

# Dataton WATCHOUT® version 6.4

This version contains some new features, such as MPCDI file import and task folders, and fixes some issues.

## Multiple Projection Common Data Interchange (MPCDI) file import

You can now import display and projector calibration data from MPCDI files. Please consult the user's guide for more information.

## Task folders

Auxiliary timelines can now be grouped and organized into folders in the task window. The order of timelines, folders, and timelines in folders, all affect the stacking order when rendered.

Dragging and dropping tasks to change their order, and place them in folders, has been reworked to be more intuitive.

## Custom cue colors

You can now set custom colors on cues, either on different types of cues through the Preferences dialog, or on individual cues in their corresponding dialog.

## Other new features

- Manual pre-roll can now be applied on all kinds of media cues, not just video and audio.
- You can open a capture card control panel on Dataton media servers, where applicable.
- The task window can now be locked, to prevent any unwanted changes in stacking order, trigger conditions etc.

## Improvements

- Cues are always rendered and pre-rolled, regardless of opacity, resulting in smoother playback in cues that are faded in.
- HAP video can utilize more than 16 logical CPU cores if encoded with more than 16 chunks. This can increase HAP video performance on high-end media servers.
- Improved overall performance on Windows 10 media servers to resolve some instances of choppy playback.
- The process of entering or exiting fullscreen mode has been improved.
- Enhanced NDI performance and stability (update to NDI 3.8)

## Fixes

- An issue with preloading from version 6.3 has been fixed. This could cause glitches and/or poor performance of any media playback, when jumping on the timeline or using play/pause cues.

- The production software will no longer hang if you delete a virtual display device while its corresponding media is being used in a media cue.
- Replacing any media cue by a DMX media no longer causes the production software to crash.
- The display software could turn black when connecting/disconnecting a display, if there was no show running. This has been fixed.
- In Windows 10, the show's refresh rate was not set correctly on certain displays/projectors. This has been resolved.
- When calibrating a 3D projector while there were multiple 3D objects on different stage tiers, WATCHOUT placed the calibration points on all those objects, not just those on the same tier as the projector. This has been fixed.
- Timecode now works with non 44.1 kHz devices.

## Dataton WATCHOUT® version 6.3.1

This update contains some tweaks and fixes.

- Hardware acceleration of H.264 video is disabled for WATCHMAX 2 models WX7100 and WX9100 due to incorrect handling in MainConcept codec which may cause frame corruptions.
- NDI has been updated to version 3.7.2.
- Fixed an issue with the Network window where non-Dataton media servers were listed incorrectly.
- Fixed memory leak when importing audio files.

## What was new in version 6.3

This version introduces new features, including real-time motion tracking, as well as improvements and fixes.

### Live motion tracking

Live motion tracking using the RTTrPM protocol is a new type of input. This multi-variable input enables media cues to mimic the position and rotation of real-world objects. It may also be used in expressions and for conditional show programming providing great flexibility.

### Other new features

- It's now possible to select which MIDI device to use for input. Choose from among those connected to the system.
- You can now select which audio device you want to use for timecode input, including ASIO or WASAPI audio devices.
- It's possible to download log and dump files from media servers, through the Stage menu.
- A menu item has been added to open the GPU control panel on selected Dataton media servers (requires a disk image update).

- You can now lock the width/distance ratio of projectors when calibrating.
- A compatibility mode hint has been added to address problems with dropped frames on some capture devices. This setting is available through a checkbox in the live video dialog.
- Basic support for audio in RTSP streams has been added.
- Support for WATCHMAX 2 (WX7100 and WX9100) has been added.

## Improvements

- You can now open a configuration dialog for audio devices on non-proprietary media servers. This was previously only possible in the production software. Note: This does not apply to Dataton media servers which are pre-configured with optimal settings.
- Reliability and performance have been improved for the dynamic image server.
- Geometry correction now produces a sharper and more precise result.
- We've improved cluster synchronization on highly loaded networks.
- Reliability and performance have been improved for NDI media.
- Incremental improvements in audio playback.

## Fixes

- In recent Windows 10 editions, the display software sometimes failed to start if there were many high-resolution displays connected to the same computer. This is now resolved.
- Preloading media cues that are shorter than 3 seconds now works properly.
- Going online to a single media server with "Use as Synchronization Chain Master" checked will no longer cause a crash.
- The Color tween dialog now works as intended.
- In some rare cases, control cues could be skipped. This has now been fixed.

