and previews the previous object.
- **Next Clip**: Selects and previews the next object.

#### b. Playback Buttons

- **Go to start position**: Places the slider at the beginning of the material. It jumps at the very beginning of the timeline, no matter where the **Master In** is set. There is also another scenario – if the **In-Out** button is pressed (from the **Marker Buttons**), then the slider will go on the **Mark-In** point.
- **Play/Pause**: Plays the video /pauses the playback.
- **Stop**: Stops the playback.
- **Previous frame**: Goes to the previous frame.
- **Next frame**: Goes to the next frame.
- **Go to end position**: Locates the slider at the end of the timeline or at the - **Mark-Out** point (if the **In-Out** button is pressed).

#### c. Marker Buttons functions are depending on the type of the selected object.

- **Select Next Marker**: Enables switching to the next marker on the timeline. Each time you press the button, the next marker is selected and red-highlighted. The **Master In/Out** and **Mark In/Out** points are considered as markers, too.
  - **Add Marker**: Adds a new marker where the slider is at the moment.
- In **Censor mode**, these two buttons turn into the buttons mentioned above: - **Add Video Censor, Add Audio Censor**. Their functions are described above in the censor mode description section.
- **Zoom In Timeline**: Enlarges the timeline. Different parts are getting bigger.

- **Zoom Out Timeline:** Reduces the timeline until everything being previewed is gathered into the timeline length.
- **Loop:** Repeating the playback between the start and end points.
- **In-Out:** Concerns the playback looped. If this button is pressed, the loop will be repeated between the **Mark In/Out** points.

#### 4.16.11. Viewer Menu

##### 4.16.11.1. Asset

**Discard Changes** – Cancels all the latest changes applied. These may be setting **Mark In/Out** points, **Master In/Out** points, **Audio/Video Censors** or **Add markers**. Latest changes are the ones applied after the last **Save** chosen.

**Save Changes Now** – Immediately saves the changes applied, i.e. it saves the material in the status it is in the moment of choosing this option.

**Save and Continue** – Saves the material with all the latest changes applied and creates a new asset of this material. The new asset keeps referring to the same source file. After doing all this, the **Viewer** keeps on previewing the first asset (not the new one). The new one you can find in the same bin (usually listed as last). To be sure which is the asset you currently preview – always look in the **Viewer headline** – the asset’s name is written there.

**Reload** – This option is active for image objects. The latest changes applied will be canceled from here.

**Grab And Save Screenshot** – Saves the current frame into a picture-format file. You browse to point where the file will be saved. **Metus MAM** can create also a new asset for this picture. If so, the picture will be archived on the storage (if archive project is used) so that the asset keeps the reference to the archived picture on the storage (or tape drive).

**Transcode** – already described in the **Transcoding** section above in that manual.

**Create Proxy** – Proxy creation is already described, too.

**Create Web Proxy** – Described above.

**Archive** – Available for assets being previewed in **Library Projects**. This is just the **Archive** option which had been described above in the manual.

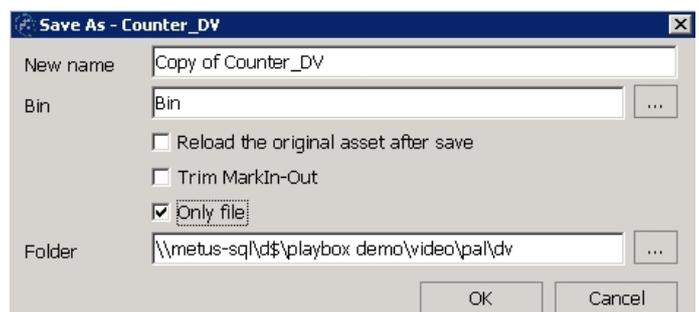
**Archive as...** - Similar as the previous.

**Retrieve** – This is the **Retrieve** option, described above in the manual, in the section, describing the asset’s context menu.

**Retrieve to Library** – Similar as the previous.

**Save as** – Saves the object being previewed as another asset in the project (together with the latest changes applied). The new asset can be created from the material’s content **Trimmed Only between the Mark In and Out points** or just from the entire content. You can **Reload the Original Asset After Save** or you can go on with previewing the new asset.

If the **Viewer** is opened via a library project, then the **Save As** menu provides one more option – to save



the material being previewed as a separate file on any place in the network or on the local machine.

#### 4.16.11.2. Edit

This menu is for image objects only.

##### **Color**

**Brightness, Contrast, Gamma** and **Saturation** provides scales with sliders for applying the needed changes in the relevant ranges.

**Grayscale** – Acts like turning the image into black-and-white format.

**Invert** – Inverts the colors. Black -> white, red -> blue, etc.

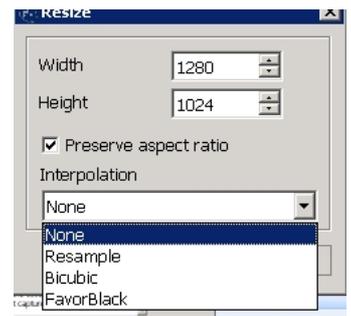
##### **Rotate/Flip**

**Rotates** the image on predefined degrees - **90 CW, 90 CCW, 180** or makes a **custom rotation** – with a dialog to fill in the degrees for the rotation. Buttons **for 90 CW** and **90 CCW rotations**, as well as the custom one, are available on the toolbar. Be sure to make the **Drawing toolbar** visible from **Tools → Show Drawing Toolbar**.

**Flip** – Image objects can be flipped in two ways – vertically and horizontally.

##### **Resize**

From this menu you can resize the image that you currently preview. Enter the new **Width** and **Height** and check to **Preserve Aspect Ratio** if you want to resize proportionally the picture. For resizing to bigger proportions you can choose a method for calculating the new pixels positions by selecting one of three interpolations - **Resample, Bicubic** and **FavorBlack**. **None** is a choice for non-using interpolation.



#### 4.16.11.3. View

This menu displays (excludes) different sections from the **Viewer** interface.

**Show Mini Browser** – if checked, the **Mini Browser** will be displayed.

**Show Speed/Duration Controls** - shows/Hides the **Speed Control** panel.

**Show Offset Controls** - shows/Hides the **Offset Control Panel** (on right).

**Show Vumeters** – Shows/Hides vumeter at viewer, next to preview. Note: Vumeter should be enabled from tools – options – preview – **Show Vumeters in Asset Viewer**.

**Show Timers** - check it to display the **Timers**.

**Show Metadata Window** - the **Metadata Window** will be displayed (on left) as a part of the **Viewer** together with the values for the fields. Select any object in the **Mini Browser** and its values will be displayed in this section.

**Show Recently Added Asset List:** This option is used mainly for monitoring purposes or for content description of long duration files. It is usually used in combination with the **Metadata window** preview in the **Viewer**, the **Save and Continue** option from the **Asset** menu, as well as the **Mark In/Out** points positions change. And the idea of all

this is to move the markers in the timeline so to distinguish the beginning and end of a part of the video (a scene). In the metadata window put the proper values for the selected scene, **Save** this and **Continue** working with the original file. Each time, for each new scene, a separate asset will be created.

**Example:** Let assume that the file we shall work with presents a 24/7 ingest of a TV channel playout (or anything recorded with a camera and being previewed). Our task will be to describe each its parts. Let say there will be a morning block show, a song, a science fiction, afternoon block, news, etc.

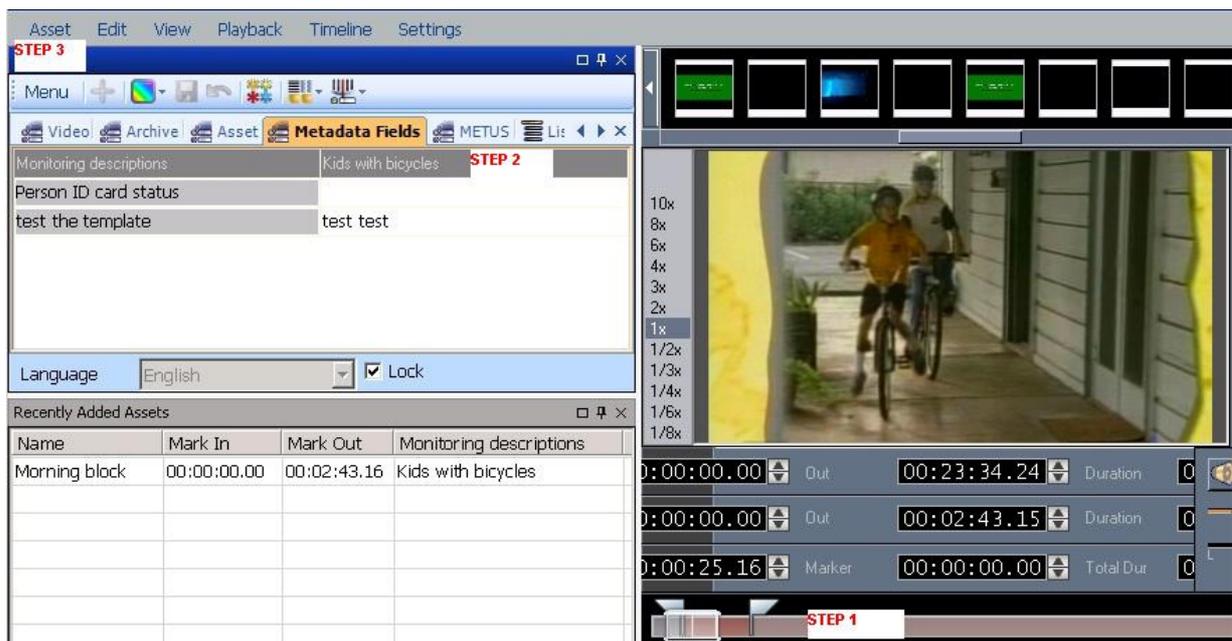
The first thing needed is to open this file in the **Viewer**. Run **View -> Show Metadata Window** and **View -> Show Recently Added List**.

Place the **Mark In** and **Out** points at the beginning and end of the morning block show and put descriptive values for this scene in the relevant metadata field. Then select **Asset -> Save and Continue**. As a result of this, a new asset is created for the morning block show and you go on working with the original file again so that you can repeat the same step for the next scene: the song. With screenshots it will look like:

Step 1 – Set **Mark In and Out** for marking the scene

Step 2 – In the metadata window, the **Monitoring descriptions metadata field** (created by the user) add a text describing the scene.

Step 3 – Select **Asset -> Save and Continue**



Repeat these steps now to “extract” all the next scenes. As a result, a lot of new assets will be created – each one of them presenting only the scene it had been generated from. And the values for the metadata field will be different each time.

Furthermore, in the **Viewer** – opened like shown on the screenshot, each time you select the scene from the **Recently Added Assets** window, it shows its values for the relevant fields in the opened metadata window above. You can make these values displayed in the **Recently Added Assets** window in an additional column. Right-click in the window (in the columns header) and select the option **Add-Remove Columns**. The

metadata tree will open. Choose the field you want to add as a column to this grid. Finally you start using the results this option provides – select the scene and on the timeline you see its start/end and in the metadata field you see the descriptive values for it. Of course, searching via these values is possible.

**Show Timeline** - this one concerns the Timeline.

**Show Right Panel** – if unchecked, the **Right panel** will be excluded from the interface.

**Show Metadata:** This option is bound with **Settings -> Configure Metadata Overlay**.

After specifying the settings there, check this option so that the values are displayed over the preview window.

**Show Drawing Toolbar** – available when previewing images. The **Drawing Toolbar** enables some basic graphic changes to be applied.

**Show All Items** - all the items displayed in the **Mini Browser** will load in the timeline.

**Same Types** - if selected, only items of the same type (as the selected one) will be shown in the **Mini Browser**, i.e. acts like filtering this format.

**Censor Mode** - switches between **Censor** and **Normal** mode.

#### 4.16.11.4. Playback

**Play:** Starts the playback.

**Pause:** Pauses the playback.

**Stop:** Stops the playback.

**To Start** – pulls the slider to the **Mark-In** point

**To End** - pushes the slider to the **Mark-Out** point

**Next frame** - locates the slider on the next frame (when in **Pause** or **Stop** mode).

**Previous frame** – locates the slider on previous frame (when in **Pause** or **Stop** mode).

**Next Clip** - jumps on the next object (as listed in the **Mini Browser**)

**Previous Clip** - jumps on the previous object (as listed in the **Mini Browser**).

**AutoStart** - this check reflects the video and audio objects. When the check is active, and such an object is selected, it will automatically start playing back.

**Loop** - plays continuously the material between its start and end point (the original ones). If the **In/Out** button is pressed in the same time, then the playback will be looped between the **Mark In/Out** points.

**Play In-Out** - if selected, only the range between the **Mark In/Out** points is played.

**Playback Rate** - enables you to select the preview-play-speed for video and audio objects. You can choose between the predefined values: 1/8 1/6, 1/4, 1/3, 1/2, 1, 2, 3, 4, 6, 8 and 10. For quicker preview, choose values bigger than 1. For slower, detailed preview choose the fraction numbers. Please, keep attention to the fact that the proxy file preview is not affected by the playback rates chosen.

**Offset** - Locates the slider on the timeline with some seconds forward or backward, depending on the value chosen (between predefined ones).

#### **Audio**

**Mute** - Mutes the volume preview.

**Volume 25, 50, 75, 100** - Determines the preview-volume-level at these predefined volume settings.

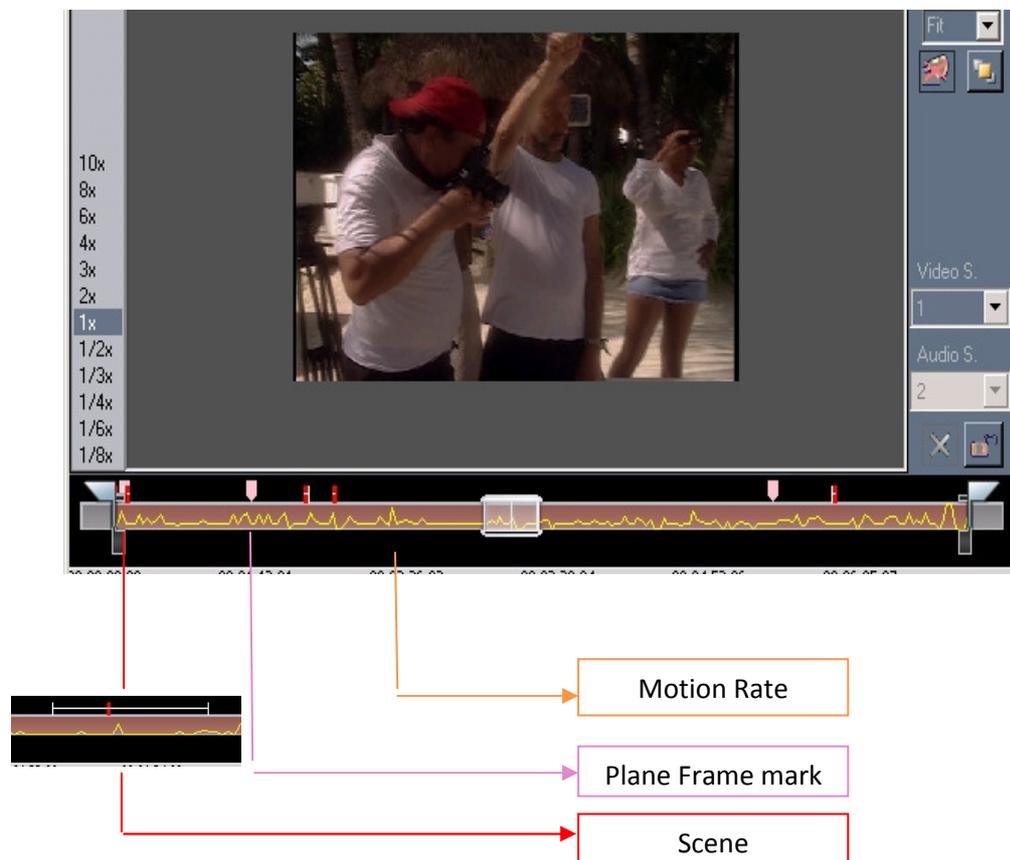
**Pan Left, Right, Balanced** – Accelerates the left/right channel audio preview or makes them equal.

#### 4.16.11.5. Timeline

**Lock Controls** – this check locks the **Timeline – Descriptive Markers** cannot be added or deleted; **Mark In/Out** points, as well as the **Master In/Out** points cannot be moved; **Censor mode** cannot be switched on/off, etc.

**Zoom** – is zooming the timeline. **Zoom-In** is enlarging it while the **Zoom-Out** is shrinking the timeline.

**Show Scenes, Show Video Motion Rate** and **Show Plane Frames** are checks resulting in preview changes (seen in the timeline) for objects being indexed. Usually we analyze with these options the assets being result of **Image matching search**. In the **Search Results** tab select the asset being a result, open it in the **Viewer** and check these options from the **Timeline** menu. As a result of this, the timeline will change – it will show the **Video Motion Rate** vector with yellow color; the **Scenes** into which the best match is found (you can select this scene in the timeline, right-click over it and choose **Play Scene** to preview it – usually it is very short) and markers for each **Plane Frame** in the video – see the screenshot.



The **Scenes** are very short and most of the cases their beginning and end points are overlapped on the timeline. To distinguish them well, use the **Zoom In** option/button to enlarge the timeline preview.

**Go to Mark In** – locates the slider on the **Mark In** point.

**Go to Mark Out** – locates the slider on the **Mark Out** point.

**Go to Master In** – locates the slider on the **Master In** point.

**Go to Master Out** – locates the slider on the **Master Out** point.

**Set Mark In** - sets the current position as **Mark In** point.

**Set Mark Out** – sets the current position as **Mark Out** point.

**Set Master In** - sets the current position as **Master In** point.

**Set Master Out** - sets the current position as **Master Out** point.

**Add Marker** - adds a new marker at the point where the slider is placed.

**Delete Marker** - deletes the selected marker(s). The option is available also from the **Marker's** context menu.

**Edit Description** - Opens the **Edit Description** window to edit the currently selected marker's description. The option is available also from the **Marker's** context menu.

**Go to Marker** - Locates the slider on the selected marker. The option is available also from the **Marker's** context menu.

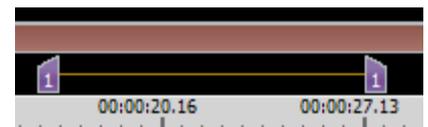
**Delete** – Deletes a currently selected marker.

**Edit marker** – Opens the marker's dialog so that you can edit the description (as well as the extra description) of this marker.

**Go to marker** – Places the slider (cursor) over a selected marker.

**Next Marker** - Selects the next marker in the timeline.

**Add Custom In - Out** put on the timeline another type of descriptive markers. Observe them as markers which describe a part of the material. Use these markers to describe a scene selection. Each custom in-out markers gets a different number to help understanding which one belongs to which.



**Join Custom Areas to File** – At library projects, this option creates a new file by merging all custom in-out areas of the asset.

**Join Custom Areas to Asset** – At archive projects, this option creates a new asset by merging all custom in-out areas of the asset.

**Join Outside of Custom Areas to File** – This option merges the only areas which are not in any custom in-outs.

**Thumbnail** – for video objects - sets the current frame as a thumbnail.

**Add the Marker Frames to the Storyboard** – Adds all the frames where markers are to the storyboard.

**Join Uncensored Areas to File** – This works just like “join outside of custom areas to file” but instead of custom in outs, this options merges areas which are not censored at library project.

**Join Uncensored Areas to Asset** – This option works same with “join uncensored areas to file” but instead of file this merges areas in an asset for archive projects.

#### 4.16.11.6. Settings

**Use Proxy** – this option “commands” the **Viewer** to display only the proxy files. If the file is missing proxy, nothing will be displayed.

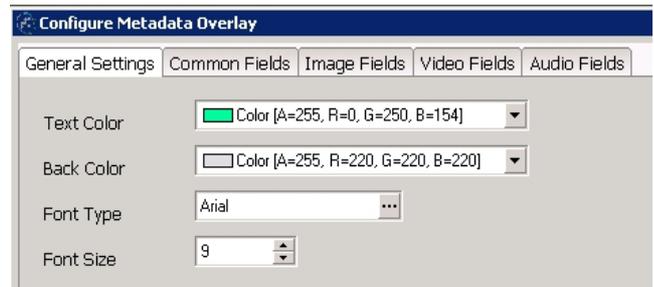
**Use Web Proxy File if Proxy is not Present** – related to the first option. If the file is

missing proxy, the **Viewer** will display the web proxy file (if available).

**Use Original File if Proxy is not Present** – again related to the first option. If the file is missing proxy, the **Viewer** will display the original source file (i.e. in this case the proxy file is with high-priority compared to the original file).

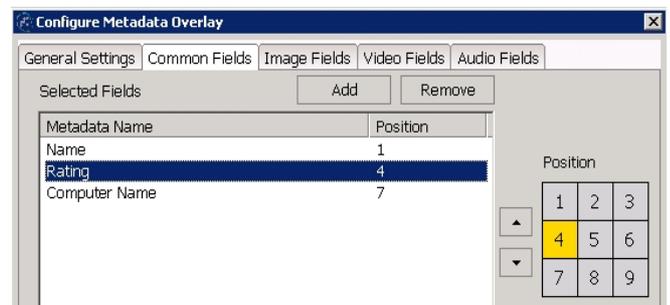
**Clear Asset List On Close** – when the **Viewer** is closed, all the info gathered in the **Asset List** will be erased.

**Configure Metadata Overlay** – **Metus MAM** provides a possibility some metadata values (chosen by the user) to be previewed together with the material in the **Viewer's** window. Usually, these values are placed over the **Preview Window**. For this purpose, some settings must be applied before that in the **General Settings** tab:



**Text Color** – from here you choose the color with which the text will be displayed.

**Back color** – specify here the background color (like when subtitles are displayed). **Font Type** and **Font Size** are to set these final text characteristics.



The next four tabs are similar – they are to choose which metadata fields' values to load on the preview window. You can choose some **Common metadata fields** or such which had been created especially for image objects (**Image Fields**), videos (**Video Fields**) or audio files (**Audio Fields**). What you have to do is just to add the fields pointing them in the **Metus Metadata Tree** which will pop up when clicking on the **Add** button. **Remove** is to delete any selected field in the list.



If we assume that the **Position** table presents the **Viewer's** preview window, then we can logically divide it in 9 parts. Select any of the fields that you already added in the list on left and choose at which position on the screen you want to see its values.

The result from this example will look like shown on the screenshot here.

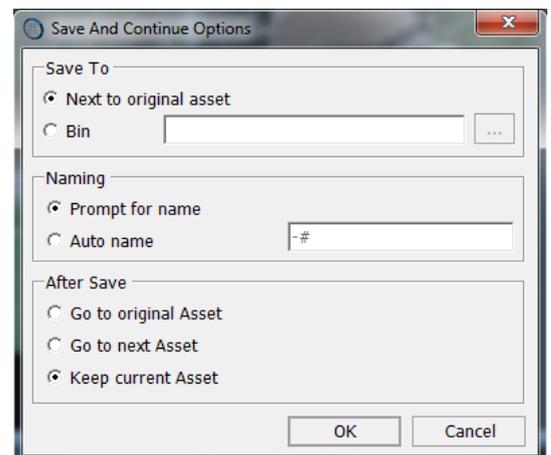
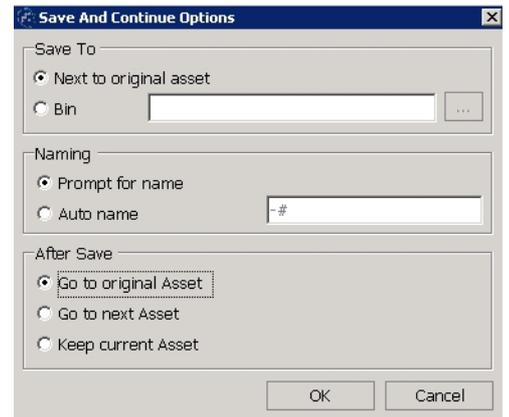
**Save As and Continue Options** – here you specify the default **Viewer** behavior when using this option from the **Asset** menu.

First, about the asset being saved – you define the place it will be saved in the project – either **Next to the original asset** (same bin) or you browse to select another **Bin** in this project.

Second, for naming this asset – a **Prompt Message** will appear for asking the new asset name or a rule for **Auto Naming** will be run.

Finally, after the asset is saved you can either go back to using the **Original Asset** or you pass on using the **Next Asset** (as listed in the **Mini Browser**) or you continue working with the **Current Asset** (the just created new one).

