

MoviejayHX release notes

- **Version 2.6.1 - 1.6.9.9142 - 27/03/2017**

- moviejayHX virtual output device now adds support for Skype and other 3-party application, that will now be able to capture the moviejaySX playback output. Also, general support has been improved for already supported applications like Adobe FMLE, Vmix, and many others.
- The preview window's background for the CG Editor can now be set to display the same video as the current on-air output as well as any other virtual device. This new feature helps to properly position the CG objects on-the-fly inside the preview window, but based on the actual on-air output.
- When the moviejayHX on-air module played back a passthrough video, virtual device or NETPLAY event, it was erroneously truncated to 1 hour. Fixed.
- New graphics on digital counters and better precision on VU-meters.
- In the moviejayHX Setup->Playlist editor, if a filter was applied inside the Programs management window, any record added to the playlist and not contemplated in the filter was marked as "not valid" (red + underlined). Fixed.
- Added uppercase and word wrap button for the Text object inside the CG editor.
- Dragging the position slider inside the preview window now updates the clip playing position in realtime before while still dragging (releasing the slider), thus offering a realtime preview.
- Improved internal XML parsing and its thread safety
- Updated ffmpeg to latest stable version - N-83458-g53234b9 (09.02.2017)
- The general playlist stability was improved.
- High CPU issue load if no video, audio or external audio was selected. Fixed.
- In special cases, buffer overflows and fps drops might occur when capturing the playback output to MPEG clip. Fixed.



- Version 2.6.0 - 1.6.7.9089 – 17/02/2017

- In the moviejayHX Setup->Playlist editor, it is now possible to set specific row colors for each type of playlist item. Settings are accessible from moviejayHX Setup->Hardware->Various.
- On the CG Editor window, when adding/replacing a CG project the file open dialog now stores and recalls the latest used folder.
- On the clips, commercials, programs and hard disk clip browse windows, the interlace settings have now been updated to default, top, bottom, progressive, one field.
- Attempting to click on a Clip palette button inside the icon area did not activate the button. Fixed.
- On the CG Editor windows, hints were not showing. Fixed.
- On the Clip Palette window, the Clear Logos button did not clear CG projects from overlay and did not switch off the yellow LEDs on active buttons. Fixed.
- The orange camera now reflects the current encoder state, so it turns off if encoding stops for any reasons.
- On moviejayHX Setup, inside the commercials and programs database management windows, improved functionality for the "Producer" box: when you click the drop down box, this is automatically set to the same text as the edit box, to avoid any possible discrepancy and/or filing or unwanted values.
- On moviejayHX Setup, if the playlist editing window was opened following the Programs management window, the "program details" box was displaying empty values. Fixed.
- On moviejayHX Setup, when a new playlist is created in the playlist editing window, the new record is immediately posted, to avoid generating orphan records in case of any issues when editing very long playlist.
- Improved file switching performance.
- Fixed NVENC crash on certain systems.
- Lots of other improvements and fixes in the playback engine.

- Version 2.5.9 - 1.6.1.7700 – 20/07/2016

- Newtek NDI (Network Device Interface) is an open standard developed by NewTek that allows transmitting video streams via LAN instead of SDI. The protocol aims to connect video applications in the production and post-production areas. moviejayHX now offers simultaneous playing out to a NDI stream, to playout card (Decklink or others), streaming output, and WebRTC (see below). Clearly, the NDI protocol allows as well to send video to and from any Winjay application, for example a CapturejayHX can capture the NDI stream generated from a moviejayHX on any other workstation in the LAN.
- WebRTC is a new technology that provides browsers and mobile applications with Real-Time Communications (RTC) and allows audio/video data to be transferred between desktop applications and browsers like Google Chrome and Mozilla Firefox without any plugins. WebRTC has a number of awesome features like adaptive bit rate, direct peer-to-peer data transfer and low latency. moviejaySX now offers simultaneous playing out to a NDI stream, to playout card (Decklink or others) streaming output, and WebRTC. Clearly, the WebRTC protocol allows as well to send video to and from any Winjay application, for example a CapturejayHX can capture the WebRTC stream generated from a moviejayHX in any other location in the world via the internet.
- The CG Editor now supports playing of media files (video clips) as CG items to overlay.
- Added QuickSync H.264, MPEG-2 and VC-1 hardware-powered decoding support.
- On moviejayHX Setup, if a filter was applied to the Commercials database and subsequently the Commercial Breaks window was opened, all records not belonging to the filtered selection appeared as blank rows. Fixed.
- If the Blackmagic Videohub was set as matrix switcher and a twin switch was set to perform a passthrough video (99 to 99) as 1st switch, the 2nd switch was ignored. Fixed.
- Added new CG thread processing logic that significantly improves performance.
- Added DekTec SDI devices basic support (for capture and playout).
- Added multithreading logic to DVCPRO encoder and JPEG-2000 decoder.
- Several other minor fixes, improvements and optimization in the playout engine.



