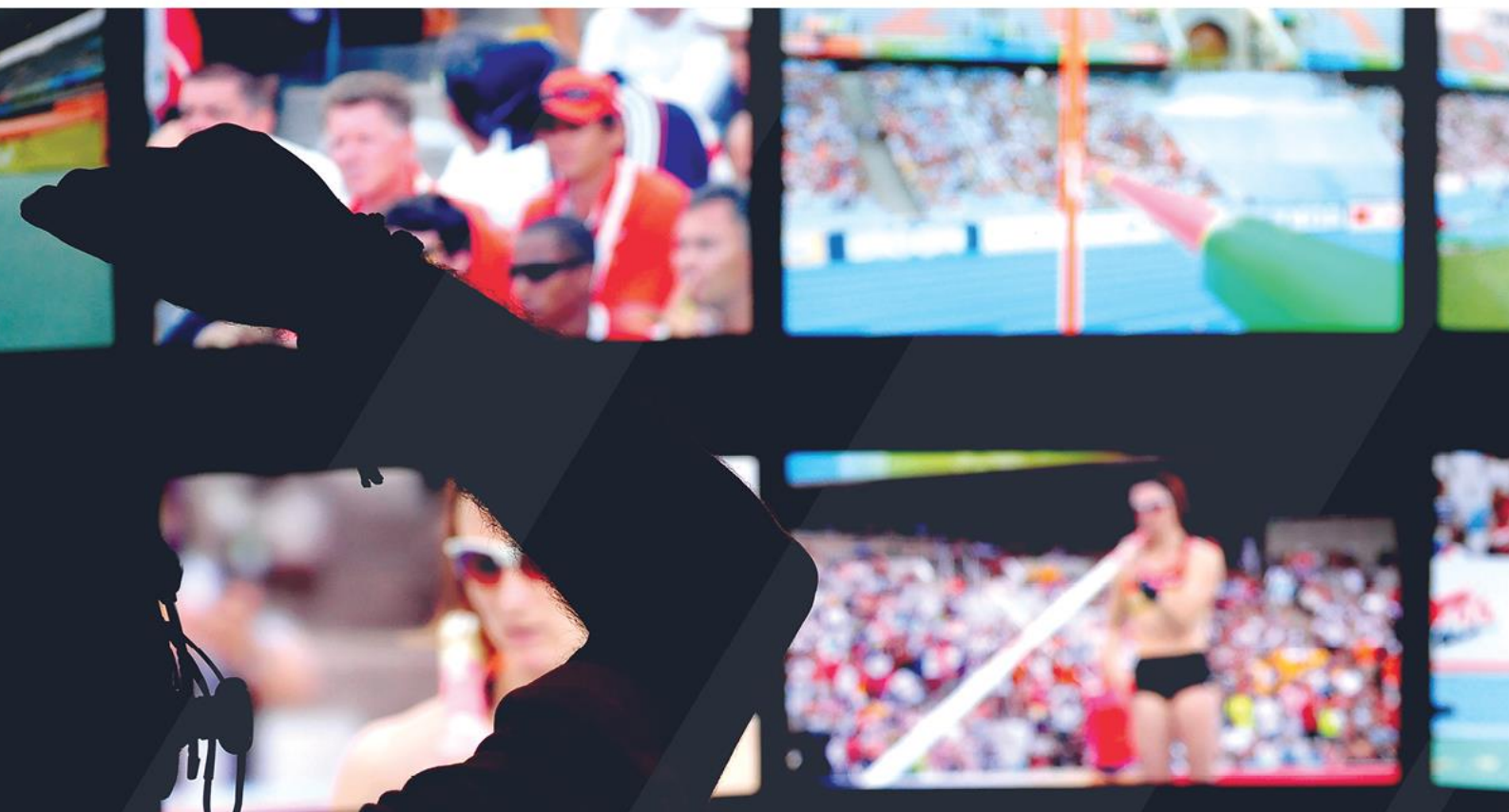


Operators' ProNews

Replay and Highlights

Package 20.4 & 20.5 | July 2023



Corporate

+32 4 361 7000

North & Latin America

+1 973 575 7811

Asia & Pacific

+852 2914 2501

Other regional offices

evs.com/contact/offices

→ evs.com

Contents

1	INTRODUCTION.....	3
2	LSM-VIA 1.6.....	4
2.1	Shortcut Improvements	4
2.2	Metadata Improvements.....	4
2.3	Export Improvements.....	5
2.4	Restripe TC Improvements.....	5
2.5	Graphical User Interface Improvements	6
2.6	Remote Workflow Improvements.....	7
3	LSM-VIA 1.7	8
3.1	MultiReview	8
3.2	Exclusive Control.....	8
3.3	LSM-VIA Viewer Improvements	9
3.4	Legacy LSM Clip load mechanism.....	10
3.5	Technical Improvements.....	11
3.6	Shortcut Buttons Improvements	12
4	XTRAMOTION 2.0	13
4.1	What is XtraMotion?	13
4.2	XtraMotion Edge	14
4.3	VIA Xsquare Integration	14
4.4	Real Time Processing.....	14
5	XTRAMOTION 2.1.....	15
5.1	Restore as Super Motion Clip.....	15
5.2	XAVC-Intra Improvements.....	15
5.3	UHD-4k Support.....	15
5.4	Improved Upgrade Process.....	15
6	COMPATIBILITIES.....	16
7	SOFTWARE DOWNLOAD AND MANUALS	16

1. Introduction

Recent months have seen the release of two LSM-VIA updates: versions 1.6 and 1.7. Both bring a range of functionality and workflow improvements. In parallel, we've also improved our XtraMotion workflow with the launch of versions 2.0 and 2.1 bring major operational improvements.



In LSM-VIA 1.6 the shortcut functions have been expanded, and a clip and cam toggle have been added in the Metadata interface and when exporting clips. The Restripe TC process has been updated, allowing you to restripe your TC at a specific IN point of your clip, and you'll also notice some graphical user interface improvements to provide a better user experience.

LSM VIA 1.7 brings you MultiReview, a control mode that enables you to browse all record trains over the whole XNet-VIA, quickly create clips, append clips to your playlist or export multi-angle clips instantaneously. On top of those improvements, the revolutionary MultiReview LSM-VIA 1.7 also introduces the ability to select dedicated PGM outputs to be controlled from the EVS XT Server with your LSM-VIA remote.