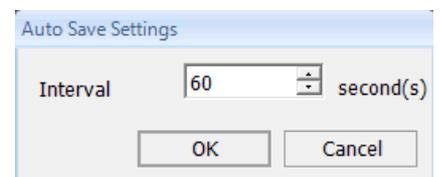
**Save as and Continue Options** – This options pops up a window where user can adjust save as options like where to save, naming of it and focus what after saving. User can basically choose to save **next to original asset** or to a **bin** which is selected here. For naming the saved asset, there are two choices as **prompt for name** and **auto name**. By auto name option, user can write a name here and all saved assets will be named with it. By **After Save** option, user can choose what will happen after asset viewer saved. Options are **go to original asset**, **go to next asset** and **keep current asset**.



#### **Auto Save:**

**Enable Auto Save** – Clearly, it enables the auto save option which saves asset while editing viewer time to time.

**Auto Save Settings** – This option let user to choose the time interval of auto save as desired.



#### **Profiles:**

**Save Profiles** - Save all the current settings (checks) applied in the **Viewer** menus so that when starting it next time, all these will be kept (for user convenience).

**Reset to default settings** - Restores the default **Viewer's** settings (as per being set with the installation).

#### **4.16.12. Using the Viewer**

##### **4.16.12.1. Navigating between the objects**

Click on any object in the **Mini browser**. Click on the right arrow to see the next objects or on the left one to see the previous objects. When you click and hold the arrows, the list starts sliding continuously to left or right. In addition, if the number of objects increases so that the **Mini Browser** gets full, a slide bar is displayed below to easily navigate in the list.

The current object can be changed by pressing **Previous Clip**, **Next Clip** buttons on the buttons panel.

**Ctrl+Right** arrow keys combination switches to the next object, **Ctrl+Left** arrow keys combination switches to the previous one.

##### **4.16.12.2. Using Proxy**

Press the **Use Proxy** button on the right panel. Also, to enable or disable only the proxy usage you can check/uncheck **Settings -> Use Proxy**.

To avoid missing preview for the situations when no proxy is created, you should preview the original file. Ensure this from **Settings -> Use Original File If Proxy is not Present** from main menu.

##### **4.16.12.3. Selecting a Thumbnail**

For video assets – slide the cursor over the timeline. When the desired frame is reached, drop the slider at that point and then press the button **Create Thumbnail From Current Frame** from the **Right Panel**.

##### **4.16.12.4. Locking the Timeline**

You can lock the timeline against further changes by pressing **Lock Viewer Against Changes** button from the **Right Panel** or by choosing **Timeline -> Lock Controls** option. By default the timeline is unlocked. If the user doesn't have permissions to modify, the timeline is locked automatically and unlocking button becomes disabled. Such user cannot add/remove markers, change the slider position and add/remove censors.

#### 4.16.12.5. Adjusting the Preview Volume

The preview volume can be adjusted by dragging the **Volume Slider** in the **Volume Controls** section in the **Right Panel**; by using the **Page Up and Page Down** keys on the keyboard or by choosing the proper level in the **Audio** submenu of the **Playback** menu. The preview can be muted by pressing the **Mute** button in **the Audio Controls** section; by choosing the **Mute** level in the **Audio** submenu of the **Playback** menu or by pressing the **M-key** on the keyboard.

#### 4.16.12.6. Adjusting the Balance

You can adjust the right and left audio channels by moving the **Balance Slider** in the **Volume Controls** section; by pressing the **Shift+UpArrow** and **Shift+DownArrow** keys on the keyboard or by choosing the relevant option in **Playback -> Audio**.

#### 4.16.12.7. Using Time Boxes

A digit becomes active when you click in it. After that you can change its value by using the **Up/Down** arrow buttons on right. You can change numbers faster by pressing and holding these buttons. When a digit reaches the maximum value it can take, the digit on left increases with 1 unit and the digit being edited, resets. If the digit value becomes “0” and goes on decreasing, the value on left decreases 1 unit down. You can also switch between the digits with the **Left/Right Arrow Keys**.

### 4.17. The Progress Status window

The **Progress Status** window shows the status of the current process(es) running on **Metus MAM**.

Progress Status Total: 13							
Object Name	Task	Progress	Server	Status	Added	Message	
Trailer1	Archive	39%	Metus-S...	Source is being archi...	13.7.2009 r. 11:59:44		
VODA_BEZ_NADPISL_1	Preparing To...	66%	Metus-S...	Objects are being sen...	13.7.2009 r. 11:59:43		
Terminator3 - Trailer	Archive	31%	Metus-S...	Transcoding Source...	13.7.2009 r. 11:59:30	Running	
▶ SpiderMan_Trailer	Archive	100%	Metus-S...	Finished	13.7.2009 r. 11:58:40	[Finished Time: 13.7.2009 r. 11:58:45]	
copy of terminator3 - trailer	Transcode	100%	Metus-S...	Finished	13.7.2009 r. 11:58:20	Finished [Finished Time: 13.7.2009 r. 11:59:08]	
Terminator3 - Trailer	Archive	100%	Metus-S...	Finished	13.7.2009 r. 11:58:09	[Finished Time: 13.7.2009 r. 11:58:17]	
BadBoys_MusicVideo1	Archive	100%	Metus-S...	Finished	13.7.2009 r. 11:52:07	[Finished Time: 13.7.2009 r. 11:52:33]	
6th Day Trailer	Archive	100%	Metus-S...	Finished	13.7.2009 r. 11:51:55	[Finished Time: 13.7.2009 r. 11:52:06]	
SpiderMan_Trailer	Archive	0%	Metus-S...	Cancelled	13.7.2009 r. 11:51:40	Operation was canceled.	
LOTR_Trailer	Archive	0%	Metus-S...	Cancelled	13.7.2009 r. 11:51:15	Operation was canceled.	
Ice_Age_Scrat	Archive	0%	Metus-S...	Cancelled	13.7.2009 r. 11:51:09	Operation was canceled.	
02.Toni Braxton - You're Makin'...	Archive	100%	Metus-S...	Finished	13.7.2009 r. 11:50:54	[Finished Time: 13.7.2009 r. 11:51:54]	
Zorro_Trailer	Preparing To...	100%	Metus-S...	Finished	13.7.2009 r. 11:50:52	[Finished Time: 13.7.2009 r. 11:52:00]	

In the **Object Name** column the asset name is displayed. The **Task** column shows the type of the task that must be run (archiving, transcoding, proxy creation, indexing, moving to **Recycle bin**, deleting, Bins analyze, etc.). The **Progress** displays the level of the task completion. **Server** column informs about the name of the machine (server) executing the relevant task. Whether the task is waiting, running, finished or canceled can be seen in the **Status section**. When the task is running it displays what process exactly is being done. If it is canceled there are two cases – to be canceled by the user or when the server was not capable of running the task. This can be understood from the last column – **Message**. **Added** is the pre-last column which shows the date and time the task had been added to this list for execution. The newest tasks are added to the beginning of the grid. If the processor is busy and cannot start the execution of some task, its status is been displayed as

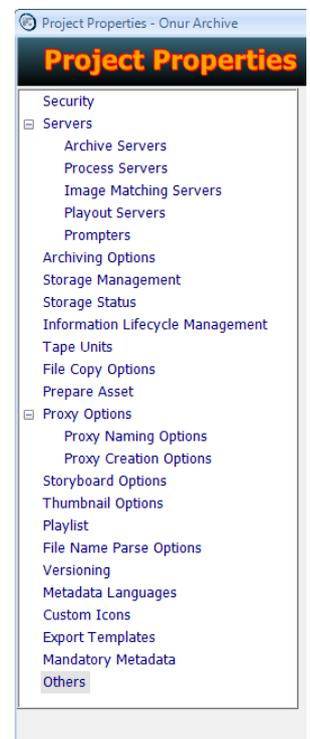
**Waiting.** It waits until the processor finishes the currently running one. The number of the tasks running simultaneously can be changed. It depends on the setting applied for this **MPS** in the **Project -> Properties -> Process Servers -> Manage MPS -> Server Settings**.

You can make the **Progress Status** window look more précised and well-structured by leaving visible info only about the tasks that are not finished. For this purpose right-click in the **Progress Status** window and choose **Remove Finished Jobs**. You can also stop the execution of a running task by selecting it and choosing **Cancel**. If you choose **Cancel All** this will stop all the tasks currently running, as well as those, being waiting. **Remove** erases from the list any selected task. **Remove All** pops up a dialog for asking about your choice. You can delete all the tasks with which the processor is not going to work anymore (i.e. the past tasks – no matter if finished or canceled) or you can delete past tasks plus the currently running ones. Both in the two cases the remaining (still not loaded tasks) will be executed after the **Remove All** selection.

#### 4.18. Project Properties

This is the most important window with optional dialogs in **Metus MAM**. Here most of the project settings are applied (general, common, etc.).

**NOTE!** Only users with full (administrator) rights can access the **Project Properties** window.

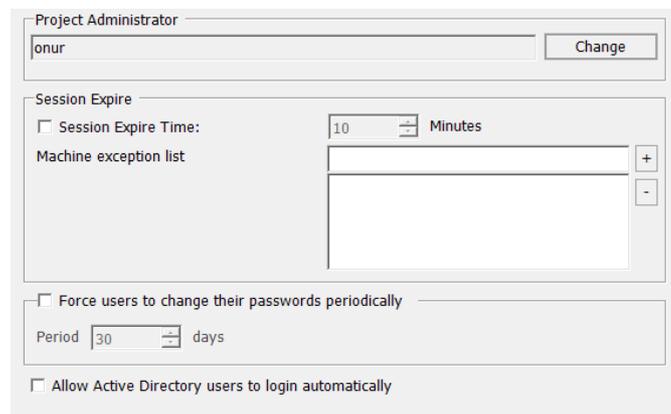


##### 4.18.1. Security

This is the dialog to define the upper-security-level of the project – setting the **Administrator**. This must be only one person and to set his name you have to browse with the **Change** button in the list with the users already defined for the current project, i.e. you choose one person from the already defined user list. From the moment of the project creation until setting the **Administrator** here, the project administrator is **Anonymous** (set as default). No password for this user.

In order to avoid misusing of any **Metus MAM** instance you can set **Session Expire Time**. If it is 10 minutes this means that if the system has not been used in the last 10 minutes (mouse not moved) it will ask for username and password to log again in the project so to keep going on working with it.

Even though, some client machines can be allowed to connect to this one during the system being locked. These machines are added with their names in the **Machine Exception list** (type only the name – not the IP). Specify the PC name in the **Machine exception list** field and press the **“+”** button. To remove a machine from the list, use the **“-”** button.



Users can be forced to change their passwords periodically from here to increase security level. And this period time can be adjusted as well. It's also possible to allow active directory users to log in with their accounts.

#### 4.18.2. Servers

Under this note you can configure according to your needs **MAS, MPS, MIMS, Playout Server** and **Prompters Server**.



##### 4.18.2.1. Archive Servers

In this section all the archive devices are listed and configured – storages, tape drives or tape libraries.

Storages are usually FC-connected to the **MAS** computer and thus their units are available for configuring by the **Metus MAM** system. Storage units can be presented either by **disk sets** or by **disks** (system drives). Disk sets are usually gathered in a RAID configuration so that they can be replaced at some moment if some of them burns or fails because of any reasons. When a disk replacement is needed, the system can be told which disk is going to be replaced so it “understands” and copies back the new data to the new disk after the replacement.

When the storage units are displayed as disks (system drives) **Metus MAM** lists them as shown on the screenshot here.

In this case we have three drives listed – C, D and E. Each one of them is considered as a place to which

Server	Disk Name	Free Space	Total	Temp Size	Unusable S...	DiskSet	State
Metus-SQL	C: D: E:						Connected
	C: ( )	23358	32035	1 (%)	1 (%)	Archive	Disable
	D: (Data)	964899	1430443	1 (%)	1 (%)	Primary	Active
	E: (Video)	963421	1398408	1 (%)	1 (%)	Secondary	Suspend

the system can automatically copy (archive) the materials being archived in the project. Before starting this, it is better to configure these parts in order to set some priority for them.

First – the MAS server. Its state must be **Connected** so that the server is running and carrying on the tasks he has to do. In case the status becomes Disconnected it means that either the network failed for some reasons and the connection to the MAS computer is lost or the Windows **Metus Archive Server** service is not running.

The State for the system drives can be **Active, Suspended** or **Disabled**.

We **disable** the drives to which do not want to write anything. The best example for this is drive C where usually the Windows installation is done. So, we always avoid using this drive for any purposes. We do not copy to it; we do not read from it - totally ignore it.

We **suspend** a drive when we want to temporarily stop copying to it. But we still keep on reading data from it. So, it becomes like a read-only device.

**Active** is the drive to which we both read and write (copy) to.

**Disk** and **disk sets** are labeled with priority terms like **Primary** and **Secondary** in order to tell **Metus MAM** if several of disks are active, to which one to copy firstly. When the **Primary** disks get full, the system goes on copying to the **Secondary**-labeled disks. Please, keep in mind that **Primary** and **Secondary** are just labels. You can name the disks as per your wish when adding them to the system. This is done via the **Add disk** button (adding) and from the **Information Lifecycle management** section (where rules are defined) you set the name for the disk.

The columns into this “table” show information for each drive, like:

- **Disk Name** – as per set by the system;
- **Free Space** (in bytes) available on this drive;
- **Total Space** (in bytes) shows the full drive capacity;

- **Temp Size** (in percents) shows the space on the disk used for temporal saving purposes. Sometimes, when a client creates an archive request, the file is not copied to the archive folder. The file is copied to a temp folder. The temp folder is in the same disk. It is generated automatically by the MAS.
- **Unusable space** (in percents) on the drive is the space which **Metus MAM** is not going to use – it is reserved by the system or other applications.

There are cases in which the customer needs to enlarge the storage. He can either add additional disks (as already mentioned) or add one more **MAS server**. This is an optional feature in **Metus MAM**, so please refer to the **Metus Price List** in such cases. Adding additional **MAS server** is a better option because the searching in the storage, as well as the preview and browsing will become quicker.

To add another **MAS server** press the **Add server** button and browse in the network to point the machine which will be the second **MAS server**. Select it from the opening menu. On each **MAS server** machine the **Metus Archive Server** service must be running (**Metus Archive Server.msi** must be installed there)



On later stage, if some of the **Metus MAM** clients have problems with reaching this machine, you can edit it by pointing its real or alternative **IP address**. So, select the **MAS server** from the list and press the **Manage** button. Enter the IPs here.

Logically, the **Remove Server** button will delete a selected **MAS server** from the list.

**Move Up** and **Move Down** are buttons to re-order the MAS servers in the list.

When the status of a **MAS server** is disconnected and the probable reasons (mentioned above) are already eliminated, press the **Refresh** button in order to update the statuses of the machines. Disks space can be refreshed, also, as well as any other characteristic shown here.

In cases that the MAS is disconnected (situations we already mentioned above) the files cannot be previewed in **Metus MAM** – they are marked with X-sign. You can “skip” the MAS server and access the files even though - press the **Make Files Accessible** button and the files can be previewed again.

**Add Remote Storage – Metus Archiving System** is able to use network shares, NAS etc. as storage units to archive to. The remote storages behave like local disks. When your local storage is full you can add additional remote storage to have more free space. Please, keep in mind that each additional space used must be included in the license for the storage capacity to be supported.

When sharing storage, press the **Add Remote Storage button** and you will see the **GUID** generated by **Metus MAM** – use it to name the share like this.

In the **Share Path** field, in front of the **GUID** enter the IP of the PC where is the space that will be used as additional storage (the share).

Add Remote Storage	
Share Path	\\IP of the PC\7d80690d-dc20-42db-8e76-fe0da258c243
Share User	MetusUser
Share User Password	*****
Diskset	Primary

Create a user and give him full permissions for working with this share. Enter his name as **Share User** and his **Password** in the next field.

From the **Diskset** menu choose how to label the shared storage – **Primary, Secondary**, etc.

For more details regarding sharing and users, please, watch the video **04- 2 Defining Archive**

**Servers and Disks Advanced (Adding Remote Storage).wmv.** It is included in the **Metus Product CD (Help -> Video Tutorials)**. If anyhow you do not have the video, please, contact support@metus.com.

#### 4.18.2.2. Process Servers

The processes such as transcoding, proxy creation, indexing, etc. take long time and use too much CPU sources. They can be performed by other computers in the network. If a **Process Server** is not selected, these processes must be executed by the local PC CPU. To select a **Process Server**, press the **Select Server** button in the **Process Server** level. In a pop up window all the computers in the network are listed. Browse and select the computer you will use as a **Process Server** and then click the **OK** button.

Process Servers	
Server	Status
Metus-SQL	Connected
galia	Disconnected
Metus-SQL [Local MPS]	Connected

You can add any machine in the network as a **MPS server**. The **Metus Process Server** service must be running on it (**Metus Process Server.msi** must be installed there). If you need to add more **MPS servers** (quicker processes as well as running simultaneously more tasks), you can add them the same way as adding **MAS servers**. It is optional, so please refer to the **Metus Price List**.

Press the **Connect** button to connect to a **MPS server** after the network (a possible reason for disconnection) is already available. **Refresh** button will inform you about the new statuses of the servers (updates the info).

No matter how many **MPS servers** you have added to the system, **Metus MAM** always lists the local machine as an **MPS server**, as well. The **local MPS** could never be deleted from the list.

The **Local MPS** is used when the global (network) **MPS server** cannot reach the local folder set for the task given to the **MPS server**.

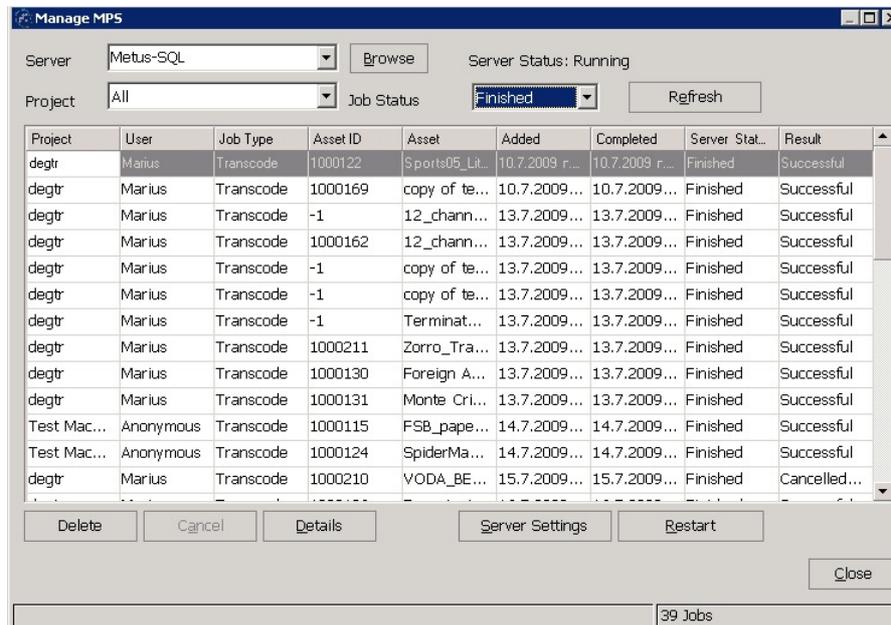
Example: Here is a situation into which the **Local MPS** use is needed. Let say a file in the project must be retrieved locally and transcoded during the retrieval. But the global MPS is not given a write-permission to the folder into which the resulting file must be saved (f.e. the file is going to be saved locally on the Desktop). In this case, the **Local MPS** will do the task. To avoid such situations, share the folder that you want to transcode to.

Select a MPS and press the **Manage Server button**. A dialog opens. Into it you can see details about tasks proceeding or processed.

Project	User	Job Type	Asset ID	Asset	Added	Completed	Server St...	Result
degtr	Marius	Transcode	1000255	DV reel 4	29.7.2009...	01.1.0001...	Running	Not set
degtr	Marius	Transco...	1000271	a	29.7.20...	01.1.00...	Running	Not set

From the **Server** drop-down list select the MPS – here are listed all the MPS servers which you have added to the system. For the selected server watch details about either all the projects that the server had served or only of a separate project – select it from **Project** drop-down list. The

info displayed in this dialog can be filtered more – show either the tasks currently running (**Job Status = In Progress**) or the completed tasks (**Job Status = Finished**). The **Refresh** button is used to update the status of the tasks running and the status is changing meanwhile status is quickly.



If the rows width is not enough to read the info, double-click over a row and you will see the same info precisely ordered in a separate dialog.

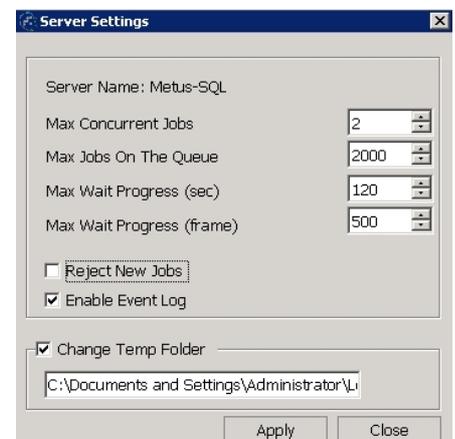
Press the **Server Settings** button to fine-tune the MPS configuration. The name of the server will be displayed on the first row (**Server Name**).

**Max. Concurrent Jobs** presents the number of the tasks that may run simultaneously – as more tasks run, as slower the processes will be.

**Max. Jobs on the Queue** shows the number of the tasks that may wait for execution (queued tasks).

**Max. Wait Progress** can be set in **Seconds** and **Frames**. There are situations in which some files transcoding or any process running can hang and not finish due to external reasons (not enough permissions for writing in the folder, etc). In such situation the MPS starts doing the task but at some level it stops and waits (checks its write permissions, etc). This waiting may last forever or at least until the permission is allowed. That behavior can cause the MPS freeze. To avoid this, **Metus MAM** applies the setting **Max. Wait Progress** for each processor (editable by the user). After this time is over, MPS skips the task and starts the next one.

**Reject New Job** is not checked, by default. If you apply this check, each time a new job is given to the MPS, it will check if the number of the tasks given is exceeding the number of the tasks set above. If so, the new loaded tasks will be automatically rejected. Nothing will be queued.



The user will be informed about this with a proper message in the **Progress Window**.

**Enable Log** check concerns logging info in the **MPS Event Viewer**.

**Temp Folder** is the place through which the transcoded files pass. MPS does not transcode the files to the desired folder directly - a file is firstly transcoded in the **Temp Folder** and after the transcoding is completed, MPS copies the files to the desired places. The **Temp Folder** is a default one, but its place can be changed as per users' wishes.

#### 4.18.2.3. Image Matching Servers

Similar to the other servers added to the system we can add an **Image Matching Server**. This is the machine where the **Metus Image Matching Server** service is running (two installation files must be run there – **Metus Image Matcher.msi** and **Metus Image Matching Server.msi**). Thus we install not only the engine taking care for the image matching task to be run but also the server which is providing the two-directions communication between the image engine and the project (the client application). The dialog is similar to the other servers' ones. Four buttons are available – all of them described in the other server sections above: **Add Server**, **Remove**, **Connect** and **Refresh**.

The **Image Matching option** is already described in the **Searching section – Image Search**.

#### 4.18.2.4. Playout Servers

**Playout Server** is the machine on which the playout software is installed (f.e. **AirBox**). It is supposed to broadcast the materials included in the playlists created in **Metus MAM**. These playlists can be sent to that machine locally. Therefore, some general settings must be defined for this **Playout Server** in that level of the **Servers** node.

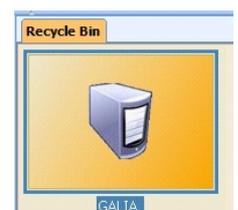
Press the **Add Server** button and browse to point the **Playout server** – it should be a machine in the same network. The status of the server immediately becomes **Connected**. It will be **Disconnected** only when the network disappears for some reasons or the machine can not be reached. After you apply the relevant changes in the network or the playout machine, press the **Refresh** button so the status is updated.

If several **Playout Servers** are going to be listed, any of them can be selected and **Set As Default**. This means that this server will be proposed to be used each time you create a playlist.

When a **Playout Server** is added, the project tree changes – the added servers are listed in the **Devices Bin** container. Inside of this level, the playlists which are created for the relevant **Playout Server** can be seen (as filters).



If you do not want to use anymore any of the servers, just select it and press the **Remove** button – this server will disappear from the **Playout Servers** list. As a result, it “goes” to the **Recycle Bin** and at any moment, from the assets' context menu it can be restored back to the servers list.



**Properties** button pops up the dialog for configuring the needed settings for the **Playout Server**.

The first tab – **General**, is separated in two sections – upper and down. The first one is to define all the folders related to the playlists creation and realization. The second one is for taking feedback about the playout been executed.

In the **Name** field type the label of the playout instance – this is not obligatory to be the name of the PC with the playout software. This is just what you think to be proper for naming that instance. The real name (or IP) of the playout server is to be set in the next field – **Computer Name/IP**.