- Version 2.5.8 - 1.6.0.6613 – 07/06/2016

- A new feature allows to set playback to pause the video at the last frame after the latest clip in the playlist, or if the playback mode is set to Auto Stop, or a playlist item is set to Stop.
- moviejayHX now includes a screen capture engine, that can be set from moviejayHX Setup->Hardware->Streaming tab, to serve as video source for the passthrough device feature. Thanks to this, it is possible, for example, to add a screen capture feed into the playlist.
- The scrolling text panel that appears when you click on the customer logo from the main application window now also shows the dongle serial number. This information turns useful when updating the subscription package.
- On moviejayHX Setup, Playlist scheduling window, the Update Breaks feature now takes into account the date/time of each item immediately preceding the commercial break instead of the playlist date. This allows the feature to work correctly also on long playlists that extend over more days.
- On moviejayHX Setup, External Lines window, the list of records was not sorted alphabetically. Fixed.
- On moviejayHX Setup, when entering the commercial->scheduling window, the related controls might be erroneously set to weekly scheduling mode if the preview window had been opened before. Fixed.
- When playing back External Feed events with aspect-ratio information set, the aspect ratio was not correctly sent to the EPG encoder. Fixed.
- On moviejayHX Setup, Playlist editing grid, it is now possible to enable/disable checking of playlist items so that invalid items will be marked in red and underlined.

To enable this feature you shall set inside moviejay.ini, in the [Settings] section:

PlaylistCheck=1

Or to disable this feature:

PlaylistCheck=0

- On moviejayHX Setup, trying to insert an existing playlist into a new one displayed the error message: "invalid value for field length". Also, if the existing playlist contained any forced events, the user set forced time was not copied. Fixed.

- Version 2.5.7 - 1.6.0.6613 - 04/03/2016

- Thanks to integration of the new CG Editor into moviejayHX, the existing management of logos, text, and Flash items as single objects is now replaced by CG projects, since these latter ones are easier to manage with increased flexibility into a user-friendly interface. Management of single objects is going to be dropped down starting from the forthcoming versions, so you are advised to convert these existing items into CG Projects in the meantime. For the same reason, while it is still possible to preview existing Picture, Text and Flash objects, the Logos management window on moviejayHX Setup will only allow to add CG Projects.
- On moviejayHX Setup, Logos database management window, a dedicated button now opens the CG Editor window allowing to make changes to stored projects or create new ones.
- Now moviejayHX network playback now offers playback of MPEG-DASH (Dynamic Adaptive Streaming over HTTP, an adaptive bitrate streaming technique that enables high quality streaming of media content over the Internet delivered from conventional HTTP web servers. Also, M-JPEG decoding performance has been increased with multithreaded logic, allowing for streams to decode up to 4 times faster (depending on the CPU).
- From moviejayHX Setup, the Hardware->Streaming tab now allows to set a default streaming profile to run automatically when moviejayHX on-air module is started. You can define these profiles from the encoder section on moviejayHX on-air module.
- On moviejayHX on-air module, improved accuracy on the expected start time display and delay display on the playlist queue.
- The encoder from moviejayHX on-air module now adds AAC audio codecs for .FLV and MPEG-TS formats.
- Improved transition logic for clips with different frame rates: in order to avoid possible audio issues when doing a transition from, for instance, a 25 FPS file to a 30 FPS file, moviejayHX playout engine now converts the stream to the target frame rate before performing the transition. This makes transitions smoother and free from audio defects.
- Various minor fixes and improvements.