Some legacy LSM catch-up has also been done to give operators the familiar controls they have known and appreciated.

With the launch of XtraMotion 2.0 an on-premises version of XtraMotion is now available alongside the existing Cloud Service. Thanks to the integration of XtraMotion into VIA Xsquare, the workflow is now even faster than before, and configuration has become easier. XtraMotion 2.1 embeds the SuperMotion metadata into the clip, enabling all SuperMotion features known on LSM and LSM-VIA.

Discover all the improvements to LSM-VIA and XtraMotion in this dedicated newsletter.



2. LSM-VIA 1.6

2.1 Shortcut Improvements

In LSM-VIA 1.6 the shortcut functions have been expanded again, offering you more options to configure your shortcut buttons.

You can now map a specific keyword directly to a shortcut button, allowing you to quickly add a keyword to your clip without needing to go into the Metadata screen.

When mapping Record Trains to your shortcut buttons, the Recorder Name will be displayed in the shortcut interface, next to the LSM-ID.

LSM-VIA 1.3 added a Clear Shortcut function to the Shortcut Edit Screen. In LSM-VIA 1.6 we've added another, faster option for clearing a single shortcut function. You simply need to press the Clear Button, followed by the shortcut button that needs to be deleted.

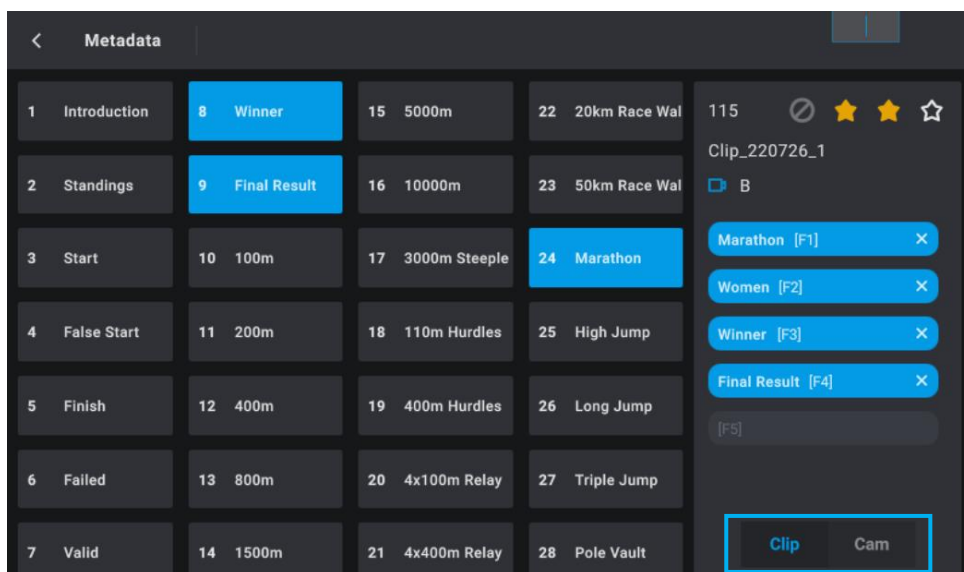
The shortcut buttons have been one of the most appreciated functions of LSM-VIA and we continue to improve on functionality in this area. To give you an overview of all the improvements made to the Shortcut buttons since the launch of LSM-VIA, we've created a new video: [click here](#).

2.2 Metadata Improvements

In the latest LSM-VIA update, when adding Metadata to your clip you can toggle between all camera angles or a single camera angle, by selecting Clip or Cam from the metadata screen.

By default, the Cam mode is selected, allowing you to add metadata to the camera angle currently loaded on your lowest numbered controlled program output. When selecting Clip, the metadata will be added to all the camera angles linked to the Clip loaded on that output.

The status of the Clip or Cam mode selection is persistent from one edit to another. When using shortcuts to add keywords or star ratings to a clip they will be added following the current Clip or Cam mode selection.



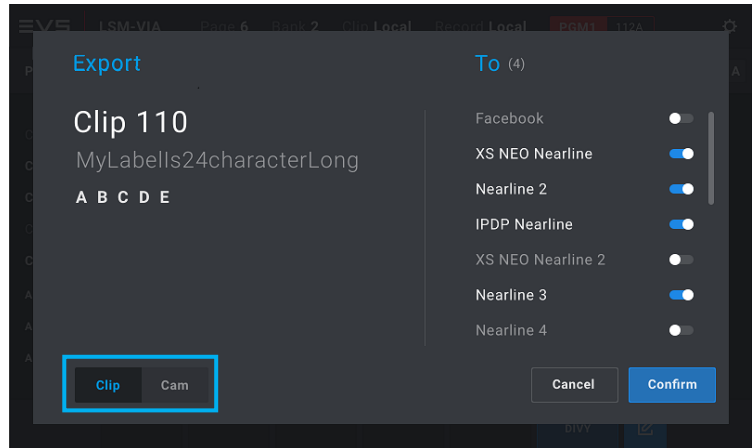
2.3 Export Improvements

Export in Clip/Cam Mode

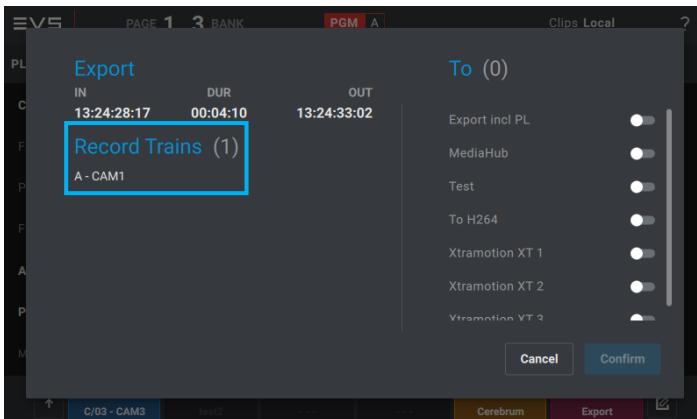
Similarly, to the Metadata improvements, a Clip and Cam mode is now available when exporting clips from LSM-VIA.

By default, the Cam mode is active when accessing the Export function. This will export the clip angle currently loaded on your lowest numbered controlled program output. When toggling to Clip mode, all camera angles of the currently loaded clip will be exported.