**Metus MAM** gives the opportunity to create playlists from there. Playlists will be saved in the current project (somewhere in the bins) but physically the playlist must be saved as a file, too. So, after you create it, it will be realized to the **Playout Server** machine and could be saved in a folder on that same machine. This is in order the playlist to be saved locally for the playout server so that if the network fails, the running broadcasting program will not lose the list to execute.

**Playlist Location** is the place where we save the list into. It can be any folder in the network; a local one (for the **Metus client** machine) or a local folder for the **Playout Server**. In each case the folder must be a network sharing with all the permissions allowed. No matter where we save it, we must know that this is just the physical place the playlist will be saved into.

It is possible that the playlists are saved directly into the **Playlist Location** – listed there one after another or each playlist can exist in a separate subfolder (this subfolder will be a part of the **Playlist Location**). If you prefer the second way of organizing the playlists and the content, then check the **Create content folder for each playlist**.

When the broadcasting program loads the playlist, it can access the included files in two ways:

- The first one is to **Tunnel** the content. The files in the playlist will be displayed with their network path (they will be placed on the storage and played out from here). Actually, this is what we call a network playback.
- The second is to **Push** the files together with the playlist. **Metus MAM** checks the playlist during its realization and all the files included in the playlist are pushed in a folder we define in the **Central Content Location** field.

In other words, for each **Playout Server** we define two folders – one for the playlists (**Playlist Location**) and the other one (**Central Content Location**) for the video materials included in the playlist (if **Push** mode is used). Both of them are displayed with network paths so that they are accessed from all the machines in the network (all the **Metus MAM** clients can write there, all the playout instances can access the playlists and the content loaded there).

When working in **Push** mode, the **Metus MAM** system is replicating the files from the playlist in the **Central Content Location** – already mentioned above, a network folder. The files, included in the playlist, are displayed with this network path. Thus, even placed on the same (playout machine) the broadcasting program is trying to access them through the network.



Therefore, this is still assumed as a network playback. But this is not recommended for most of the playout softwares. For that reason the **Local Path** field is available here – type inside a folder, which is local for the **Playout Server**. The files, included in the playlist, will be changed paths; they will be displayed in the broadcast program with this folder-path exactly and further on they will be observed as local. To summarize: **Metus MAM** is changing the paths internally of the playlist.

**NOTE!** If you use **AirBox**, please, keep in mind that both the two types of accessing the files are not safety due to the broadcast characteristics. In the first scenario (**Tunnel** mode) if the network fails or disappears even only for a second, the broadcasting program will freeze without feeding contents or the playback quality will be very bad. In the second case (**Push** mode) the copying on the playout server is done through the Windows system, which is just making transfer of data directly to the system being playing out, meanwhile. Such data replication is often causing playback disturbing or stuttering, etc. Therefore, for achieving the best playback behavior, when using **AirBox** we recommend contacting **PlayBox** support at [www.playbox.tv](http://www.playbox.tv) -> **Support section**.

Very often the institutions are using more than one playout machine. Furthermore, each playing machine is presenting a different playout channel. In **Metus MAM** you can relate each **Playout Server** to a different channel. To achieve this firstly you must select **Project -> Fields -> Definition Packages -> TV Channels** and edit the package for the **TV Channels**.



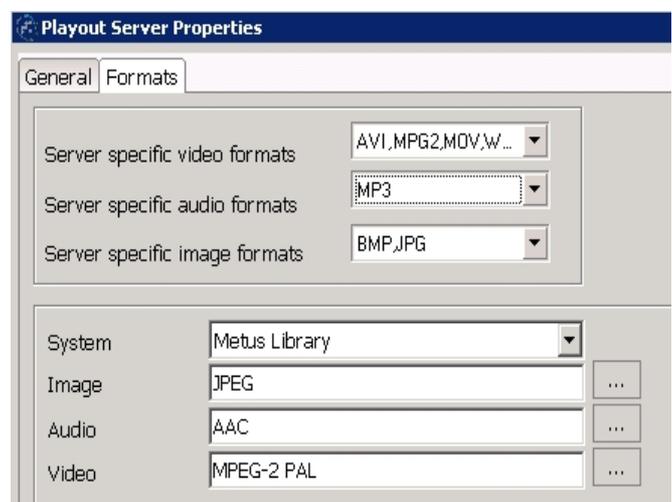
**Example:** If there will be three channels the definition package will look as shown on the screenshot.

After the channels are set, each time when adding a **Playout Server**, choose with which channel it will be bound (see the screenshot above).

The use of this is during the playlist creation. It is easier to tell for which channel the playlist is purposed for instead of pointing out the **Playout Server**. Nevertheless, no matter which option you prefer and choose, all the settings configured there, will load automatically.

Still in the upper part of the **Playout Server Properties** dialog, we shall discuss here the second tab of this window - **Server formats** – the section where we configure **Specific formats** for the **Playout Server** and the preferable formats the system transcode the archived files to.

**Specific formats** can be defined for video content, for audio content, as well as for images. From the drop-down list check all the formats the **Playout Server** can support



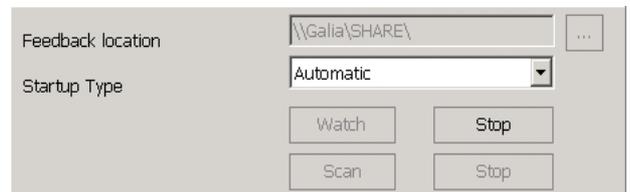
and prefers to run – the check is multi-choice-based. Repeat the same for the audio and image files. Depending on the type of the broadcasting software installed, these two can be skipped (if only video is supported).

In the second part choose **Metus MAM** or **Carbon Coder** to transcode the content in any of the formats set in the below fields. In this section only one format can be chosen - it is done via the **Browser** button. Choose the most preferred format (the **Playout server** is running mostly).

When you create playlists in **Metus MAM**, add any type of file to the playlist without checking if it is supported by the server or not. During the playlist realization, depending on the **Playout Server** selected for the current playlist, **Metus MAM** will check the formats of the files included in the playlist. If they are listed as **Specific formats** for this playback machine, then the files are just copied to the **Central Content Location** (if in **Push mode**). If a file, included in the playlist, is not specific-formatted, during the realization (while copying it to the **Central Content Location**) **Metus MAM** will transcode it to the format set in the **Image, Audio or Video** fields.

**Feedback Location** is the place (folder) into which the **Playout server** generates the feedback file that **Metus MAM** uses further on.

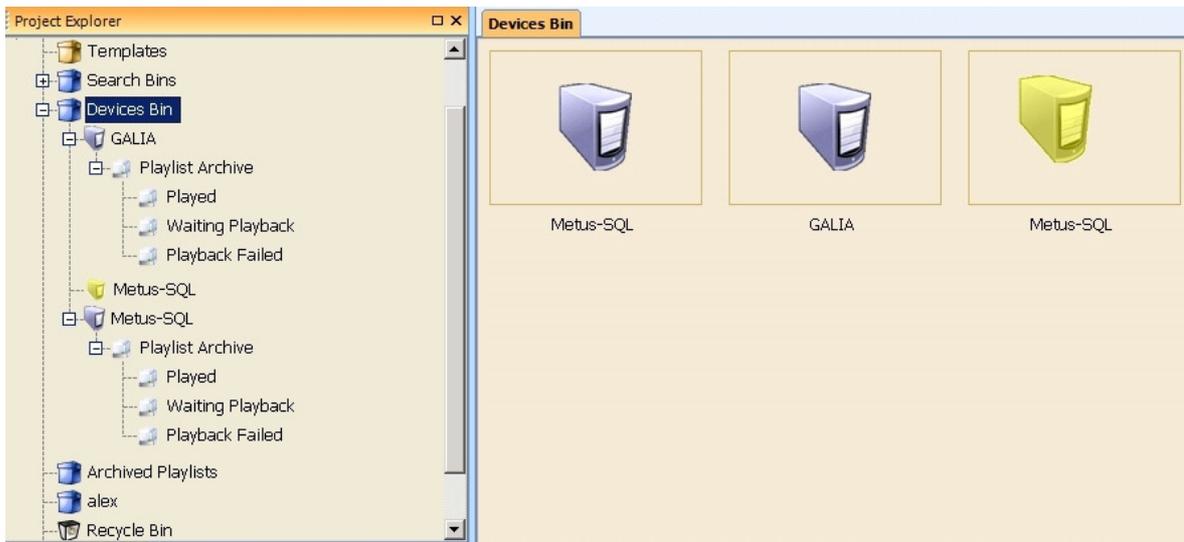
The **Startup Type** for watching the location can be:



- **Automatic** – The system always watches the folder and the logs being placed there and updates the playlists statuses according to this information. Even the information is watched automatically, there may be cases in which the MAM system is not accessing it – f.e. when **Metus MAM** is closed and meanwhile the broadcast software is updating the log. After **Metus MAM** being launched again, it will continue to listen to the log for new changes. But it will not “understand” for the events that happened meanwhile. To make the system check everything up to the moment (all the log files in the **Feedback Location**) press the **Scan** button so that all the playlist information is updated.
- **Manual** - This is a mode in which the logs are traced only when the user says so. When working in **Manual mode**, press the **Watch** button to start the folder observation. **Metus MAM** will check any feedback update until you press the **Stop** button. **Scan** and **Stop** are acting the same way like described above.
- **Disabled** – means that the feedback from the playout system to the **Metus MAM** will be forbidden and not run.

Any information that the broadcast software is loading into the log file will be parsed by **Metus MAM** and loaded in the relevant metadata fields – some of the values can be loaded in fields, created by the user; others – in fields included in the **Playlist** level of the metadata tree. To preview all this info, select the playlist asset in the project and watch the values in the metadata window below.

**NOTE!** When a **Playout Server** and/or a **Prompter Server** (explained below) are added to the system, they are automatically listed in the **Devices Bin** container.



After a playlist realization the project tree changes. In the **Devices Bin** container, where the **Playout Server** is listed, inside of it you can find three filters that sort the playlists according to their feedback – playlists can be **Played**, **Waiting Playback** or **Playback Failed**. Select any of these statuses and it will filter all the playlists answering to them on right. Then in the right part select any playlist and at the bottom (the metadata window) you will see separately the statuses of each file included in that playlist.

Playlists are **Played** when all the files inside are played until the end.

**Waiting playback** are these playlists which still have not been played in the broadcast program.

**Playback Failed** is the status of a playlist into which even one file only have failed playback. **Failed playback** is the one which is interrupted from outside (external interaction) or skipped by some reason (manual jump on another file, not enough time for its execution, etc).

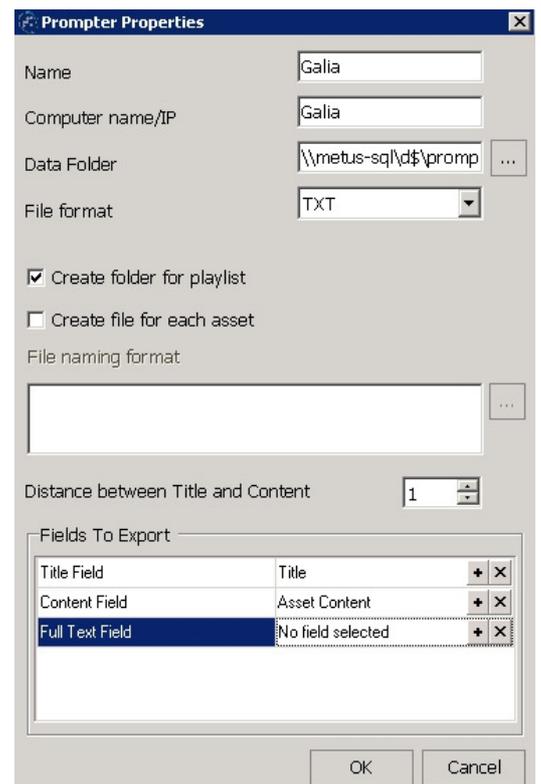
**NOTE!** To get a full idea of the **Playout Server** configuration as well as the **Playlist settings**, please, read also the **Playlist Editor** explanation below in the manual.

#### 4.18.2.5. Prompters Servers

**Prompter Server** is not a separate machine which needs special installations to be run like the other server machines in **Metus MAM**. Usually, this is the machine to which the prompter device is connected.

Prompting in **Metus MAM** had the following general workflow-idea:

Users from different cities upload their materials in the project. In adjacent additional file (see the supported types) they put the text that must be sent to the prompter device. Or they load this text in some metadata fields. They can also not put any text for the prompter but this text can be entered later in the project by any other **Metus MAM** client. However, we assume that somehow the asset already has a metadata field with the text loaded into it.



Next step is to tell the system to take the text from this field and forward it to the prompter device. For this purpose, first the text is copied to a file (txt, rtf or xml) and this file is saved in a shared folder somewhere in the network, the so called **Data Folder**. The **Prompter Server** machine is configured finally to watch the files inside the **Data Folder** and to pop up the text being placed in the files there.

In the **Prompter Properties** dialog enter a label and the name of the machine that will be the **Prompter Server**. As explained above, a location for saving the files with the text is needed – browse and point it in the **Data Folder** field.

**NOTE!** Be sure to define all permissions checked for this folder.

For file format choose between \*.txt, \*.rtf and \*.xml – this will be the file that contains the prompter text and in this format it will be saved in the **Data Folder** so that the prompter device take it from here.

For each realized playlist, a separate folder can be created, as well as a separate file for each asset from which text values are taken. This is applied with the checks for the options **Create folder for playlist** and **Create file for each asset**. When you choose the second option, this means that for each video material a prompter-text-file will be created (txt/rtf/xml). This file must have a name and you have to specify its structure in the **File Naming format**.

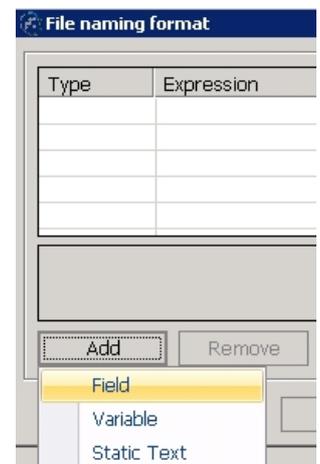
The name can “take” the value from a metadata field or several metadata fields’ values concatenated. If you prefer this way of naming the file, choose **Add -> Field**.

**Variable** is an option to define a naming format so that the name of the file changes each time. The variable fields that you can enter are predefined – see them in the **Field/Variable** drop-down list. According to what variable field you select, the **Step type** and **Data type** are changing – they are coded for each variable and cannot be edited. The idea here is not to set **Step** and **Data type**, but to choose that variable field which **Step** and **Data type** are matching best your needs.

After the variable field selection, you can set its format – again listed in a drop-down menu and the **Max.Length** (number of symbols) for that name.

A **Static** text is another option. If you select **Static text**, enter the text that will be the filename and for each different file **Metus MAM** will put a number at its end.

Which fields’ values to be loaded in the prompter text file is configured in the **Fields To Export** section. Basically, we assume that the prompter text is logically divided in three parts: **Title Field**, **Content Field** and **Full Text Field**. This is not obligatory to specify all of them. F.e. the **TitleField** can “take” the values loaded in the **Title** metadata field. **Content Field** may “take” the text from **Asset Content** metadata field. Distinguish the first and the second parts by setting the number of empty rows between them. Enter it in **Distance between Title and Content**.



### 4.18.3. Archiving Options

Here is the section into which we configure default archiving settings. These are settings which will be applied to all the materials being archived on the storage (tape). Because some of the archived materials may come from a library project, it is possible that they have existing **Metus MAM** metadata, such as **Storyboard**, **Proxy** and **Trim In/Out** points. There are three tabs for archiving options which are **general**, **transcode** and **metadata**.

In general tab, there are storyboard, proxy, trim, HSM Unit and index options.

**Storyboard** - the archiving of any object may be done together with its **Storyboard** (if it comes from a library project). If you do not want to archive storyboards with the items, just leave this section unchecked.

The first choice is to **Archive the available storyboard**, which means that the objects which still do not have storyboards will be archived without such. Those that have storyboards will keep them. Shortly said – everything will be kept as it comes.

Second choice is to **Archive storyboards of assets that have storyboard, otherwise create storyboard**. It is self-explanatory – the assets “coming” with storyboards will keep them; those that “come” without storyboards will be created such immediately after being archived in the project. Their storyboard creation will be done according to the general **Storyboard Options** explained below in the **Project->Properties** menu.

The last option is to **Recreate Storyboards**. This will create storyboards of all the archived materials (no matter whether they have such or not) according to the rule set in **Storyboard Options**.

**Proxy** – the same as **Storyboard**. If the proxy check is not applied at all, then the objects will be archived without proxies (even those that have such).

**Trim** – if the object is coming from a library project, it is possible to archive only a part of it. This can be either the **Only between mark In/Out** section or the one **Between the Master In/Out**.

#### Options

- **Automatically Archive items to HSM Unit** – this option is active when a tape drive is attached to the system. It will archive everything coming in the project directly on the tape cartridge.

- **Automatically Archive Proxies to Tape** – In addition to the previous option, or separately from it, the proxies of the items being archived can be sent directly on the tape if desired.

- **Delete Files After Archiving** – When archiving any file from a local folder to the project, it will be copied on the storage that is defined for this. From this moment, we go on working with

The screenshot shows the 'Archiving Options' dialog box with the 'General' tab selected. It contains several sections with checkboxes and radio buttons:

- Storyboard** (checked):
  - Save storyboard if exists
  - Save storyboard if exists, otherwise create storyboard
  - Create storyboard in any case
- Proxy** (checked):
  - Save proxy if exists
  - Save proxy if exists, otherwise create proxy
  - Create new proxy in any case
- Trim** (unchecked):
  - Between MarkIn-Out
  - Between MasterIn-Out
- Options**:
  - Automatically Archive Items to HSM Unit
  - Automatically Archive Proxies to HSM Unit
  - Delete source files after archiving
- Index**:
  - Create Index

this archived copy. The original file (the one being source for this replication) remains untouched at where it is. Usually, it is not needed anymore and there is no reason to keep it because it only takes place on the PC HDD. This option automatically gets rid of these files by deleting original files.

**Create Index** – This option creates index for the asset after archiving automatically if it's checked.

**Transcode Tab** – Very powerful and useful option supported in **Metus MAM** and deeply differentiating it from the other MAM solutions available on the market. This check applied here is to ensure that all the materials available on the storage units will be of one and the same format. Everything “coming” in the project will be transcoded to this format. For more details about this, please refer to the **Transcoding** section above in the manual.

**Metadata Tab** – Metus MAM provides a possibility to **Select file based metadata types to save to database**. These are additional metadata grouped by types (**Video, Audio, EXIF, IPTC, MP3** and **Summary**). We recommend not checking them because they unduly enlarge the database. To see what metadata fields are listed for each group, click on the question mark on right.

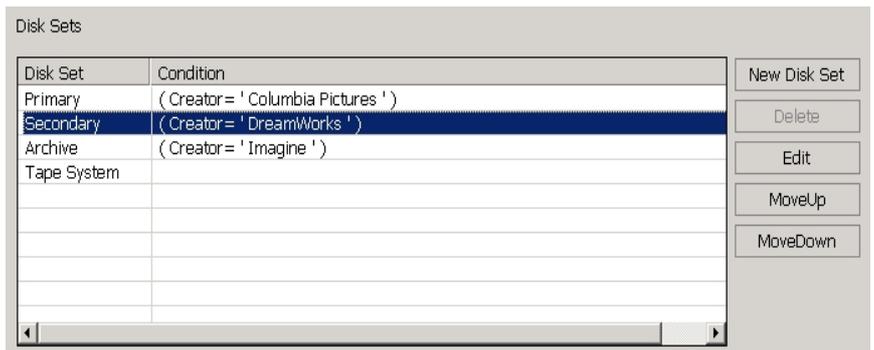
When archiving a file in the system, we take it from some folder. Sometimes, in the same folder additional files exist – with the same filename but with different extension. These are called adjacent files and they are bringing additional information that can be used by the Metus system (f.e. sometimes the descriptive metadata of one video are placed in a \*.xls file next to it). In such workflows, check the option **Archive Adjacent File Contents**. The following types for such additional files are supported: \*.xml, \*.txt, \*.xls, \*.doc and \*.pdf. So, depending on the format of the adjacent file “coming”, select it and **Select a field** into which you will load the values coming with this file.

**NOTE!** The adjacent files should contain one value only, because it is supposed to be loaded only in one metadata field. Furthermore, this metadata field could be only of **String** or **Text** type.

#### 4.18.4. Storage Management

This section is used generally to name the new disks added to the storage. For these disks you can define some filters concerning the content which will be saved on them.

Press the **New Disk Set** button and a dialog will pop up. In the **Name** field below enter a name for the new disk. Define the criteria for the content that you want to be filtered and copied on this storage – with the browse button open the metadata



tree so to select the metadata fields that which values will be used for filtering. When more criteria are added you can apply one of the two logics – **AND/OR** with the help of the field **Match** (**All** – all the criteria must be observed or **Any** – even only one of the criteria is observed, the filter will be executed).

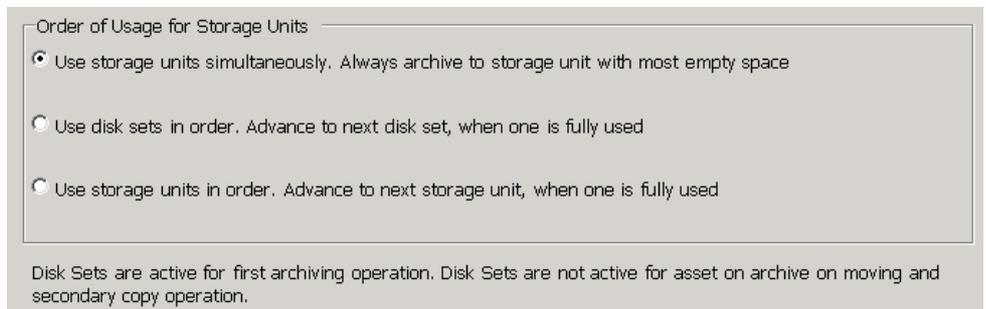
The example on the screenshot shows how the content can be archived on the storage due to the criteria **Creator** – if the creator is *Columbia Pictures*, the files will be copied on the **Primary** labeled disks. The files with creator *DreamWorks* will be archived on the **Secondary**-labeled disks. *Imagine* content will be sent to the **Archive** disks.

The rules defined here are not run only over the content being archived (in the moment of archival). These rules can be used so to order content even after it has been already archived – these are content managing rules.

On later stage, if needed, a rule can be additionally changed by selecting it and press the **Edit** button. It can be erased, also, with the **Delete** button.

After the rules are defined, you can check one of the options below for organizing priorities for the processes that **Metus MAM** will run. These options are self-explanatory:

**Use Storage units simultaneously. Always archive to storage unit with most empty space.** – **Metus MAM** will archive to the most empty disk without taking in view what is the disk order (in the list here).



**Use disk sets in order. Advance to next disk set, when one is fully used.** – **Metus MAM** will copy on the disk sets units, in the order they are listed here. As soon as a disk set gets full, it will go on copying on the next one as per the order in the list.

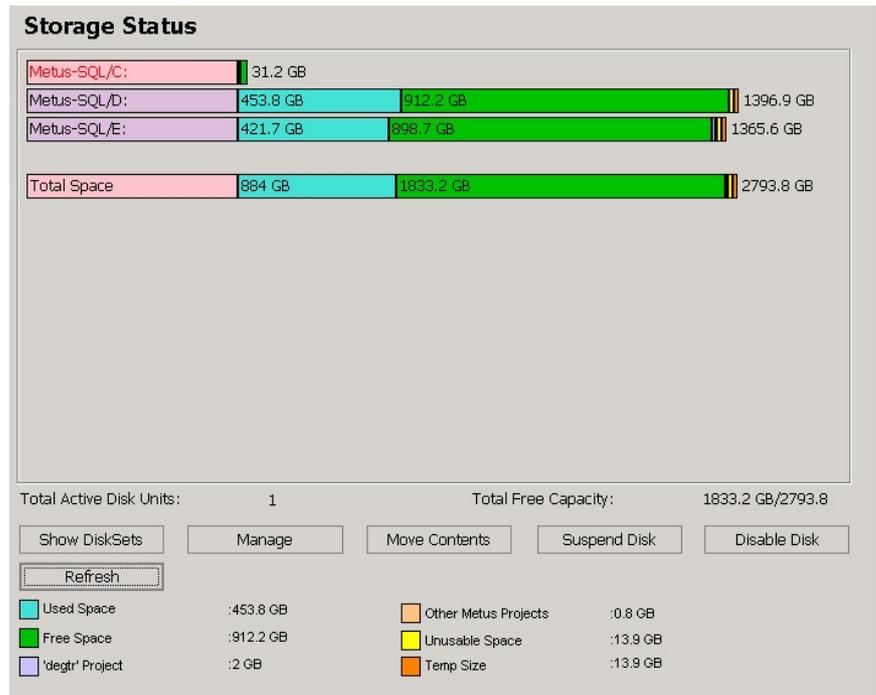
**Use storage units in order. Advance to next storage unit, when one is fully used.** – Same as above, concerns the disks (system drives).