## Known issues and limitations

- Audio may start playing slightly before the video in RTSP streams.
- Looping video with embedded audio might drift out of sync, if the audio stream is longer than the video (our recommendation is to use audio on a separate layer).
- NewTek NDI HX is currently very sensitive to the network configuration and may only work on a few media servers at a time. This is a NewTek issue and the best workaround is to convert NDI HX streams to regular NDI streams.
- H.264/AVC is limited to level 5.2. Videos encoded using a higher level will not be rendered.
- Seeking in hardware-accelerated videos may display the incorrect frame in a paused state.
- Audio streams in NewTek NDI are not supported.
- When remotely upgrading a WATCHPAX to 6.2.2 or 6.3 from an older version, the WATCHPAX

is rebooted twice to make sure all components are installed. As a result, the production software needs to be taken online manually, after the update is finished.

- When upgrading the software remotely, WATCHOUT must have administrative rights for the media server (non WATCHPAX). Otherwise, essential components which are required by WATCHOUT may not be installed.

## What was new in version 6.2.2

This release mainly contains improvements on performance and stability, as well as fixes.

- Improved behavior of looping video with embedded uncompressed audio.
- Improved audio playback in WASAPI exclusive mode.
- Improved stability in Text Media dialog.
- Improved stability when editing display masks.
- Improved reliability when controlling auxiliary timelines.
- Improved license detection on WATCHPAX 2.
- "Insert/Delete Time" command is more stable.
- HAP Q video is always played with the correct colors.
- Image Media used as display masks are more stable and reliable.
- "White Masked" display mode works well with geometry correction.
- Image proxy works with external URL.
- HAP, HAP Alpha and HAP Q video with embedded audio are no longer recognized as audio only.

## Known issues and limitations

- Looping video with embedded audio might drift out of sync, if the the audio stream is longer than the video.
- NewTek NDI HX is currently very sensitive to the network configuration, and may only work on a few media servers at a time. This is a NewTek issue and the best workaround is to convert NDI HX streams to regular NDI streams.
- H.264/AVC is limited to level 5.2. Videos encoded using a higher level will not be rendered.
- ASIO is not supported for LTC input.
- Seeking in hardware-accelerated videos may display the incorrect frame in a paused state.
- Audio streams in NewTek NDI are not supported.
- In Windows 10, Nvidia graphics cards could produce flickering image in a multi-display setup. This issue is resolved in Nvidia Quadro drivers 385.77 and Nvidia Geforce drivers 388.00, or later.
- When remotely upgrading a WATCHPAX to 6.2.2 from an older version, the WATCHPAX is

rebooted twice to make sure all components are installed. As a result, the production software needs to be taken online manually, after the update is finished.

- When upgrading the software remotely, WATCHOUT must have administrative rights for the media server (non WATCHPAX). Otherwise, essential components which are required by WATCHOUT may not be installed.

## What was new in version 6.2.1

This version contains mainly improvements and fixes.

To improve usability, the Anti-Aliasing setting in the Geometry tab of the display dialog has been removed. The function has been unified with the Anti-Aliasing setting in the Advanced tab instead. Additionally, the setting has been renamed Edge Smoothing.

### Improvements

- NDI HX performance with multiple display servers is improved (updated NDI HX driver).
- A single alert is displayed if the primary NDI device is inaccessible.
- WASAPI now uses 24-bit playback as default.
- Overall audio playback has been optimized.

### Fixes

- Audio cues will loop.
- It is possible to add media without having a default Windows sound playback device.
- WASAPI works with multichannel configurations.
- Edge smoothing works well with soft edges.
- Disconnecting displays will not cause rendering errors in soft edges, and does not disable windowed mode in the display software.
- License key upgrade issues in WATCHMAKER are fixed.
- Creating an Input and using it in a formula, while in Live Update, no longer results in error messages.
- HTTP video, using Network Video, is enabled.
- The connection to online display servers is maintained when the window layout is switched, or reset. The timeline marker position is also preserved.
- Inactive ASIO devices are hidden.
- Scrolling with the mouse wheel in list windows, such as the Media, Input, Output and Task windows, on Windows 10, displays correctly.
- Deleting free-running audio cues while playing will cause them to cease playing.
- Minor bug fixes in H.264 and MPEG-2 decoders.

- Minor bug fixes in MP4, MPG and MXF demuxers.
- Switching to certain ASIO devices no longer causes a crash (Dante Virtual Soundcard had this issue).
- The Ctrl + Shift + A shortcut for remote access works in Stage list.
- Moving displays (and undo) in Stage view is pixel-precise.
- Constants in tween expressions will not lose their value when you press cancel.
- Images used as display masks:
  - Work well with Live Update.
  - Are no longer affected by what you do with an image cue that is using the same image media.