- Version 2.5.6 - 1.5.4.5342 – 05/02/2016

- On moviejayHX on air module, main selection window, it is now possible to set a default button between add, replace, insert so for example adding of clips might be set on "insert" if preferred, to avoid kicking out items from the playlist when the button is set at "replace" as default.
- On moviejayHX on air module, the 1st item loaded at application startup is now correctly positioned into the Play 1 slot instead of the On Air slot at the top.
- On moviejayHX on air module, in the special case when a playlist starting with a command was loaded at application startup, this command was not executed. The same playlist run fine provided that at least any other clip had been played. Fixed.
- On moviejayHX on air module, Clips, Commercials and Programs selection windows, a dedicated box now allows to perform a free text search.
- On moviejayHX Setup, the Hardware->Streaming section fields has updated to reflect the newest file writing and streaming engine. It now allows to enable/disable streaming at startup, with the specified profile.
- On moviejayHX Setup, Playlist editing window, the form for adding a new command now stores and recalls last used folder when using the CG LOAD and CG CLEAR commands.
- On moviejayHX on air module, when using the audio processor window with no clips playing, random access violation errors might be generated. Fixed.
- Various minor fixes and improvements.

- Version 2.5.5 - 1.5.4.5342 – 14/12/2015

- Added support for simultaneous playback/capture (such as moviejayHX with external feeds input) on the same Decklink card. May not work on older Decklink cards.
- On the streaming and file writer output, H.265 (HEVC) encoding is now available on Nvidia's latest Maxwell GM20x GPUs (GTX980, 970, 960) and future Quadro/Tesla/GRID platforms based on GM20x GPUs.
- On moviejayHX Setup, if a filter was applied to the Programs database and subsequently a playlist was opened inside the editing window, all records not belonging to that selection appeared as blank rows. Fixed.
- Updated FFmpeg codecs to version 2.5.8 (build 2015-07-31, Git revision 1bfb99).
- Added support for older DeckLink drivers.
- Format auto-detection for new Blackmagic devices (this might require updating your drivers to the latest version).
- Added UDP streams playback improvement.
- Fixed audio/video sync for certain MPEG files playback.
- Significant improvements for MPEG-TS and PS files seeking accuracy and performance.
- Added support for DVD/DVB subtitles format.
- Significant seeking improvements for LXF files.
- Added support for 360 system MXF files.
- MXF parsing logic improvement: MXF files without index are now parsed much faster.
- The 4K output optional plug-in adds support for 4K 50p, 59p, 60p.
- Various minor fixes and improvements.

Version 2.5.4 – 1.5.4.4732 – 26/06/2015

- The Clip Palette now offers a "PREVIEW" button that allows to preview a oggetto grafico off the air (the graphics overlays will be displayed inside the "preview" window).
- The Clip Palette now accepts standard CG projects and internally converts them to CG compositions on-the-fly. This way, more CG projects can be loaded at the same time and each one can be switched on/off individually from the clip palette.
- On the CG window, it is now possible to edit name of individual CG items by clicking twice on the current name or using F2 key.
- The Logos database section on moviejayHX Setup now also supports filing and previewing of CG projects as well as CG compositions.
- A new feature on moviejayHX on-air module now automatically reloads the current playlist on-air if the same playlist is modified from moviejayHX Setup. This feature is restricted to standard "insert" playlists (not loop). To enable this feature you shall set inside moviejay.ini, in the [Settings] section:

CheckPlayListChange=1

- On moviejayHX on-air module, a couple of playlist load/save buttons allow to load/save the current playlist as standard XML files, the same way as moviejaySX.
- On moviejayHX on-air module, inside the playlist selection window, a new feature allows to save the current playlist to the database as a new entry or replace an existing one.
- Added basic support to AJA cards.
- Updated FFMpeg codecs to build 2015-01-11.
- On the live streaming feature, added support for Live Smooth Streaming, an adaptive bitrate streaming extention for Microsoft Internet Information Server (IIS), that makes it possible to stream video via the HTTP protocol to players like Silverlight.
- The CG CLEAR playlist command can now be used to clear a specified project (if specified in the related box) or a CLEAR ALL (in case no CG project is specified).