As seen from the last two options, the list order is important. Therefore, use the **Move Up** and **Move down** buttons on right to order the rules in the list in a proper way.

#### 4.18.5. Storage Status

The **Storage Status** shows the entire storage as separate units via a colorful diagram interface. From this section you can see all the info seen in the **Archive Servers** settings – **Disks Size**, **Temp Size**, **Free Space**, etc. and on other hand – you can make some management of the storage disks.

The storage units are presented either as disks (drives C, D, etc) or as **Disk Sets** (their labels - **Primary**, **Secondary**, etc). To switch between these two modes use the button **Show Disk Sets/Show Disks**.



All the system drives are listed here – **Active**, **Suspended** and **Disabled** ones. Select any of them and for the currently opened project you can see what size of the disk the project is taking with all the materials archived for that project on that disk – the lilac color (look below, too). You can see also how much space another projects' archived materials are taking – the peach-colored info (**Other Metus Projects** field). In the colored lines above the info is presented in proportions and digits (if enough place); below it is displayed with digits and explanations for what each color is presenting.

Select any of the storage units and press the **Manage button** to see the additional info as **Temp Size**, **Unusable Space**, **Disk Set**, **Disk State** and **Serial Number** of the disk. This **Serial Number** can be saved to a metadata field so that a search by **Disk Serial Number** is possible. The last check in this dialog is **Used by the Tape Library not stand-alone drive** and it is active when a tape drive is attached. Applying the check means that the disk will be used for tape library cash disk. This is automatically used by the system only in cases when the cash disk is not recognized (some kind of hybrid configuration – manually point the disk which the system will automatically use for this purpose, if needed).

**Suspend** button is active only for drives which are either **Active** or **Disabled**. Select such a disk and **Suspend** it by pressing the button here. The same can be done in the **Archive Servers settings**. No matter from where you apply the status, the change is always reflected in the other dialog.

Same explanation is referred to the **Disable Disk** button.

**Refresh** is for updating the info and its preview.

**Move Contents** button is purposed to move files on the storage from one disk to another. Select the disk you want to move from and press this button. A dialog appears asking to where to move. In this dialog all the other disks (disk sets) are listed in the left half. You select the disks to which you would like to transfer and add these disks in the right part. Some details (**Name** of the disk, the **MAS server** name, **Free Space** that can be used for archiving, **Archive Size** – the place already used for archiving purposes in **Metus MAM**) about the source disk are displayed in the upper part of the dialog; details about the target disks are displayed at the bottom of the dialog after you select the disk in the list.

#### 4.18.6. Information Lifecycle Management

In this section rules can be created for automatic **Archiving to Tape**, **Double Copy** creation, contents **Deletion** or **Moving** as well as **Transfer** of files from the storage to predefined places. The rules are created via adding criteria for different metadata fields (specific conditions). This is done in the **Information Lifecycle** window; we call it shortly **Rules** window.

The **Rules** window firstly displays the places for adding the metadata fields as per which the criteria will be done. The more fields you want to add, the more times press the “+” button. To remove surplus fields already added, press the “-” button – it always removes the last added field.

The rules that we are going to create are supposed to do automatically some of the **Actions** below: **Archive to Tape**, **Double Copy**, **Delete**, **Move** and **Transfer**. So, according to what action you will undertake, it is good to decide firstly which files to be affected by this rule.

The screenshot shows the 'Information Lifecycle' dialog box. It has a title bar 'Rule' and a main title 'Information Lifecycle'. The dialog contains two criteria rows. The first row has 'Age' in a text box, followed by a dropdown menu showing 'Greater Than', and a numeric spinner set to '100'. The second row has 'View Count' in a text box, followed by a dropdown menu showing 'Less Than', and a numeric spinner set to '10'. To the right of these rows are two columns of '+' and '-' buttons. Below the criteria is a 'Match' dropdown set to 'Any' and a 'Match Whole Words' checkbox which is unchecked. Below that is a 'Name' field containing 'Rule One' and an 'Action' dropdown set to 'Archive to Tape'. At the bottom, there is a section titled 'Use options below for assets that have secondary copy or proxy' containing three radio buttons: 'Assign secondary sources as primary' (selected), 'Delete secondary sources', and 'Archive secondary sources to Tape'. Below these is a checked checkbox for 'Archive proxy to tape'. 'OK' and 'Cancel' buttons are at the bottom right.

Example: If we are going to automate the process of tape-archiving (files from storage being archived on tape) then we decide which files is better to be moved on the tape. Let say we shall archive those of the files which are either archived in the project for more than 100 days or those that are previewed less than 10 times. So, this is **OR** logic. Therefore we add these criteria and select **Match=Any**. If we select **Match=All** this will act like **AND** logic and all the criteria must be observed by the files being archived on the tape cartridge, i.e. we shall move to tape all the files that are archived on the storage before more than 100 days and have been previewed less than 10 times.

If in the added criteria the matching value is containing a text (word) there is a possibility to match either the part of this text or to match it totally – apply the **Match Whole Words** check as per your needs for this.

In the **Name** field specify a name for the rule you are creating currently.

Actions are listed above. According to what action is undertaken, the last part of this dialog changes so to configure the relevant settings here.

**Archive To Tape** – there is a possibility to “tell” **Metus MAM** what to do with the secondary copy of the original file (if such is created).

- **Assign secondary sources as primary** - The secondary copy may remain on the storage and can be assigned as a primary;
- **Delete secondary sources** – remove all the doubled copies created for the files (primary, source files) being archived on the tape;
- **Archive secondary sources to tape** – both the primary and the secondary copies will be sent to the tape.
- **Archive proxy to tape** – The last option is to define will the proxy be sent to the tape, as well as the file being moved there, or the proxy will remain on the storage. If you need movement to the tape, just apply the check here.

**Double Copy** – it is reasonable to make a double copy of files being used very often. Or for files that somehow are important for the company and for the workflow. In the first case we can describe the assets with f.e. *ViewCount>200* or whatever is your need. For the second case the assets could be checked values for a relative metadata field.

It fully depends on you to decide which files double copy creation should be automated.

For **Double Copy** action, the additional settings that should be applied are concerning the choice of the destination into which the copy to be saved. It can be:

- **Disk** – any of the MAS/storage system drives with **Active** status;
- **Disk Set** – any of the labeled disk sets – either **Primary** or **Secondary** ones.
- **Computer** – choose any of the machines listed in this drop-down section. Only machines where MAS is installed will be listed, i.e. you choose between the **MAS Servers**.

Sticking to the examples above, we come to the third action – deletion. After deciding which files should be deleted you have to enter these criteria and choose action **Delete** for that rule.

No additional settings to apply. The files will be

deleted from the storage together with their proxy files, the indexing information files, as well as the metadata from the **SQL database**. The files won't be placed in the **Recycle Bin** – they will be automatically deleted forever.

Next action is **Move**. The files filtered by the criteria set above will be moved on the place defined here. It can be any of disks/disk set or the tape cartridge. All the storage units are listed in the left half of the window; select these of them which you want to move to and add them to the right half of the dialog as target locations. The last check in the **Move** action section is to tell **Metus MAM After Move action to update other assets which use the same file(s)**. This is to update their status and reference to the files new locations (the path).

The last action is **Transfer**.

The files filtered by the above criteria will be transferred either in a folder (a local one – this is like automatic retrieval) or to some ftp location.

For setting a folder press the **Browse** button and select the folder from the network machines tree.

For ftp location – enter the ftp address and the **User** name and **Password** to access it. Press the **Test Connection** button to try its availability.

All the checks below concern what content to be transferred to the chosen location – you can **Transfer Source**, together with the metadata applied for it (**Transfer Metadata**), its proxy (**Transfer Proxy**) and if it has a storyboard, you can choose to transfer it, too (**Transfer Storyboard**).

For the files being transferred, you can define a way their names should be structured like. Any of the metadata fields' values can be added in the filename. Check the **File Naming Format** and proceed on. The screenshot shows example with a structure like **Name + ID + Creator**. This should be checked and used according to your needs and the entire workflow used. The result will be that the transferred file will be renamed with the values from the metadata fields listed here so that the people “taking” them from the target locations can parse the names and use them as per their needs.

The content can be transferred with its original duration or partially. It can be trimmed either **Only between Mark In-Out** points or **Only between Master In-Out** points.

**Directory Structure Format** displays the way the folder will be named – this is the folder into which the content is moved. If you want to create subfolders inside, use the slash symbol as it is clearly stated at the bottom of the dialog.

After the **Rules** window explanation, we go back to the **Information Lifecycle Management** dialog.

Once the **Rules creation** is done, they will be listed here. To add a **New Rule**, press the relevant button on right. To remove any of the rules listed, select it and press the **Delete** button. To apply changes in a rule, mark it and choose **Edit** – the **Rules** dialog will appear so to apply changes to this defined rule.

Before loading any rule, it is a good idea to test it firstly. One of the tests can be to ensure which files will be

affected when this rule runs. For achieving this press the **Preview** button. A confirmation dialog appears, with **Yes** confirm your choice and watch the project. All of the files that will be affected by this rule will be displayed in the project, in a separate **Search Results tab**.

Very often the workflow requires a rule's execution to be temporarily stopped. For this, press the **Disable** button. When this is done, the button toggles to **Enable** so that when pressing it again it will activate back the rule's execution.

A rule can be run on **Schedule** – see the last section in this dialog. It can be run on some **Period**, defined in hours or at a set **Time** – any time in the day. F.e. if it is 17\*00 o'clock then each day at 17\*00 o'clock the rule will be executed.

Name	Condition	Action
Move Rule	(Name= ' ABCD ') OR (Name= ' XYZ ')	Move
Tape archive	(Rating > 4 ) AND ( View Count > 100 )	Archive to Tape
Deletion Rule	( View Count < 2 ) AND ( Creation Date < 24.1.2007 r. )	Delete
Double copy ...	( Rating = 3 ) AND ( View Count > 300 )	Double Copy

Delete Assets when 'Lifetime' is elapsed or 'Kill Date' has passed

Send requests before all kinds of automatic deletion

Request Lifetime for Automatic Deletion: 3 Day

Request Default Action for Automatic Deletion: Reject

Enable storage capacity limit (delete the oldest assets when capacity limit exceeds)

Capacity Limit: 85 %  Total  Disk  DiskSet

ILM Life Time: 4 year 1 month 1 Day

This is the time how long the project is controlled after last opened time.

Schedule:  Period 1 Hour  Time 15:48:00

But most probably when you create the rule, you would like to test its execution. For such purposes, the **Run** button is placed here – press it and the rule will be run instantly without observing the **Schedule** section settings.

Use the buttons **Move Up** and **Move Down** to re-order the ILM rules in the list. Reordering the rules in the list is not only for user perspicuity. It is related to the execution order, too. If two (or more) rules are scheduled to be run on such time that their execution moments overlap, **Metus MAM** will run them in the order they are listed here, i.e. the first listed one will be executed firstly.

In the metadata tree that is involved in the **Metus MAM** installation in the **Asset** subgroup are existing two editable fields which values are loaded by the user – **Life Time** and **Kill Date**.

The first one presents the number of the days the asset should exist after the moment of its archival. *Example:* if **Life Time** = 50 it means that 50 days after the archival, the asset and its file and all related info will be deleted.

The second field – **Kill Date** presents the date on which the asset and the related files plus info must be deleted. *Example:* If the Kill Date is 15 Of May 2011 this means that exactly on this date the asset (and its file and metadata) will be automatically deleted.

To have these fields activated, you must apply the check **Delete Assets when Life Time is elapsed or Kill Date has passed**. This will do automatic deletion as per the set dates.

To avoid deletion of files that maybe needed later, you can configure the system to ask for confirmation before starting the automatic deletion process. This is a really useful option, such a workflow is much more safety. To use it, check **Send request for all kinds of automatic deletion**. As a result, a request for deletion will be created. Define a period this request will be active – set it (in days) in **Request Life Time for automatic deletion**. After these days are past, the request will be automatically deleted (not waiting your approval anymore). Just before the request is deleted it takes status either **Approved** or **Rejected**. In the first case the automatic deletion will be executed for all the files that the request asked about. In the second case the deletion will be canceled and the files will remain. Choose which default action to be executed for requests that you have not answered manually and they “die” due to life time over -> in the field **Request Default action for automatic deletion** – choose **Approved** or **Rejected**.

**Enable storage capacity limit (delete the oldest assets when capacity limit exceeds)** – **Metus MAM** will delete the oldest files in the archive in order to always sustain some free space on the storage. The free space that have to be ensured is not entered, but you have to enter the vice versa digit – the **Capacity Limit** (in percents) that should be used in the archive. This limit should not be exceeded. It can be set for the **Total** storage or for the **Disks** or **Disk Sets** units.

**ILM Life Time** – This presents (in days) the time that the rule will be executed even if the project is closed.

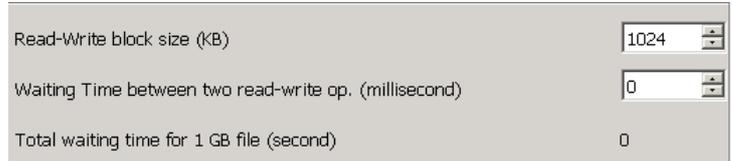
Example: Let assume **ILM Life Time**=6. The project is opened, something is done and then it is closed for 10 days. The first 6 days after it has been closed the rule will be active and running (even the closed project).

#### 4.18.7. Tape Units (optional)

This dialog can be managed when a tape drive is attached to the system – the parts of the cartridges are listed in the window here. You can see the defined archiving units, and online or offline cassettes in the **Archive Units** section - you can name, rename them, etc.

#### 4.18.8. File Copy Options

Here we configure the general options for copying processes.



The screenshot shows a dialog box with three rows of settings:

Read-Write block size (KB)	1024
Waiting Time between two read-write op. (millisecond)	0
Total waiting time for 1 GB file (second)	0

**Read-Write block size (KB)** –It is the buffer size of a read-write process. When you copy a file, two operations are running in fact - first read and then write. A file cannot be copied in one step. So, this block space is acting like a buffer.

**Waiting Time between two read-write op (ms)** – It is the delay time after one buffer read and written. It depends on the size of the file – so, it is a loop.

**Total waiting time for 1 GB file (seconds)** – Logically, this is the result between the first setting multiplied by the second one. It is just an example for quick calculation about 1GB size file being copied. For 5 GB files this delay will be this time x5.

#### 4.18.9. Prepare Asset

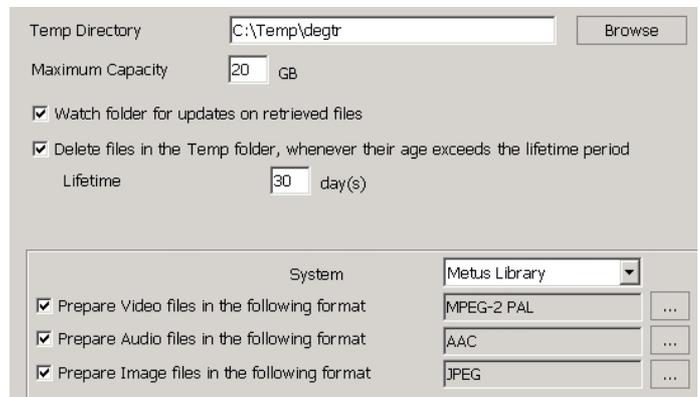
Read firstly the **Asset's Context menu -> Prepare Asset** section.

All the **Prepare asset** explanation is related to the options that are set in **Project -> Properties -> Prepare Asset** dialog.

**Temp Directory** is the local folder into which the local copy will be saved.

**Maximum Capacity** is the space that this folder should not exceed.

**Watch Folder for updates on retrieved files** ensures that each time you press **Save** in the NLE application, **Metus MAM** will understand and pop up the dialog asking more details (screenshot in **Prepare Asset** explanation).



The screenshot shows a dialog box with the following settings:

- Temp Directory: C:\Temp\degr (with a Browse button)
- Maximum Capacity: 20 GB
- Watch folder for updates on retrieved files
- Delete files in the Temp folder, whenever their age exceeds the lifetime period
- Lifetime: 30 day(s)
- System: Metus Library (dropdown menu)
- Prepare Video files in the following format: MPEG-2 PAL (with a ... button)
- Prepare Audio files in the following format: AAC (with a ... button)
- Prepare Image files in the following format: JPEG (with a ... button)

**Lifetime** (in days) presents the period for which the local copy will exist in the **Temp Directory**. To make this file be automatically deleted according to that criterion, check the option **Delete files in Temp folder, whenever their age exceeds lifetime period**.

If the archived file is not in a proper format for the NLE editing tool, you can transcode it during the retrieval process using either **Metus MAM System** or **Carbon Coder**. Thus, the local copy will be transcoded. See the last section of the dialog.

#### 4.18.10. Proxy Options

##### 4.18.10.1. Proxy Naming Options

Sometimes the files that are being archived already have proxies. In order to save system resources, **Metus MAM** can copy the ready proxies and not create them from the very beginning. The system “understands” which the proxy file is with the help of a filename parsing rule (**Name Format for Proxy Assignment**). In this rule we have to specify which is the filename’s **Prefix**, **Suffix** or the proxy file **Extension**. When **Metus MAM** finds a file with such name format, it copies it as a proxy.

Metus MAM searches for such files either in the same folder where the original file is (**Get proxy from the same folder**) or in another folder (**Get proxy from the specified folder**). In the second scenario you must use the **Browse button** to point where the folder is.

There are same options for Web proxy options for Metus Online usage.

##### 4.18.10.2. Proxy Creation Options

These have been already described in the Proxy section above in this manual.

#### 4.18.11. Storyboard Options

Specify the storyboard general settings – they will be applied as default when you choose **Create Storyboard** option.

For general storyboard setting you can select either the **Total Frames** option or the **Interval** option (described already above in the Storyboard section).

This is the only place in **Metus MAM** into which the size of the storyboard pictures can be defined. Set the **Image size** via the **Width** and **Height** fields and choose whether to **Keep aspect ratio**. For the pictures, that is possible to add manually to the storyboards, choose whether to keep their original size or to **Use Image Size settings above**.

#### 4.18.12. Playlist

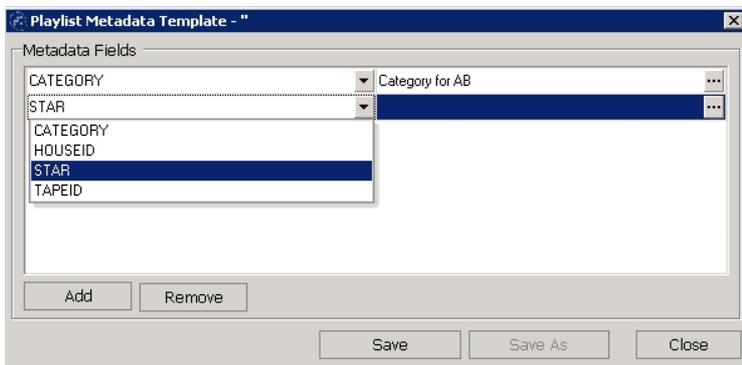
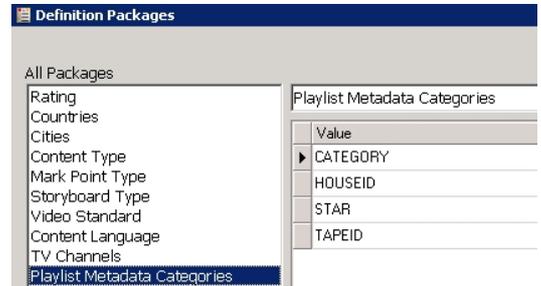
In this section define the users that will approve playlists, as well as metadata templates. These settings are going to be applied later for each playlist.

Three approval groups must be selected: **Technical Approvers**, **Administrative Approvers** and **Playlist Approvers**. Use the browse button next to each one and the list with users and groups defined for this project will appear. Select the group that will have rights for the relevant approving. Any of the users belonging to this group will obtain this right automatically. So that when this user is logged in the project, he can approve the playlist as per his rights.

**NOTE:** Logically, the **Project Administrator** has all the rights for approving.

The **Metadata Template** is the section into which we create templates for configuring which metadata fields' values to be forwarded to the playout softwares. **Delete** a created template with the relevant button. Apply changes to already created template with the **Edit** button.

With the **New** button start a new template creation - a dialog opens. On left are listed the metadata fields supposed to be supported in the playout software. They are predefined in **Project -> Fields -> Definition Packages**.



From the left drop-down list select the playout software's metadata field and on right point which values to be loaded in that field. I.e. it is relating the metadata fields between the playout software and **Metus MAM**. Do not forget to **Save** the template before you **Close** it.

Later, these playlist templates must be involved in the playlist realization in order the included metadata to be sent to the playout server's playlist. See more details below in the **Playlist Editor** section.

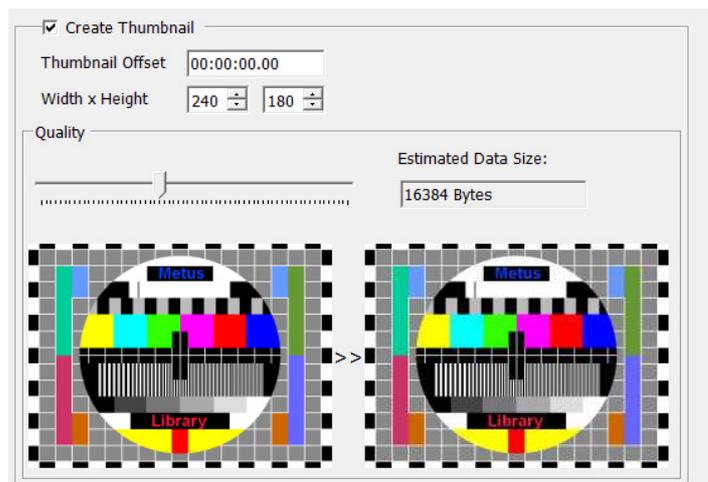
#### 4.18.13. Thumbnail Options

**Create Thumbnail** – This option allows MAM to create a thumbnail for archived assets automatically.

**Thumbnail Offset** – This option determines which frame of video will be used as a thumbnail. It's automatically 00:00:00:00. It can be adjusted to any frame.

**Size settings** – In here, height and width of thumbnail frame can be adjusted.

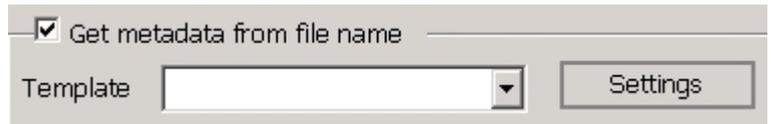
**Quality** – By increasing this bar, quality of thumbnail image can be increased but naturally with more quality data size of image increase as well. It can be seen that how much size increased from estimated data size. Pictures at bottom of this window give a hint about thumbnail's quality according to the original frame.



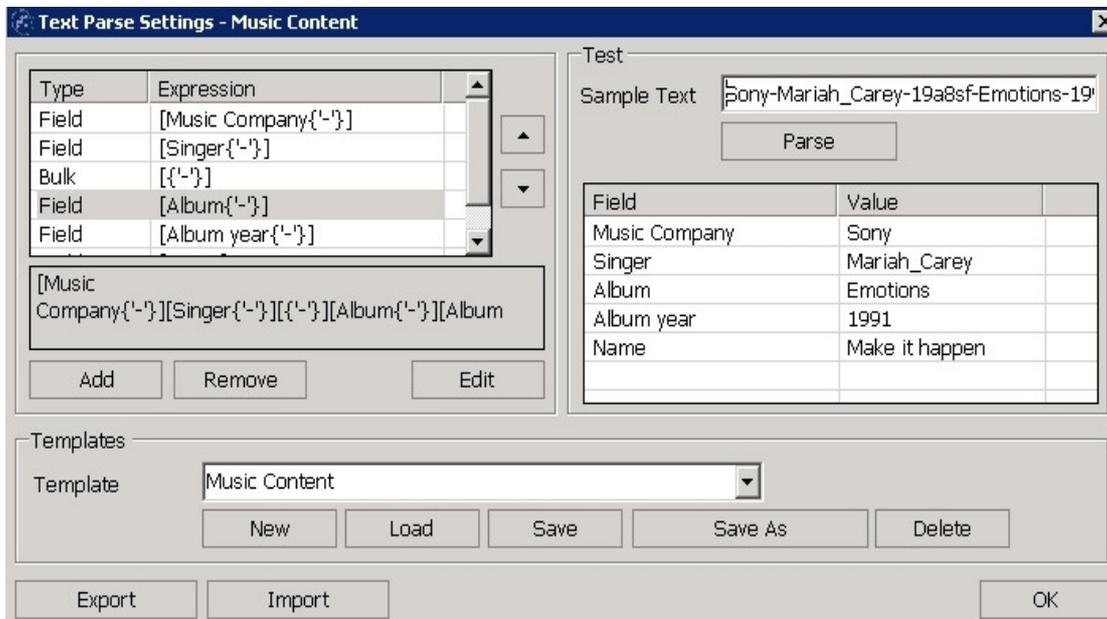
#### 4.18.15. Filename Parse Options

Parsing filenames is used in cases when the names are structured according to a strictly set rule and format. The goal of this is to extract some values from the filename and forward them in separate metadata fields.