The status of the Clip or Cam mode selection is persistent from one export to another. When using Export Targets on the shortcut button, the selected clip will be exported following the last known current Clip or Cam mode selection.



Export in Pending Clip Mode



When adding the Export function from the Generic Shortcut Edit Screen to one of your Shortcut Buttons, you now have the option to select a target from the Export Screen without creating a clip.

This mode is called: Pending Clip Mode. It allows you to set an IN and/or an OUT point on the Record Trains and export the media loaded on your lowest numbered controlled output straight away.

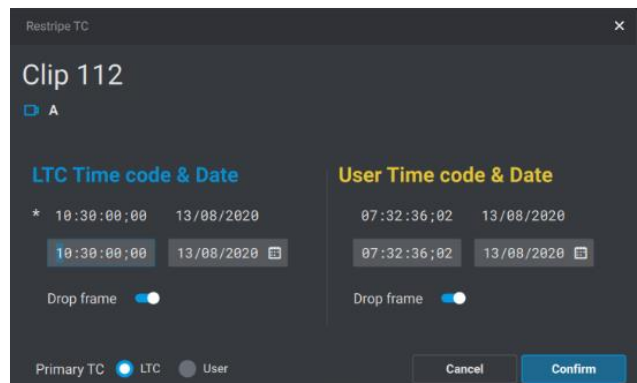
This will allow you to quickly export any content needed elsewhere, without having to create a clip out of it.

2.4 Restripe TC Improvements

In LSM-VIA 1.6 the principle to restripe TC has been updated.

If there's no clip loaded on the lowest controlled program output, the Restripe TC is performed on the clip or clips selected on the LSM-VIA Viewer Clip grid. In this case the TC IN of the selected clip or clips will be edited.

If a clip is loaded on the lowest controlled PGM output and a Restripe TC is performed, the current TC shown



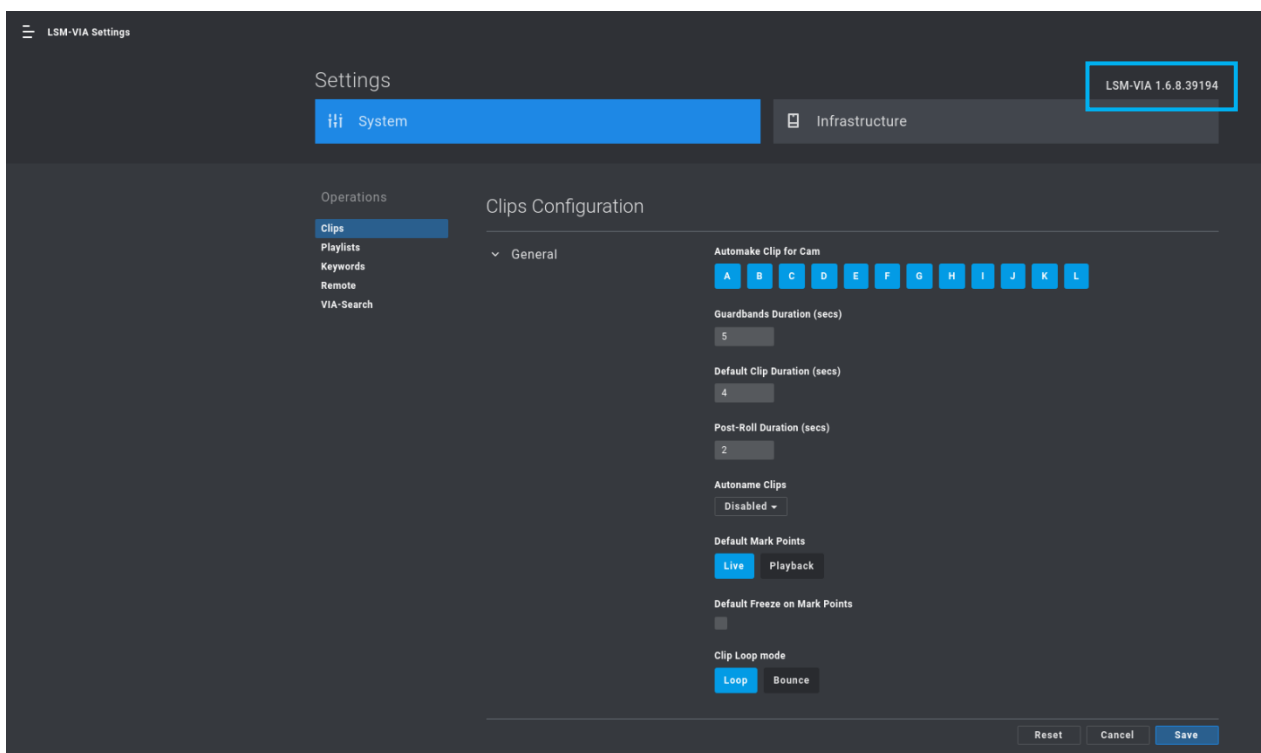
on the PGM Out will be edited and become the TC predefined in the Restripe TC Window. The TC IN of the clip will then be updated accordingly.

Keep in mind that it not possible to Restripe the TC of remote network clips, and that a Restripe TC can only be performed on the LSM-VIA Viewer application.

2.5 Graphical User Interface Improvements

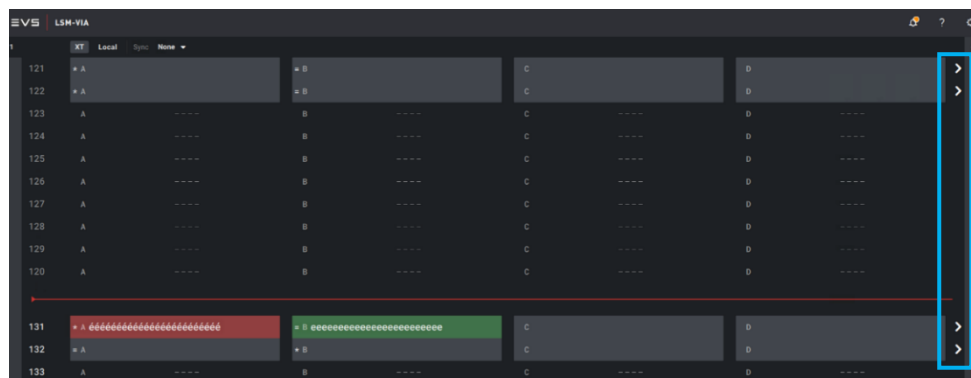
LSM-VIA Version on LSM-VIA Config

The installed LSM-VIA version number is now displayed in the LSM-VIA Configuration page. It can be found above the infrastructure tab.