- It is now possible to queue in playlist 2 or more CG events sequentially thanks to a dedicated event queue.
- Inside MoviejayHX Setup, ADD COMMAND window, when the LOGO ON / OFF is selected, the path browsing is automatically disabled and when CG LOAD / CLEAR are selected instead, the logo selection is automatically disabled, to avoid possible misunderstandings.
- On moviejayHX on-air, playlist selection window, and moviejayHX Setup, playlist editing window, the 1st column of the playlist grid now displays specific icons to better visually identify each kind of event (clip, programme, Line In etc.)
- On moviejayHX Setup, preview window, improved behavior of "Start clip / end clip" trimming check feature. To avoid confusion, now the "Fade In/Out Test" button must be specifically click to enable or disable this feature. If the "Fade In/Out Test" is not down, the preview will operate normally without queuing any additional clips at start/end.
- Several minor bug fixes and enhancements.

Version 2.5.3 – 1.5.2.3832 – 17/02/2015

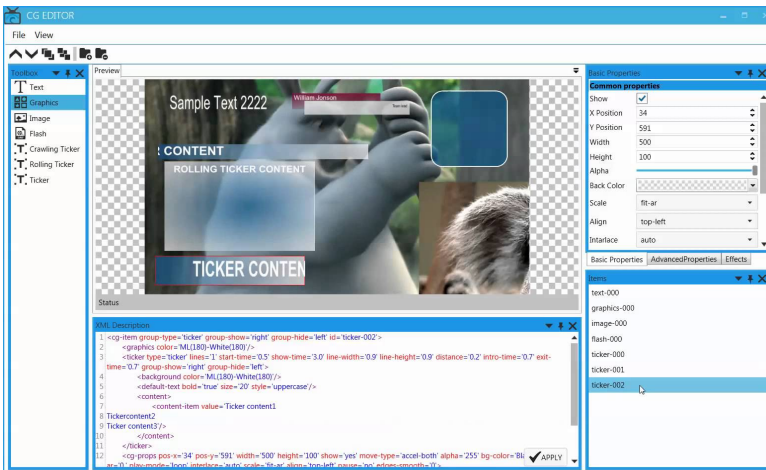
- On moviejayHX on-air module, in case two or more playlists are added to the end of play queue, when they are about to be expanded only the latest playlist was expanded. Also in some cases, attempting to collapse a playlist, an access violation error was shown. Fixed.
- On moviejayHX on-air module, in case the play queue view was shifted to more than the initial 5 or 10 items with the up and down buttons, when trying to swap playlist items with a drag and drop, the item might end up in a different slot from the required one or completely disappear. Fixed.
- On moviejayHX Setup, playlist editing window, a new button allows to duplicate the current playlist to a new one, in case you wish to use a playlist as draft to create a new one with just slight changes.
- On moviejayHX Setup, Commercials section, it is now possible to specify Type, Details and Production informations as required from Italian government log.
- On playlist scheduling window, commands section, added CG LOAD and CG CLEAR commands to load or remove a CG project inside the playlist.
- When an external feed entry was set to perform a double switching with one matrix switch and one live passthrough, the 2nd switch was not performed. Fixed.
- Inside the moviejay.ini, added specific entries to set username and password to access the mySQL database server.
- On moviejayHX Setup, various small issues inside the playlist editing grid have been fixed.
- On moviejayHX Setup, playlist editing window, printing of playlist report and playlist detail were not working correctly. Fixed.
- On moviejayHX Setup, playlist editing window, when trying to batch add the clip, commercials or programs database with the "Add all" button, the following error message was shown: "Cannot access field NextStart as type integer". Fixed.
- In order to optimize compatibility with Windows 8.1 and Windows10, some support files are now installed inside the c:\program data\Winjay folder.

Version 2.5.2

- On moviejayHX on-air module, when using the on-air preview from an external capture card ("enable video capture" feature), with some video capture cards the picture shown was completely messed up. Fixed.
- On moviejayHX on-air module, manual loading of playlists just followed the loading mode (insert, enqueue, replace) set on playlist editing window (moviejayHX Setup) ignoring preferences manually specified from the main selection window (such as insert, enqueue or replace). Fixed.

