

USER GUIDE

Etere
a consistent system

VIACOM SINGAPORE

A step-by-step guide to
the management of:

MUSIC CLIPS

VIACOM

February 2014



Change Log

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INTRODUCTION

VIACOM Inc., short for "Video & Audio Communications", is an American global mass media company, the world's fourth-largest. The current company owns Viacom International, which is the formal owner of copyrights of Viacom's corporate website and its cable networks.

Comprising BET Networks, MTV Networks, and Paramount Pictures, **VIACOM** operates approximately 170 networks reaching more than 600 million subscribers in 160 countries. **VIACOM** has a strong focus on its own in-house productions which is made for its various networks including **Comedy Central, Logo, BET, Spike, TV Land, Nick at Nite, Nickelodeon, TeenNick, Nicktoons., Nick Jr., MTV, VH1, MTV2, Tr3s, CMT, Palladia.**

ETERE provides **VIACOM** with an Etere MERP solution able to manage the entire media activity of the company -from initial acquisition to the final delivery- under a centralized and integrated workflow. A set of tailored workflows will permit operators to track every single step of the media management process while giving them the tools and functions required to reach the maximum of efficiency and reliability.

A centralized and comprehensive digital archiving system based on **ETERE** will be used to convert and manage **VIACOM's** digital content and distribute to its Asian networks. The use of MERP workflow-based technology will permit **VIACOM** to significantly improve its media management by introducing on it the use of a series of enterprise capabilities including:

MERP capabilities:

- Intelligent and tailored workflows which faithfully reflects company activities
- Clear abstraction of tasks with custom actions, results, roles and rights
- Detailed logging and monitoring of all manual and automatic tasks
- Scalability for including more custom workflows and tasks at any time

This paper is aimed to provide **VIACOM** departments with the guidelines required to start using the **new media management workflow** and all the features seamlessly integrated on it, thus permitting them to leverage the improvements performed on the overall management by including key operations such as task assignments, operations tracking, email notifications, automatic transfers, accurate conversions.

The content management, from acquisition to delivery, stands on a set of **file-based workflows** accurately designed to perform automatic operations and take operators through their assigned tasks. **VIACOM Singapore** is in charge of acquiring and localizing media content for **all VIACOM channels** in the Asian market, the media management takes place in the VIACOM's Singapore office whereas media playout is externally performed by **ENCOMPASS** which also archive videotapes and pre-archive transmission files.

The system will manage content stored in the archived with the following characteristics:

<u>CODEC</u>	<u>Description</u>
IMX50 SD PAL	Used to archive SD content
XDCAM HD PAL	Used to archive HD content

<u>LANGUAGE</u>
English (US)
Malaysia (Bahasa)
Indonesia (Bahasa)
Thai
Simplified Chinese (Mandarin)
Japanese
Hindi

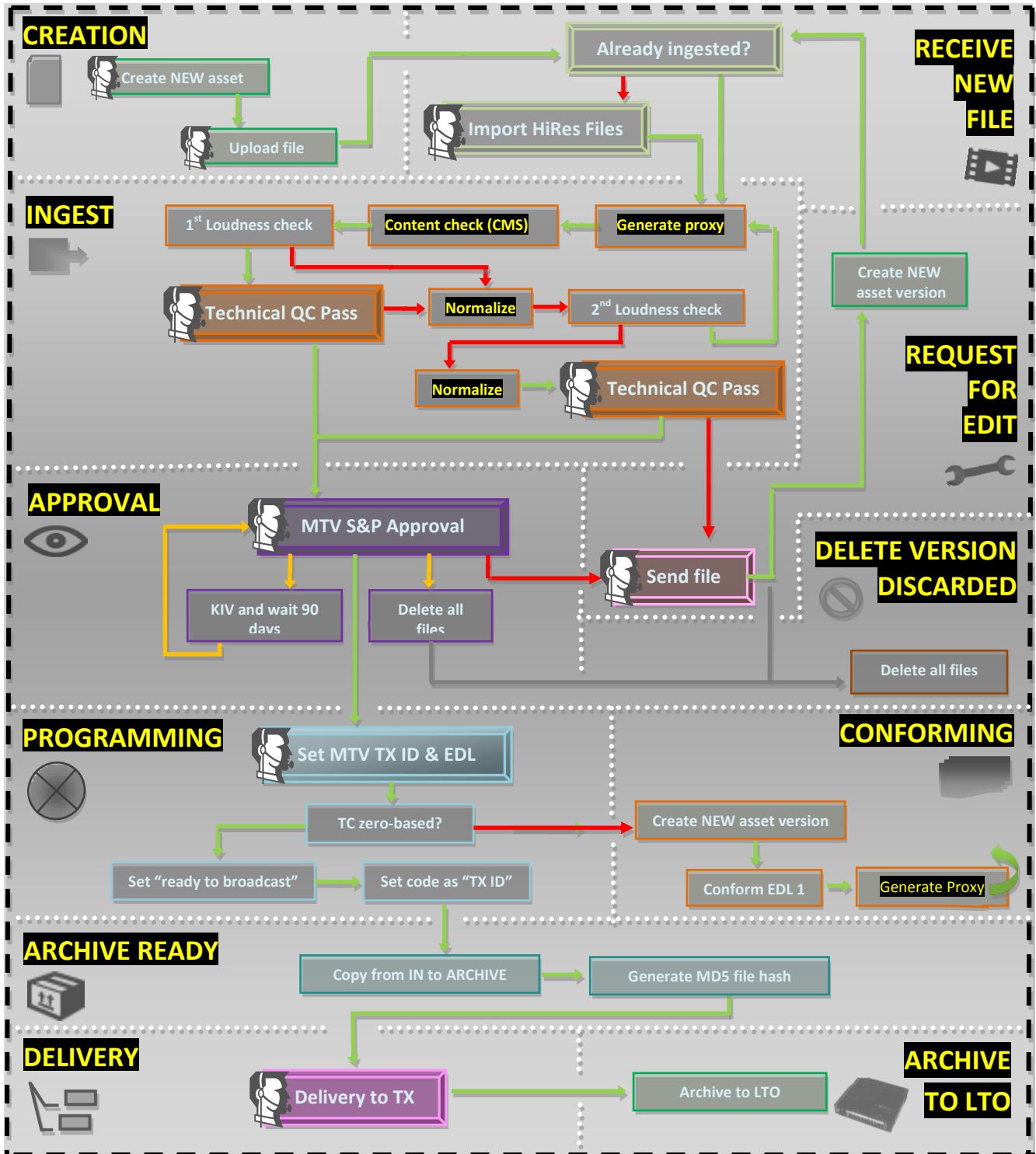
The **VIACOM system** comprehends different sections with very similar requirements; special needs of each channel will be analyzed to fully meet their requirements. The **workflow management** approach allows processing assets according to their related department.

Following chapters will describe the workflows that will allow **departments** to manage their related content, from acquisition to delivery, through approval, editing and production:

<u>Department</u>	<u>Function</u>
Networks Ops	Clips
Traffic	Commercials
Distribution	VOD, SVOD, Catch Up, etc.
MTV Programming and Ops	MTV shows
CC Asia Programming and Ops	Comedy Central Asia Shows
NICK programming and Ops	Nickelodeon shows (content, audio and subtitles)
MTV OAP	MTV promos
MTV Programming and Ops	Music clips
Production	Locally Produced Shows
CC Asia OAP	CC Asia Promos
NICK OAP	Nickelodeon Promos
Digital Media	Content for website
IPS	International Program Sales

MUSIC CLIP

The diagram below summarizes the management workflow for music clips:



The above workflow is detailed through the following **high-level steps**:

1.	<u>Creation</u>	
1.1	The NetOps user manually creates the asset for the music clip.	
1.2	The NetOps user manually inserts the minimum required metadata for the asset including a code, type (Music clip), station (MTV), title and Tx ID (if available).	
1.3	The NetOps user manually uploads the music clip into the “ IN metadvice ” specifying an UNK codec .	
1.4	Once uploaded, the <u>Receive New File workflow</u> is automatically started for the asset.	
2.	<u>Receive new file</u>	
2.1	Automatically mark the asset as active (i.e. not expired)	
2.2	Automatically check if the asset already has a master video file	
	Yes	Automatically start the <u>Ingest workflow</u> . The Receive New File workflow ends
	No	Move the workflow forward
2.3	Automatically check if the asset already has a master audio file	
	Yes	The Receive New File workflow ends
	No	Move the workflow forward
2.4	The NetOps user completes a task to import the new file received (e.g. from External Vendor or Internal Edius):	
	Uploaded	Move the workflow forward
	Abort	Send alert to Singapore IT. The Receive new file workflow ends.
2.5	Automatically start the <u>Ingest workflow</u>	
3.	<u>Ingest</u>	
3.1	Automatically set the asset as not ok to broadcast	
3.2	Automatically check if the asset has a master video file in IN :	
	Uploaded	Move the workflow forward
	No	Send alert to Singapore IT department. The Ingest workflow ends.
3.3	Automatically execute a FileInfo action to set the master video file as the one to be processed by the	

	workflow						
3.4	Automatically attach and start the Create Proxy workflow						
3.5	Automatically reset the “ content check ” status						
3.6	Automatically attach and start the CMS workflow						
3.7	<p>Automatically check (for the first time) the loudness compliance, that is, if the detected loudness value is within the range of acceptance (from -24 to -19 dB):</p> <table> <tr> <td>Out of range</td><td>Move the workflow forward to step 3.9 (Normalize workflow)</td></tr> <tr> <td>Within range</td><td>Move the workflow forward.</td></tr> </table>	Out of range	Move the workflow forward to step 3.9 (Normalize workflow)	Within range	Move the workflow forward.		
Out of range	Move the workflow forward to step 3.9 (Normalize workflow)						
Within range	Move the workflow forward.						
3.8	<p>The NetOps user completes a task to perform a “Technical QC 1” task, selecting one of the following results:</p> <table> <tr> <td>True</td><td>Move the workflow forward to step 3.16 (SIG-PC workflow)</td></tr> <tr> <td>False</td><td>Move the workflow forward</td></tr> <tr> <td>TBD</td><td>Attach and start the Request for Edit workflow</td></tr> </table>	True	Move the workflow forward to step 3.16 (SIG-PC workflow)	False	Move the workflow forward	TBD	Attach and start the Request for Edit workflow
True	Move the workflow forward to step 3.16 (SIG-PC workflow)						
False	Move the workflow forward						
TBD	Attach and start the Request for Edit workflow						
3.9	In case either the <u>first loudness check</u> or <u>technical qc</u> was negative, the Normalize workflow will be automatically attached and started						
3.10	Automatically attach and start the Create Proxy workflow						
3.11	Automatically reset the “ content check ” status						
3.12	Automatically attach and start the CMS workflow						
3.13	<p>Automatically check (for the second time) the loudness compliance, that is, if the detected loudness value is within the range of acceptance (from -24 to -19 dB):</p> <table> <tr> <td>Out of range</td><td>Automatically attach and start the Normalize workflow and move the workflow forward.</td></tr> <tr> <td>Within range</td><td>Automatically attach and start the Normalize workflow and move the workflow forward.</td></tr> </table>	Out of range	Automatically attach and start the Normalize workflow and move the workflow forward.	Within range	Automatically attach and start the Normalize workflow and move the workflow forward.		
Out of range	Automatically attach and start the Normalize workflow and move the workflow forward.						
Within range	Automatically attach and start the Normalize workflow and move the workflow forward.						
3.14	Automatically delete the master video file from IN and move the file from Normalize to IN						

3.15	After the second loudness check, the NetOps user completes a task to perform a "Technical QC 2" task , selecting one of the following results:	
	True	Move the workflow forward
	False	Automatically attach and start the Request for edit workflow
3.16	Automatically attach and start the SIG-PC workflow	
4.	Create Proxy	
4.1	Automatically check if the asset's master video file already has a proxy:	
	Yes	The Create Proxy workflow is ended.
	No	The workflow is moved forward.
4.2	Automatically set the asset's " aspect ratio " metadata (SD 4:3, SD 16:9 or HD) according to the master file storage location	
4.3	Automatically generate a proxy file (from IN into PROXY) using a Rhozet transcoding action	
5.	CMS	
5.1	Automatically check if the asset's master video file already has a proxy:	
5.2	Automatically check the loudness compliance , that is, if the detected loudness value is within the range of acceptance (from -24 to -19 dB):	
	Within range	Move the workflow forward.
	Out of range	Automatically reset the "content check" value and perform a "content check" action. Then, move the workflow forward.
5.3	Automatically regenerate the icons (EDL thumbnails) of the asset	
6.	Normalize	
6.1	Automatically check if the file is stored in IN (SD 4:3, SD:16:9 or HD):	
6.2	Automatically check the height (480/486/576/1080) of the master video file to determine the corresponding Rhozet profile	
6.3	Automatically execute a Rhozet profile consisting of an audio filter (to normalize) and a video filter (to set the timecode to zero)	
7.	Request for Edit	
7.1	The HiRes file is copied to the Surreal folder.	