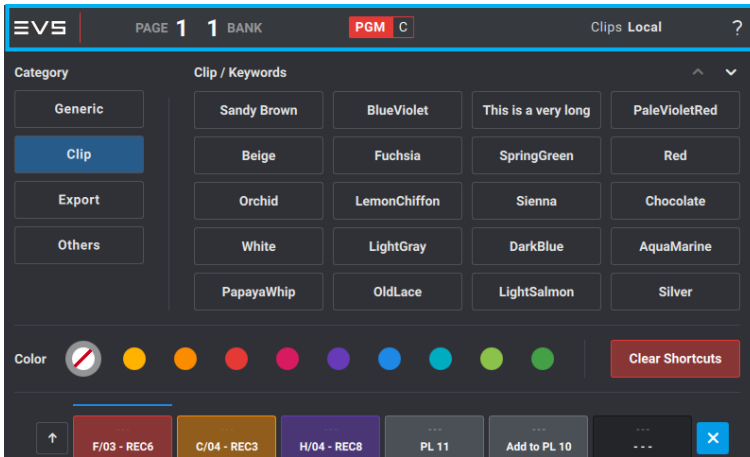


Improved angle indication on clip grid

In the LSM-VIA Viewer application the size of the arrows has been made bigger so that it's easier to see if other angles on the same LSM-ID are available. You can access the other angles by pressing "Ctrl" + "Arrow Left or Right" or by clicking on the arrow icon with your mouse.



Improved header on LSM-VIA Remote



On the touchscreen of the LSM-VIA Remote the header user interface has been improved in response to operators' feedback.

The LSM-VIA Logo has now been removed from the header bar. There's a larger font for the Page and Bank notifications. The controlled PGM and the related media loaded on that output have been centred. And finally, the Records notification has been removed (as on LSM-VIA you don't need to access a specific server anymore thanks to the Trains feature that allows you to access all Record Trains at once).

All these changes have helped create a cleaner and clearer header on the LSM-VIA Touchscreen.

2.6 Remote Workflow Improvements

With the arrival of LSM-VIA, remote workflows became easier to implement. Some golden rules need to be kept in mind:

- The XClient-VIA and LSM-VIA Remote must be at the same location.
- The Multiviewer of XT-VIA must still be transported to the operator (for example: Haivision Makito)
- An RTT up to 100ms is supported between the XClient-VIA and XT-VIA

In the latest LSM-VIA versions some improvements have been implemented to ensure smoother remote workflow operations.

Overall, the responsiveness of all basic channel control operations has been improved: Jog, Lever, Play, Load, Live, Swap, Sync to, Next, Skip, Step, Freeze.

In addition, the clip creation workflow is now properly secured even at higher latencies. This allows the operator to quickly set an IN and OUT point and assign it to an F-Key to save the clip without any issues. In previous versions, when working too fast, the server wouldn't receive the answer on the OUT point quickly enough because of network latency. As a result, a clip was saved with only an IN point and the duration was based on the default clip duration value set in the system settings.

3. LSM-VIA 1.7

3.1 MultiReview



MultiReview allows you to create and name up to 20 different workspaces (tabs), containing all record trains from the XNet-VIA, structured by the operator using one of the 17 workspace templates. The MultiReview software is hosted on XClient-VIA. From the LSM-VIA remote you can enable MultiReview as a control mode from the Main Menu (Shift + Menu + C) or assign MultiReview to your shortcut buttons.

You will be able to: browse all record trains assigned to your different workspaces with the LSM-VIA jog wheel or use the GoTo TC function to jump quickly to a different timecode, mark IN and OUT points on a multi-selection of angles in one or multiple tabs, save the marked content immediately as a clip by using the F-Keys, append or insert the multi-angled clip to the active playlist, append the clips to a Playlist by using the “Add to

Playlist” function available on the shortcut buttons or export the multi-angled clip to a VIA Xsquare target using the export button on the LSM-VIA Remote touchscreen or by exporting immediately to a dedicated target assigned to one of the shortcut buttons.

In the MultiReview interface on the XClient-VIA you will be able to open a Playlist Panel to visualize the playlist content and perform basic playlist editing like the edit options that are currently available on the Playlist Panel alongside the Clip Grid screen in the Viewer Application.

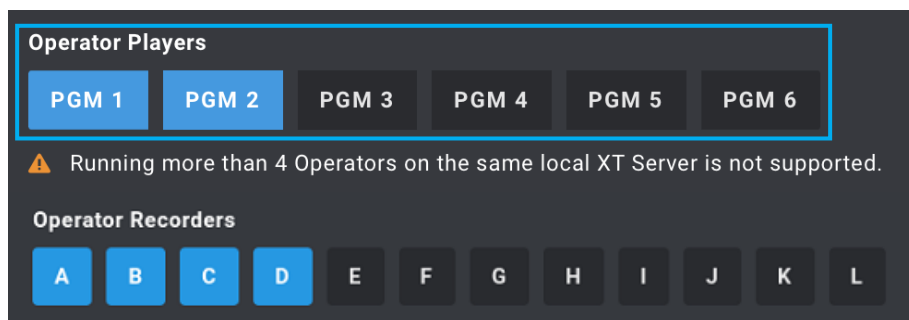
Find out more about how to configure and start MultiReview in our dedicated instructional video: [click here](#).

Find out more about how to operate MultiReview in our dedicated instructional video: [click here](#).

3.2 Exclusive Control

In the Infrastructure Settings of LSM-VIA you are now able to select the PGM Outputs of the EVS Video you want to control with your LSM-VIA Remote.

The ability to select the Operators’ Players now allows you to set “Exclusive Control” when working in combination with IPDirector. This means you can reserve dedicated player channels for LSM-VIA Operators and keep player



channels exclusively available for IPDirector. This allows operators to configure unlogic combinations that were not possible before (e.g.: Operator 1: PGM 1/2/3, Operator 2: PGM 4, Operator 3: PGM 5/6).