To start using this option in **Metus MAM**, choose **Project -> Properties -> Filename Parse Options** and activate the check **Get metadata from filename**. Then list the drop-down menu and select which **Template** to run in order to extract the values from the filename. For more detailed templates settings, press the button next to the drop-down list – **Settings**.



Another dialog opens into which the rules for parsing are defined.



If a template is already created you can preview its settings by choosing the template from the drop-down list here. Select it and press the **Load** button. All the template's fields will be loaded in this window in the upper-left part. If a field deletion is needed, select it and press the **Remove** button. If you want to change something in the field, use **Edit** – the field's properties dialog will open – **Formatting Step Settings**. Make here changes and press **OK**. After that either **Save** them (the changes) or **Save As** the template – see the buttons below in that window.

After a template is loaded, you can test its behavior in the **Test** section with a **Sample Text**. Enter any text here and press the **Parse** button. In result, the text will be divided in parts as per the rules defined in that template and this result will be displayed in the **Field** and **Value** columns.

The created templates can be exported to another project – use the **Export** button so that all the settings (of templates selected) will be saved in one file only (\*.xml format). **Import** button is used to import here (from xml file) other templates settings. And the **Delete** button – it is used to erase any template from the list.

With **New** start a new template creation. Once you press this button, enter a name for the template in the **Template** field. **Metus MAM** is automatically popping up name **New** in order to avoid losing your information, in case you forget to specify a name.

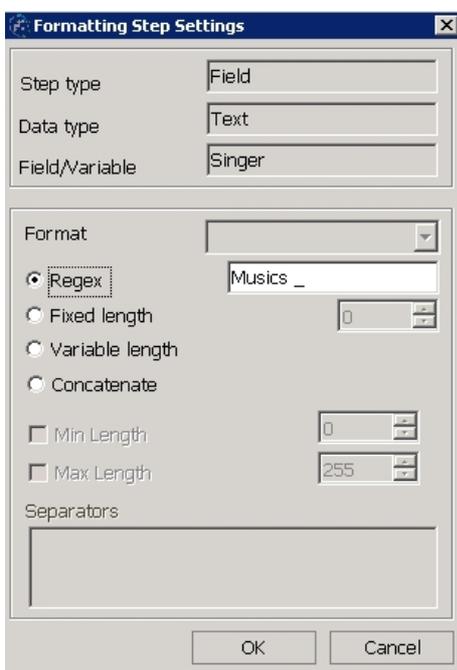
Press the **Add** button to add the first field in the form. Select what will be the type of the first part of the filename – **Field**, **Bulk** or **To Start**.



**Field** opens the metadata tree dialog to select which field to add. Double-click the added field and the **Formatting Step Settings** dialog will open so that you configure here the field – its length, format, etc.

The same dialog opens when you select the **Bulk** field.

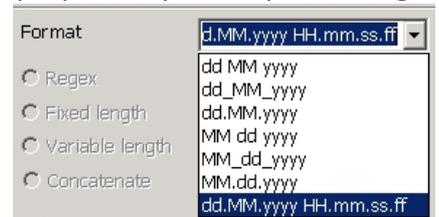
**To Start** adds **[(Return)]** value and it is not working alone - it needs to add a **Field** after it (on the next row). Once you select **To Start**, the parsing will jump on the first part of the filename and load this part into the field placed on the next row (after **To Start**). With this the filename parsing ends! Even if there are more parts in the filename, they will be ignored. Generally, **To Start** is mainly used for loading one and the same value in two different fields.



The **Field's Formatting Step Settings** dialog looks like shown on the screenshot here.

**Step Type**, **Data Type** and **Field/Variable** sections show the info about the **Field** which properties you are previewing.

**Format** – When a date field is selected, this section becomes active so that you can select the format of the **Date**-value that will be extracted. Shortly said - specify here what will be the format of the date that this part of the filename will present.



**Regex** stays for **Regular Expression** and presents a string which always is one and the same exactly into this part of the filename. This string must include the separator after it, too.

If the currently described part of the filename is going to be always with one and the same number of symbols, we can describe it as a **Fixed length** section. Enter the number of the symbols, including the separator after it.

**Variable length** is the mostly used option as basically, the parts of the filename are changing their lengths. If you describe a **Variable Length** part, you can additionally specify its **Min.Length** and/or **Max.Length** (in symbols). Do not forget to point in the last field of the dialog which will be the **Separator** as parsing will search for it in order to “understand” where the end of this filename part is. Once the separator is met, the part can be extracted and loaded in the metadata field.

Sometimes, however, it is needed to load in one and the same field more than one part of the filename. To achieve this, **Add a Field** and select which values to **Concatenate** into that field.



Let's now explain the parsing in the best way it could be done – with an example (see the screenshot above, also).

In a music TV they tender to name their files in one and the same way: first they put the creator company, then the singer name, then some symbols which present a kind of internal

system ID, after that the album name, the year the album is released and finally – the name of the song: **Creator – Singer – System ID – Album name – Album year – Song name**. From a filename with such a structure we can extract values for several metadata fields and thus we shall save time with applying values for these fields inside of the project.

If the filename is: **Sony–Mariah\_Carey–19a8sf–Emotions–1991–Make it happen.mpg** we can parse this name like this:

<b>Sony</b> -> <b>Creator</b>	<i>Sony</i> value will be loaded in the field <i>Creator</i>
<b>Mariah_Carey</b> -> <b>Singer</b>	<i>Mariah_Carey</i> – in the field <i>Singer</i>
<b>19a8sf</b> -> <b>Bulk</b>	<i>19a8sf</i> can be skipped (not needed) and could be marked as <i>Bulk</i>
<b>Emotions</b> -> <b>Album Name</b>	<i>Emotions</i> could be loaded in the field <i>Album Name</i>
<b>1991</b> -> <b>Album year</b>	<i>1991</i> presents the <i>Album year</i>
<b>Make it happen</b> -> <b>Song name</b>	<i>Make it happen</i> is the name of the song ( <i>Song Name</i> )
<b>Mpg</b> -> <b>Bulk</b>	The extension ( <i>mpg</i> ) we can mark as <i>Bulk</i>

We have to create a template rule for this parsing:

First we add **Field (Creator), Variable length, Separator “-“**

Second is **Field (Singer), Variable length, Separator “-“**

Third is **Bulk** (can be **fixed length** if symbols are always one and the same number);

Forth is **Field (Album Name), Variable length, Separator “-“**

Fifth is **Field (Album Year), Variable length, Separator “-“**

Sixth is **Field (Song Name), Variable length, Separator “-“**

Seventh is **Bulk** (can be **fixed length=3**).

After all these are added the template fields will look like shown on the screenshot above:

**Type/Expression** columns.

Write the original filename in the **Test** section and **Parse** it to see how the text extraction works. The result will be as displayed on the same screenshot.

Finally, when the file **Sony –Mariah\_Carey–19a8sf–Emotions–1991–Make it happen.mpg** is archived on the storage **Metus MAM** will take the values and load them in the mentioned metadata fields.

**NOTE!** Do not forget to set the check **Get metadata from filename**

#### 4.18.15. Versioning

Specify how many versions of one asset to be kept in the database.

Upon default change source file there are three

options about saving old file as a new version or not. First one is let the user decide while changing source, second one automatically saves all old source files as a version and the third one never saves old files as versions.

Metadata Versioning Settings

Number of previous versions of an Asset to keep: 100

Default Change Source File Option:

- Ask the user
- Save as file version
- Do not save as file version

#### 4.18.16. Metadata Languages

You can define up to six languages that will be used later for the content description. These are the languages in which the metadata fields values can be entered – see the example in the **Create New Metadata Field** section.

To define a language click twice slowly over it – like trying to rename it. Enter whatever language you need.

#### Languages

- English
- Türkçe
- Russian
- French
- Spanish
- Bulgarian

#### 4.18.17. Custom Icons

**Metus MAM** installation provides some icons which makes the interface more graphical and user-friendly. Some of them are:



Marks an asset which is created a temporal copy with **Prepare Asset**



Marks assets having **double copy**



Marks assets which are **locked** for editing



Marks **QuickTime** format videos



Marks **MPG** videos



Marks **WMV** format videos

You can make the **Metus MAM** interface more various by adding your own icons. For example, you can add the following icons to mark:

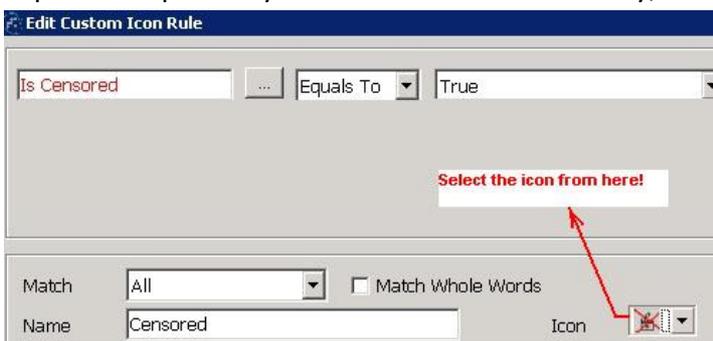
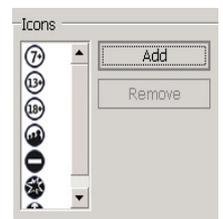


Censored assets



Big rating assets

To achieve this, first run **Project -> Properties -> Custom Icons**. See here the list with the available icons. You can enlarge it if you **Add** a new icon or decrease the number of icons if you **Remove** a selected icon in the list. To **Add** a new icon, press the relevant button here and browse in the opening dialog to point the picture you will add to the list. Finally, the icons list is ready.



Now we have to define what the new icon will mark. Select the **Add New** button above. It will open a dialog to create a rule for specifying which assets the icon will be purposed for.

For the first icon we are adding we must define a rule: *"Is Censored equals to True"*. Do not forget to add the icon at the last section of the dialog.

For the second icon the rule will be *"Rating bigger than 3"*.

After all this is done, some of the assets in our project will look like shown on the screenshot here. If this is convenient for you, use this way to distinguish the assets in the project as per some criteria.

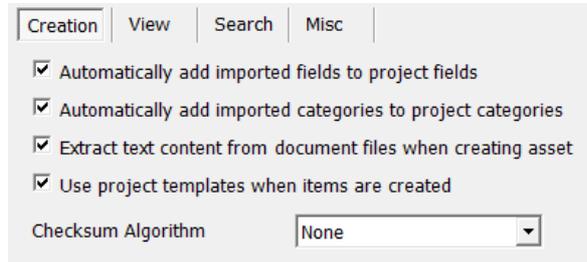


#### 4.18.21. Other

There are for tabs as “other” settings. These are creation, view, search and misc.

##### Creation:

- **Automatically add imported fields to project fields** – concerns the metadata fields coming from another projects – they “come” with the assets being copied (archived) to the current project. If such metadata fields do not exist in the current project’s metadata tree, they will be added.



- **Automatically add imported categories to project categories** – same as above - just concerns the category tree.

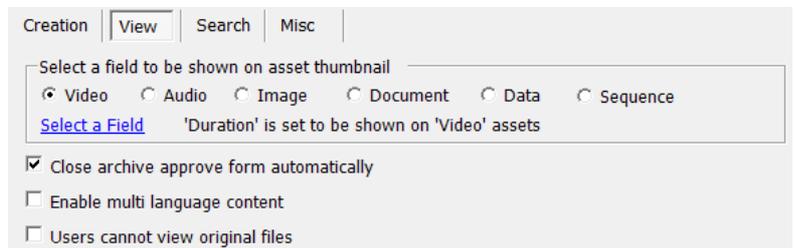
- **Extract text content from document files when creating asset** – this is related to the document files - txt, doc, xls, ppt, pdf, etc. When the check is applied, the content of these files will be loaded in the **Asset Content** field.

- **Use project templates when items are created** – check this to make your templates be applicable for the objects they are purposed for.

- **Checksum Algorithm** – User can select which checksum algorithm will be used here for creation checksum information. The options are MD5, RIPEMD160, SHA1, SHA256, SHA384 and SHA512.

##### View:

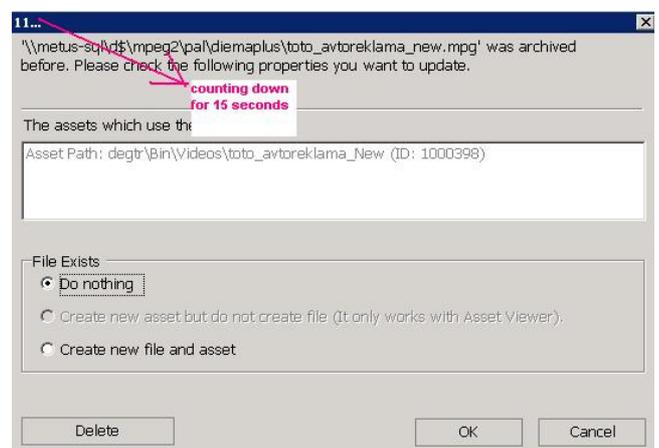
- **Select a field to be shown on asset thumbnail** – This option lets user choose which metadata will be displayed over thumbnail. User can click over “Select a Field” and choose any metadata field. User also can read near this select field what metadata is currently selected to be show.



- **Close archive approve form automatically** – Concerns the behavior of this dialog:

If this check is on, **Metus MAM** will countdown for 15 seconds and will automatically close the window. The default action that will be executed is **Do Nothing**.

- **Enable multi-language content** – must be checked when metadata values will be entered in more languages (already explained in the **New Field Creation (Adding a field)** section)



- **Users cannot view original files** – if checked, only proxy files can be previewed. If no proxy – there will be no preview, at all.

**Search:**

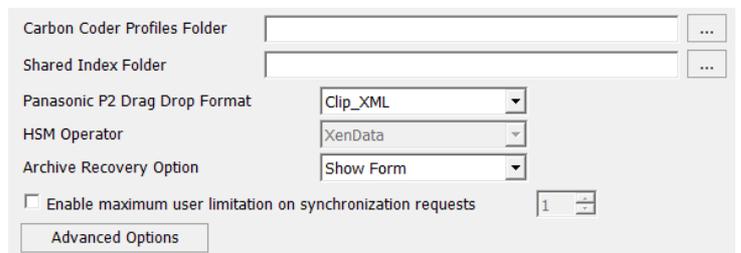
- **Simple Search Options** – User defines default search fields in this option. It's adjusted as searching over all fields as default. User can change this to search over only desired field by selecting search over specified fields and adding the fields that are desired. And also by checking "Always Force Full Text Search" option user can force searching to be a full-text search.



- **Save search criteria to Action History** – in the **Action History** log the criteria via which a search is done, will be saved as info. It will be listed on a separate row in the log.

**Miscellaneous:**

- **Carbon Coder Profile folder** is the place into which the **Carbon Coder** transcoding presets are saved. This is needed only in case when **Carbon Coder** is installed and used.



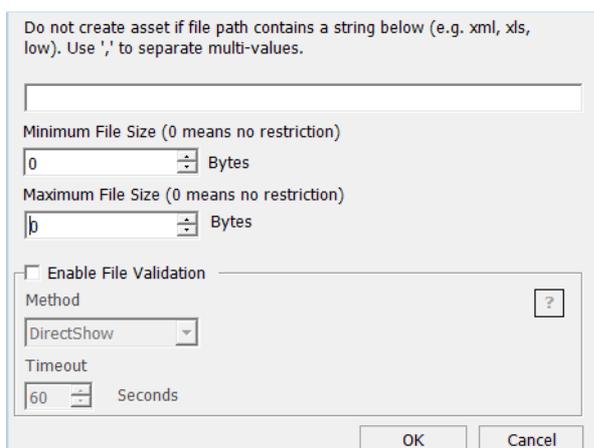
- **Shared Index Folder** – browse to point a shared folder into which the indexing information will be saved. Indexing the materials is needed for image searching as well as for scenes-storyboard-creation. The share folder must be presented with it UNC format - \\PC\folder.

- **Panasonic P2 drag-n-drop format** – when dragging a **Panasonic P2** file from **Metus MAM** to another application, choose how the file will be presented when dropping it: as **Clip\_XML**; **Video\_MXF**; **Icon\_BMP**; or all the three options - **All files**.

- **HSM Operator** – when a tape drive (library) is attached, choose the software that will control it directly (through the **Metus MAM** interface): **Xendata**, **IBM\_Tivoli** or **Sony\_PetaServe**. This depends on the tape drive brand and model.

- **Archive Recovery Options** – In case that due to some reasons the archival process is interrupted and only part of the content had been archived, after the system is back again (MAS) it can either ask you in a dialog what to do with the content still not archived (**Show Form**), automatically **Rearchive** what is remaining or automatically **Delete** the remaining content.

- **Enable maximum user limitation on synchronization request** – set the number of the maximum users that can synchronize simultaneously content or values.



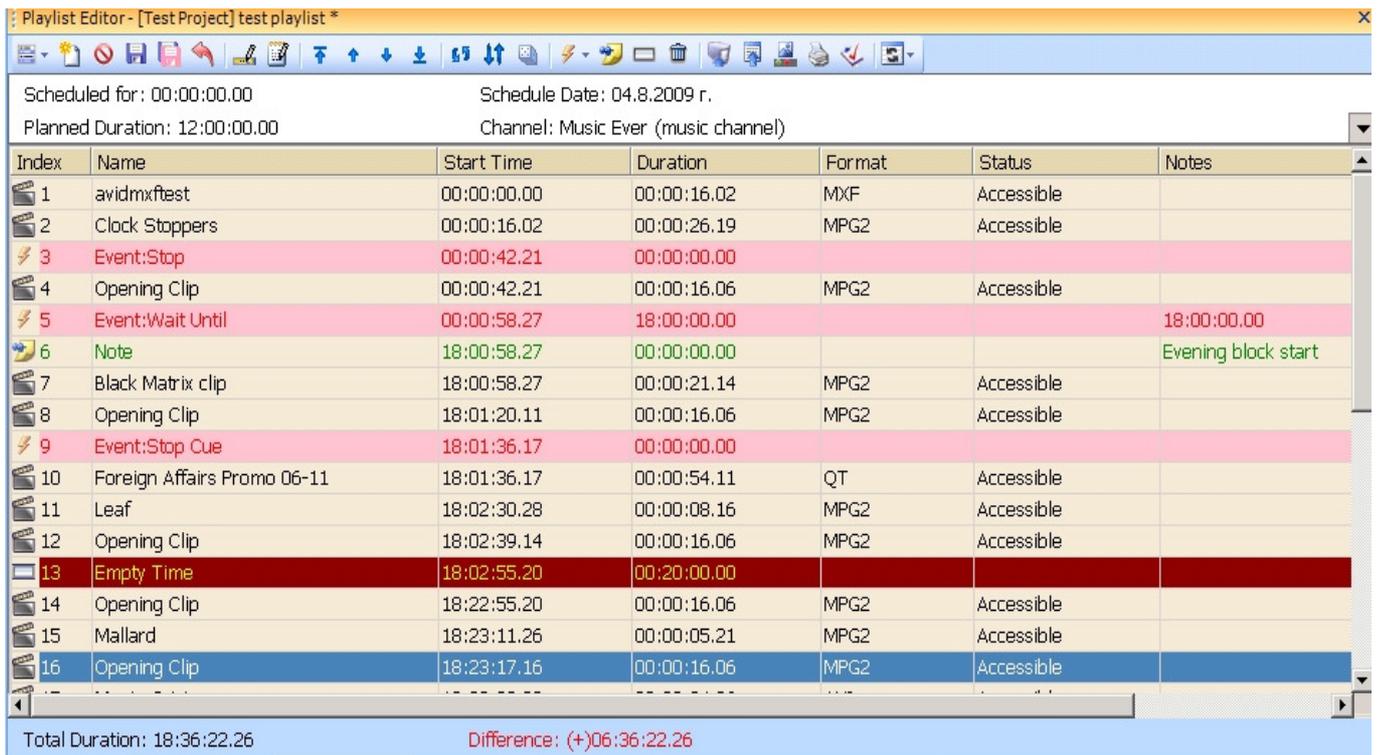
- **Advanced Options** – This is to exclude a type of content that you do not desire to send on the storage. You can exclude files as per their extensions or according to the length of the files. If "0" is entered it means that there are no restrictions for the file length.

**Enable File Validation:** Some files can cause Metus MAM crash. You can enable this option to prevent that. But this makes asset creation time longer. If you are sure your files are valid you do not need this. The invalid files can be seen on MLog.txt (on Metus MAM Installation folder) and progress window as tagged 'Invalid File'.

#### 4.19. Playlist Editor

This is the next extremely powerful and optional **Metus MAM** feature. **Playlist Editor** is used to create and edit playlists, involve metadata and export the playlists as well as the included video files to the **Playout Server**.

The **Playlist Editor** looks like shown on the screenshot here. Select the assets in the project



and drag-n-drop them to this window. What is resulting is called playlist. It can be previewed either in **List View** or in **Track View** – toggle the preview mode from the last button on the toolbar.

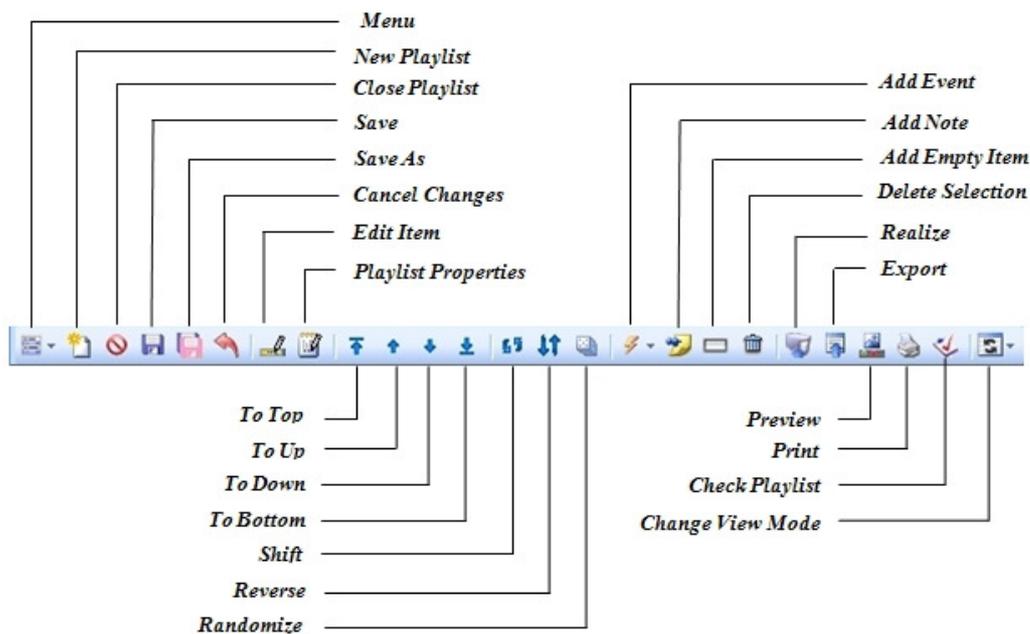
For each playlist item some basic information is displayed in the grid here – **Name** of the asset, the **Duration** of the item, its **Start Time** (calculated as the **Start time** of the previous item plus the **Duration** of the previous item). Usually, the first item in the playlist starts at 00:00:00:00. In the grid you can see also the **Format** of the included files, their **Status (Accessible/Not Accessible)** and **Notes** for some items.

In the upper section are shown more details like the time the playlist is **Scheduled for** (if it is a daily playlist) and the **Schedule Date**, the **Planned duration** and the **Channel** the playlist is purposed for.