	Note: Location is <u>\\sin-etere-trs01\MAM File Transfer\Surreal\</u> , filename format is "Code-Title".	
7.2	A task is prompt to the NetOps user to decide if an external or Internal editing is required:	
	External	The file (renamed with the asset code) will be manually copied from the Surreal folder (read permission are required) to the external destination .
	Internal	The file (renamed with the asset code) will be manually copied from the Surreal folder (read permission is required) to Edius and edited based on the EDL clip marks.
	The user manually requests to the vendor (e.g. via email) the need of a file editing.	
7.3	A new asset version is created, and the Receive new file workflow is automatically started for it.	
7.4	The Delete Version Discarded workflow is also automatically started for the <i>original asset version</i> .	
8.	Delete version discarded	
8.1	Automatically set the original asset as "not ok to be broadcasted"	
8.2	Automatically set the original asset as "expired"	
8.3	Automatically schedules the automatic deletion of original files (IN, Proxy e NORMALIZE) after 90 days.	
9.	Sig-PC	
9.1	Automatically check if the asset is already in the Archive :	
	No	Move the workflow forward to next step
	Yes	The Sig-PC workflow ends TBD: Reset all flags (Technical QC, Content approval, S&P approval and Ok to broadcast) then and move file back from ARCHIVE to IN and restart the SIG-PC workflow.
9.2	Automatically check if a "Technical QC" has been already performed:	
	No	Move the workflow forward to next step
	Yes	Move the workflow forward to step 9.6 (Check TX External)
9.3	In case the "Technical QC" has not been performed, the NetOps user completes a task to perform a "Technical QC" task, selecting one of the following results:	
	True	Move the workflow forward
	False	Automatically attach and start the Request for edit workflow
9.4	Automatically check the "S&P Approval" metadata to determine if the Approval workflow has been already performed:	

	<table><tr><td>No</td><td>Move the workflow forward to next step</td></tr><tr><td>Yes</td><td>Move the workflow forward to step 9.7 (Programming workflow)</td></tr></table>	No	Move the workflow forward to next step	Yes	Move the workflow forward to step 9.7 (Programming workflow)	
No	Move the workflow forward to next step					
Yes	Move the workflow forward to step 9.7 (Programming workflow)					
9.5	Automatically attach and start the Approval workflow					
9.6	Automatically check the “TX External” metadata to determine if the Programming workflow has been already performed:					
	No	Move the workflow forward to next step				
	Yes	Move the workflow forward to step 9.8 (expiry data check)				
9.7	Automatically attach and start the Programming workflow					
9.8	Automatically check the asset’s “Expiry date” to determine if the Approval and Programming workflows have been correctly completed:					
	Expired	The asset has been set as expired during the “approval”. The SIG-PC workflow ends.				
	Not expired	Move the workflow backward to step 9.4 (check s&p approval)				
9.9	Automatically set the asset code as “TX External”					
9.10	Automatically set the asset as “Ok to broadcast” (i.e. ready for use)					
9.11	Automatically attach and start the Archive Ready for broadcast workflow					
10.	Approval					
10.1	The MTV Programming user completes a MTV S&P Approval task to verify the content compliance\censorship , selecting one of the following results:					
	KIV	Keep in view and wait 90 days and restart the “ MTV S&P Approval ” task. Note: In case users want to start the Approval workflow before the 90 days have passed, it will be possible to restart said workflow from the Media Library.				
	Discard	Mark asset as expired and delete files starting the Delete Version Discarded workflow				
	Not approved	Mark asset as expired and ask for a new file starting the Request for edit workflow				
	Approved	Automatically starts the Archive Ready for broadcast workflow				
11.	Programming					

11.1	<p>In case the Technical QC was successful (i.e. the TX external has been set),, the MTV Programming user completes the MTV TX ID & EDL task to set the TX ID and set the clip EDL marks</p> <table border="1"> <tr> <td>Done</td><td>The TX ID has been correctly set and the EDL has been correctly marked.</td></tr> </table>	Done	The TX ID has been correctly set and the EDL has been correctly marked.		
Done	The TX ID has been correctly set and the EDL has been correctly marked.				
11.2	<p>Automatically checks if the “physical start” and “SOM” of the clip are different from zero (i.e. if the EDL has been edited) to determine if a conforming is required:</p> <table border="1"> <tr> <td>Yes</td><td>The workflow is moved forward.</td></tr> <tr> <td>No</td><td>The workflow is moved forward and the “Conform EDL1 IN” workflow is started.</td></tr> </table>	Yes	The workflow is moved forward.	No	The workflow is moved forward and the “ Conform EDL1 IN ” workflow is started.
Yes	The workflow is moved forward.				
No	The workflow is moved forward and the “ Conform EDL1 IN ” workflow is started.				
12.	<u>Conform EDL1 IN</u>				
12.1	Automatically set the conforming source to EDL1				
12.2	Automatically set the conforming profile based on the storage (SD4:3, SD16:9 or HD)				
12.3	<p>Automatically create a new asset version featuring the source EDL on its EDL #77 (system EDL dedicated for conforming).</p> <p>The Conforming workflow (default) is automatically attached and started in the new asset</p>				
12.4	Automatically reset the conforming source				
12.5	Automatically mark the original asset as expired				
12.6	Automatically wait for one hour before setting also the original file as expired				
13.3	<u>Conforming</u>				
13.1	Automatically set the source of the asset as originated from “ conforming ”				
13.2	Automatically set the asset as “ not ok to broadcast ” (to prevent its use before its readiness)				
13.3	Rhozet automatically transcodes a new video file, based on the conforming source and profile and with a zero-based timecode .				
13.4	Automatically attach and start the Etere-PC workflow				
14.	<u>Etere-PC</u>				
14.1	Automatically attach and start the Create proxy workflow				
14.2	Automatically reset the “ content check ” status				
14.3	Automatically attach and start the CMS workflow				
14.4	Automatically attach and start the SIG-PC workflow				
15.	<u>Archive Ready For Broadcast</u>				

15.1	Automatically check if the asset can be broadcasted :	
	Yes	Move the workflow forward
	No	Send alert to the Singapore IT department. The Archive workflow ends.
15.2	Automatically check the “ S&P Approval ” metadata to determine if the Approval workflow has been already performed:	
	Yes	Move the workflow forward
	No	Send alert to the Singapore IT department. The Delivery workflow ends.
15.3	Automatically copy the file from IN into ARCHIVE	
15.4	Automatically generates a “ MD5 file hash ” for the asset file	
15.5	Automatically delete the file stored on IN	
15.6	Automatically starts the <u>Delivery Video to TX (Encompass) workflow</u> .	
16.	<u>Delivery Video</u>	
16.1	Automatically check if the asset can be broadcasted :	
	Yes	Move the workflow forward
	No	Send alert to the Singapore IT department. The Delivery workflow ends.
16.2	Automatically check the “ S&P Approval ” metadata to determine if the Approval workflow has been already performed:	
	Yes	Move the workflow forward
	No	Send alert to the Singapore IT department. The Delivery workflow ends.
16.3	Automatically copy the file to the “ Encompass ” folder Note: Location is <u>\\sin-etere-trs01\MAM File Transfer\Encompass\</u>	
16.4	Automatically rename the file as the asset's code .	
16.5	The NETOps users manually completes a task that specifies if the “delivery to tx” is required:	
	No	The workflow ends .
	Yes	Automatically starts the <u>Archive to LTO workflow</u> . The NetOps user manually marks the file as “delivered to encompass”.

17.	<u>Archive to LTO</u>
17.1	Automatically archive the file on the long-term storage system after 30 days.
17.2	The workflow ends .

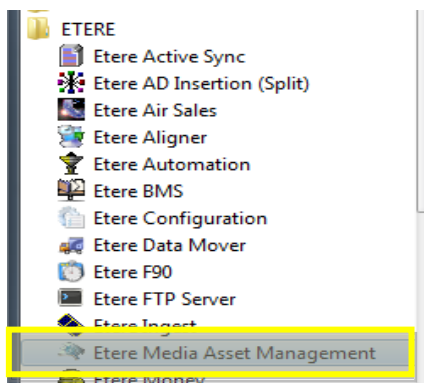
All automatic and manual operations that made up the multiple workflows used for the management of music clips will be fully explained in following chapters.

▼ 1. CREATION

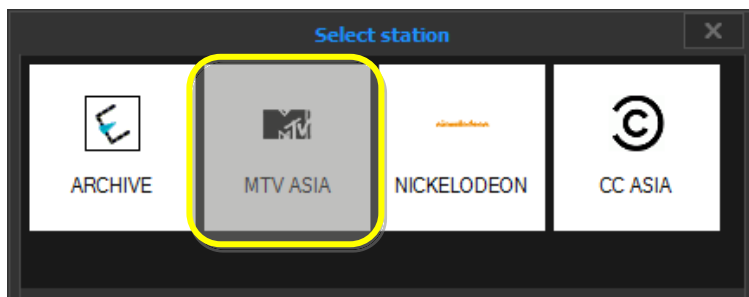
The following procedure explains how to create an asset and upload media on it:

Create asset

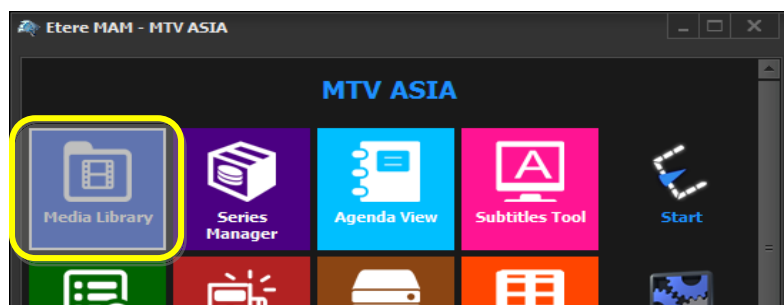
- ▼ 1.1. The **NetOps** user launches the **Etere MAM** application clicking on the shortcut available in the Start menu, under All programs > Etere > Etere MAM:



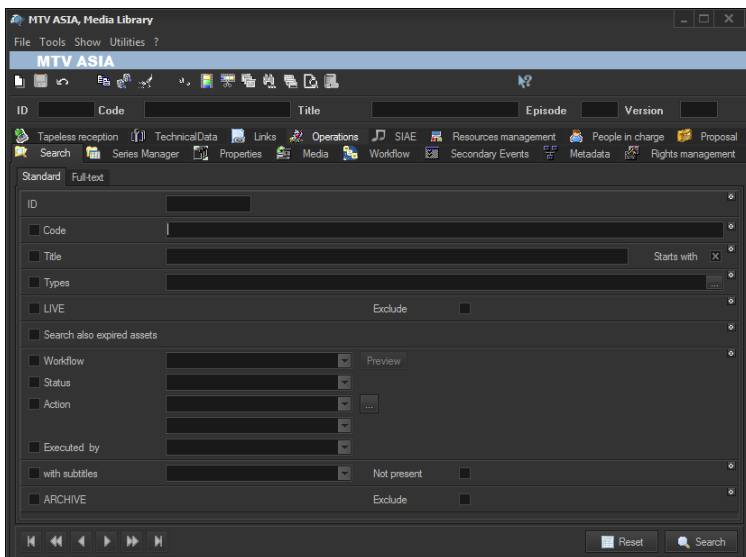
- ▼ 1.2. The **NetOps** user selects the station on which to start working: **MTV ASIA**



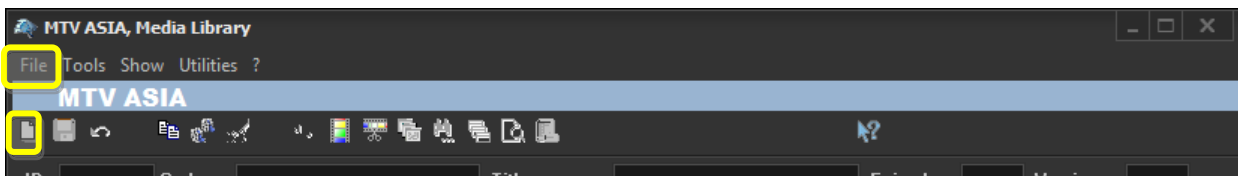
- ▼ 1.3. The **NetOps** user makes double-click on the **Media Library** module:



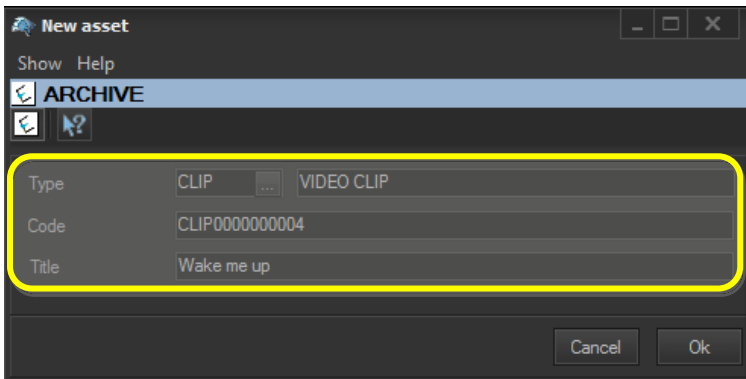
- ▼ **1.4.** The **Media Library** will be opened focusing on the **Search tab**, where the user can search for existing assets (using multiple filters) or creating a new one:



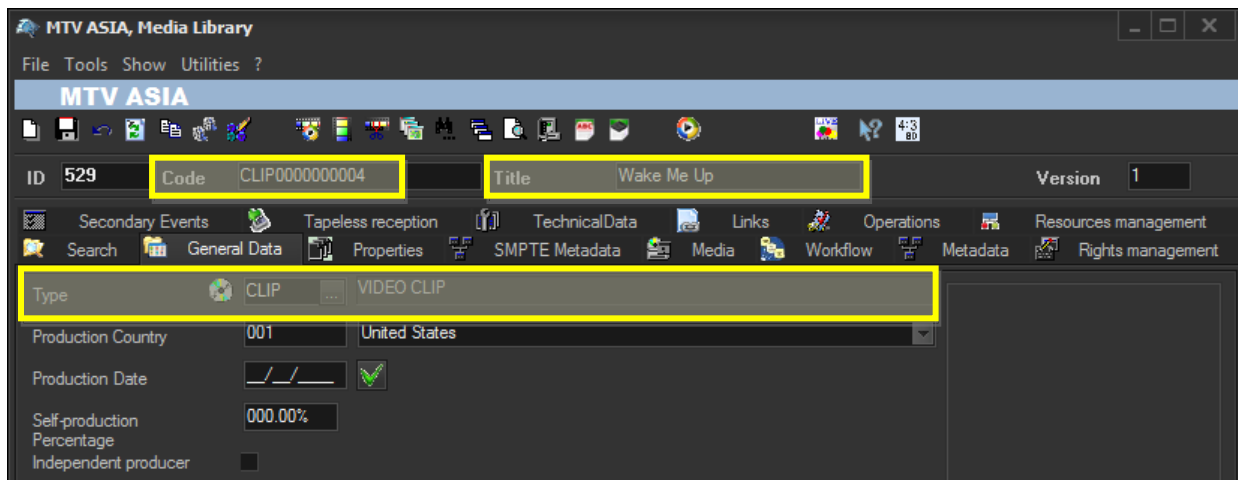
- ▼ **1.5.** A new asset can be created either clicking on the **new asset button** (📁) positioned in the top left or going to the **File menu** and clicking on the “**New**” function:



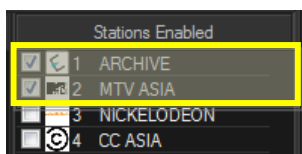
A pop-up window will prompt the user to select the **type** of material (CLIP), and the **title** of asset (code is automatically generated):



- ▼ 1.6. A new asset is created featuring all entered information:

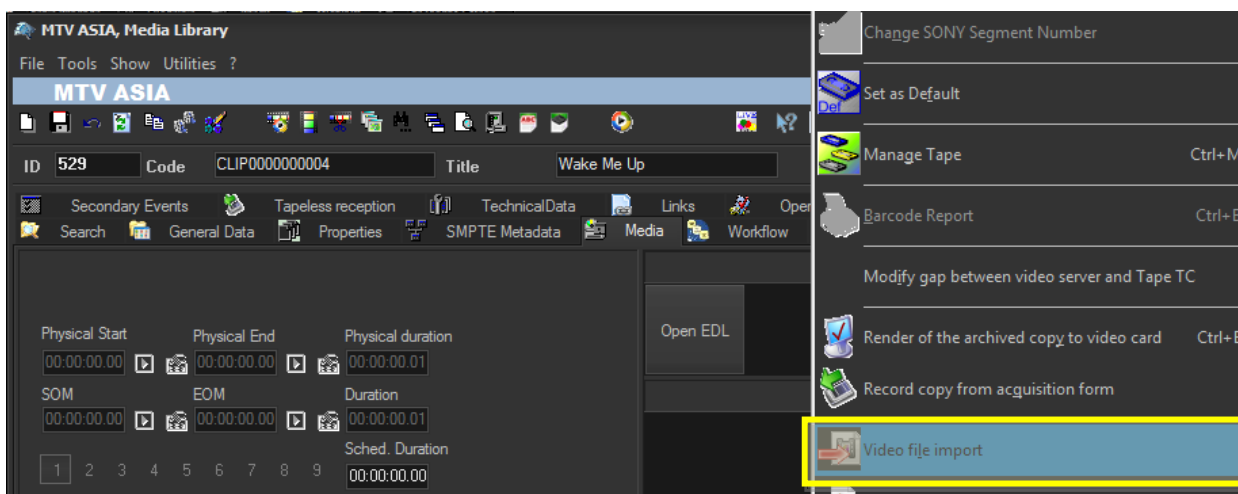


- ▼ 1.7. Users can manually insert more asset metadata including **stations**, **title**, **Tx ID** (if available), etc.:

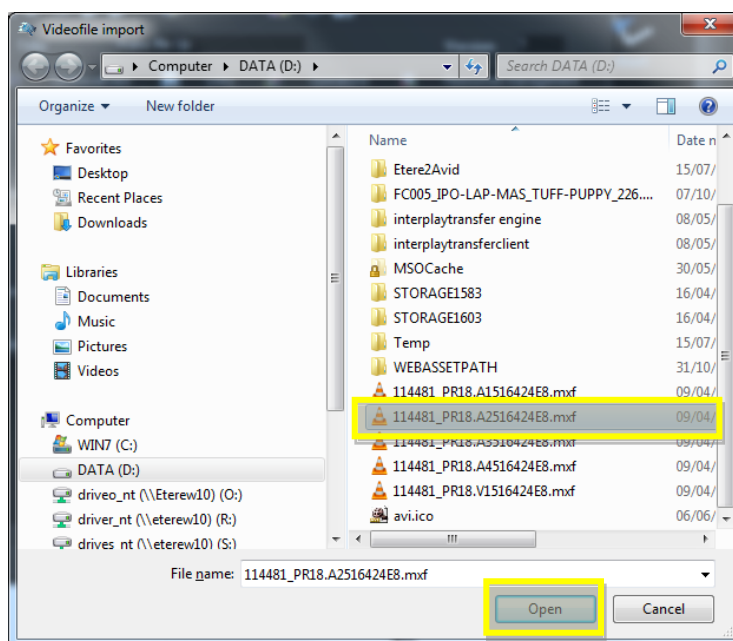


Upload asset

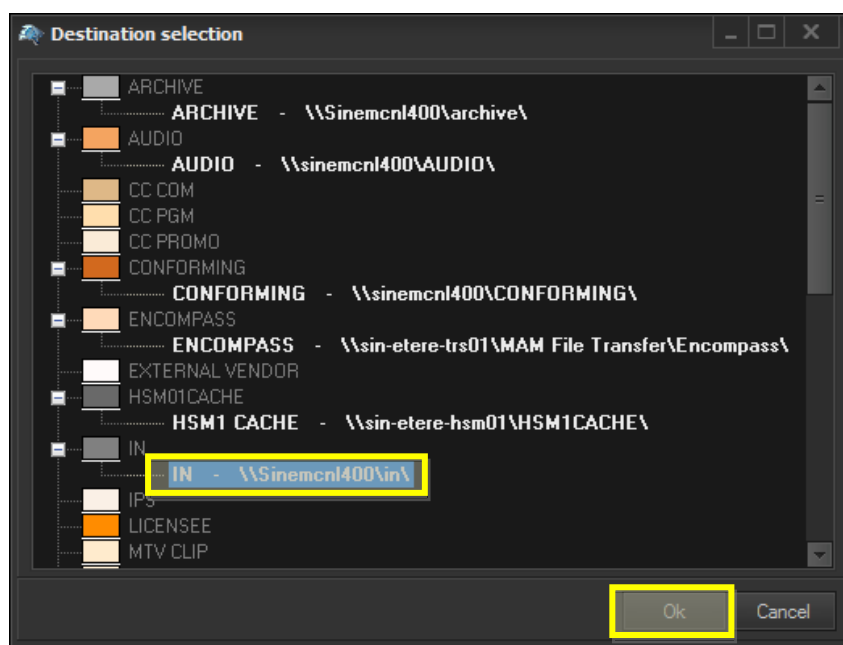
- ▼ 1.8. In order to upload a file for the asset the user needs to move to the **Media** tab, right-click on “**Media list**” area and select the “**Video file import**” function:



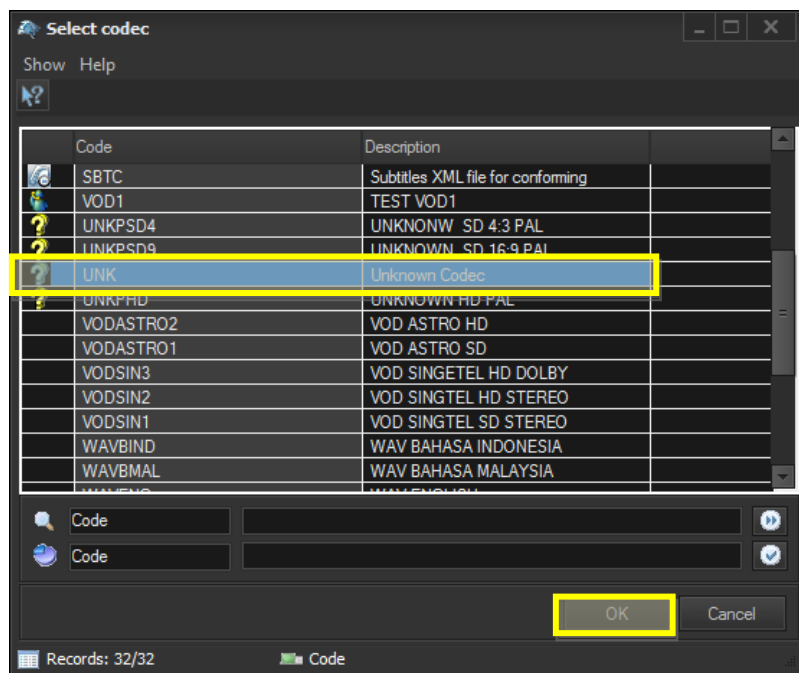
- ▼ **1.9.** A selection window will be opened to allow the user selecting the file to be uploaded, once selected, press the **[Ok]** button:



- ▼ **1.10.** A form showing possible destinations is prompted to allow the user to select the one on which to upload the file, in this case, the **IN metadvice**:



- ▼ **1.11.** After then, another form is displayed to allow selecting the codec to be assigned to the uploaded video file, in this case, select the **UNK codec**:



- ▼ **1.12.** The upload will start and the file will be copied to the selected destination, after which, the [Receive new file workflow](#) will be automatically started.