Version 2.5.1

- Added new visual CG editor application offering a much more user friendly drag and drop editing mode comparing to the already existing implementation. The visual CG editor allows to load/save the generated projects for quick and easy reuse inside the moviejayHX playout application (manual loading, scheduling, etc.).



- The playout engine has been updated to offer full support for the new Blackmagic 4K devices. Our tests on 4K cards showed lower latency compared to the old series.
- Added setting of sound card to be used for audio monitoring inside the moviejayHX preview window and on-air, cueing and live input windows from the moviejayHX on-air module. This avoids that preview audio might be accidentally routed to the Blackmagic card if this is set as default sound card from Windows control panel.

- The time base for the on-air module counters can now be switched between 1/10 sec and frames. To switch mode, the user just needs to click on any of the time displays. Added protocol for remote control of Blackmagic Videohub both via RS232 or TCP, and ATEM VS481A switcher.
- On moviejayHX Setup window, all database grids (browse clips, commercials, programs), playlist editing and station log have been ported to a new component that fully supports skins and also offers several additional features. Same porting had been made on moviejayHX on-air, playlist selection window.
- On moviejayHX on-air, playlist selection window, loading of the playlist from a specifically selected record was not working correctly. Fixed.
- Countdown markers: MoviejayHX now offers a countdown feature for up to 4 events on the playlist queue, which for example turns useful to warn the studio and presenters about remaining time before a live event etc.

The screenshot displays the MoviejayHX 2.5.1 software interface. At the top, there is a header area with a portrait of a woman, the text 'Άποψη μου Ελένη Χατζίδου', and a 'Remain' timer showing '00:02:39'. Below this is a control bar with buttons for Play, Pause, Clock, Encoder, ON AIR, PREVIEW, INPUT, MIXER, Auto Seq, and Pre. The main area shows a playlist with five items:

Play	Image	Title	Artist	Start Time	End Time	Duration	Buttons
Play 1		Για χάρη σου	Παναγιώτης Ραφαηλίδης	16.14.42	16.17.55	00:03:13	M, E, Play, Stop, X, +1 DAY, Apr 1, Pre
Play 2		Εδώ γελάμε	Δημήτρης Γιώτης	16.17.55	16.21.24	00:03:29	M, E, Play, Stop, X, +1 DAY, Apr 2, Pre
Play 3		Έτσι κάνω εγώ	Στέλλα Καλλή	16.21.24	16.24.47	00:03:23	M, E, Play, Stop, X, +1 DAY, Apr 3, Pre
Play 4		Я ТЕБЯ НЕ ОТДАМ	СЕРЕБРО	16.24.47	16.28.54	00:04:07	M, E, Play, Stop, X, +1 DAY, Apr 4, Pre
Play 5		Utilities		16.28.54	16.30.02.5	00:03:57	M, E, Play, Stop, X, +1 DAY, Apr 5, Pre

The 'Utilities' window is highlighted with a red circle and contains the following information:

Next marker 1:	Next marker 2:	Next marker 3:	Next marker 4:
00:02:37	00:05:50	00:09:19	00:12:42

At the bottom of the interface, there is a status bar showing 'Uptime: 27/10/2014 20.00.00 blabla', a date '27/10/2014', and a time '16.12.04'. The 'WINJAY RADIO AND TV AUTOMATION' logo is visible in the bottom right corner.

- When using the audio processor, master volume set on user presets was not loaded at software startup and after correcting it manually, was not kept at the start of next clip. Also, when opening the audio processor window a short audio gap occurred. Both have been fixed.
- On moviejayHX on-air module, playlist selection window, column headers were not translated. Fixed. Also added a new column to display STOP events.
- On moviejayHX on-air, Hard Disk selection window, when selecting multiple files just the last one was loaded. Fixed.