Some general rules need to be considered when configuring the Operator Players:

- Maximum 4 LSM-VIA Remotes per XT-VIA Server
- Maximum 3 PGM per LSM-VIA
- PGM selection needs to be consecutive per operator
- Each PGM can only be used once

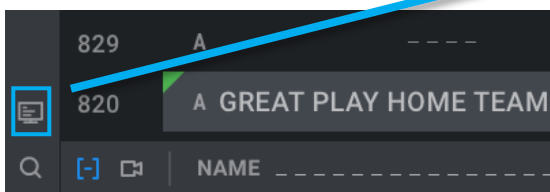
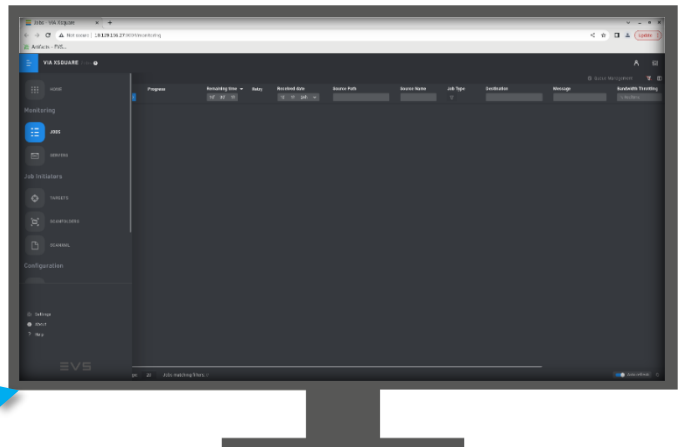
3.3 LSM-VIA Viewer Improvements

LSM-VIA 1.7 brings more keyboard shortcuts to navigate in the LSM-VIA Viewer application. Find out more on how to navigate through the LSM-VIA Viewer application, in our dedicated instructional video: [Click here.](#)

VIA Xsquare Integration

In the bottom left corner of the LSM-VIA Viewer application a new button is added to the interface. This new button will grant you access to the VIA Xsquare interface, allowing you to monitor your scheduled, in progress, failed and successful transfers.

VIA Xsquare access is based on user rights, and depending on those rights it is even possible to do more than just monitoring. It will allow you to create and publish targets for your LSM-VIA or even configure clusters of your different XTAccess machines.



VIA-Xsquare 4.7 (or future versions) is needed to benefit from this VIA Xsquare Integration.

Page and Bank Navigation

In this latest version a new possibility to navigate quickly to a dedicated page and bank is added. Typing 1 digit in the name field, followed by pressing “F7” on your keyboard will bring you to that respective page. Typing 2 digits in the name field followed by pressing “F7” on your keyboard will bring you to the respective page and bank.

This will replace the legacy VGA behaviour where this function was available by pressing “F3”. On LSM-VIA the “F3” button is dedicated to call media. A letter to access the record trains, 2 digits to make a dedicated playlist active, 3 digits to load a specific clip.

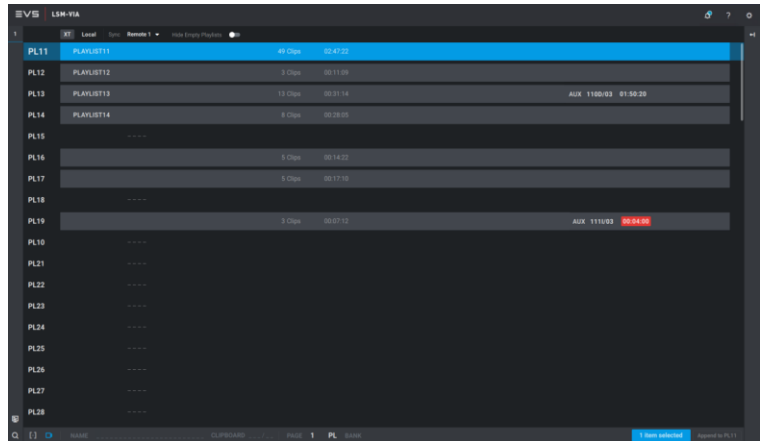
As a reminder, it is also possible to quickly navigate to a page by pressing “ctrl” + the number of the page you want to visit. Pressing “Alt” + a number will bring you to that specific bank of the current page.

Playlist Bank Navigation

If you press the “End” key on your keyboard in the clip grid of the LSM-VIA Viewer application, you will land on the first playlist of the current page.

In previous versions the end button brought you to the current active playlist.

Note that the playlist bank on the LSM-VIA Viewer application is still one big list and depending on the focus of the screen it might be that not all playlists are immediately visible. A scroll action might be required. It is also still possible to hide the empty playlists by activating the value at the top of the interface.



Quick Connect

It is now possible to navigate back and forth between the current server clip grid and the previously visited server's clip grid.

By pressing “Shift” + “F9” you will toggle between both clip grids, and it will bring you to the same page and bank where it was during the last visit.

The shortcut “Shift” + “F9” has been chosen by the LSM-VIA Team as an obvious shortcut because “F9” opens the Connect Screen, allowing you to see and connect to all servers available on the XNet.

As a reminder, “Alt” + “Tab” is a shortcut used by operating systems like Linux to toggle between different applications and thus is not available to implement the legacy quick connect shortcut you might remember from the VGA.

3.4 Legacy LSM Clip load mechanism

In LSM-VIA 1.7 the mechanism to load a clip has been updated to the Legacy LSM behaviour.

In older LSM-VIA versions the clip saving and loading mechanism was designed to wait until the preferred and secondary preferred angle were saved in the Clip Database. This mechanism caused a delay when you tried to recall a clip that was created just before. This meant that if you tried to recall a clip within the second after you created it, the system prevented you from loading the clip - followed by the classic “beep” sound.