▼ 2. RECEIVE NEW FILE

The “Receive new file” workflow allows NetOps users to accomplish the following tasks:

- **Make media suitable** (e.g. after a *file import*)
- **Acquire new media** (e.g. after a *request for edit*)

This workflow includes a series of automatic actions (e.g. normalization) and operator tasks (e.g. technical QC) sequentially ordered as following described:

▼ 2.1. Automatically **mark the asset as active** (i.e. not expired)

▼ 2.2. Automatically check if the asset already has a **master video file**:

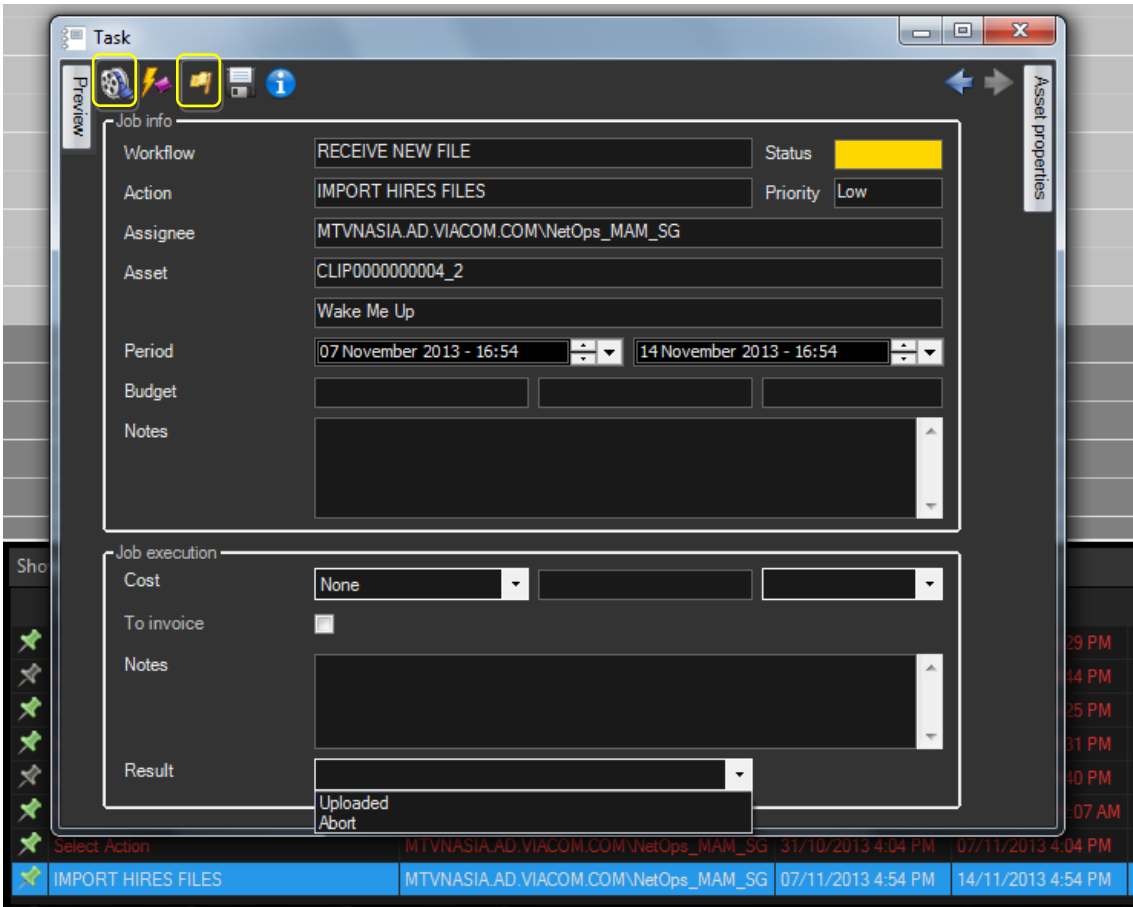
Yes	Automatically start the Ingest workflow . The Receive new file workflow ends.
No	Move the workflow forward

▼ 2.3. Automatically check if the asset already has a **master audio file**:

Yes	The Receive new file workflow ends.
No	Move the workflow forward

[Import HiRes Files] task

▼ 2.4. The **NetOps users** will find the “**Import HiRes Files**” task in their **Agenda View** to import the received file (from either External Vendor or internal Edius) into the new asset version, they need to take the task (click on the **green flag**) and then click on the **Media Library** button:



Import the file into the **Media Library** using the “Video file import” function as previously explained in the [Creation > Upload asset](#) step.

Once the file is imported, set a result for the task:

Uploaded	Move the workflow forward
Abort	Send alert to Singapore IT. The Receive new file workflow ends.

▼ **2.5.** Automatically start the [Ingest workflow](#)

▼ 3. INGEST

The **Ingest workflow** allows making acquired media suitable for the archive, this, through the execution of the following automatic actions (e.g. normalization) and operator tasks (e.g. technical QC):

▼ **3.1.** Automatically set the asset as **not ok to broadcast**

▼ **3.2.** Automatically check if the asset has a **master video file** in **IN**:

Uploaded	Move the workflow forward
No	Send alert to Singapore IT department. The Ingest workflow ends.

▼ **3.3.** Automatically execute a **FileInfo** action to set the **master video file** as the one to be processed by the workflow

▼ **3.4.** Automatically attach and start the [Create Proxy workflow](#)

▼ **3.5.** Automatically verify the existence of the **PROXY** file:

Exists	Move the workflow forward
Doesn't exist	Send alert to Singapore IT department. The Ingest workflow ends.

▼ **3.6.** Automatically **reset** the “**content check**” value of the asset

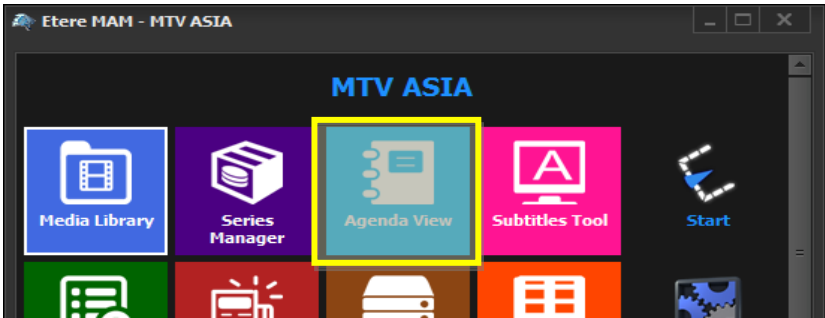
▼ **3.7.** Automatically attach and start the [CMS workflow](#)

▼ **3.8.** Automatically check (**for the first time**) the **loudness compliance**, that is, if the detected loudness value is within the range of acceptance (from -24 to -19 dB):

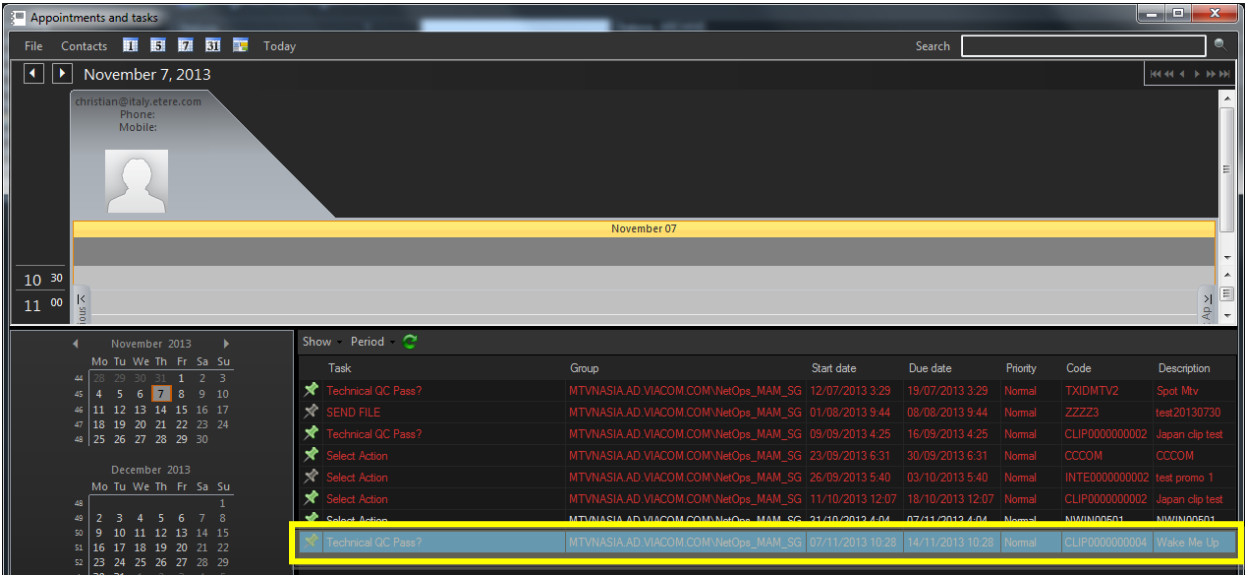
Out of range	Move the workflow forward to step 3.10 (Normalize workflow)
Within range	Move the workflow forward.

[Technical QC Pass 1] task

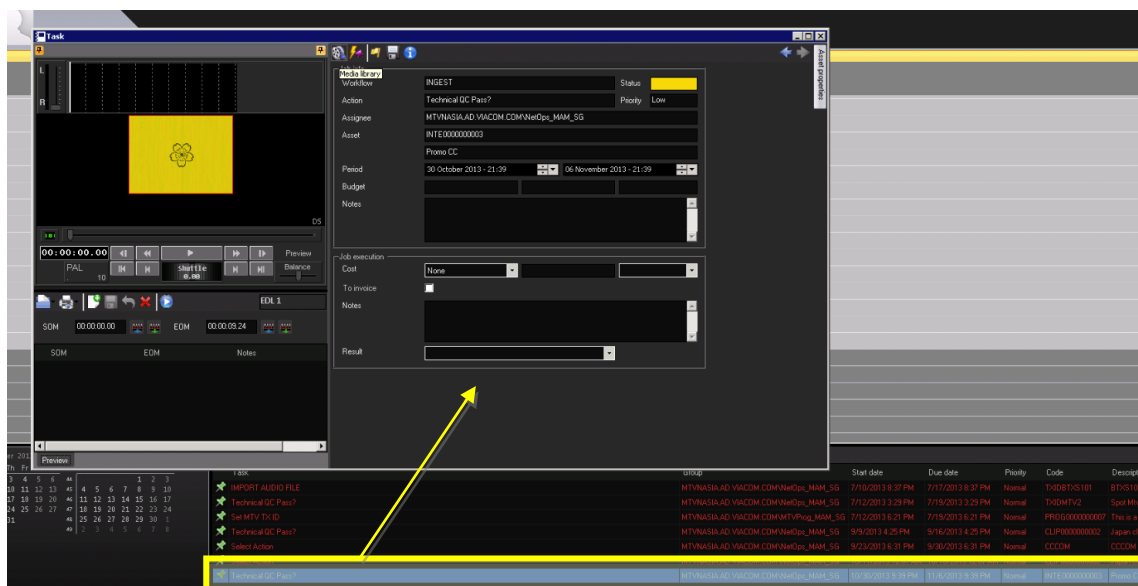
▼ 3.9. In case a **positive result** was returned from the **first loudness check**, the **NetOps user** is required to complete a **Technical QC Pass** task, this, by opening the **Agenda View** module:



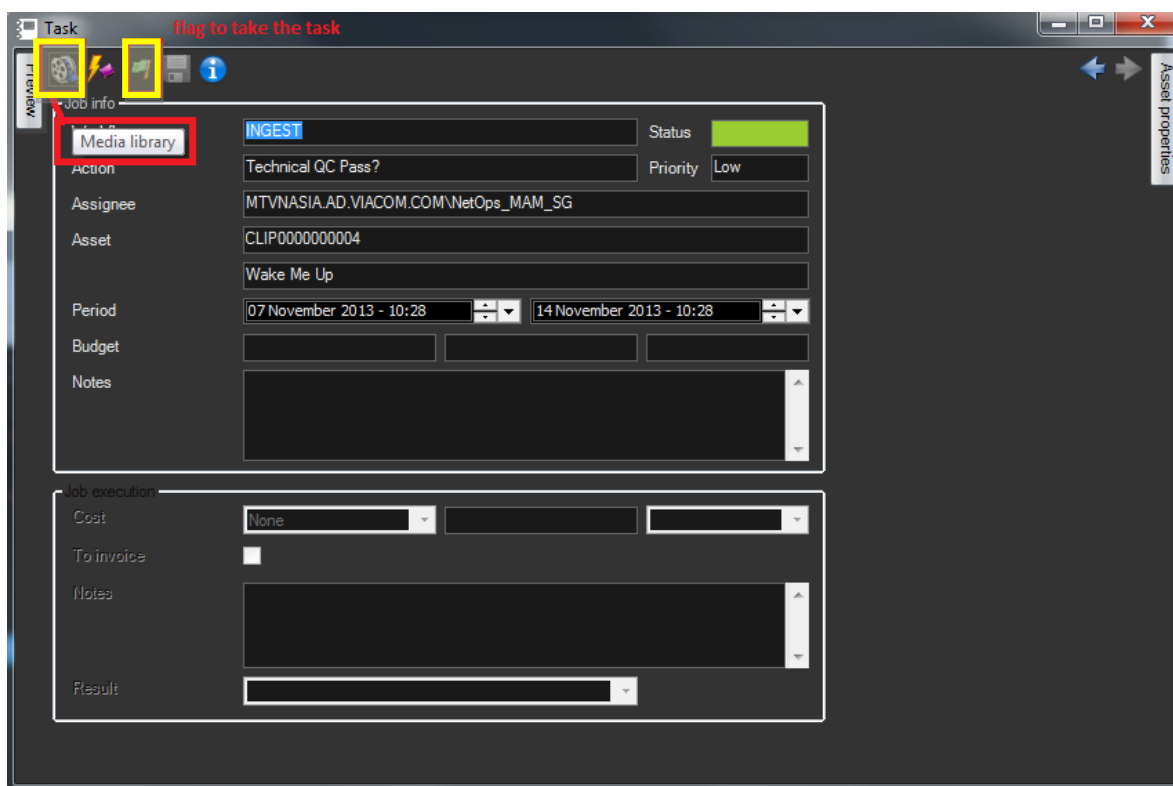
The **Agenda View** is opened displaying all tasks assigned to the current user, who can make double-click on a “**Technical QC Pass**” task line to open it:



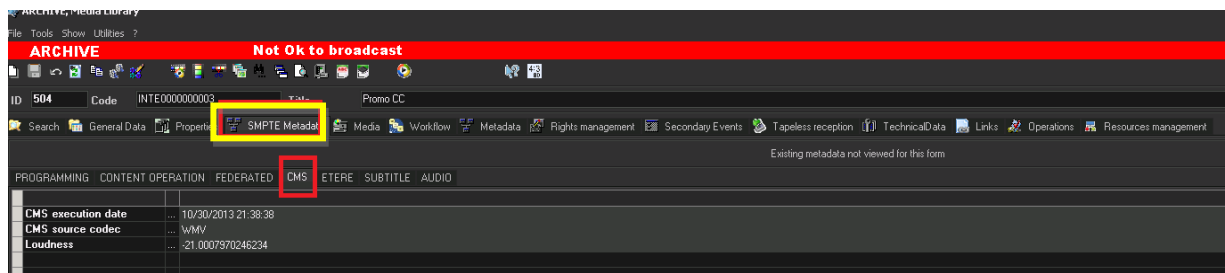
A form will be opened displaying all task information:



Make click on the **green flag** to **take in charge** the task, the flag will become **yellow** to indicate that it can be now completed, in this case, clicking on the **Media Library** button (📁) to access the asset metadata:




Once the **Media Library** is opened and asset information is loaded, **NetOps users** need to check in the **SMPTE Metadata** tab the **loudness value** located under the **CMS** tab:



Under the **Media** tab, double-click on the Proxy video file and preview the video content, in case of media with multiple audio tracks you can select them as follows:

WMP9 Player

Click the "menu"  button and select the "Audio channels" option, then select the audio channel:

Media List

MPG Codec

WMV

MTX

MTX

Details

Audio waveform

✓ 1 - English (Australia) [3081]

Audio channels

Resize

Set Proxy File start

Subtitles

ShuttlePRO Profile

Open file with

Show also NTSC

✓ Frame by frame with PLAY

Load an audio file

00:00:00,01

Shuttle 1

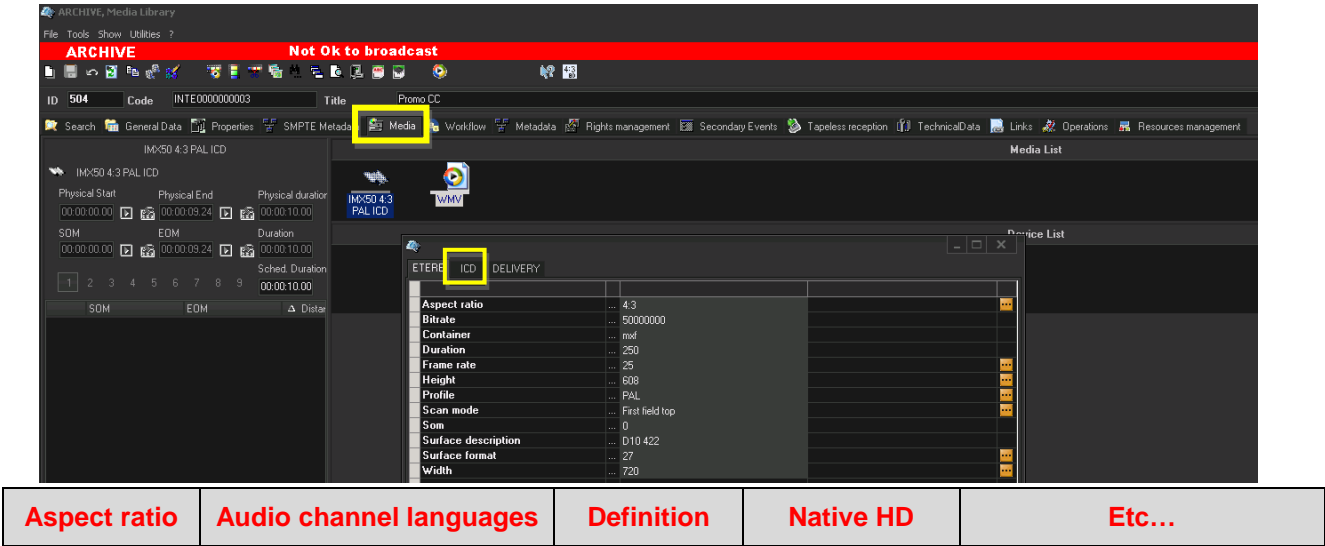
Counter

LTC

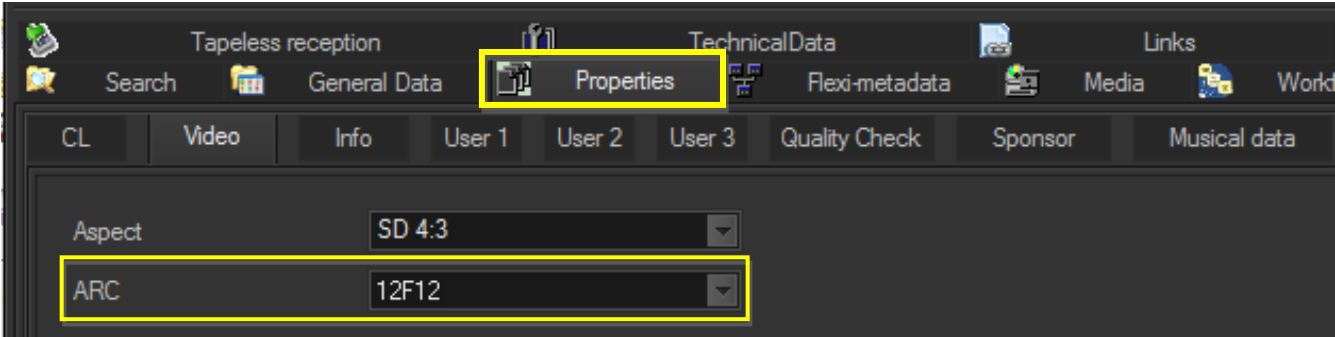
CTL

Preview

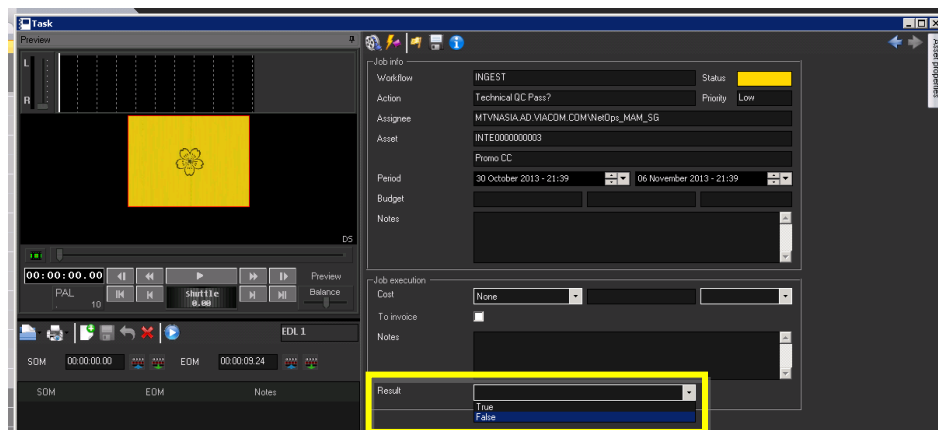
The **Media** tab also allows selecting the *HiRes video file*, right-click on it and selects the **"SMPTE metadata"** function to add the **LCD metadata**:



Under the **Properties** tab, they need to specify the *Aspect Ratio Conversion* of the previewed hires video file, this, selecting it from the **ARC** combo box:



Once all required asset data is set, the **Media Library** can be closed. Back in the **Task View** interface, the clip can be previewed before setting one of the following **results**:



True	Move the workflow forward to step 3.20 (SIG-PC workflow)
False	Move the workflow forward
TBD	Attach and start the <u>Request for Edit</u> workflow

▼ **3.10.** In case either the **first loudness check** or **technical qc** was negative, the **Normalize workflow** will be automatically attached and started

▼ **3.11.** Automatically check the existence of a **NORMALIZE** file:

Exists	Move the workflow forward
Doesn't exist	Send alert to Singapore IT department. Move the workflow forward

▼ **3.12.** Automatically attach and start the **Create Proxy workflow**

▼ **3.13.** Automatically verify the existence of the **PROXY** file:

Exists	Move the workflow forward
Doesn't exist	Send alert to Singapore IT department. The Ingest workflow ends.

▼ **3.14.** Automatically **reset** the “**content check**” value of the asset

▼ **3.15.** Automatically attach and start the **CMS workflow**

- ▼ **3.16.** Automatically check **(for a second time)** the **loudness compliance**, that is, if the detected loudness value is within the range of acceptance (from -24 to -19 dB):

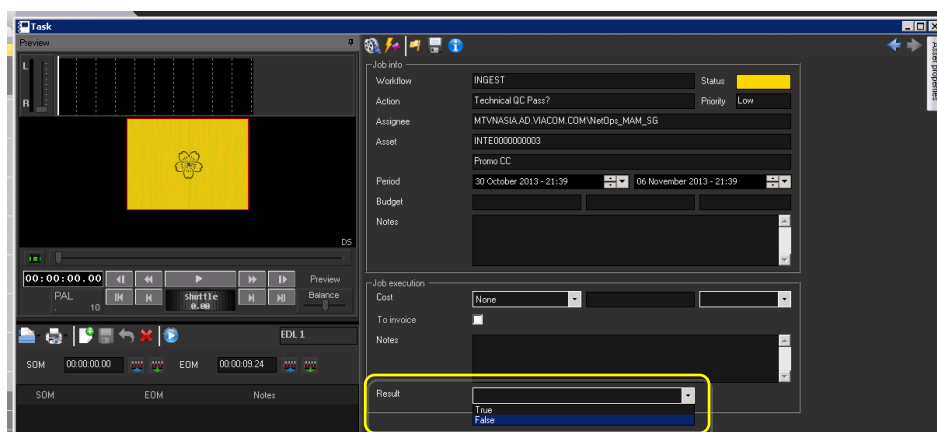
Out of range	Automatically attach and start the Normalize workflow and move forward
Within range	Automatically attach and start the Normalize workflow and move forward

- ▼ **3.17.** Automatically delete the master video file from **IN**

- ▼ **3.18.** Automatically move the file from **Normalize** to **IN**

[Technical QC Pass 2] task

- ▼ **3.19.** After the **second loudness check**, the **NetOps** user is required to complete a **Technical QC Pass** task as explained in **step 3.9 (technical qc pass)**, and setting one of the following results:



True	Move the workflow forward
False	Automatically attach and start the Request for Edit workflow . The Ingest workflow ends.

- ▼ **3.20.** Automatically attach and start the **SIG-PC workflow**

▼ 4. CREATE PROXY

The **Create Proxy workflow** is intended to automatically create a **proxy file** from a master video file, this, through the following automatic operations:

▼ 4.1. Automatically check if the asset's master file **already has a proxy**:

Yes	The Create Proxy workflow is ended.
No	The workflow is moved forward.

▼ 4.2. Automatically set the asset's "**aspect ratio**" **metadata** (SD 4:3, SD 16:9 or HD) according to the master file storage location

▼ 4.3. Automatically **generate a proxy file** (from IN into PROXY) using a Rhozet transcoding action

▼ 5. CMS

The **Create Proxy workflow** is intended to automatically check the content of a media proxy and regenerate its thumbnails, this, through the following automatic operations:

▼ 5.1. Automatically check if the asset's master file **already has a proxy**:

Yes	The workflow is moved forward.
No	Send alert to the Singapore IT department. The CMS workflow is ended.

▼ 5.2. Automatically check the **loudness compliance**, that is, if the detected loudness value is within the range of acceptance (from -24 to -19 dB):

Within range	Move the workflow forward.
Out of range	Automatically reset the "content check" value and perform a "content check" action. Then, move the workflow forward.

▼ 5.3. Automatically **regenerate the icons** (EDL thumbnails) of the asset

▼ 6. NORMALIZE

The **Normalize workflow** is intended to fix audio issues (loudness out of acceptable range) encountered during the media preparation process:

▼ 6.1. Automatically check if the file is stored in **IN** (SD 4:3, SD:16:9 or HD):

No	Move the workflow forward
Yes	Move the workflow forward to step 6.4 (normalize file)

▼ 6.2. Automatically execute a **FileInfo** action to gather information on the **master video file**

▼ 6.3. Automatically check the **height** (480/486/576/1080) of the master video file to determine the corresponding **Rhozet profile**

▼ 6.4. Automatically execute a **Rhozet profile** consisting of an **audio filter** (to normalize) and a **video filter** (to set the timecode to zero).