## What was new in version 6.2

This version comes packed with additions and enhancements. The top two new features are support of NDI (Newtek's Network Device Interface protocol) and ASIO/WASAPI audio..

### New features

- **Audio.** The multi-channel audio renderer has been completely reworked to include:
  - Support of ASIO and WASAPI
  - Support of up to 24 channels
  - Individual channel volume and routing
  - Vastly improves overall audio synchronization
- **Video.** Support for video capture over NDI (Network Device Interface) has been added.
  - Stream high quality video over local network with very low latency.
  - NDI HX (H.264 encoded NDI) is also supported. Please note that this requires the installation of a driver, included as an option in the WATCHOUT installer.
- **Auto-alignment.** It is now possible to import auto-alignment display data from DomeProjection systems:
  - 2D display and 3D projector import
  - Geometry correction mesh import
  - Blend mask import
- Support for WATCHPAX 20 has been added.
- Image media can be used as display masks.
- Display masks can be applied before, or after, geometry correction.
- A single command can now be used to create multiple displays arranged in a grid.
- Properties of multiple displays can be edited all at once, by selecting them and double-clicking

- one of them, or via the Specifications command in the Edit menu or in the popup menu.
- There is now the option to apply anti-aliasing on display outputs.
- Tween effects can be pasted onto multiple cues using multi-select.
- Images can now be pre-split, in the same way as video.
- Window layout management has been added:
  - Window layout can be saved in 10 presets.
  - Window layout can be loaded from presets.
  - Window layout can be reset to default.
- The user interface for selecting display frequency has been improved, enabling you to select a frequency of 59.94Hz, for example.
- Support for multiple DMX universes allowing individual inputs and outputs to specify which universe they will use.
- Support for 16-bit and 24-bit DMX input and output.
- Added ability to select between 3 different kinds of interpolation for inputs:
  - Linear - as performed previously
  - Circular - to support wrapping input controls
  - None - no interpolation
- "Save as..." command added to the File menu.
- The corner points of the corner tweener can be moved with the arrow keys, while holding the Ctrl key (Ctrl + Shift to move larger steps).
- The 3D mapping projector can be moved using keyboard arrow keys.
- Support has been added for the following image formats in image sequences:
  - DDS images
  - 32-bit RGB targa images
- Dynamic Image Server performance is greatly improved, using NDI.
- Dynamic Image Server can be used to capture the computer desktop.
- The production software can be discovered by WATCHNET 1.4.

## Improvements

- Better playback performance due to improved file reading capabilities for the following codecs:
  - HAP, HAP Q and HAP Alpha
  - ProRes
  - QuickTime Animation (QT RLE)
- Better playback performance for media encoded with 4:2:0 chroma subsampling.

- Updated codecs for H.264 and MPEG-2
- Improved performance and stability in image sequence playback.
- Improved frame accuracy in hardware-accelerated video playback.

## Bug fixes

- Connecting/disconnecting displays on a WATCHPAX 4 while WATCHOUT is running now works properly.
- Using a HapQ video as a 3D model texture no longer results in the wrong colors.
- Detection of blend mode for images that use premultiplied white works again.
- Scrolling using the mouse scroll wheel in the timeline window on Windows 10 now works properly.
- 3D projectors can be pointed straight upwards/downwards.
- MPEG-2 can have 4096 as dimension.
- The issue with scrambled frames in H264 hardware decoding has been resolved.
- Support for ProRes 4444 with 16-bit alpha has been added.
- ProRes is forced to full color range.
- Artifact issue in ProRes decoding has been resolved.
- Support for HAP files with mixed compression formats has been added.
- Resolved issue with playing network video repeatedly.
- The display name setting of an audio cue is maintained during copy and paste.
- Explicit preroll of video and audio now works as intended.
- The "Rebuild show cache" command now works as intended.

## Known issues and limitations

- NDI HX in its current state is very sensitive to the network configuration, and may only work on one media server at a time. This is a Newtek issue and the best workaround is to convert NDI HX streams to regular NDI streams.
- H.264/AVC is limited to level 5.2. Videos encoded using a higher level will not be rendered.
- ASIO is not supported for LTC input.
- Seeking in hardware-accelerated videos might display the incorrect frame in a paused state.
- Audio stream in NDI is not supported.
- In Windows 10 Nvidia graphics cards would produce flickering image in a multi display setup. This is solved in Nvidia Quadro drivers 385.77 and Nvidia Geforce drivers 388.00, or later.
- When remotely upgrading a WATCHPAX to 6.2 from an older version, the WATCHPAX is rebooted a couple of times, to make sure all components are installed. This results in the

production software needing to manually go online again, after the update is finished.