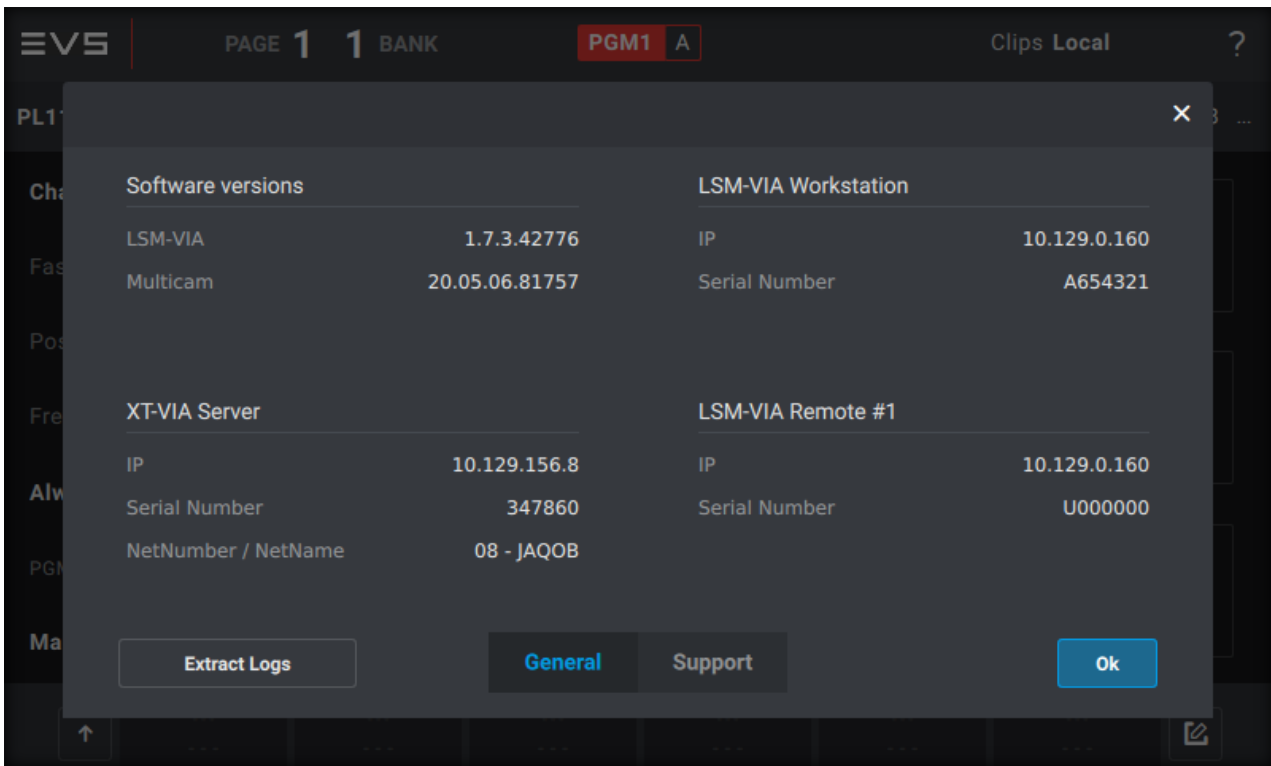
Responding to Operators’ feedback we’ve implemented the legacy way of loading clips, disabling this save mechanism set in place on LSM-VIA. This means that you are always able to load your clip - even immediately after you’ve created it. However, keep in mind that when you recall your clip before the preferred and secondary preferred angles are saved in the Clip Database, the A angle will be loaded automatically. This is the same behaviour as on the Legacy LSM.

3.5 Technical Improvements

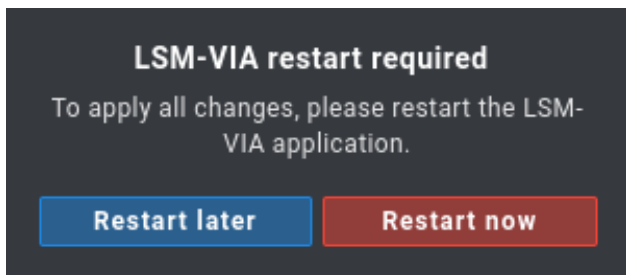
Infrastructure information on LSM-VIA Remote

Since LSM-VIA 1.5 Infrastructure information has been shown in the About Screen of the LSM-VIA Viewer Application. In this latest release the same information is now available from the LSM-VIA Remote. Tap the question mark “?” at the top right corner of the touchscreen of the LSM-VIA Remote. The infrastructure information is shown in the General tab. This will give you information about the current software versions, IT Infrastructure configurations of the EVS Video Server, LSM-VIA Workstation, and LSM-VIA Remote.

Under the Support tab you will find all contact information from EVS to get in touch with our world class customer service.



Restart LSM-VIA from LSM-VIA Configuration



Some configuration parameters in the System or Infrastructure settings of LSM-VIA require a reboot of the LSM-VIA Viewer Application. Previously, a notification was shown asking you to reboot the software. However, the reboot had to be executed manually. Since LSM-VIA 1.7 the notification is updated with the possibility to “Restart now” or “Restart later”. By clicking on one of the two options, the application will reboot immediately or not.

Note that restarting the LSM-VIA Viewer application does not impact the recordings of the EVS Video server.

Check Connection

Check Connection	
Last check	02 May 2023 - 05:36 PM
Latency between LSM-VIA Workstation & EVS Server	16 ms RTT
EVS Server	XT-VIA
MUL Version	20.05.18.82354, compatible with LSM-VIA 1.7.10.43535
VIA Services	Available
VIA Services response time	72 ms RTT
Net Number - Net Name	1 - XT-VIAHQ1
Serial Number	

A Check Connection button has been added to the EVS Server tab in the LSM-VIA Infrastructure configuration screen. By clicking the button, you will get some technical information related to the setup and its connection.

You will see the EVS Server type (XT-VIA or XT-GO), its Net Number and Net Name, the EVS Server Serial Number, the Multicam software version installed and if

the VIA Services are active. A response time of the VIA services is mentioned and the latency between the LSM-VIA Workstation and the EVS Server is also provided.