▼ 7. REQUEST FOR EDIT

The **Request for Edit** workflow is performed only when an editing action is required (e.g. from a [Technical QC task](#) or [MTV S&P Approval task](#)).

▼ 7.1. The HiRes file is automatically copied to the “Surreal” folder.

Note: Location is \\sin-etere-trs01\MAM File Transfer\Surreal\ , filename format is “Code-Title”.

[Send file] task

▼ 7.2. The NetOps users get a “Send file” task to send the file for Editing; they need to take the task (click on the **green flag**), **manually drop** the file in a user-selected destination and request the vendor (e.g. via email) the file editing.

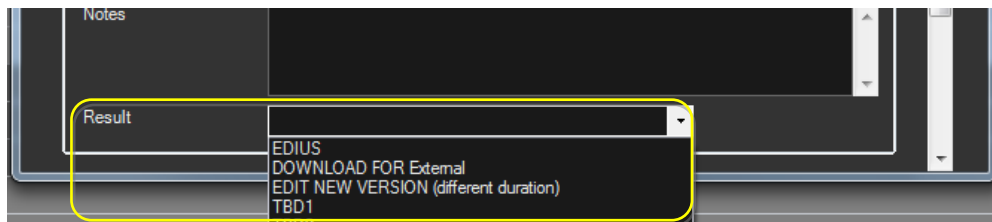
The screenshot shows a 'Task' window with the following details:

- Job info:**
 - Workflow: REQUEST FOR EDIT
 - Action: SEND FILE
 - Assignee: MTVNASIA.AD.VIACOM.COM\NetOps_MAM_SG
 - Asset: CLIP0000000004
 - Title: Wake Me Up
 - Period: 07 November 2013 - 16:47 to 14 November 2013 - 16:47
 - Budget: (empty)
 - Notes: (empty)
- Job execution:**
 - Cost: None
 - To invoice: ☐
 - Notes:
 - 064300000... (PROXY)
 - 064300000... (ARCHIVE)

Note 1: Drag and drop requires the user to have **+read permission** on the “Surreal” folder.

Note 2: Files are **named as Code-Title** of their related asset (e.g. CLIP04-Cool_datinge.MXF).

Close the **Media Library** and set a result for the task:



EDIUS	The user needs to manually copy the file from the “ Surreal ” cache folder to Edius (which will internally edit the file based on the EDL marks).
Download for external	The user needs to manually copy the file from the “ Surreal ” cache folder to the external destination .
Edit new version (different duration)	No file copy is needed by the user.
TBD 1-6	<i>TBD outputs are not used; they're only templates for more eventually needed options.</i>

- ▼ **7.3.** A **new asset version** (to hold the new edited media) is automatically created and a [Receive new file workflow](#) is automatically started for the new asset.
- ▼ **7.4.** Automatically attach and start the [Delete Version Discarded workflow](#) to the original asset version (discarded)

▼ 8. DELETE VERSION DISCARDED

The **Request new file** workflow allows importing a media once its editing has been completed.

- ▼ 8.1. Automatically set the original asset as “**not ok to be broadcasted**”
- ▼ 8.2. Automatically set the original asset as “**expired**”
- ▼ 8.3. Automatically schedules the **automatic deletion** (after 90 days) of original files from **IN, PROXY** and **NORMALIZE**

▼ 9. SIG-PC

The **SIG-PC workflow** (Singapore Processing Center) is intended to allow users to perform quality controls through the following actions:

▼ 9.1. Automatically check if the asset is already in the “Archive”:

No	Move the workflow forward to next step
Yes	Move the workflow forward to step 9.4 (Check S&P approval) TBD: Reset all flags (Technical QC, Content approval, S&P approval and Ok to broadcast) then and move file back from ARCHIVE to IN and restart the SIG-PC workflow.

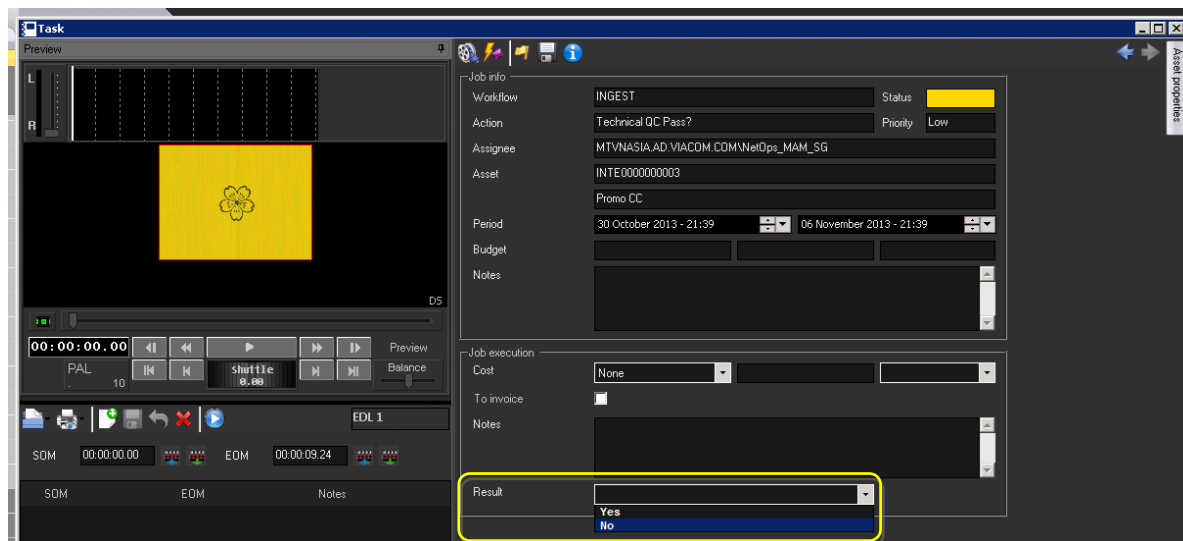
▼ 9.2. Automatically check if a “Technical QC” has been already performed:

No	Move the workflow forward to next step
Yes	Move the workflow forward to step 9.4 (Check S&P approval)

[Technical QC Pass] task

▼ 9.3. In case the **Technical QC** has not been performed; **NetOps users** will automatically get a “**Technical QC Pass**” task on their **Agenda View**, allowing them to decide what to do with the asset.

The task must be undertaken pressing the **green flag** and completed selecting one of the following actions:



Yes	Move the workflow forward
No	Automatically attach and start the Request for Edit workflow . The SIG-PC workflow ends.

- ▼ **9.4.** Automatically check the “**S&P Approval**” metadata to determine if the **Approval workflow** has been already performed:

No	Move the workflow forward to next step
Yes	Move the workflow forward to step 9.6 (Programming workflow)

- ▼ **9.5.** Automatically attach and start the [Approval workflow](#)

- ▼ **9.6.** Automatically check the “**TX External**” metadata to determine if the **Programming workflow** has been already performed:

No	Move the workflow forward to next step
Yes	Move the workflow forward to step 9.8 (expiry data check)

- ▼ **9.7.** Automatically attach and start the [Programming workflow](#)

- ▼ **9.8.** Automatically check the asset's "**Expiry date**" to determine if the **Approval and Programming workflows** have been correctly completed:

Expired	The asset has been set as expired during the "approval". The SIG-PC workflow ends.
Not expired	Move the workflow backward to step 9.4 (check s&p approval)

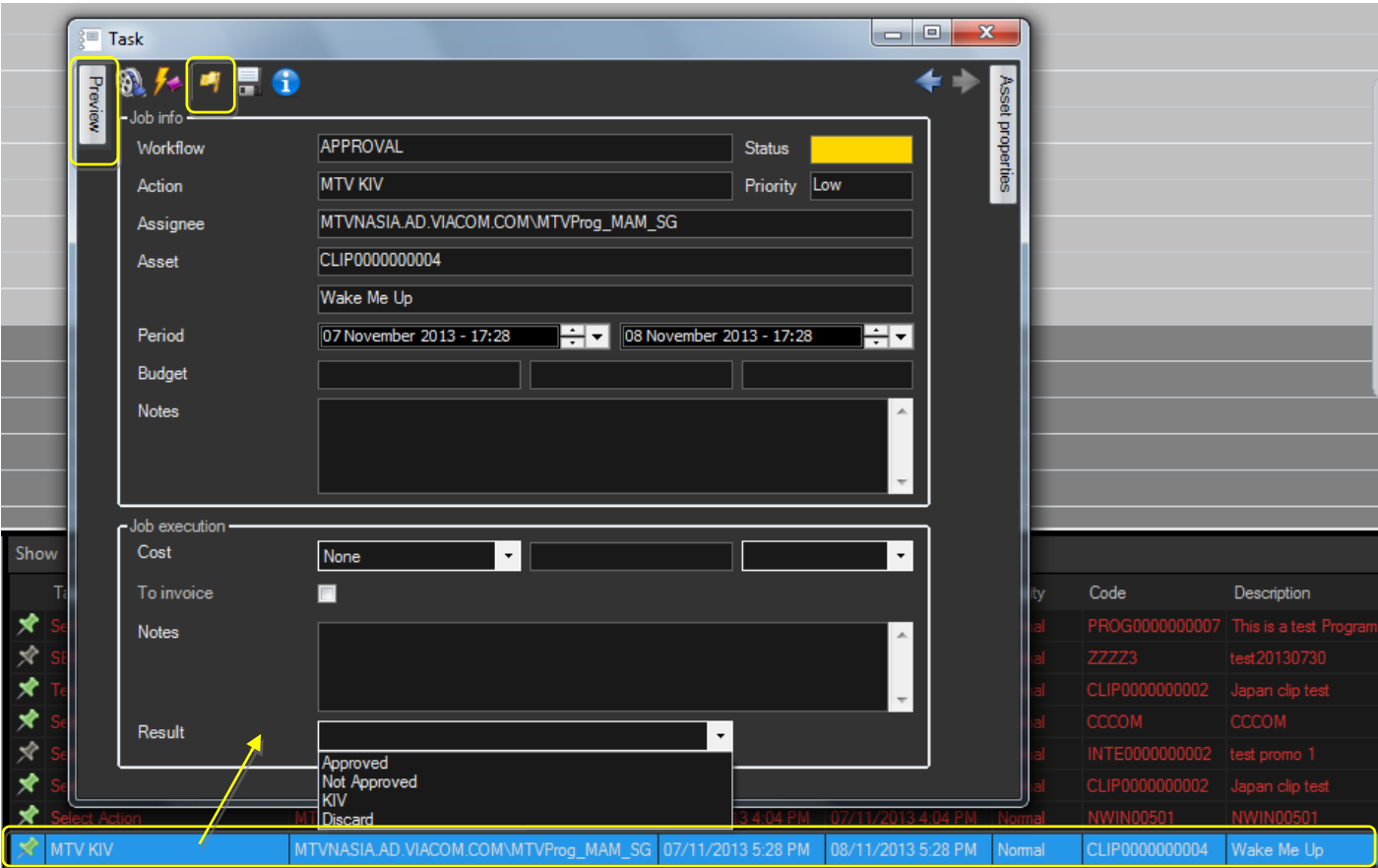
- ▼ **9.9.** Automatically set the asset code as "**TX External**"
- ▼ **9.10.** Automatically set the asset as "**Ok to broadcast**" (i.e. ready for use)
- ▼ **9.11.** Automatically attach and start the [Archive Ready for Broadcast workflow](#)