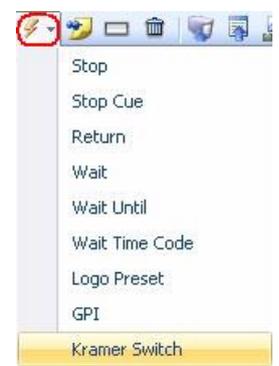
The playlist **Total Duration** is displayed at the bottom of the window – it is a sum of all the items' durations. In this section, right to that message, you may see a warning message if a **Planned Duration** is set and there is a difference between the real playlist duration and the planned one – read about this in the explanations following below.

##### 4.19. 1. Playlist Editor Toolbar

The **Playlist Editor Toolbar** buttons are as follows:



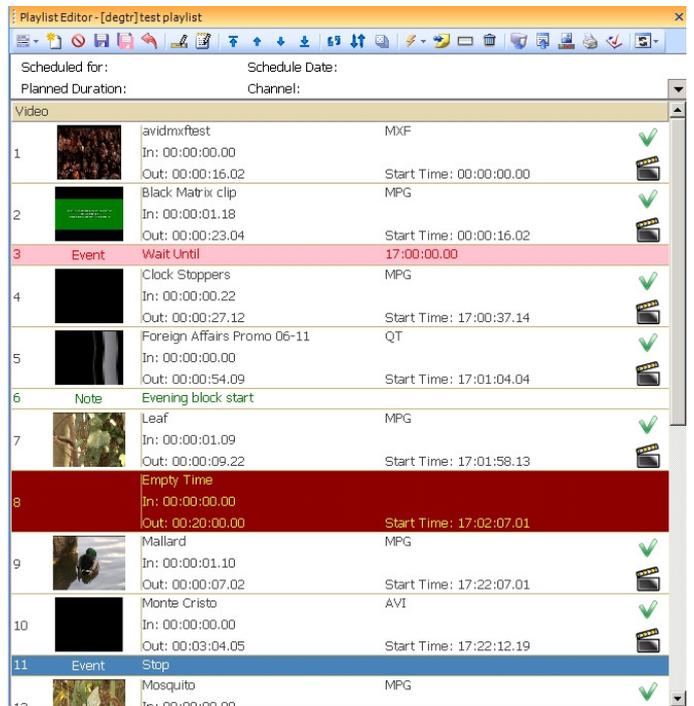
- **Menu** – Lists all the options that the buttons from the toolbar provide.
- **New Playlist** – Opens an empty grid to start a new playlist creation.
- **Close Playlist** – Closes the currently opened playlist.
- **Save** – Saves the playlist (in a bin of the project tree) and/or last applied changes.
- **Save As** – Saves a copy of the currently opened playlist. Once you save it you keep on working with the second copy.
- **Cancel Changes** – Cancels all the changes made after the last **Save**.
- **Edit Selected Item** – Opens the Viewer application for vague item editing.
- **Playlist Properties** – Opens another dialog for configuring additional settings. See below the details.
- **To Top** – Brings the selected clip in the beginning of the playlist (it becomes first).
- **To Up** – Moves the selected clip one position upper in the playlist order.
- **To Down** – Moves the selected clip one position down in the playlist order
- **To Bottom** - Brings the selected clip in the end of the playlist (it becomes last).
- **Shift** – Shifts a clips selection so that the order changes with one position – the “moving” is in upper direction, i.e. the third clip will become second, the second becomes first, the first becomes last (in the selection area only) and so on.
- **Reverse** – Reverses the order of clips in a selection. Reversing is mirror-like, i.e. if five items are reversed, the first and the fifth changes their places; the second and the forth – also and the third one remains on the same position.
- **Randomize** – Changes the order of clips selection in a random manner.
- **Add Event** – Adds additional events to the playlist:



- = **Stop** (on such event the playback stops),
- = **Stop Cue** (the playback stops on the first frame of the selected clip in the ply or the first frame of the next coming clip in the playlist);
- = **Return** – used after a **Jump** command is executed manually. This returns the playback to the same point in the playlist from which the **Jump** was executed.
- = **Wait** – Set a time here. The playback will stop and wait until this time elapse. After that it will be resumed again.
- = **Wait Until** – The playback stops and waits until some hour (time) is reached. When the time is reached, the playback resumes.
- = **Wait TC** – The playback stops and waits until some **TC** is reached. When this time code is reached, the playback resumes.
- = **Logo Preset** – With this event you can set **Logo On/Off** events as well as = **Logo preset** – set the number of the number of the preset. The playout software should be loaded with the presets. Logo event execution offset can be applied from here, too. Set it in this dialog, in milliseconds.
- = **GPI** – Inserts a **GPI** event. Specify here the **GPI** number and the event execution offset.
- = **Kramer Switch** – Define here the **Machine** (the number of devices connected to the **COM**-port of the **Playout Server**. If it is an **AirBox** platform – up to 8 devices can be connected) and **Input** – the number of the desired **Switcher** input. Event execution offset can be applied, also.

- **Add Note** – Adds a row with notes.
- **Add Empty Item** – Adds an empty item to the playlist (**Dummy clip**). Enter the duration of the empty clip so that the playlist duration can be approximately or fully accurately calculated.
- **Delete Selected item(s)** – Deletes a selection of items.
- **Realize** – Wizard opens for guiding the realization process. See below the details.
- **Export** – Similar to realizing but simplified. See details below.
- **Preview** – Opens the **Viewer** application – all the videos from the playlist are loaded in one timeline so that you can preview how the playlist will run or at least the playback between one's clip end and the next clip's beginning.
- **Print** – If you want to have the playlist printed on a paper, use this button here. The **Print Playlist** dialog opens. From here you can configure the **Printer Settings, Page Settings** and **Preview** the playlist. When everything is already configured press the **Print** button to start the process.

- **Check Playlist** – Press this button to start a check of the playlist items. The playlist check reports the total duration of the playlist; total duration of the video files included; audio files included; difference between the real playlist duration and the planned one (if set). Generally, the **Check Playlist** is tracing durations. If assets' limit durations are specified in the **Playlist Properties** dialog, they are also traced during the check here. But if desired formats are specified in the same dialog, the **Check Playlist** option reports also if a clip with non-desired format is included in the playlist. After the check finishes, a message **Complete** appears at the end of the window.
- **Change View Mode** – Toggles the preview between **List View** and **Track View**. By default we preview the playlists in **List View**. When turning to **Track View** the preview changes as the one shown on the screenshot here – the thumbnails of the clips are shown. Double-clicking on the camera sign at the end of the row you can quickly invoke the **Viewer** application so to preview the video there. The green check marks the accessible files.



All the commands available through the toolbar buttons can be executed from the **Menu** options.

## 4.19. 2. Playlist Properties

### 4.19. 2.1. General

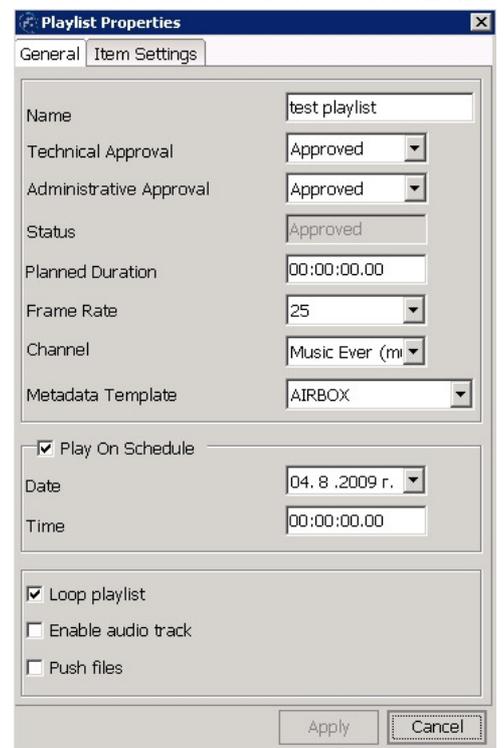
From this dialog we specify very specific and important playlist characteristics.

The **Name** field shows the name of the playlist as per how you had saved it.

The playlist can be **Technically** and **Administratively** approved. As already mentioned in **Project -> Properties -> Playlist** there must be defined users (groups) that will have rights to do this. Only users logged as a member of the relevant groups can do the playlist approval. The status of the approval can be **Approved**, **Rejected** or **Pending**. Both the **Technical** and **Administrative** approvals must be applied, otherwise the summarizing playlist status is considered as **Pending**.

**Planned duration** is the time the playlist must prolong. If the playlist should last 12 hours but its real duration is less or more, there will be a warning message at the bottom of the **Playlist Editor** window.

When the real duration is longer, the message seems like this one:



19	The Matrix Reloaded_8Mb	17:31:18.18	00:01:18.18
Total Duration: 17:33:08.11		Difference: (+)05:33:08.11	

When the real duration is less than the planned one – the message is orange-colored:

16	SpiderMan_Trailer	02:27:34.17	00:00:30.00
17	SWAT - Trailer	02:28:06.07	00:01:40.00
Total Duration: 02:33:08.11		Difference: (-)09:26:51.14	

For **Frame rate** you can select the most used rates defining the **PAL/NTSC** format. The **Frame Rate** is important setting for the **Playout Server**. Set the proper **Frame Rate** so that the playlist duration is calculated correctly. Changing this setting is re-calculating the **Duration** of the clips (**Start Time** is changing also, as well as some other events prolonging).



Setting a **Channel** is already described above in the **Playout Server Settings**. Choose here for which of the channels the playlist is purposed.

**Metadata Template** is described in **Project -> Properties -> Playlist**. Here you specify which template will be applied for the current playlist so that metadata values will be sent to the playout software.

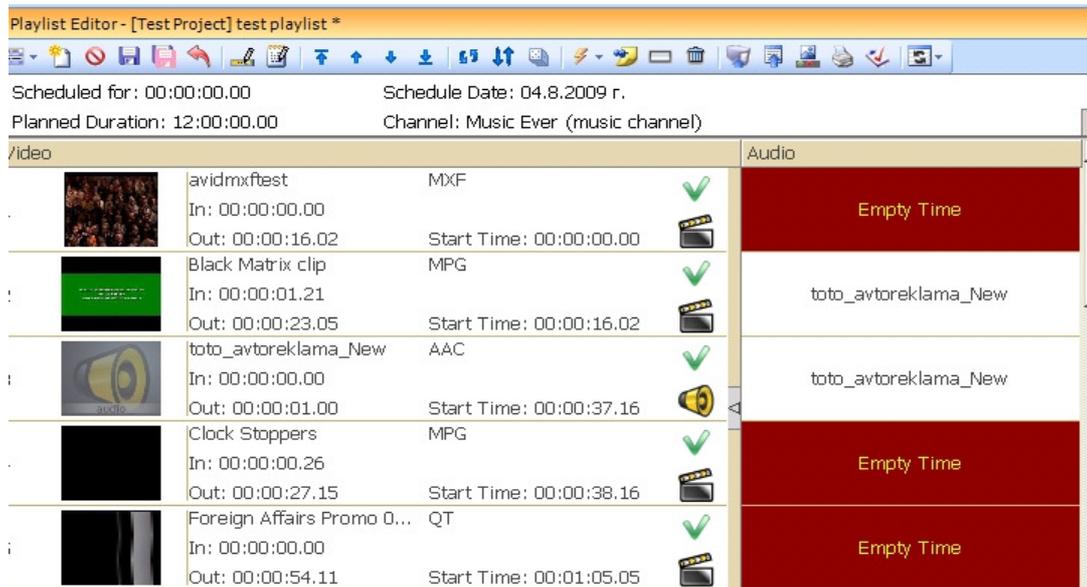
If a playlist is checked the **Play On Schedule** option, this means that the playlist will be saved physically (in the folder specified for this) as a **Daily Playlist**. The filename of the playlist will be like yyyy-mm-dd-hh-mm-ss.ply. This presents the year, month, date, hour, minutes and seconds when the playlist must automatically start playing. Set here the **Date** and the **Time** at which the playlist must be played and **Metus MAM** will do the correct **Daily Playlist** naming when saving the playlist in the specified for this location.

**NOTE!** Playlists are saved as **Daily playlists** only via realization process. Exporting a playlist in not observing the schedule information and exports the playlist with the name under which it is saved.

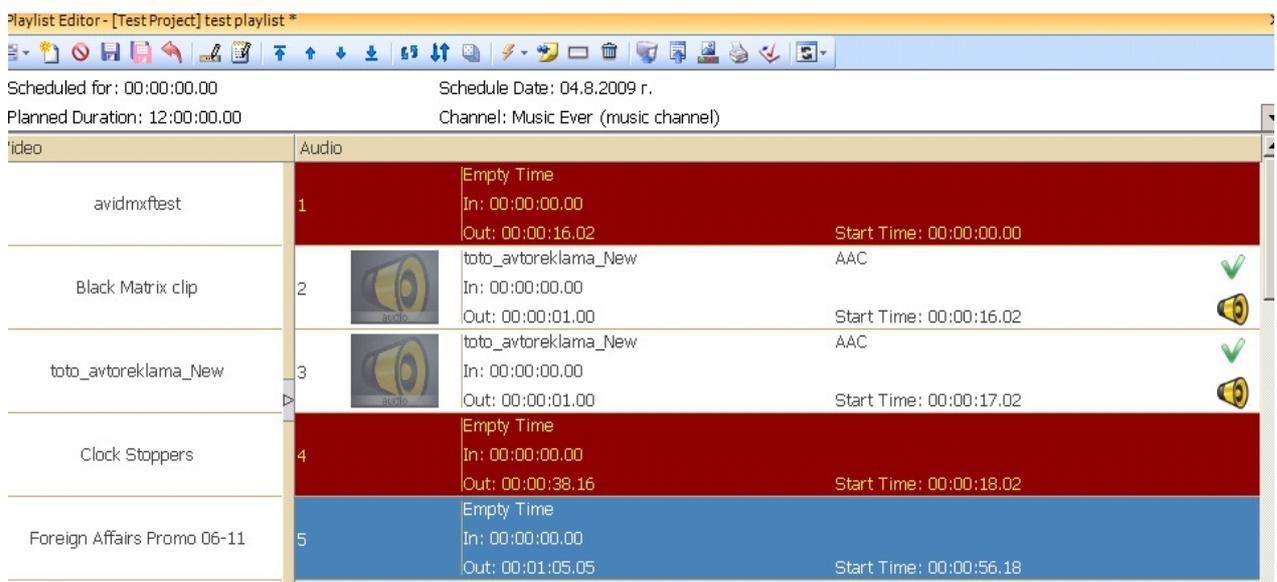
The **Loop Playlist** check ensures that in the broadcast program the playlist will be repeated again and again until stopped either manually or by any other automatic event. If you activate the check here, you will see it applied in the playout software, too.

**Enable Audio Tracks** is a **Metus MAM** internal option. It is to activate using additional tracks with audio during a video clip is running on. In result, the two audios will be mixed. To achieve this, first enable this check and then run the playlist in **Track View** mode. Drag and drop the additional audio track from the project. It is recommended the audio track to have the same duration as the video clip. The audio file must be placed on the right of the video clip it is supposed to be played with. Usually, when you drop an audio file here, it is placed as first audio track in the audio part of the playlist. To offset (move) it down, use the insertion of **Empty clip** and for each **Empty clip** set duration equal to the duration of the video clip it is being placed next to.

Example: If the playlist consists of 5 video files, and you want to add additional track to the 2<sup>nd</sup> and 3<sup>rd</sup> clip, then it will look like:



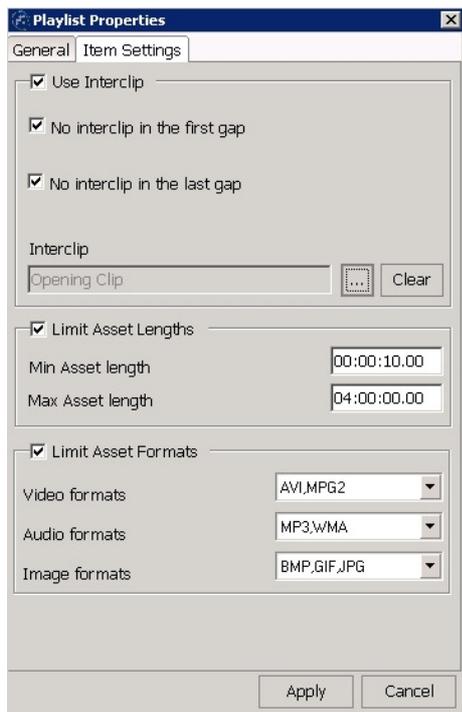
Use the arrow in the middle of the screen to switch between videos and audios playlist sections.



Please, note that the first video clip (avidmxftest.mxf) is long 16:02. The **Empty clip** next to it has the same duration.

If a channel is predefined **Tunnel** mode for accessing the files and this channel is selected for the currently opened playlist, this means that the **Playout Server** will play remotely the videos from the playlist. If you want for this selected channel and only for the currently opened playlist the files to be played locally, you have to **Push** the files to the **Playout Server**. Basically, this is a **Playout Server (Channel)** setting but there is a possibility in **Metus MAM** to **Push** the files for this playlist only. If you need so, apply the check **Push files** in the **Playlist Properties** dialog.

**NOTE!** **Push** files option will reflect only the **Playlist Realization** process. **Playlist Export** is not observing this check.



#### 4.19.2.2. Item Settings

In some workflows it is required the playlist to repeat one and the same clip after each playlist item. In such cases, the clip that must be repeated had to be set as **Interclip**. Browse in the project tree to select which clip will be the **Interclip** and apply the check **Use Interclip**. You can avoid displaying the **Interclip** between the first and the second playlist item (**No Interclip in the first gap**) as well as not using it between the last and the pre-last item (**No Interclip in the last gap**). Pressing the **Clear** button will ask you what to do with the **Interclip** included in the playlist – it can be deleted from all the places where been pasted in the playlist or turned to a normal clip and remains in the playlist as a normal clip after each item. No matter what is your choice, the selected **Interclip** will be removed from the field showing it (in this dialog here) and that field will get clean (empty).

In some broadcast systems it is not allowed to play videos shorter than some time (f.e.7 seconds). Long videos can cause playback troubles, too. Therefore some playout

software may require not using clips longer than (let say) 2 hours. This is called video files length limitation and it can be set in **Metus MAM** when creating playlists so that only proper items are included into them. The length of the assets included in the current playlist can be limited via the **Min Asset length** and/or **Max Asset length**. To make these settings be observed by **Metus MAM** do not forget to put the check **Limit Asset Length**.

There is a possibility to **Limit Asset Formats**, also. Press the check to activate this option and define allowable formats for video, audio and/or images.

After you configure the entire **Item Settings** dialog and press the **Apply** button, the system will pop out messages if assets with less/longer duration that the limited is met in the playlist and if non-desired format asset is included in the playlist. Such messages will be shown if you run the **Check Playlist** option, described above.

#### 4.19.3. Export Playlist

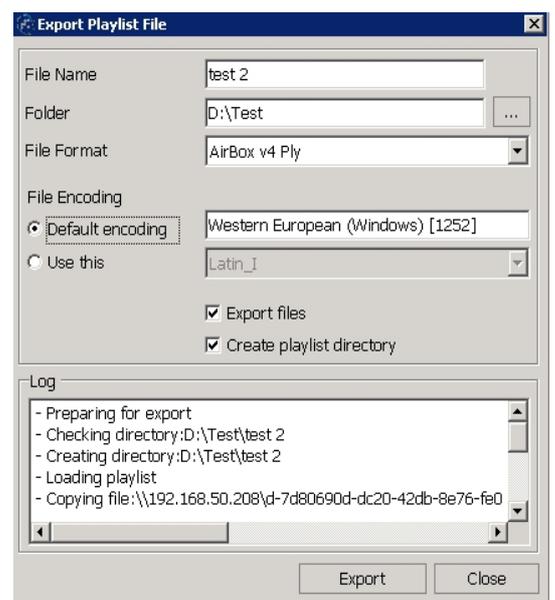
Exporting a playlist saves the playlist as a file in a folder specified for this, together (or not) with the clips which are included in that playlist.

The playlist will be saved as a file with **File Name** as set in the relevant field here (see the screenshot). Its format will be one of the supported – choose it from the drop-down menu. **Metus MAM** format saves the playlist as a file with extension \*.mpl.

- Metus Library v3
- AirBox v3
- AirBox v4 Ply**
- AirBox v4 XML
- FinalCutPro v4 XML

**AirBox** format saves files with extension \*.ply. For **Final Cut** you can save the playlist with \*.xml extension.

The place into which the playlist file will be saved is defined in the **Folder** field.



There are cases in which the metadata set in some language cannot be read by the broadcast program. To avoid problems like this one, **Metus MAM** provides the **File Encoding** option. It concerns the encoding of the playlist file. This encoding should be the same like the one set in the **Playlist Server** PC. Thus, the target PC can open and read correctly the content of the playlist (clip names, clip paths, metadata, etc.). If usually one and the same encoding is used – define it as a **Default encoding**. At any moment you can write into this field another encoding or choose encoding from the drop-down list available for **Use this** option.

As mentioned above, pushing files is an option that copies files during the playlist realization process. It is not concerning the playlist export. So, if you are exporting a playlist, but you need to copy the included files, also, activate the **Export files** check and the videos will be copied in the same **Folder** where the playlist is saved. In that same **Folder** you can create subfolders for each playlist (check **Create playlist directory**) or just leave everything to be saved into this **Folder** directly.

The **Log** window in the last section of the dialog shows the status of the files being exported. While **Metus MAM** is proceeding with the playlist saving and files copying the **Export** button stays inactive. When everything is completed it becomes active again. **Playlist Export** completes with a message window about this.

#### 4.19.4. Realize Playlist

Playlist realization is more complicated as it involves not only playlist export and files copying, but metadata extraction, as well as observing several **Playlist Server** predefined settings.

**Playlist Filename** displayed is the one that is used to **Save** the playlist with.

**Playlist Server** appears automatically as per the channel selected in the **Playlist Properties** dialog (channels are related to broadcast servers) or as per the **Playlist Server** which is set as default in **Project -> Properties -> Servers -> Playlist Servers**. However, you can re-target this playlist for another **Playlist Server**. Use the **Browse** button next to that field and choose another server from the **Playlist Servers** list.

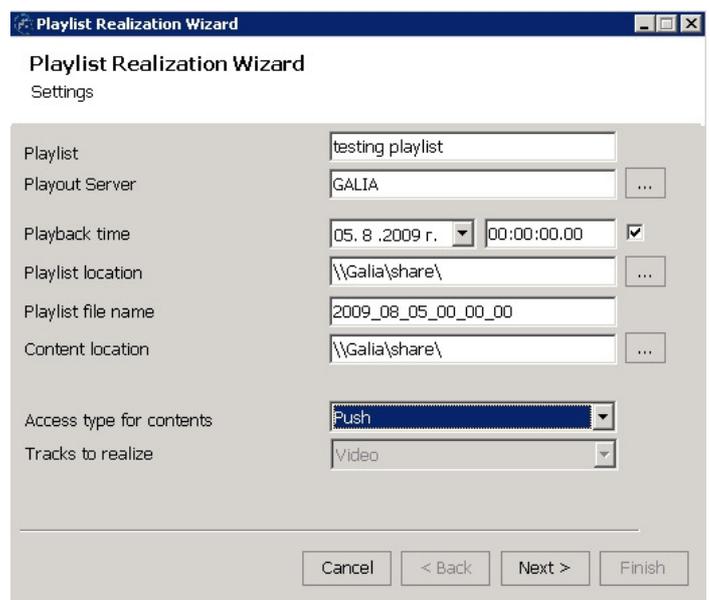
The **Playback time** is displayed here automatically if it is scheduled before that in the **Playlist Properties** dialog. If you

want to cancel that schedule, uncheck the option from here. And vice-versa: if a playlist is not scheduled you can do this from here – apply the check and set the **Date** and **Time** for the playback. Finally, if the schedule is activated, the **Playlist filename** field will display the filename with which this playlist will be saved, i.e. the **Daily Playlist** filename.

**Playlist location** is predefined in the **Playlist Server** settings. Same concerns the **Content location**.

**Access type for contents** is the one chosen for the selected **Playlist Server**. For the opened playlist it can be changed from the **Playlist Properties** dialog, as well as from the realization dialog, here. If the access type is turned to **Tunnel**, the **Content location** field will become inactive.

You can choose which playlist's **Tracks to realize** – it can be either only video or audio track or them together. If you had already defined these two sections in the **Playlist Editor**, it is most



reasonable to realize both the two tracks – for sure the audio part is included to additionally sound-screen the clip being broadcasted.



On the next window in the realization wizard some already known settings have to be defined – **Playlist Format** (described above) and **File Encoding** (described, too).

The check **Export Metadata** means that the metadata values applied in **Metus MAM** will be forwarded to the playout program fields. If you choose to **Export Metadata**, before that you must create a metadata template **in**

**Project -> Properties -> Playlist** (see above how to do this) and then apply this template in this **Playlist Properties** dialog (see in the relevant section above). If a metadata template is created and involved in the **Playlist Properties** dialog but the check here is not applied, then nothing (no metadata values) will be forwarded to the playout system.