3.6 Shortcut Buttons Improvements

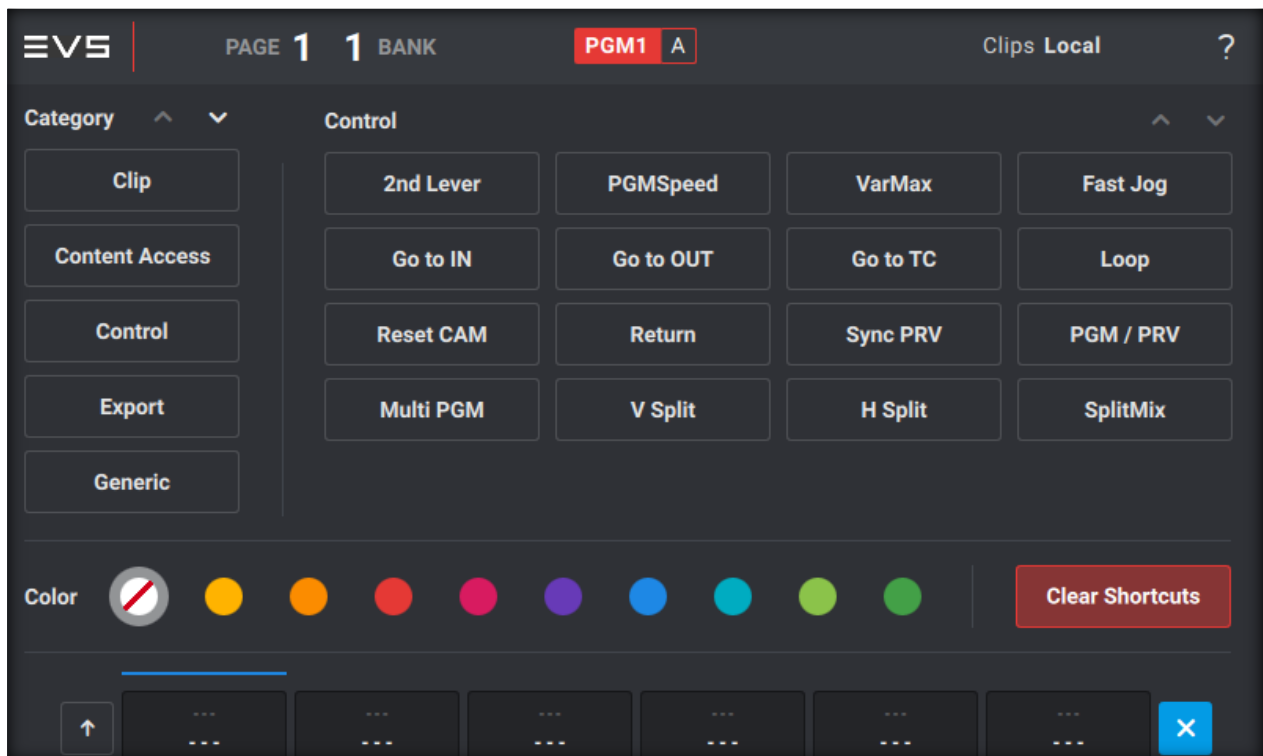
The programmable shortcut buttons are among the favourite function in LSM-VIA. To provide you with the best user experience we've implemented some improvements in this latest version of LSM-VIA.

The control modes MultiPGM, PGM+PRV and MultiReview have been added to the long list of shortcut functions - allowing you to quickly switch between MultiReview and another control mode.

The shortcut categories have been expanded, and the functions have been reorganized into different categories allowing you to more easily find your desired function to be assigned to a shortcut button.

The Shortcut buttons are now organized in the following way:

- Clip: 1/2/3 Star Rating, Add to Playlist, Archive, AUX Clip, Edit Metadata, Keywords, Push, Push to Favorites
- Content Access
Media currently loaded on PGM, current active Playlist, Add to Shotbox, Shotbox, Back to Local, Last Mark, Mark, Last Search TC, Search TC, Search TC Config, Page, Recall, Record Trains, Trains
- Control
2nd Lever, PGMSpeed, VarMax, Fast Jog, Go to IN, Go to OUT, Go to TC, Loop, Reset CAM, Return, Sync PRV, PGM+PRV, Multi-PGM, MultiReview, V Split, H Split, Split Mix
- Export
Export, Flatten Playlist, list of available VIA Xsquare targets
- Generic
None (to unmap a function from a button), Cerebrum, Character, Extract Logs, Log Point, Lock Remote
- Dyvi
Up to 6 Dyvi macros can be mapped



4. XtraMotion 2.0

4.1 What is XtraMotion?

XtraMotion is an AI driven Super Slow-Motion service, in the cloud or on-premises, for live production replays. It can transform any content into Super Slow-Motion in seconds. Thanks to XtraMotion, storytelling can be enhanced by turning any camera into a Super Slow-Motion camera.

XtraMotion is completely integrated into the EVS ecosystem and exists either in a cloud version or as an on-premises implementation. For each frame ingested into XtraMotion the interpolation function generates 2 additional frames. Creating a 3x phase SuperMotion Clip.

Our proprietary AI algorithm has been found to work better than all existing methods in the scientific community and was awarded with a NAB Product of the Year 2023 Award.



Find out more about XtraMotion in our dedicated video: [Click Here](#).

4.2 XtraMotion Edge

With the launch of XtraMotion 2.0 we've also introduced an On-Premises version of XtraMotion. This comes with dedicated hardware (PFX2) allowing you to transform your regular content into Super Slow Motion without the need for uploading and downloading it from the Cloud. This makes the service even faster than before.

In terms of configuration, we've tried to make it as easy as possible: Connect and Configure an IP Address for the 1GbE PCLan connection and do the same for the 10 GbE Media Sharing network.

A monitoring interface is available through a web browser, by providing the PC Lan IP Address of the XtraMotion Server or by double clicking the shortcut on the desktop. In this interface Server data, Services Health, Logs and License information can be accessed.

- **Server Data:** Uptime, storage, RAM, CPU and GPU usage. It is also possible to stop the server and restart the server from this window.
- **Service Health:** Overview of all XtraMotion services active, service versions, number of clips currently and successfully processed.
- **Logs:** Download all XtraMotion Services Logs and download the status of XtraMotion.
- **License:** Manages all XtraMotion Licenses.

4.3 VIA Xsquare Integration

XtraMotion 2.0 is now integrated into the VIA Xsquare Software Suite, allowing you to easily configure XtraMotion targets for LSM-VIA, Legacy LSM and IPDirector. In previous versions PowerShell scripts was used, now this workflow has been replaced by a connection code to link the infrastructure with the Cloud instance.

Another improvement, thanks to the VIA Xsquare integration, is the direct processing of frames by XtraMotion. In previous versions the file had to be fully uploaded to the cloud storage before the rendering of additional frames. With the integration of XtraMotion into VIA Xsquare the frames are directly sent from the EVS Video Server to the XtraMotion instance.

It is also possible to restore the XtraMotion Clip to the same LSM ID as the original clip. The XtraMotion Clip will be saved on the same page, bank and F-key of the original Clip on the first available Camera Angle Slot will be used.