▼ 10. APPROVAL

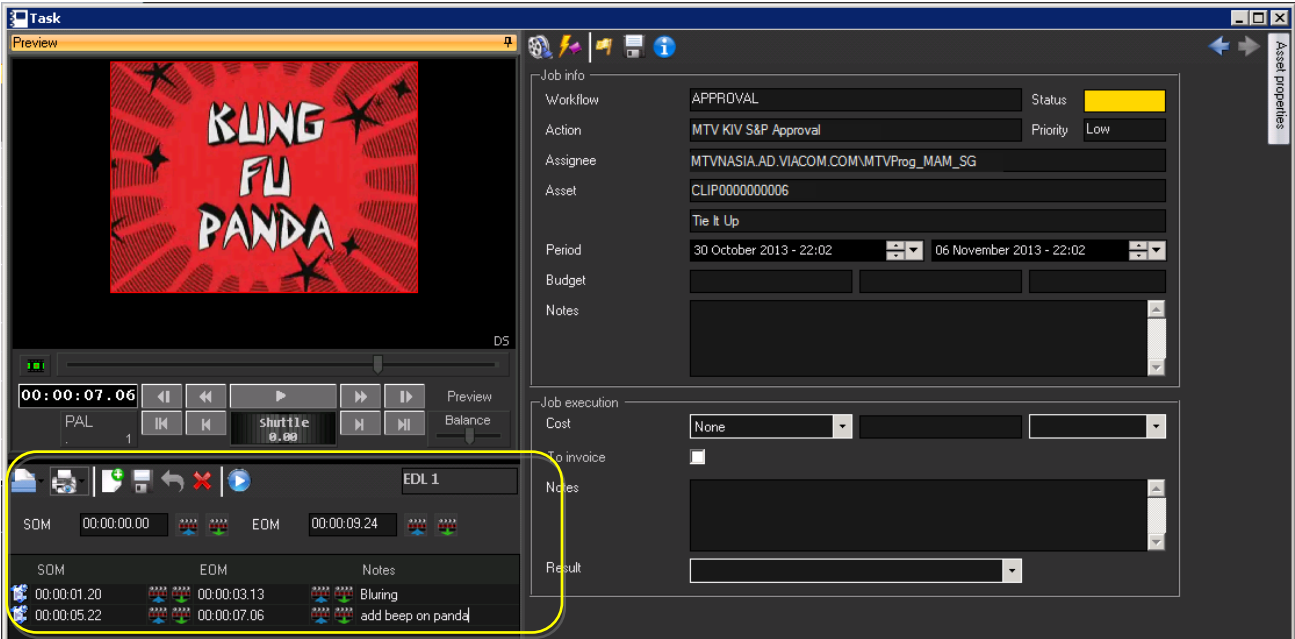
Once the “**ingest workflow**” of content is completed (i.e. has made ingested media suitable for the archive), an “**approval workflow**” is automatically executed to check assets and editing them if required to make them suitable to **VIACOM specifications**:

[MTV S&P Approval] task


- ▼ 10.1. **MTV Programming users** will find a “**MTV S&P Approval**” task in their **Agenda View** to verify the content compliance/censorship of the program; they need to take the task (click on the **green flag**) and then click on the **Preview** button:



The **Preview** area will be expanded to allow the operator setting the marks of the asset media and manage the EDL (insert/delete segments considered as “to be edited”).

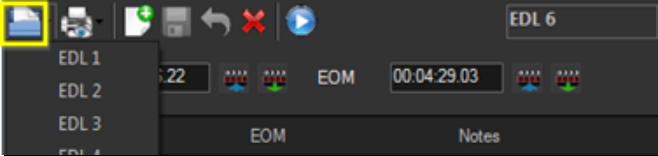


The functions available for the management of Edit Decision Lists are detailed below:



Select EDL

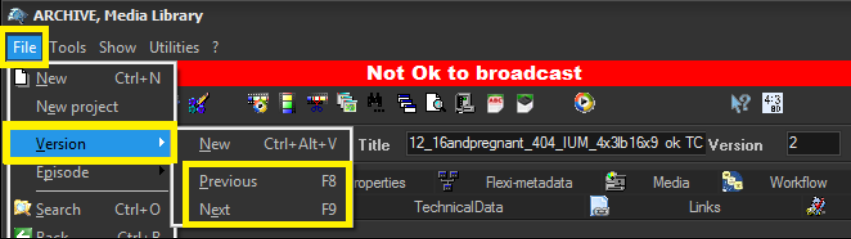
Select the **EDL** to be edited. Once opened, the system prompts an EDL according to the following convention:

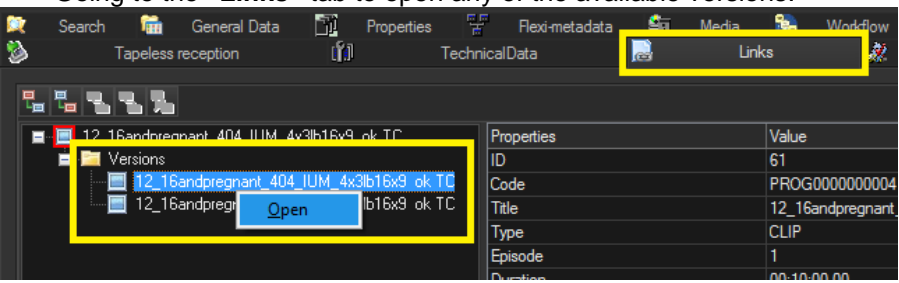

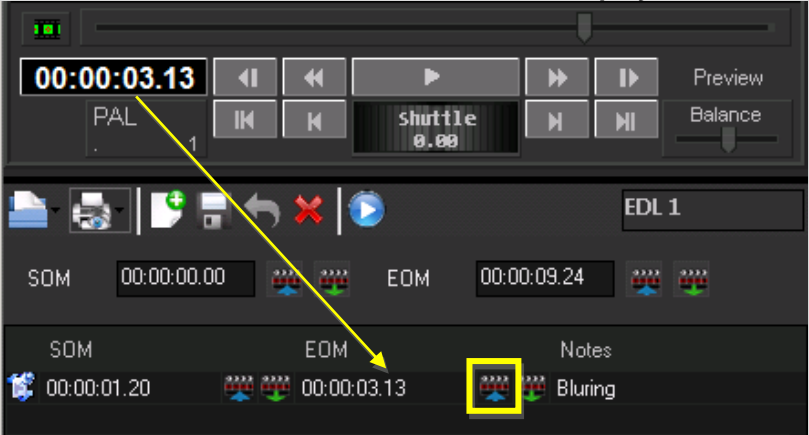

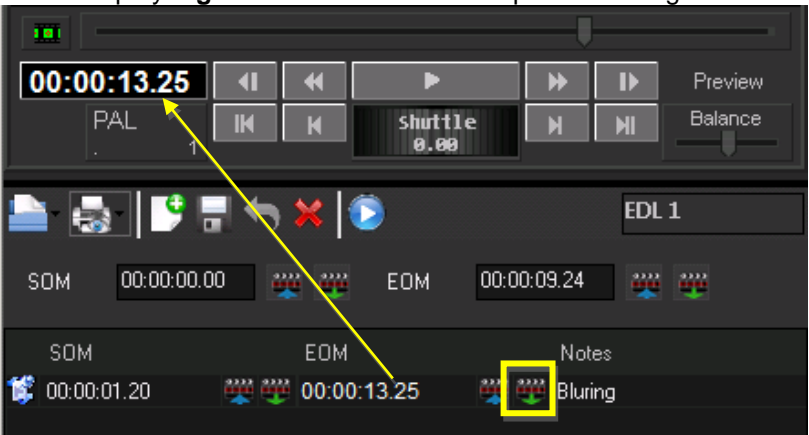








EDL 1,2,3	Broadcast or VOD
EDL 4	Cerify or Baton
EDL 5	CMS
EDL 6,7,8,9	Censorship (Default is 6, but If it's not empty, the first one empty will be prompted for being used)

In case the asset is a **version** (e.g. created from an editing request) it will contain all the EDL marks of the previous original asset. Opening the original asset (e.g. to view *EDL marks*) can be done in the following ways:

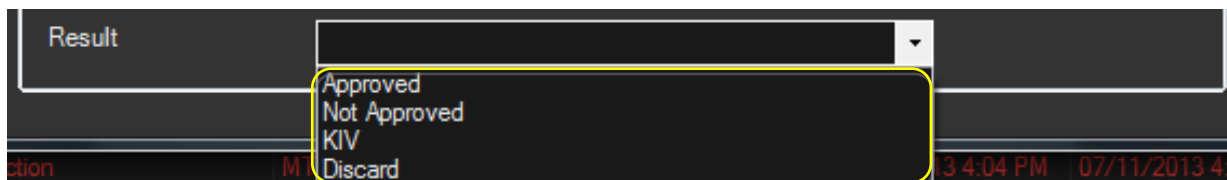
- Using the **F8** and **F9** shortcuts to open previous and next versions:

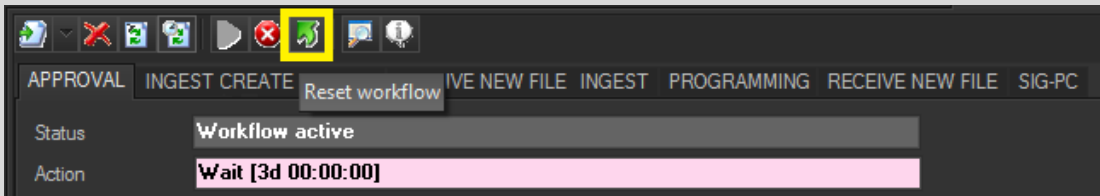


		<ul style="list-style-type: none"> Going to the "Links" tab to open any of the available versions: 
	Get timecode	<p>Fill the SOM or EOM with the value of the current player timecode. E.g.:</p> 
	Set timecode	<p>Make the player go to the SOM or EOM to preview it. E.g.:</p> 
	Insert segment	Insert the segment (with its SOM and EOM) into the EDL Inserted segments can be quickly edited from EDL double-clicking on them
	Save segment	Save all changes (SOM, EOM and Notes) performed to the segment
	Print	Generate a report on either the current EDL or all EDL's
	Undo	Cancel the last change performed to the EDL

	Delete segment	Remove the selected segment from the EDL
	Preview segment	Play the selected segment from its SOM to its EOM .

Once the EDL is marked for censorship, a result can be set on the task:



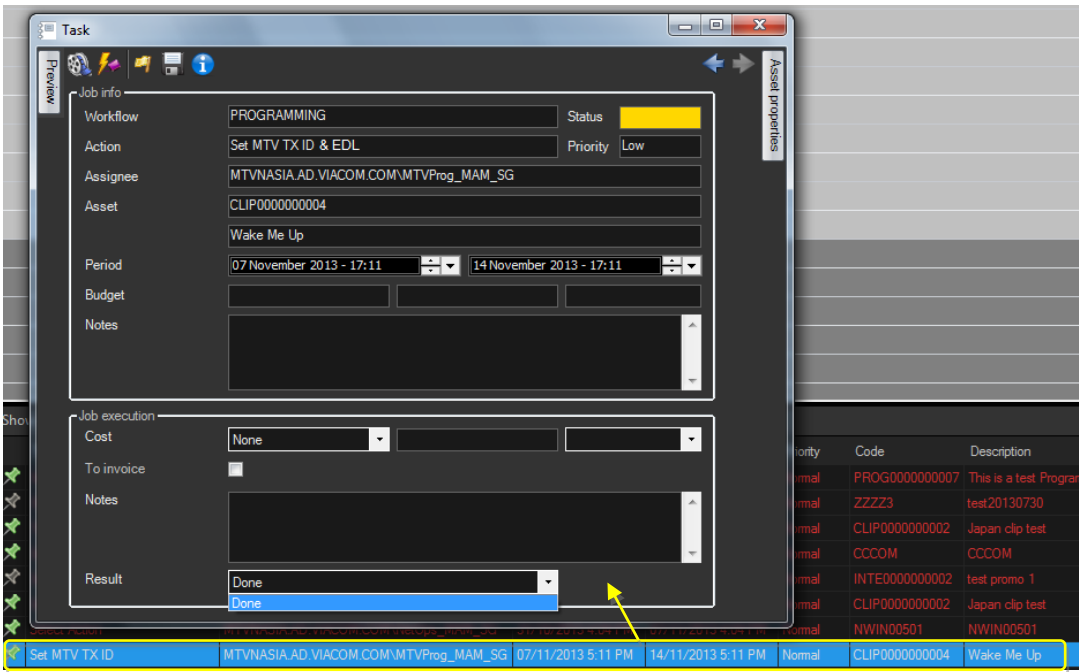
KIV	<p>Keep in view and wait 90 days and restart the “MTV S&P Approval” task</p> <p>Note: In case users want to perform the approval before 90 days are passed, it will be possible to restart the Approval workflow from the Media Library:</p> 
Discard	Mark asset as expired and delete files starting the Delete Version Discarded workflow
Not approved	Mark asset as expired and ask for a new file starting the Request for edit workflow
Approved	Automatically starts the Archive Ready for Broadcast workflow .