The next dialog concerns **Prompters**. If text for prompter devices is going to be extracted, choose the relevant **Prompter Server** (pre-defined before that). **Prompter Servers** are explained above.

The next dialog is making **analysis** of the playlist – from here you can see which of the clips are offline, online, nearline (those on tape cartridges), which clips have been transcoded during the realization (transcoded to any of the **Specific Formats** for the **Playout Server** – if such are set).

The last window finishes the realization.

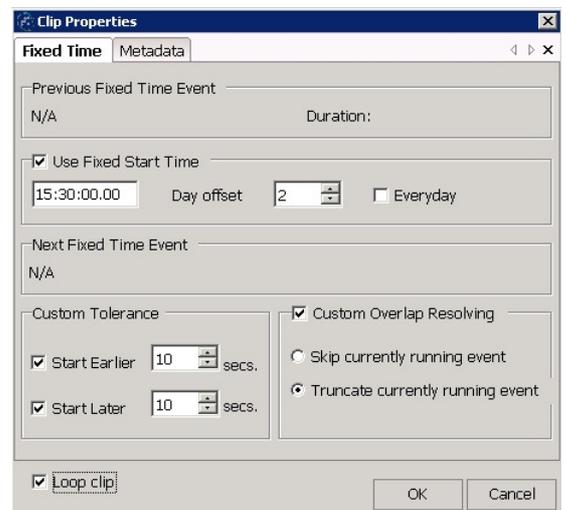
#### 4.19.5. Clip Properties

It is possible to configure the settings of a separate clip from its **Clip Properties** dialog which is opened from the item's context menu. Generally, the dialog is used to fix the time for which this clip should be played out. To specify exact time when the clip must start to be broadcasted, apply the check **Use Fixed Start Time** and enter the desired time here (hh:mm:ss.ms). If you need the file to be played in this time after two days then enter digit 2 in the Day offset field. If you need the clip to be played at this time each day, then activate the **Everyday** check.

In order not to stop the running of the previous clip and if it is not fatal to play this fixed clip several seconds later, apply the possible delay in the **Start Later** tolerance. Same concerns the **Start Earlier** tolerance – as the previous clip may be shorter.

However, there are cases when the previous item and this one may overlap more than the tolerance time (if such is defined). To resolve this conflict you can choose either to **Skip currently running event** or **Truncate currently running event**. In the first case the previous item will be ignored (skipped, not played) and during this time can be played a predefined auto-fill clip (all this depends on the playout software features). In the second case the clip will be stopped (interrupted) at the moment when the **Start time** for the current clip approaches.

To **Loop Clip** option is typical for the broadcast programs. **Metus MAM** gives you the possibility to apply the check even here – in the very first stage of playlist creation and then the check status will be forwarded to the playout software so that the clip is played again and again.



In the second tab of the **Clip Properties** dialog – **Metadata**, you can preview for the currently selected clip which values will be sent to the playout program according to the metadata template involved in the **Playlist Properties** dialog. Furthermore, you can enlarge the template definitions for this clip exactly – add more playout grid fields and relate them to the **Metus MAM** metadata fields and **Get the Metadata** to be sent to the **Playout Server**. All these changes – for this clip only.

#### 4.19.6. A Sample Playlist Creation Workflow

1. Edit the videos in the project and ensure that this is their last status – no needs for more changes and editing. Be sure that for each video that will be used in the playlist, the metadata needed to be displayed in the playout system, are applied. If needed, you can fine-tune some of the clips settings after that in the playlist via the **Viewer** application – select the clip and from its context menu choose **Edit Item**.

2. Define the settings for the **Playout Server** in **Project -> Properties -> Servers**.

3. Select the clips in the project and drag and drop them in the **Playlist Editor** area.

You can quickly create a playlist from all the assets in a **Bin** -> select the **Bin** in the project tree, right-click on it and choose either **Create a playlist from this bin** or **Create and realize playlist**. In the first scenario, a dialog opens to name the playlist and choose where to save it in the project tree. All the items list in the **Playlist Editor** and wait your next move. In the second scenario all this happens and after that the **Playlist Realize** dialog opens immediately so that you can proceed with the realization.

All the assets that are included in the playlist can be listed in the project area. If you want to see them like that, run **Menu -> Playlist -> List Used Assets**.

If you have marked clips selection but you want to select the items vice-versa, choose **Invert selection** from the context menu or from the **Menu -> Edit**.

To find the place of any clip in the project, select the clip, run the context menu and choose **Locate on Project**.

To adjust additional settings for a selected clip (fix time or parse the preview its metadata values) open its **Clip Properties** dialog from the item's context menu.

To remove any object(s) – select it (them) and press the **Delete** button on the keyboard or select the same command from the item's context menu.

4. If needed, **Add** more **Events** in the playlist.

5. **Save** the playlist in the project tree. Define its name.

6. In **Project -> Properties -> Playlist** create a metadata template to forward the metadata values.

7. In the **Playlist Editor** open the **Playlist Properties** window and approve the playlist. If needed, configure the other settings, too. Involve the metadata template, also.

8. Go to the **Playlist Realization** now. Choose on which **Playout Server** it will be loaded. Fine-tune the left settings, also. Run the realization and wait until it is finished.

9. Go to the **Playout Server** and check the files accessibility, is everything loaded correctly in the broadcast program, are the metadata there, etc.

#### 4.20. Action History

Launch the **Action History** window from the **Project menu**.

In this dialog some user-performed processes are displayed. This is helpful information for the Administrator to get known with the processes the different users had been executed in the currently opened project, i.e. this dialog reports to the Administrator what had been done by whom and when.

At first time opening the **Action History**, Metus MAM initially shows today's processes as default.

User name	Group	It.	Action	Da.	T	System Info
Marius Cistea	Item	34 tes...	Edit	25.8.20...	10:24	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Object edited.						
Marius Cistea	Item	34 tes...	Playlist Edit	25.8.20...	10:24	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Marius Cistea	Item	34 tes...	Playlist Export	25.8.20...	10:25	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
File Path:"\Gallia\share\34 test 1.ply", Format:AirBox_v4_Ply						
Marius Cistea	Item	34 tes...	Add	25.8.20...	10:25	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
New Playlist added.						
Marius Cistea	Item	34 tes...	Playlist Add	25.8.20...	10:25	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Marius Cistea	Item	GALLIA	Playout Server...	25.8.20...	10:31	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Marius Cistea	ProjectProperties	degrt	Edit	25.8.20...	10:31	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Marius Cistea	Search	degrt	Search (Advanc...	25.8.20...	10:32	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Realized Server ID Exact '1000320', Playlist State Exact '3'						
Marius Cistea	Search	degrt	Search (Advanc...	25.8.20...	10:32	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Realized Server ID Exact '1000320', Playlist State Exact '1'						
Marius Cistea	Search	degrt	Search (Advanc...	25.8.20...	10:32	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Realized Server ID Exact '1000320', Playlist State Exact '3'						
Marius Cistea	Search	degrt	Search (Advanc...	25.8.20...	10:32	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Realized Server ID Exact '1000320', Playlist State Exact '5'						
Marius Cistea	Search	degrt	Search (Advanc...	25.8.20...	10:32	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Realized Server ID Exact '1000320', Playlist State Exact '1'						
Marius Cistea	Search	degrt	Search (Advanc...	25.8.20...	10:33	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Realized Server ID Exact '1000320', Playlist State Exact '5'						
Marius Cistea	Search	degrt	Search (Advanc...	25.8.20...	10:33	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Realized Server ID Exact '1000320', Playlist State Exact '1'						
Marius Cistea	Search	degrt	Search (Advanc...	25.8.20...	10:33	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Realized Server ID Exact '1000320', Playlist State Exact '3'						
ILMUser	Search	degrt	Search (Advanc...	25.8.20...	10:51	METUS-SQL-METUS-SQL\Administrator: Metus Archive Server, 3.5.34
Kartug No Exact'..N/A..'						
Marius Cistea	ProjectProperties	degrt	Edit	25.8.20...	10:51	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Marius Cistea	Users And Groups	Mariu...	Login	25.8.20...	10:53	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Marius Cistea	ProjectProperties	degrt	Edit	25.8.20...	11:03	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Marius Cistea	Item	Termin...	Thumbnail Reg...	25.8.20...	11:03	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Marius Cistea	Item	Termin...	Metadata Edit	25.8.20...	11:04	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Metadata Edited						
Marius Cistea	ProjectProperties	degrt	Edit	25.8.20...	11:04	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Marius Cistea	Item	Termin...	Metadata Edit	25.8.20...	11:05	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Metadata Edited						
Marius Cistea	Item	Termin...	Metadata Edit	25.8.20...	11:05	METUS-SQL-METUS-SQL\Administrator: Metus Library 3.5, 3.5.34
Metadata Edited						

The upper part of the dialog is the section to define the filter criteria.

At the bottom of the window you can see the total number of the processes performed in the project as well as the number of the listed ones (filtered). There are arrows to navigate between the pages when the list is too long (500 rows per page).

The middle part is listing the results. In different columns you can see the **Username** of the person, the **Date** and **Time** he had run the action. This action is seen in the **Group** column – what had been undertaken. And the next column – **Item** – displays the name of the object (playlist, project, asset) over which the action was executed. Each column provides additional filter options (use the column's drop-down arrow to filter by any of the values in the column). Thus, the listed results number will be decreased (when needed).

Search processes can also be listed in the **Action History**, if this is set in **Project -> Properties -> Others -> Save Search Criteria to Action History**.

To list all the processes run for this project, just select **No filter** from the **Filter** field.

**NOTE!** In a long-term project, there may be a lot of process performed. All-processes-listing operation may take a longer time and even cause your computer not to respond for a while.

In the list every row has its second row (“sub row”) with description of the action. The **Action History** window can be filtered by this row, also. Select **Description** in the **Filter** field. Type the value in the next field or only a part of the description and then press the **OK** button.

You can list the processes by date. To list processes for a certain date, select **Date** in **Filter** fields and then the “=” mark. After that, select the date from the calendar provided in the next field. If you want to preview processes run before or after some date, use the “>” and “<” signs. Keep in mind that the processes, which are executed on the date entered in the criterion, will not be listed.

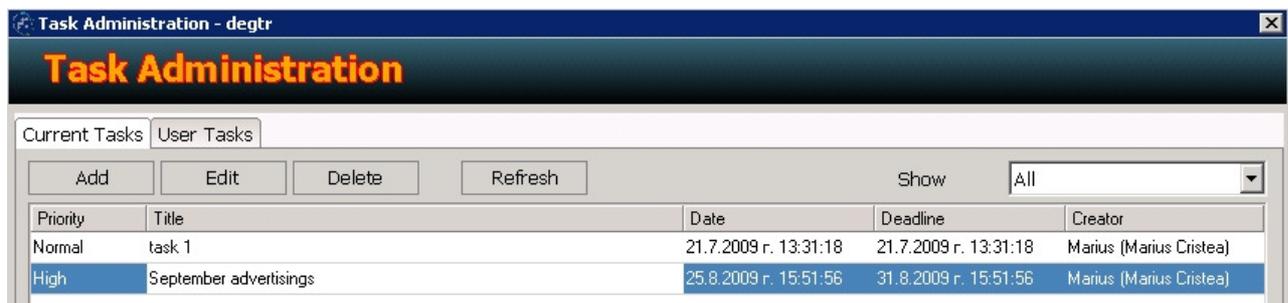
Listed processes can be deleted by selecting them and then using the **Delete** from the context menu or the same button from the keyboard.

#### 4.21. Task Administration

In **Metus MAM**, a task manager can assign various tasks to other users. Users get a warning message when tasks are assigned. The project manager can monitor if the tasks are performed or not.

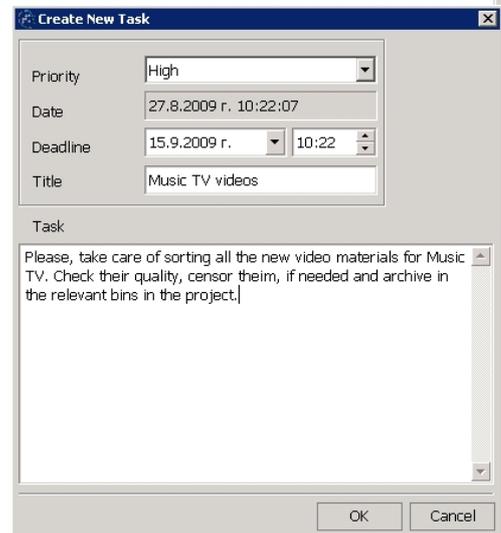
Run the **Task Administration** option from the **Project** menu.

The window is presented in two tabs – **Current Tasks** and **User Tasks**.



The upper part of the first tab displays all the tasks being added – use the **Edit** button to preview and change any selected task’s settings. The **Delete** button will erase selected task(s). Use the **Show** filter to display either only the **Expired Tasks** (deadline is past) or **Current Tasks** (still running period). By default **All** the tasks are shown in the list.

To create a new task, press the **Add** button – the **Create New Task** dialog opens. Set the **Priority** for the task (**Low**, **Normal** or **High**). Define the last date and time for the task completion in the **Deadline** fields. Then type the description of what must be done in **Task**.



Finally, press the **OK** button and this task will be added to the tasks list.

Select any of the tasks in the list and see below to which users this task is assigned.

In the left half are listed all the users. In the right part are displayed the users to which the selected task is assigned.



To assign the task to some users, use the first double- arrow button in the middle of the dialog: select the user from the left part and press the button – the user will be added in the right part, i.e. this task is already assigned to him, too. In case you want to un-assign the task for some person, select him from the right part and press the second double-arrow button. The person will be not involved into this task execution anymore.

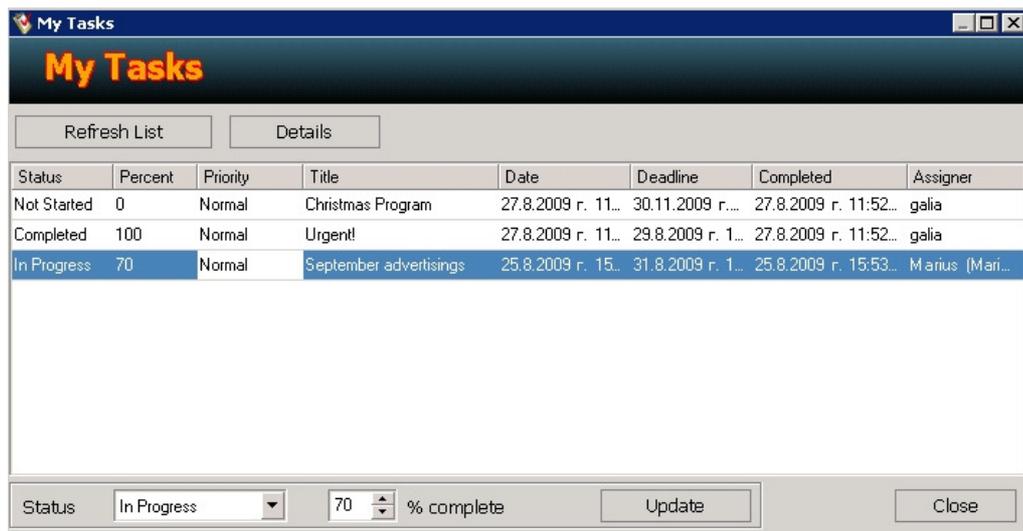
In the **User Tasks** tab are listed all the users – select any of them and on left will be listed all the tasks assigned to this user. Double-click the task-row and all the **Details** about this task will be displayed in a window. The most important is **Status** – from here the Administrator understands how much percents of the task had been executed until this moment. This status is being updated by the person running the task from **My Task** dialog.

If you want to assign more tasks to the selected user, press the **Assign New** task button – a dialog opens – it shows all the tasks which are still not assigned to this person. Choose task(s) and confirm this with **OK**.

To cancel somebody be responsible for any task(s), select the person from the right part – his assigned tasks will be listed on left. Select some task(s) and press the **Remove Task** button below. This person will not be involved into this task’s running anymore.

**NOTE!** The **Task Administration** dialog can be opened only by people with **Full Control** rights only!

Every project user can monitor his assigned tasks from **View -> My Tasks**.



This dialog displays the tasks assigned only to the user who is logged currently in the project. He can select the task and report in percents the status of the task completion. If the percent = 0, then the **Status** becomes **Not started**. If it is =100, the **Status** is **Completed**. When the percent is bigger than 0 and less than 100 (0<percent<100), then the task is reported as being **In Progress**.

This is the **Status** which the project administrator is interested about and takes info from the **Task Administration** dialog, **User Tasks** tab.

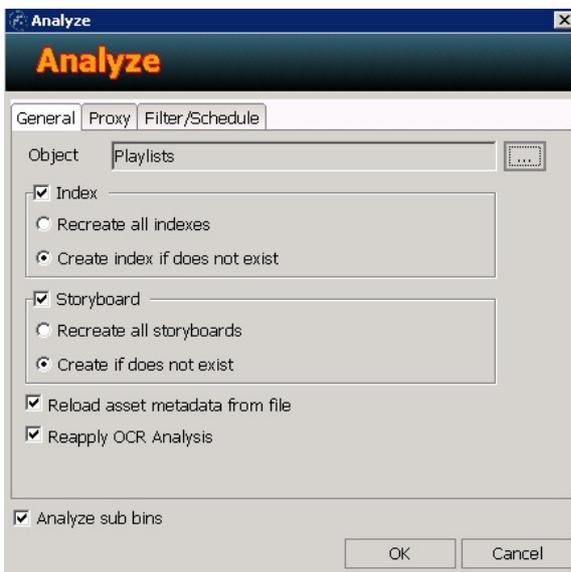
When applying the percent, use the **Update** button next to that field to refresh the value in the list.

#### 4.22. Analyze Process and Scheduled Tasks

**Storyboard**, **Proxy** and **Index** creation process can be automated. They can be run during the archival of the projects (define this in the **Archiving Options** dialog). But even though, in some workflows some of the objects may miss creation of any of these. Running these processes for each object separately is taking time and efforts and furthermore, some objects may be skipped.

To avoid this, **Metus MAM** provides the **Analyze** feature – the user defines in a dialog which of these processes to be executed, when and for which bins.

The mentioned processes can be run for a separate bin from its context menu. Select a bin in the project tree – the **Analyze** dialog opens. It is divided in three tabs – **General**, **Proxy** and **Filter/Schedule**.



The **General** tab is defining settings for automating the processes of **Storyboard** and **Index** creation.

The **Object** field displays the bin that had been selected – for this bin the processes will be run. You can change it with another bin from the project tree – use the browse button to navigate in the project tree and choose another bin.

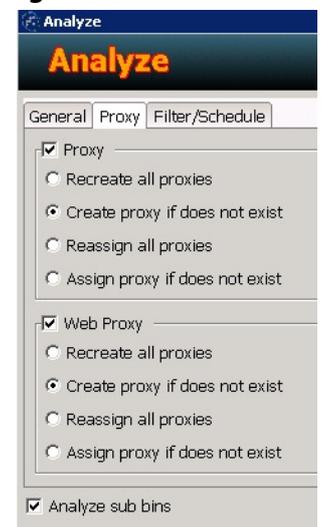
The **Analyze** dialog may be opened from the **Tools** menu, also. If you open it from here (**Tools -> Add Analyze Job**) the **Object** field will be empty (as the dialog is not invoked from any bin's context menu). So, if somehow you forget to point a bin into this field, when you start the **Analyze** option, **Metus MAM** will give out a message that no object has

been selected. In such cases go back to that section here and define the bin to be analyzed.

**Reload asset metadata from file** – It is the same as an asset's **right click->Metadata->Regenerate**. It extracts from the file such metadata as file size, video duration, resolution, tags, etc. All of them are file-based metadata. The user can run these functions in cases when these kinds of metadata cannot be extracted from the file – this can be due to some reasons like getting metadata from a file may be system-dependent; when the machine cannot get info but the other one can get it successfully (because of missing codec), etc.

**Reapply OCR Analysis** – Runs again the OCR text-extraction option over all the assets included into this bin.

**Analyze sub bin** – The bins which are included in this one will also be observing this analyzing feature – whatever is defined in the **Analyze** dialog will affect these sub bins, too.



The second tab – **Proxy** – defines the settings for automating the proxy and web proxy (still not supported) creation process.

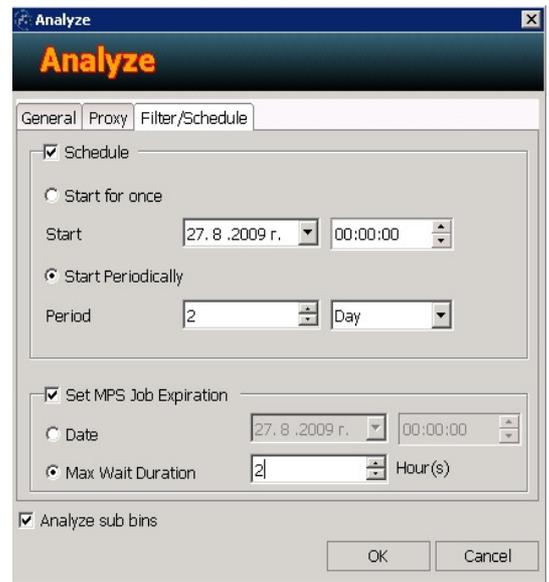
The last tab – **Filter/Schedule** is the section into which must be defined date and time for starting execution of the armed processes.

In the **Schedule** part configure how the process to be run – **Start for once** only (set date and time, if so) or run the process in some intervals of time – **Start Periodically**. If you select the second option you can determine the execution period – on each 2 **hours** (example); on each second **day** or on each 2 weeks (if **weekly** is selected next to the digit 2).

**Set MPS Job Expiration** - It is the expiration time of a task which cannot be executed until the end, due to some external reasons (f.e. folder right-permissions, etc).

**Example:** Let say in a company proxies are usually created at night when the system is idle. The operators cannot estimate the exact time when all the jobs will be finished. So, they define an expiration **date** or **time** for this, which means that if the task is not completed until this moment it will be canceled, at all.

The **Analyze** option can be invoked from the **Tools** menu, as well. Once, it can be run from the **Add Analyze Job** menu, on other hand – a list with scheduled tasks can be created in **Tools -> Scheduled Jobs**. To create a new task into this dialog, you have to press the **Add** button, which will open again the **Analyze** dialog. The difference is that from here you schedule different tasks for different bins for different time and you can see all of them in one list in the **Scheduled Jobs** window.



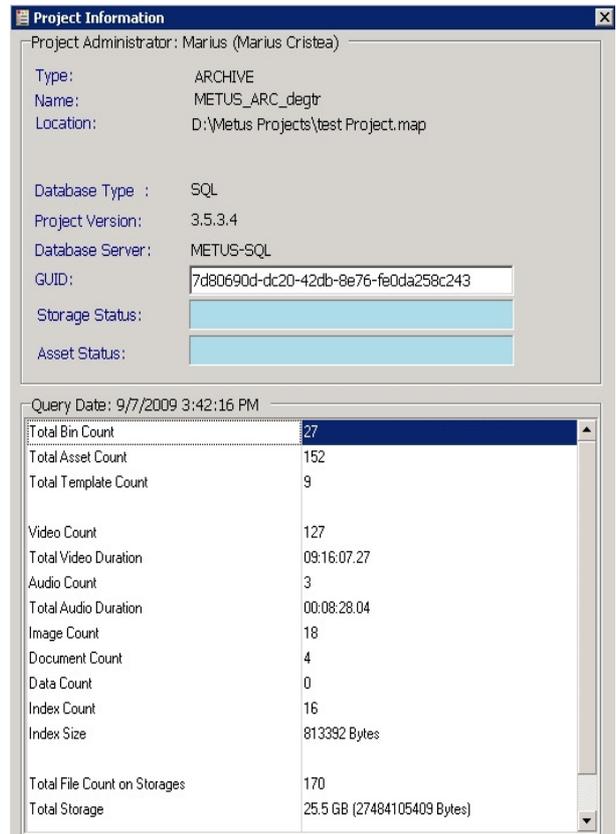
#### 4.23. Project Information

The most important project details are gathered into one dialog. This dialog is named **Project Information**. Run it from the **Project** menu.

In the upper section it is written the name of the **Project Administrator**. Then the **Name** of the project; its **Type** and **Location**; the **Database Type** used (*SQL* or *Oracle*), the **Project Version** and the **GUID**. The **GUID** is the unique name of the folder into which this projects archives the objects. This folder is usually hidden and secured by Windows. It is not accessible, by default and it is not recommended to enter it. The folder is placed on one of the disks/drives left as **Active** in the **Archive Servers** configuration.