A best practice guide has been designed to help you set up XtraMotion. Please refer to the Documentation Portal or [click here](#) to find out more about how to configure your setup.

4.4 Real Time Processing

Improvements have been made to process clips even faster than before. The internal processing of XtraMotion is now Real Time, for the Edge version it's even faster than real time. This is under the condition that only one clip at a time is being processed by the XtraMotion Service.

The turnaround time to get a clip from XtraMotion Edge back onto the remote is about 5 seconds. When using XtraMotion Cloud the turnaround time depends on the clip duration: About 15 seconds for a 3 second clip, about 60 seconds for a 30 second clip. As the processing time is real time it allows you to play back the clip once the first frame has arrived on the EVS Video Server – there's no need to wait until the full processing is done.

Note: When using XAVC-Intra the processing is not done in real time due to slower encoding. This process is updated in XtraMotion 2.1.

5. XtraMotion 2.1

5.1 Restore as Super Motion Clip

XtraMotion Clips are now restored as if they were real SLSM clips coming from a real Super Motion Camera. This means if you send a regular clip of 3 seconds 50 fps (150 frames) you will get back a SLSM 3x Clip - still 3 seconds but with 150 fps (450 frames).

When playing out the XtraMotion SLSM 3x Clip by hitting the Play button, it will play out the clip at 33% which is the default speed for SLSM 3x Clips. If you want to play out the clip at native speed (100%), simply push the lever all the way up.

5.2 XAVC-Intra Improvements

XAVC-Intra is now processed faster than real time, as was the case for the other codecs of previous versions. Overall, all processing times of all codecs have been improved.

Here are a few benchmark examples for a 30 second clip 1080p 59.94 processed with XtraMotion Edge 21:

- AVC-Intra: 5 seconds turnaround time, 52 seconds total processing time.
- XAVC-Intra: 5 seconds turnaround time, 52 seconds total processing time.
- DNxHD 10bitHigh: 5 seconds turnaround time, 67 seconds total processing time.
- ProRes HQ: 5 seconds turnaround time, 70 seconds total processing time.

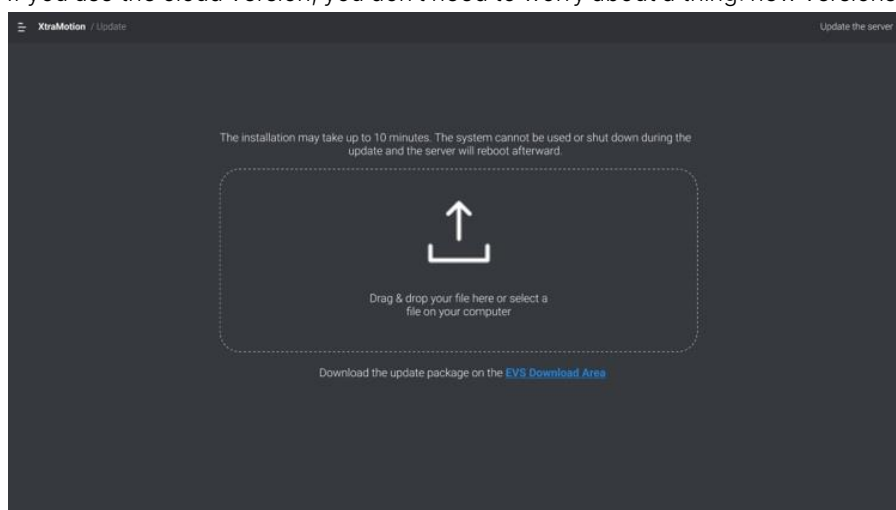
5.3 UHD-4K Support

XtraMotion 2.1 Edge now supports UHD-4K natively for the following UHD-4K Codecs: XAVC-Intra 4K and DNxHR. XtraMotion Cloud does not yet support UHD.

XtraMotion 2.0 already supported UHD-4K, but the frame interpolation processing was previously done in 1080p.

5.4 Improved Upgrade Process

If you use the cloud version, you don't need to worry about a thing: new versions of XtraMotion Cloud are deployed automatically by EVS on our AWS infrastructure. Don't forget to upgrade your VIA Xsquare Suite to benefit from the XtraMotion improvements.



For the on-premises version of XtraMotion there will be an update section in the User Interface, where you will be able to drag and drop the update package downloaded from the EVS Download Area.

6. Compatibilities

LSM-VIA 1.6

- LSM-VIA 1.6 is compatible with the latest Multicam 20.3 patch Release & Multicam 20.4 Release
- LSM-VIA 1.6 is compatible with XT-VIA and XT-GO Servers with a valid license code.
- LSM-VIA 1.6 doesn't require a specific version of VIA Xsquare.
- Integration between LSM-VIA 1.6 & Cerebrum will require Cerebrum 2.3 or higher.

LSM-VIA 1.7

- LSM-VIA 1.7 is compatible with the latest Multicam 20.5 Release.
- LSM-VIA 1.7 is compatible with XT-VIA and XT-GO Servers with a valid license code.
- LSM-VIA 1.7 is compatible with VIA Xsquare 4.6 (or higher).
- VIA Xsquare 4.7 is required for the VIA Xsquare integration in the LSM-VIA Viewer Application.
- Integration between LSM-VIA 1.7 & Cerebrum will require Cerebrum 2.3 or higher.

XtraMotion 2.0

- XtraMotion 2.0 is compatible with VIA Xsquare 4.6 or higher.
- "Same server as source" Setting in VIA Xsquare requires LSM-VIA 1.6.30 or higher.

XtraMotion 2.1

- XtraMotion 2.1 is compatible with VIA Xsquare 4.7.
- XtraMotion 2.1 is compatible with LSM-VIA 1.6.30 or higher.

Please refer to the EVS Toolbox to find out more about the compatibilities: <https://toolbox.evs.com/>

7. Software Download and Manuals

Please refer to the Download Area for software packages to download: <https://download-area.evs.com/>

Please refer to the Documentation Portal for manuals and release notes: <https://docs.evs.com/>

If you do not already have an EVS login, you will be invited to create a personal EVS account, to help ensure that you're kept up to date with only the most relevant information and updates. This will also allow you to download all the information you need, completely free of charge.



→ [evs.com](https://www.evs.com)

