

MoviejaySX release notes

Version 3.0.1 - 11/03/2020

- In the playlist grid context menu, the “add clip” and “add command” items didn’t open the corresponding windows. Fixed.
- In the moviejaySX settings window, when trying to set an IP address having any value with less than 3 digits, the IP address was stored with white spaces in messing up correct operation of Blackmagic Videohub. Fixed.
- In the “add command” window, the MRU list for NETPLAY and SQUEEZE LOAD commands were not working. Fixed.
- In the moviejaySX clip preview window, when the pause/play button was clicked, the elapsed/remain counter was reset to zero (start of clip). Fixed.
- In the moviejaySX settings window, the “force folder refresh” switch has been deprecated since it becomes useless with the new themes-based controls.

Version 3.0.0 - 15/01/2020

- moviejaySX 3 introduces a shining new, modern interface, with a completely redesigned look and feel. Sliding menus, hover effect icons and popup hints offer an entirely new user experience. Fully resizable windows make best use of available desktop space to fit more items in the view. The application is now based on system Themes and GDI+, all controls are cleaner, easily readable and work faster.
- The CG now adds a picture squeeze feature, so the played back video can be freely resized in a corner to make space for graphics such as tickers, crawls, RSS feeds, or any other object. Picture squeeze is based on standard CG projects that can be fired automatically as playlist command in the playback flow.
- A new and simple to use audio compressor limiter now offers on-the-fly automatic volume leveling on the running playlist. The audio compressor affects both the Decklink output and the streaming / NDI / WebRtc / Virtual devices etc.
- A new feature can now export a playlist to XMLTV, the widely known XML based file format for describing TV listings.
- The CG window adds a new feature to save/load single logo's position, so that a logo can be freely dragged on the video window and its settings stored, to be recalled automatically later. This improves and replaces the previous "trial and error" procedure to arrange logo position from the disk browse window.
- The now/next feature from the Music Pack now also works for events played from the uMAM, allowing the use of a different banner to announce a generic coming event in the schedule such as news, movies, shows, etc.
- The elapsed/remain counters have been improved with one only enhanced display and a paired progress bar, that can be toggled between the two statuses with just a click.
- Improved function lock, when attempting to access any feature while lock is on the control blinks in red to clearly highlight the locked state.
- Many settings, such as language toggle, now take place immediately.
- The preview window now adds a feature to reset any changes made to start/end markers, to avoid closing and recalling the same clip in case of mistakes.
- The <RANDOM> command now also scans for audio clips (wav e mp3), that can be automatically added to the music rotation.

- The NEXT display now also shows full informations in case the following event is a command.
- The uMAM load and save windows now offer a "free search" mode, allowing to easily locate a filed item by just typing any string contained anywhere in the title.
- Improved precision in the frame by frame stepping inside the preview window.
- When pausing the playlist, the play button resumed playback from the event highlighted in the grid instead of the current event. Fixed.
- Completely redesigned users' manuals, according to the new application look and feel.
- Lots of other improvements and fixes in the application workflow.

- Version 2.4.5 - 1.7.17.10614 – 06/12/2019

- Improved smoothness in playback of Flash banners in the Music Pack.
- In case of playlists scheduled as loop + instant start, sometimes just after loading the new list, the play cursor jumped forward to some other item in the play queue and playback stopped. Fixed.
- When using the banner overlay feature in the Music Pack, in case fade-in market was set for a specific clip, the banner was possibly overlaid before the set marker or not displayed at all. Fixed.
- When using the “clear list” button, an added header row was erroneously added to the playlist grid. Fixed.

Version 2.4.4 - 1.7.17.10614 – 03/06/2019

- The Music Pack's random selection now also scans for LNK (shortcut) files. Supposing clips are organized into folders, each one related to a specific category, this feature allows, for example, to link a clip from more folders, so to virtually assign the same clip to more categories.
- Both the clip browsing window and the microMAM edit and load windows now allow to manage LNK files (filing, previewing, loading, etc).
- Added playlist command <URL>, for example to call the vMix API that provides access to common functions through the HTTP protocol.
- Trying to click the pause button with the playlist in stop mode, playback was started but the counters remained idle. The pause button has been now disabled when in stop mode, so the only way to restart playback is to click on the play button.
- When the playlist reached a <STOP> event, the playlist stopped on the previous item instead of skipping to the one next to the <STOP>. Fixed
- When the playlist reached a <RANDOM PATH> command, in the special case that the selected clip could not be rendered, an access violation box was shown that prevented any further update to the list until such box was manually closed. Such clips are now automatically discarded.
- In the special case that a playlist loaded in insert mode contained a command at the end, and such playlist was loaded as last item in the play queue, the command was never removed, preventing any update to the main playlist in case of <RANDOM> commands. Fixed.