- WATCHOUT must have administrative rights for the media server (non WATCHPAX) when upgrading the software remotely. Otherwise, important components on which WATCHOUT depends may not be installed.

## What was new in version 6.1.6

This version focuses on fixing bugs as well as some improvements.

### Improvements

- Improved performance of live video media.
- Improved performance of hardware-accelerated video playback.
- Messages in the message window can be copied to the clipboard.
- Improved network video functionality that indirectly adds support for additional network cameras.

### Bug fixes

- Hardware-accelerated video would sometimes not use the full color range, for example black would not appear totally black.
- Seeking in a hardware-accelerated video would result in a frame that is about half a second in the future.
- Seeking in a hardware-accelerated MPEG-2 video would show the first frame of the video.
- A warning message could pop up when controlling WATCHMAKER externally.
- Double-clicking a display in the Stage window would sometimes not bring the corresponding dialog window to the front.
- Right-clicking on a display mask gradient curve would result in the wrong menu.
- Media cues using "Anchor as local vanishing point" would sometimes disappear.
- Looping a composition containing another composition did not work.
- Playing a video for more than one week would result in stuttering playback.
- Deleting time, using the "Insert/Delete Time" command, would sometimes yield an unwanted result.
- Virtual displays with very low resolution, such as 2 pixels in width or height, could cause rendering errors.
- Image sequences with file names containing only numbers (for example 0001.tiff, 0002.tiff etc) did not work.

## What was new in version 6.1.5

This version introduces support for the new WATCHPAX 4 media player.

## Improvements

- Overall improved hardware-accelerated video playback performance on WATCHPAX devices.
- Added support for hardware-accelerated MPEG-2 video decoding on WATCHPAX devices.
- Updated the list of available resolutions to choose from when creating a 2D Display/Projector.
- The live video dialog has been simplified and improved.
- Improved USB video capture support and performance. For example, UHD 4K video capture over USB is now possible.
- Added option to use single audio renderer.
  - Maintains inter-channel synchronization (no phase shifting).
  - Bypasses WATCHOUT's internal mixer and maps channels directly to the default audio playback device. The ability to route channels and set volume per channel is disabled.
- MP3 and AAC files can be played in WATCHOUT.
- The lower limit of the width/distance ratio of a 3D mapping projector is decreased to 0.25, to support short-throw projectors.
- Added synchronized start, play and pause for http video.

## Bug fixes

- Fixed a bug that could appear when double-clicking a WAV media.
- Fixed a bug in handling of dropped frames for hardware-accelerated video.
- Fixed a bug that could cause stuttering when using a generic input to affect a media cue on a display computer.
- Fixed a bug that prevented 8-bit wav files to play (time code files).

## Known issues

- Hardware-accelerated video decoding will be disabled for looping media.
- Seeking can produce image artifacts for hardware-accelerated H.264 video.
- Hardware-accelerated video is rendered one frame late.

## What was new in version 6.1.4

Fixed error in WAV file playback that was introduced in version 6.1.3. It occurred only when playing the audio repeatedly, either by using looping, or by using control cues.

## What was new in version 6.1.3

### Resolved issues

- Improved support for multiple displays in the display software on Windows 10.
  - Requires Windows 10 Anniversary Update.
  - For full functionality, Windows 7 is still recommended for both production and display computers.
- Error in WAV file playback that caused a clicking sound has been resolved.
- Some TGA files did not work in image sequences.
- Tearing problems in hardware-accelerated video have been resolved.
- 3D objects are now visible even at close range to the display/projector.

## Known problems in Windows 10

- Changing resolution of a display inside WATCHOUT may not be handled correctly by some display drivers.
- NVIDIA GPUs produce visual artifacts in a multi display mode.

## What was new in version 6.1.2

This version contains a number of bug fixes, mainly with regard to multi-channel audio.

- Channel assignment of multi-channel audio now works properly.
- Corrupt frames in HAP video files no longer cause the software to crash.
- It is now possible to specify an absolute path to an autostart script file, starting with a drive letter, as a parameter to the display software.
- Using a control cue to jump-and-pause to time 0 of an inactive auxiliary timeline now works properly.