Version 2.5.0

- New lightweight, DirectShow-independent and completely redesigned playout engine, engineered for a broadcast grade 24/7 efficiency, better integration with playout cards via native SDK, minimized latency and improved stability thanks to dedicated threads for video decoding: even in the event of broken clips the application and audio/video sync will never be affected.
- Thanks to the integrated industry-standard FFmpeg codecs any issues due to DirectShow codecs already installed (such as codec packs etc.) are completely avoided – once setup is completed, the application is ready to use without requiring any added end-user configuration. The new integrated codecs fully support playout in the following formats:

- **Audio/Video:**

H.264/AVC, H.265/HEVC, MPEG-1, MPEG-2, M-JPEG, generic MPEG-4 and DivX, Xvid, etc., DV, DVCPRO HD, FLV H.263 (Flash Video), HuffYUV, Theora, Google VP8, Apple ProRes 422, VC-3 (aka DNxHD), JPEG2000, Windows Media Video, Google VP8, PCM, MP3, AAC.

- **File formats:**

MXF, MXF-D10, GXF, DV, FLV, VOB, ASF, WMV, MP4, MOV (including AVC-Intra 50 and 100), XDCAM (MPEG Sony IMX), MKV, AVI, WebM, MPEG-2 (PS e TS)

- **Network protocols:**

HTTP, RTMP, RTSP, RTP, UDP

- Supports full range of Blackmagic, Deltacast, Stream Labs cards.
- New playout formats implemented for Ultra HD 4K and 3D.

- Integrated audio/video streaming to UDP, RTMP, RTSP, Adobe FMLE, WMV and playlist file writer (playout can be simultaneously saved to disk file in any format and codec).
- It is not possible to start and stop streaming without having to restart the software.
- New Play from streaming feature allows re-broadcasting of HTTP, RTMP, RTSP, RTP, UDP streaming events exactly like hard disk clips.
- New Virtual Objects feature: like the DirectShow virtual device, moviejayHX now also exposes audio/video output on virtual objects which stream can be re-used from other applications. For example, from a CapturejayHX ingest you can capture the moviejayHX playout, or in case multiple channels of moviejayHX are running on the same PC, you can add the output from channel 1 as playlist item inside channel 2, or add a CapturejaHX input signal as playlist item inside a moviejayHX playout, and so on.
- A completely new procedure for multi-threading execution of playlist commands (such as logo switching, etc.) guarantees perfect transitions without any artifacts or blank frames.
- It is now possible to vertically resize the moviejayHX on-air window, so up to 10 playlist events are dynamically created and displayed accordingly. This feature allows to take advantage of higher resolution display modes such 1280x1024 or 1920x1080 to arrange more informations on the screen.
- On moviejayHX on-air module, on-air, preview and passthrough input monitors are now implemented as dedicated windows that can be freely resized and positioned on the screen. Also, for each of the above monitoring windows you can enable/disable audio monitoring.
- Other than seamless back-to-back playout, it is now possible to select a transition effect to apply between media: Barn, Blinds, CheckerBoard, Fade, GradientWipe, Inset, Iris, Pixelate, RadialWipe, RandomBars, RandomDissolve, Slide, Spiral, Stretch, Strips, Wheel, ZigZag – and effect duration.
- When using video clips with multiple audio tracks it is now possible to select the desired audio track both when filing the clip to the archive and on the fly during playout. It is as well possible to use an external audio track.

- On moviehayHX on-air module, the majority of user settings made on moviejayHX Setup are now automatically refreshed without having to restart the application.
- On moviejayHX on-air, added drag-and-drop from Windows' Explorer, from mediajayHX search results or any other compatible interface.
- New graphics for displays and VU-meters
- Application ported to Unicode. It is now possible to use non-Latin fonts inside all the software interface and CG texts.
- Inside the file selection window, a dedicated label now shows the currently selected folder. Also, it is not possible to browse the full network (LAN).
- On moviejayHX Setup, Overlays section, it is now possible to file CG projects and compositions inside the database. These can consequently be reused on the clip palette for on-the-fly overlays.
- On moviejayHX Setup, Clips, Commercials and Programs database windows, added a dedicated window to filter the database according to user set parameters. Also, the quick search can now operate as free text search.
- New policy with some features moved to optional plug-ins allows to offer the moviejayHX Starter at an even lower price.
- Several minor bug fixes and enhancements.