▼ 11. PROGRAMMING

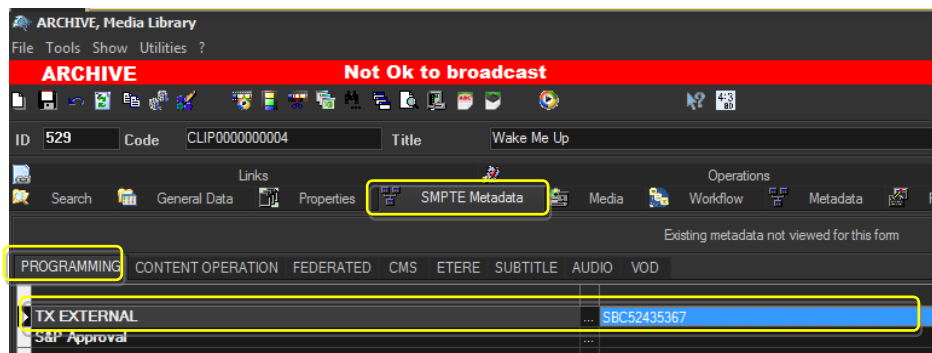
The **Programming workflow** is automatically started after a successful [approval workflow](#), this workflow request the following tasks to be completed:

[Set MTV TX ID & EDL] task

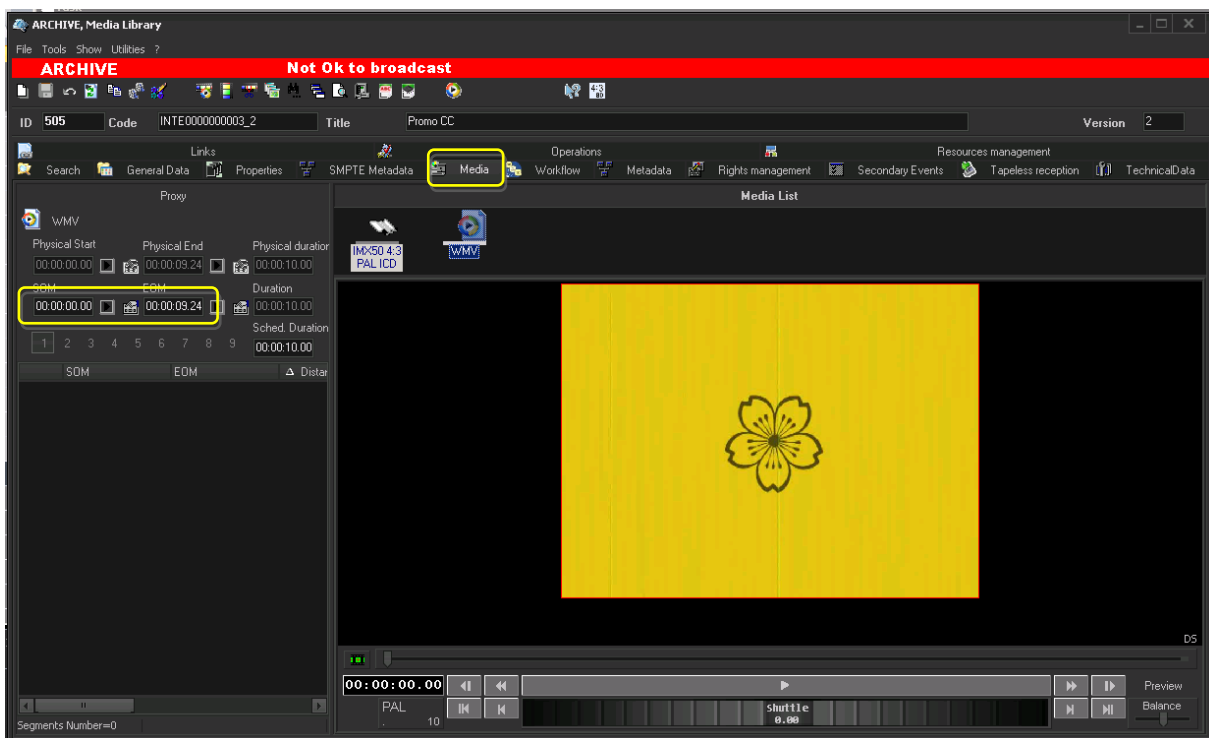
- ▼ 11.1. **MTV Programming users** will find a “**Set MTV TX ID & EDL**” task in their **Agenda View** to set the TX ID (transmission code) and EDL marks of the program. They need to take the task (click on the **green flag**) and then click on the **Media Library** button:



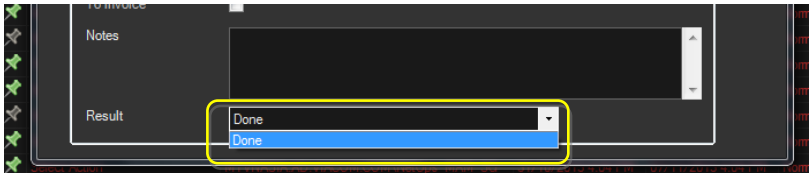
MTV Programming users will be allowed to set under the **SMPTE Metadata** tab the **TX External**:



MTV Programming users will be allowed to preview and mark the EDL under the **Media** tab, in the left part (EDL1), right-click -> **Add visible segment** or just set the **SOM** and **EOM** values:



Once set, the **Media Library** can be closed, a task **result** can be set and the **[Save]** button can be pressed:



Done	The TX ID has been correctly set and the EDL has been correctly marked.
------	---

▼ 11.2. Automatically checks if the “**physical start**” and “**SOM**” of the clip are different from zero (i.e. if the EDL has been edited) to determine if a conforming is required:

Yes	The workflow is moved forward.
No	The workflow is moved forward and the “ Conform EDL1 ” workflow is started.

▼ 12. CONFORM EDL1_IN

The **ConformEDL1_IN workflow** is automatically started when the [Programming workflow](#) requested an EDL to be conformed in **IN**. The following actions will be performed:

- ▼ 12.1. Automatically **set the conforming source** to EDL1
- ▼ 12.2. Automatically **set the conforming profile** based on the storage (SD4:3, SD16:9 or HD):
 - **1st profile:** SD-IMX50 4x3 with zero-based timecode
 - **2nd profile:** IMX50 16x 9 with zero-based timecode
 - **3rd profile:** HD-XDCAMHD with zero-based timecode
- ▼ 12.3. Automatically **create a new asset version** featuring the source EDL on its EDL #77 (system EDL dedicated for conforming). The [Conforming workflow](#) (default) is automatically attached and started in the new asset
- ▼ 12.4. Automatically **reset the conforming source**
- ▼ 12.5. Automatically mark the **original asset as expired**
- ▼ 12.6. Automatically **wait for one hour** before setting also the **original file as expired**.

▼ 13. CONFORMING

The **Conforming workflow** is launched to conform all segments in the “programming” EDL:

- ▼ 13.1. Automatically set the **source** of the asset as originated from “**conforming**”
- ▼ 13.2. Automatically set the asset as “**not ok to broadcast**” (to prevent its use before its readiness)
- ▼ 13.3. Rhozet automatically transcodes a new video file, based on the **conforming source** and **profile** and with a **zero-based timecode**:
 - **1st profile**: SD-IMX50 4x3 with zero-based timecode
 - **2nd profile**: IMX50 16x 9 with zero-based timecode
 - **3rd profile**: HD-XDCAMHD with zero-based timecode
- ▼ 13.4. Automatically attach and start the [Etere-PC workflow](#)

▼ 14. ETERE-PC

The **Etere-PC workflow** (Etere Processing Center) is performed on the new asset version holding a conformed media requested during the [Programming workflow](#).

▼ 14.1. Automatically attach and start the [Create proxy](#) workflow

▼ 14.2. Automatically **reset the “content check”** status

▼ 14.3. Automatically attach and start the [CMS workflow](#)

▼ 14.4. Automatically attach and start the [SIG-PC workflow](#)

▼ 15. ARCHIVE READY FOR BROADCAST

▼ 15.1. Automatically check if the asset **can be broadcasted**:

Yes	Move the workflow forward
No	Send alert to the Singapore IT department. The Archive workflow ends.

▼ 15.2. Automatically check the “**S&P Approval**” **metadata** to determine if the **Approval workflow** has been already performed:

Yes	Move the workflow forward
No	Send alert to the Singapore IT department. The Archive workflow ends.

▼ 15.3. Automatically copy the file from **IN** into **Archive**

▼ 15.4. Automatically generates a “**MD5 file hash**” for the file stored in **Archive**

▼ 15.5. Automatically **delete** the file stored on **IN**

▼ 15.6. Automatically starts the [Delivery Video workflow](#).

▼ 16. DELIVERY_VIDEO

▼ 16.1. Automatically check if the asset **can be broadcasted**:

Yes	Move the workflow forward
No	Send alert to the Singapore IT department. The Delivery workflow ends.

▼ 16.2. Automatically check the “**S&P Approval**” **metadata** to determine if the **Approval workflow** has been already performed:

Yes	Move the workflow forward
No	Send alert to the Singapore IT department. The Delivery workflow ends.

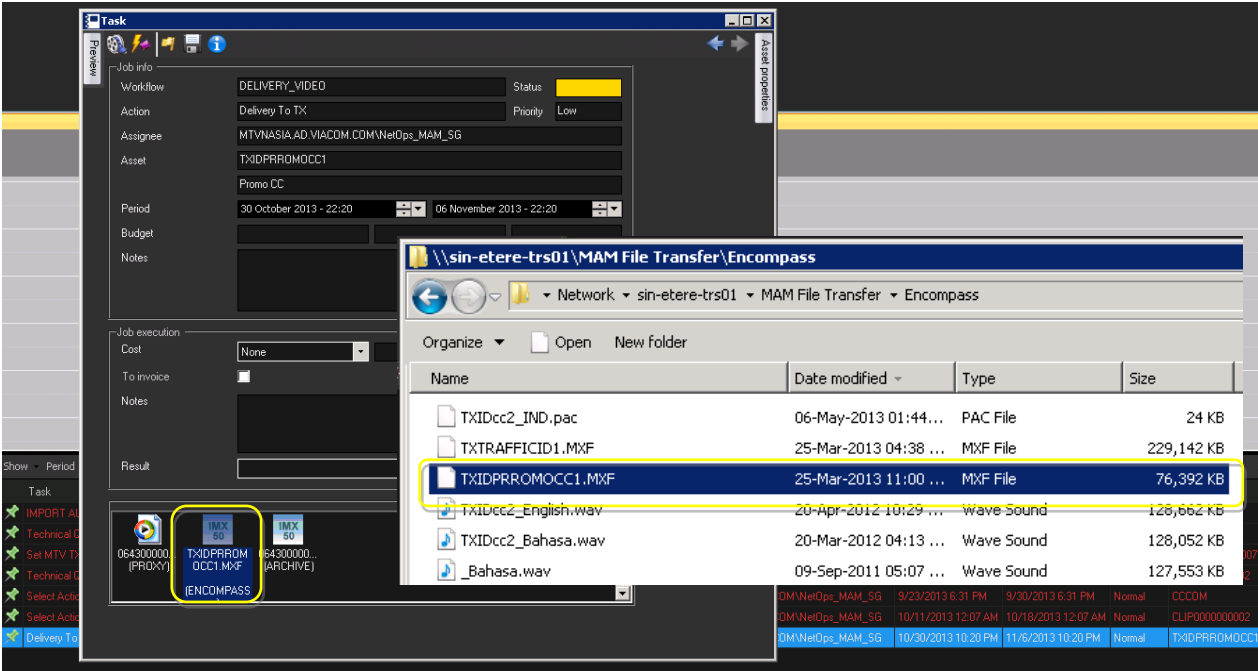
▼ 16.3. Automatically **copy** the file to the “**Encompass Metadevice**”.

Note: Location is [\\sin-etere-trs01\MAM File Transfer\Encompass\](#)

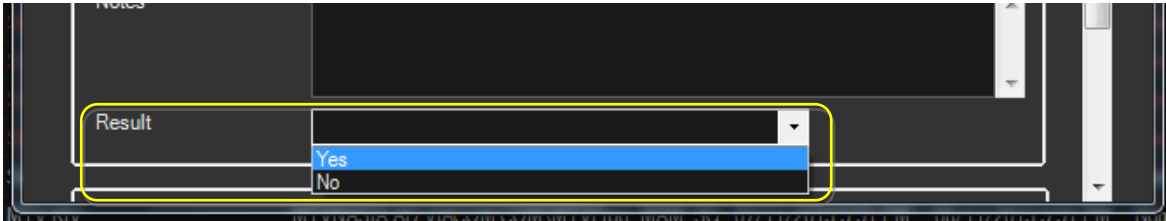
▼ 16.4. Automatically **rename** the file as the asset's **code**.

[Deliver to TX] task

▼ 16.5. **NetOps users** will find a “**Delivery to TX**” task in their **Agenda View** to decide to whether or not delivery the program to transmission; they need to take the task (click on the **green flag**) and **manually drag and drop** the **Encompass file** in the required destination:



Close the **Media Library**, back in the **Task View** set a **result** for the task depending on whether the file has delivered or not for transmission:



No	The workflow ends .
Yes	Automatically starts the Archive to LTO workflow .

▼ 17. ARCHIVE TO LTO

- ▼ 17.1. Automatically archive the file on the **long-term storage** system after 30 days.
- ▼ 17.2. The workflow **ends**.