## What was new in version 6.1.1

This version contains a number of enhancements and bug fixes.

### Enhancements

- Greatly improved video playback and overall performance of the display software.
- Calibration tab is disabled when not online and in live update. A message is shown stating that live update is required for calibration.
- It is now possible to attach a preview movie to any video proxy.
- Added ability to nudge display masks and their points using arrow keys.
- It is now possible to enable/disable multiple display masks all at once.
- Added option to preview Virtual Display media in high quality.

## Bug fixes

- Pre-split video proxies now work with live update.
- A number of crash or hang bugs in the production software have been fixed.
  - It would crash sometimes when adding a geometry point to a display.
  - Occasionally it would crash when opening a show that had many geometry points added.
  - Sometimes it would crash when adding a display mask point.
  - It would hang if you switched to a composition window while that same composition was playing on the main timeline.
- Midi inputs now consistently route to the correct input variable.
- Possible to select Video In or Audio Out device in the display software menu, regardless of computer.
- Fixed editing of values in the text fields in the Geometry Tab of the Display Dialog.
- Occasional remote software upgrade errors fixed.
- Low audio volume in the production software corrected.
- Transparency of Dynamic Image media with http content now works properly.
- Auto Save no longer activates after you manually save the show, unless you make a change to the show.

## What was new in version 6.1

This version contains some new features, as well as optimizations and performance enhancements.

### New features

#### Popup Menu

A right click contextual menu to improve user workflow, and in some places add new functionality. With it you can:

- Move displays between different tiers.
- Duplicate composition medias.
- Reach different functionality more easily such as tweening of cues.

#### Stage List

A stage list in the stage window, showing a hierarchical list view of all displays on the Stage, and what stage tier they are on. It can be activated from the stage menu. With it you can:

- Drag and drop displays easily between different tiers.
- Go to selected display by using a command in the contextual menu.

## Auto Save

Ability to automatically save your work in progress with a certain time interval. This feature can be turned on and off in the file menu or in the preferences dialog, where you can also set the time interval.

## Auto Refresh

Ability to automatically refresh media files that have changed. This feature can be turned on and off in the media menu, or in the preferences dialog.

## Enhancements

- Virtual Displays now support separate Resolution and Stage Dimensions. Useful when dealing with LED wall modules of varying densities.
- 3D object rendering is optimized on sub-mesh level. This makes rendering of large meshes, using multiple high-resolution videos or virtual displays, more efficient, allowing each projector to render only the sub-meshes that it can "see".
- Presplit videos can be assigned as 3d model texture, showing one video for each display/projector.
- Virtual Displays performance in the production software is improved.
- Geometry correction points can be adjusted using arrow keys.
- Projector calibration can be switched using the Tab key.
- A preview movie can now be attached to Video Proxy even in non-presplit case.
- Improved license manager window, being able to scan licenses on remote display computers even when you are not currently online.
- Displays connected to the same display computer can now have different resolutions.

## Bug Fixes

- Some dialogs could not be opened if you had a different language setting than english.

## 3D File Format Support

Support for the following 3D file formats has been added:

- BLEND (Blender)
- FBX (Autodesk Filmbox)

# What was new in version 6.0.2

This version contains some minor bug fixes as well as improved H264 playback performance.

## Bug Fixes

- Sort by Z depth for solid media now works properly.
- Adding a new display mask while editing another now works properly.
- Copying/pasting displays containing display masks now works properly.
- DMX recording now works also while in live update.

## What was new in version 6.0.1

This version contains minor enhancements and bug fixes.

### Enhancements

- Logo suppressed in display software when transferring new content while in Live Edit mode.
- Progress bar is shown in display software while analyzing a complex show.
- Dynamic Image Server renders still images originating from a HTTP server faster.
- Allow multi-channel audio playback through multi-channel sound interface, and not just using stereo pairs. This is done by selecting the same interface for each channel pair in Preferences (production software) or the Audio Out menu (display software) and de-selecting "Multiple Stereo Pairs".

### Bug Fixes

- Incorrect indication of media transfer progress in Live Update mode.
- Analyzing a complex show no longer makes the display software lose connection with the production software.
- Copy/Paste of Audio cues didn't work properly with "By display name" selected.
- Looping of ProRes video now works properly.
- Undoing/Redoing edits in the display dialog now works properly.

### 3D File Format Support

WATCHOUT supports the following 3D file formats:

- 3DS (3D Studio Max)
- OBJ (Wavefront)
- DAE/Collada
- LWO, LWS (LightWave)
- LXO (Modo)

## What was new in version 6.0

This major, new version of WATCHOUT ushers in a number of significant new features.