Next to the **Database Type** an **Update** icon is blinking non-stop when a **Metus MAM** update is made – this requires update of the database. Therefore, the system is reminding this from here – update the database and its status before you go on working with this project. For more details see Appendix 7.

Take a look at the screenshot to get an idea of what information else can be monitored on this window.



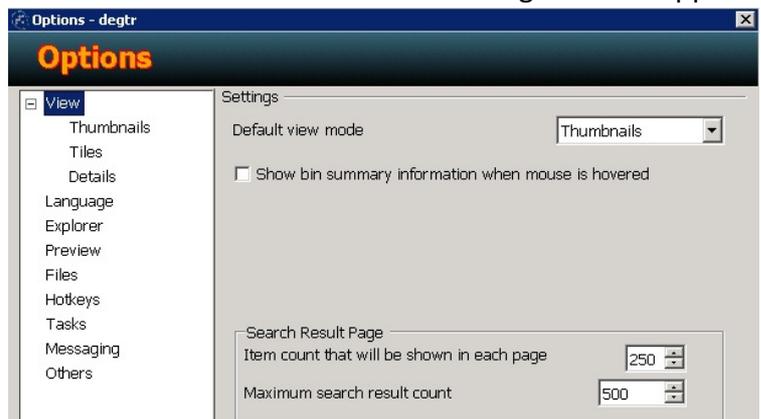
#### 4.24. Options

The **Options** dialog can be invoked from the **Tools** menu. A lot of settings can be applied from here, all of them concerning different project issues.

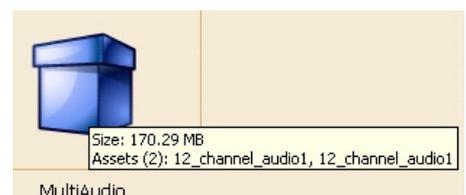
##### 4.24.1. View

From here you can define the:

- **Default view mode** for the asset icons to be displayed in the project area – choose between **Thumbnails**, **Tiles** and **Details** – all they are explained above in the manual.



- **Show bin summary when mouse is hovered** – if checked, **Metus MAM** will display in a hint some basic bin summary (bin size and the names of the included assets) when sliding the mouse over the bin – this is not concerning the bins in the project tree but the bins in the project work area – the right part.



- **Options -> View** is the dialog from which the **Search Results Page** settings can be defined: **Item count that will be shown in each page** (the number of the listed resulting assets per page) and **Maximum search result count** – as less number you define here, as less work the servers will have to do and quicker the results will be listed.

#### 4.24.2. Thumbnails

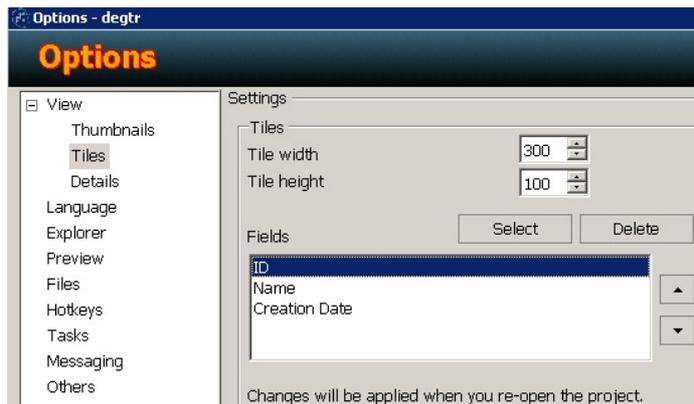
In this section we configure some settings purposed for the interface when running in **Thumbnails** mode.

- **Thumbnails width** presents in pixels the long side of the asset thumbnails. The other side (the height) is changing proportionally, i.e. this is the place from where the thumbnails size can be changed.



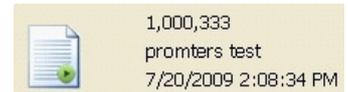
- **Popularity Threshold** specifies the minimum value of the **Popularity Index**, measuring how much the asset will be considered as popular. The less the value, the more the assets will be considered as popular. The **Popular Index** is between 0-100 and is calculated by using the **View Count** and the **Retrieve Count** properties of an asset.

#### 4.24.3. Tiles



- In the first section set the **Tile width** and **Tile height** – generally, this is the space over which the **Tiles** info will be displayed. This info is defined in the next setting.

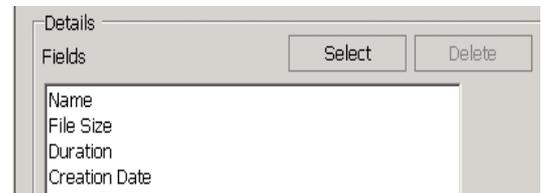
- **Fields** - Define from here which metadata fields' values to be displayed over the assets icons when they are presented in **Tiles** mode. To choose the



metadata field, open the metadata tree with the **Select** button. Use the next button – **Delete** – to remove a field from the list and the value of this field will not be displayed anymore over the asset icon (when in **Tile** mode).

#### 4.24.4. Details

Same like in **Tile** mode – define here from which fields the values to be taken.



**NOTE!** After applying settings both in **Tiles** and/or **Details** window, restart the project so that the changes take effect!

#### 4.24.5. Language

Here you select which one to be the default language into which the interface will be displayed. **Metus MAM** is translated in **Turkish, Russian** and **Bulgarian**. You can have the software running in any of these languages. Select the relevant language from this menu and then restart the application so that this change takes effect.



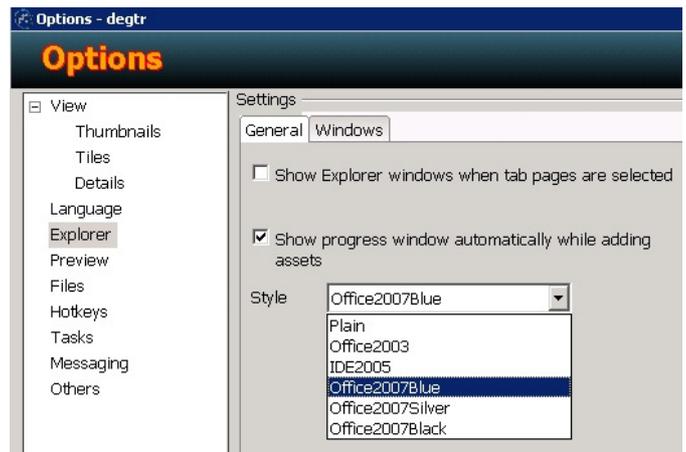
#### 4.24.6. Explorer

##### 4.24.6.1. General tab

- **Show Explorer windows when tab pages are selected** - When this option is checked and you switch between several opened projects, the upper left part of the interface will always show the **Project Explorer** tab opened, no matter which tab was left opened there before the switching.

- **Show Progress window automatically while adding assets** - When **Metus MAM** starts archiving items, the interface will automatically launch the **Progress Status** tab preview, no matter which tab had been opened until this moment. This is convenient so that you can see in a simple list the status of all the loaded and running processes.

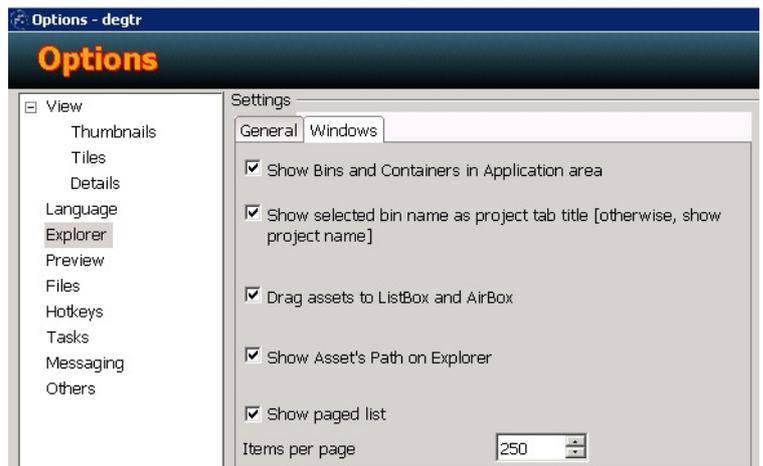
- **Style** - From the drop-down menu select a preset for the interface display - colors, layout and fonts are pre-coded there. Try the presets to see how the interface is changing.



- **Style** - From the drop-down menu select a preset for the interface display - colors, layout and fonts are pre-coded there. Try the presets to see how the interface is changing.

##### 4.24.6.2. Windows tab

- **Show Bins and Containers in Application area** - If unchecked, the project work area (the right upper part of the interface) will display only the assets included in the bin selected on left (in the project tree). If the selected bin does not include assets but only sub bins, the application area on left will be empty - nothing will be displayed. If the selected bin contains sub bins and assets - only the assets will be shown.

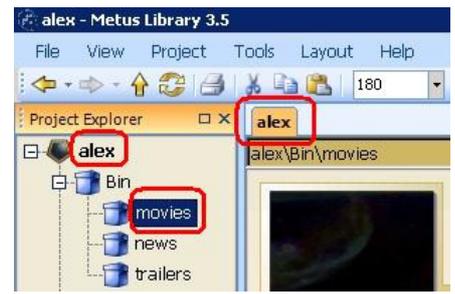


- **Show selected bin name as project tab title (otherwise, show project name)** – this is a self-explanatory feature. See the example from the screenshots, as well.



On the first picture the option is checked and the tab is named after the bin selected in the project tree.

On the second picture the option is not checked and the tab is named always after the project name – no matter



which bin is selected, i.e. the tab will always display the project name.

- **Drag assets to ListBox and AirBox** – Check the option so that drag-n-dropping assets to **ListBox/AirBox** grids will be possible.

**NOTE!** As of now (build 34 released) drag-n-dropping from **Metus MAM** to **AirBox** is not sending the metadata values - in the **PlayBox** grids only the items are dropped with their paths, duration and filename (title). The descriptive metadata are not forwarded (this can be done via the playlist realization, described above).



- **Show Asset's Path on Explorer** – This one is a self-explanatory, too. See the screenshots again. On the first one the option is checked and the explorer opens a section into which the asset's path is displayed. On the second screenshot the option is not checked.

If you select a bin in the project tree, its place in the bin (the path) will be displayed here, as well.

**NOTE!** When toggle the status of this check, you need to restart **Metus MAM** so that the change takes effect (or just close and open the project again).



- **Show paged list** – When the items are too much and you do not like scrolling up and down into one and the same page you can make the assets to be displayed in pages. If so, check this option and define how much assets (items) to be displayed on each page – enter this into the **Items per page** field.

#### 4.24.7. Preview

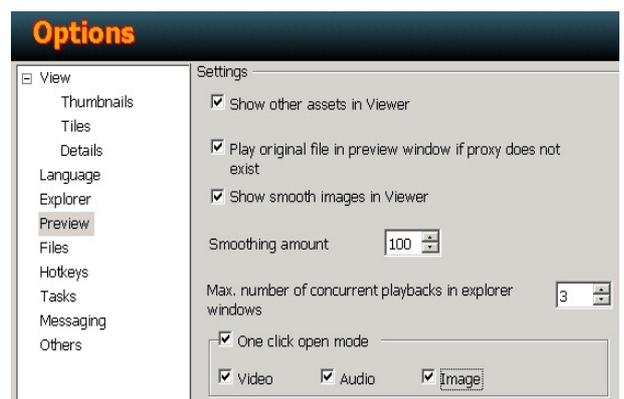
- **Show other assets in Viewer** – if the option is checked, when you preview an asset in the **Viewer**, **Metus MAM** will list in the **Mini Browser** the other assets from the same bin, too.

- **Play original file in preview window if proxy does not exist** – this one is self-explanatory.

- **Show smooth images in Viewer** – this option is smoothing the images when they are loaded for preview, trying to erase the deep color difference and contrast between different color lines and zones. As bigger **Smoothing amount** you select as smoother the image will be.

“Limitation for simultaneous playback within Explorer windows”: Sets the number of assets to be played simultaneously during Item Play.

“One click open mode”: Enables assets of selected type to be opened by one clicking.



#### 4.24.8. Files

“Show system driver in folder explorer”: System driver is not shown in folder explorer as default. With this option, disk (system disk) the operating system is installed on is viewed in folder explorer.

“Cache File Objects”: Enables files objects to be cached. Specified number of file objects are cached.

#### 4.24.9. Hotkeys

“Changing a Shortcut Assigned to an Operation”: Select a command from command list on left. Press on desired key combination. Assign shortcut key with “Assign” button.

“Removing a Shortcut Assigned to an Operation”: Select a command from command list on left. Shortcut keys assigned to that operation are listed in ‘Effective Keys’ list on right. Select shortcut key combination to be deleted from ‘Effective Keys’ list. Remove shortcut key with “Remove” button.

“Canceling Made Changes”: “Reset” button cancels all changes made and restores previous settings.

“Resetting to Default Settings”: “Defaults” button returns the program to initial settings.

#### 4.24.10. Taks

You can use this to set warnings of Metus MAM when a task is assigned to a user.

“Refresh Task List when Task is assigned”: When a new task is assigned to user, ‘My Tasks’ list is refreshed automatically.

“Show Warning Window when Task is assigned”: A little warning window appears on bottom right. Appearance time is adjustable.

“Animate warning window”: Shows warning window with selected animation.

“Play Sound”: Selected sound file is played. Sound file can be selected by clicking button on right. You can only select .wav files.

#### 4.24.11. Messaging

Responds of program are adjustable when a message incomes.

“Show message window automatically”: With this option, when a message incomes message window opens if closed, and bring to front if not.

“Play Sound”: With this option, selected sound file is played when message comes. Sound file to be played can be changed with button next to file name.

**Note:** Only .wav files can be selected.

#### 4.24.12. Others

### 4.13. OCR (Optional, please check your license)

OCR stands for Optical Character Recognition. When a picture is added to Metus as an asset, texts parts on picture is scanned and converted to text, and these texts are added to metadata fields by OCR feature.

To use OCR feature, OCR settings must be configured. When “Bin Properties” from Bin context menu is selected, “Use Customized OCR settings” option below of window must be checked. You can configure the settings on “OCR settings” window by clicking [...] button next to this.

“Text Language”: defines the language of text on picture.

“Text Type”: defines how text is written.

Probable values;

- Normal: normal text
- Gothic: figurative text
- Handprinted: manuscript
- Index:
- Dot Matrix: print out of dot matrix printer
- Type Writer: type writer text
- Magnetic Ink E13B
- Magnetic Ink CMC7
- OCR A
- OCR B

**4.13.1. Metadata Field:** The Metus field into which content on picture to be moved. Content info field comes as default. Any field can be selected as desired.

Following are options to take the text faster and as desired;

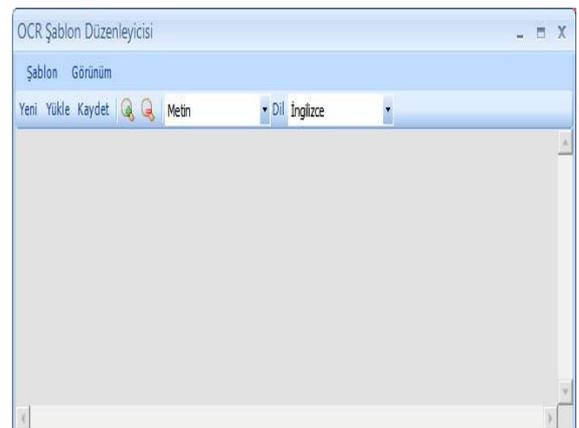
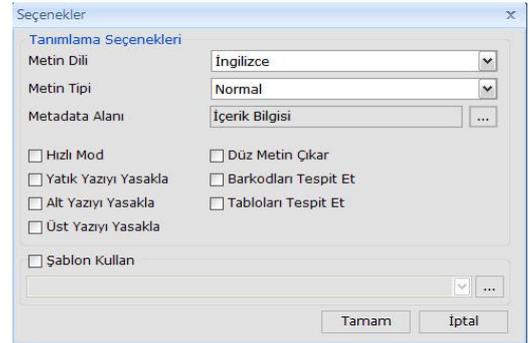
- “Fast Mode”: Not for analyzing deeply. Scan text once and doesn’t analyze. Normally, OCR scans the text and corrects errors by repeating 2 or 3 times more. This mode is 2,5 times faster. But error ratio is higher.

- “Forbid italic text”: ignores italic text.
- “Forbid subscript”: ignores subscripts.
- “Forbid superscript”: ignores superscript.
- “Retrieve Plain Text”: retrieves whole text in picture.

- “Determine barcodes”: retrieves barcodes.

- “Determine tables”: scans text in picture as tables or bullets, namely as is.

- “Use Template”: a template can be selected if any defined before. Creating Template will be discussed on next section.



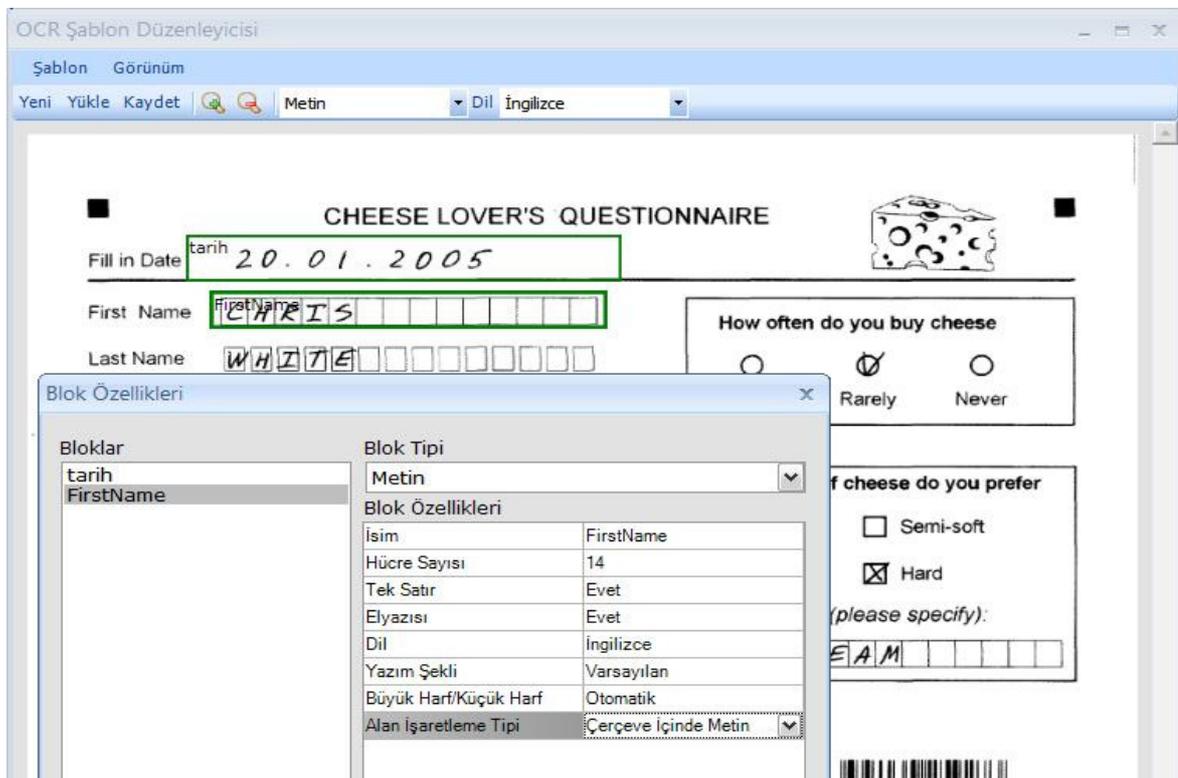
#### 4.13.2. Creating Template:

Open template layout tool from Tools -> OCR Template layout menu.

Template in that window can be loaded and edited as well as a new template can be created. To create a new template click "New" button and load reference picture (form etc.).

Choose any block in picture then right click on block and click Block Properties, Block Properties window appears. All block in picture are listed on left. Properties of selected block are listed on right.

- "Name": name of block
- "Number of cells": number of cells the text consists of (analyzing will be faster if this number is specified. For example; number is 10 as dd.mm.yyyy şeklinde 10 dur)
- "Single Row": if text is single row or not
- "Handwriting": if text is handwriting or not
- "Language": text language
- "Writing style" :
- "Uppercase/Lowercase":
- "Field Marking Type":
  - Basic Text:
  - Underlined Text
  - Framed Text
  - Grey Boxes
  - Character box series
  - Quoted
  - Quoted frame
  - Partial frame



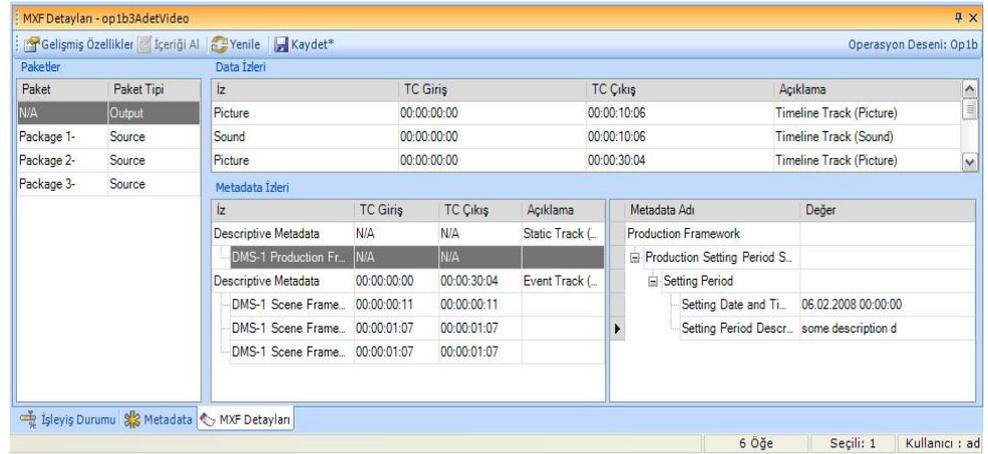
**4.18. MXF (Optional, please check your license)** This feature enables acquiring MXF formatted video or audio media into Metus MAM and makes some modifications possible on these files.

MXF file is container type. Along these files there may be multiple video and audio files at the same time. Also there can be user defined information (metadata) for any of these video and audio files or for a specific scene.

For now, Metus MAM supports only Op1a, Op1b and OpAtom patterns as well as GXF patterns along MXF designing patterns.

MXF can be added, played, trimmed (a part in file can be cut) as same way with other normal files as asset.

There is also a window named “MXF Details” containing other information about MXF. When you click on any mxf asset in project, mxf details specific to that mxf asset will be displayed on mxf details window. This window contains the following information.



**“Advanced Properties”:** In MXF details window, click “Advanced Properties” from tools, a window containing all metadata on selected mxf asset. This window contains the file history that lists all information and changes.

**“Take Content”:** Mxf file may contain more than one audio and video. These audio or videos are listed on “Data Traces” section. From the selected mxf file, you can take any file in source packs. First, select a pack that of “Source” type to take contents. Pack contents are listed in “Data Traces” on right. Select any trace from data traces and click “take contents” button. Name the file after selection of target you want to save file into and click Save in Save File window. Thus Metus saves the file with name and in place you set.

**“Refresh”:** When you click “Refresh” button, file is analyzed and contents are listed again. Normally when navigating on mxf asset, Metus memorizes this asset’s contents to temporary memory, doesn’t analyze the file and take contents each time, this procedure is performed only first time and transfer to a list with asset info. To clear this list, press Ctrl key and click “Refresh” at the same time. Only clicking Refresh causes selected asset info to be refreshed. This list is cleared when application closed.

**“Save”:** With any change on mxf asset Save button is enabled and an asterisk (\*) next to it. Click this button to save changes on file.

**“Operation Pattern”:** indicates operation pattern of selected mxf asset.

**“Packets”:** Each packet symbolizes a timeline in Mxf. Packets have traces such as video, audio, data traces on timeline. Packet name and type is listed in Packets list. Typically there are multiple source, Input (source) packets and a single Output packet.

**“Data Traces”:** Traces included in packet are listed on this list. These traces represent each file in mxf file. There are name of each permission, Timecode input and output.

**“Metadata traces”:** Metadata traces are used to add metadata to mxf files. Multiple metadata traces can be added to a packet. Metadata are not added to metadata traces directly. They are added to metadata segments on metadata traces. It is possible to add multiple metadata segments inside a metadata trace. There are 3 types of metadata trace on Mxf; Static, Event and Timeline. Also there are 3 types of segments; Production Framework, Clip Framework and Scene Framework.

When clicking segments under metadata trace, metadata in that segment is listed on right. User can add new metadata or delete the existing ones. When right clicking on metadata section, metadata addition and deletion menus appear.

User also can add new metadata trace or segment, or delete existing.