## Modernized UI

All new dark theme with clearly color-marked features provides both a modern look and reduces eye-strain when working in often darkened environments.

## Live Edit

### Streamlined show editing

Say bye-bye to the Update command! See all changes to your show live as you make them.

### Optimized, manual mode

For cases when live update isn't desired, the old manual mode can still be used. This mode is optimized by minimizing the set of files copied to each display computer.

## Video Playback

- HAP, HAP Alpha, HAP Q high performance codecs
- Apple ProRes native codec
- V210 uncompressed video
- Image Sequences

Play TIFF image sequences directly from disk for fully uncompressed video. Requires fast disks/SSD/RAID for best performance.

## Virtual Displays

### Create any shape of LED display, using non-standard resolutions and formats

Map each virtual display onto an area of a real display output from a display computer, for later mapping onto the LED display modules by the LED wall processor

### Use as textures for 3D mapping

Create composite images using the familiar rendering and compositing capabilities of WATCHOUT and map the result onto 3D geometry

### Provides composition-like objects clipped by their bounds

## 3D Models

### Directly import variety of 3D file formats (e.g., OBJ, 3DS, Collada)

3D models can be used for image mapping or as "stage props" to improve pre-visualization of entire sets. Just drag the 3D model right into WATCHOUT, like other kind of media file.

### Multiple textured areas

Each 3D model can have multiple independent areas, which can then be mapped and textured using any WATCHOUT image media, video or using the new Virtual Displays. Simply drag the

image media onto the desired area in the 3D model.

## 3D Projector

An entirely new way of displaying images. While a traditional WATCHOUT Display manages an essentially flat image area, a Projector allows images to be mapped onto arbitrarily complex 3D geometry.

- Position Projector in 3D space
- Aim Projector at a target in 3D space
- Rotate projector for optimal image coverage
- Accurately Models Focal Length, Lens Shift and other parameters
- Marker-based, Semi-Automatic Calibration

A semi-automatic method for aligning the projector in 3D space. Simply line up a few well-defined corners or other features in the projected image with their physical counterparts on the geometry being mapped onto. WATCHOUT does all the hard work of matching the actual position, target, rotation and focal length of the projector.

## Pre-visualization

- Use imported models to build "virtual sets"
- Combine static assets, with screens and mapped objects
- View from multiple angles using multiple "camera" windows

## Masks

### Create your own mask shapes

Use simple editing tools directly in WATCHOUT to create masks, while seeing the result projected live as you edit the masks.

### Mask out individual objects on a per-projector basis

Block out doors, windows or other parts of objects you're projecting onto, independently of any content.

### Custom designed, per-edge, edge blends

Each mask has individually editable soft edges with variable width and gradient. All live as you edit them.

## Dynamic Image Server

### Better performance

Performance is improved greatly by optimizing the data sent across the network, thereby significantly reducing the transfer time for large images.

## Render HTML5 content

Simply point the Image Server at a URL to render the latest weather map or similar dynamic data. Content can be accessed either remotely over the Internet or stored locally on the Dynamic Image Server itself.

## Multi-channel audio

- Route channels in multi-channel audio files to their desired outputs
- Control the volume of each sound channel individually
- Supports most multi-channel sound cards or external audio boxes

## Solids

- Create simple rectangular shapes right inside WATCHOUT
- Apply a feathered edge for use as drop shadows and masks

## Feathered Edge

Apply an adjustable feathered edge and/or rounded corners to video or images.

## Video playback speed

Adjust the playback rate of video, allowing you to match the duration of a clip to some other content, or just as an effect. This works hand-in-hand with the built-in frame blending and precise video synchronization of WATCHOUT.

## Insert/Delete Time

New command for opening up some new space along a timeline, optionally extending cues and adjusting tween point positions.

## Show Export for WATCHNET

Export your entire show to a single WATCHOUT Bundle (WOB) file, for subsequent deployment through WATCHNET.

### Faster show updates

Export a Bundle Update file, containing only the changes, for faster distribution of updates of existing shows through WATCHNET.

## Multiple Display/Projector Windows

### Simplifies geometry correction across displays

Keep multiple Display windows open on screen for tweaking the geometry correction across blends.

## WATCHPAX Fixed IP

Certain installation scenarios require the use of fixed IP addresses rather than the normal dynamic addressing used by WATCHPAX. You can now specify a fixed IP address along with router and DNS addresses, if desired.