- Version 2.4.3 - 1.7.17.10600 – 15/02/2019

- The application now also accepts registraton keys by hours. It is possibile to buy a special licence, which is only limited to a number of working hours without any expire date, to use in a backup workstation.
- Clips having the file extension in capital letter were not accepted on Drag and drop to the playlist. Fixed.
- When clips are selected from the microMAM with the <RANDOM uMAM> command, the artist/title informations shown in the banner and in the playlist queue are now read from the program title, instead of the filename.
- When a clip with the "&" symbol in the filename (or in the program title, if from the uMAM) was randomly selected from the Music Pack, the Flash banner couldn't load the title and artist informations, being the "&" the reserved string concatenation character. To avoid such issue, moviejaySX now encodes the strings with corresponding escape sequences when writing the clip informations to the txt file that is read from the Flash banner.
- When loading a clip to the playlist queue from uMAM Editing window, the program title was not displayed. Fixed.
- In some special cases when a playlist was scheduled in loop mode + instant start, this playlist was started from some clip in between instead of beginning. Fixed.

- Version 2.4.2 - 1.7.17.10600 – 03/12/2018

- moviejaySX adds support for streaming and network playback of Secure Reliable Transport (SRT) feeds. SRT is a protocol designed for live video streaming over the public internet and provides reliable transmission similar to TCP, however, it does so at the application layer, using UDP protocol as an underlying transport layer. It supports packet recovery while maintaining low latency (default: 120 ms). SRT also supports encryption using AES.
- The window shown when starting moviejaySX in demo mode (or with the command line switch MODULES) now allows to run moviejaySX with any of the software bundles available for licensing, while still allowing to selectively enabled/disable each single available plug-in. This turns useful to reproduce what exact features the application will offer with the specified plug-ins enabled and make sure that all requested features are included for the intended application before purchasing a licence.
- Added RTP streaming support
- Added RTP Pro-MPEG streaming support
- Added MJPEG encoder for UDP streaming
- Updated FFmpeg to version 4.0.2
- Optimized 10bit video decoding
- Added QuickSync H.264 video encoding and multichannel audio support (up to 16 channels) for WebRTC
- Added support for AV1 playback
- Updated JPEG2000 decoding
- Improved still images playback with external audio
- Lots of other improvements and fixes in the capture/playback engine.

Version 2.4.1 - 1.7.14.10129 – 04/09/2018

- The Music Pack setup window now allows to save all banner settings as presets, allowing reuse of such presets into playlists with the new <BANNER PRESET> command.
- A new <BANNER PRESET> command added to the Music Pack improves flexibility comparing to the standard <BANNER ON> command, allowing to recall a previously saved preset of Music Pack banners to display different banners and overlay timelines according to each specific playlist. The <BANNER PATH> command has been consequently deprecated.
- The application windows size and position (main window, on-air, cueing and line input previews) are now saved when application is shut down and automatically restored at next application startup.
- The moviejaySX Music Pack now automatically recognizes and correctly handles RTL languages (Hebrew, Arabic, etc.) when displaying Flash banners.
- A new feature available from the preview window allows to edit various clip related settings such as external audio, interlacing, etc.
- Improved playback of RTSP streams.
- Updated NDI to 3.5 version.
- Updated NVIDIA components to Video_Codec_SDK_8.1.24
- When another instance of moviejaySX was opened on LAN, a "database is locked" error message might be displayed. Fixed.
- Lots of other improvements and fixes in the capture/playback engine.

- Version 2.4.0 - 1.7.12.9972 -15/06/2018

- If both the Music Pack and μ MAM plug-ins are enabled, a new command <RANDOM μ MAM> now allows to select a random clip from the μ MAM database. It is possible as well to restrict the random selection to a specified category.
- For clips randomly selected with the <RANDOM μ MAM> command, the informations contained in the keywords/metadata database field are now exported to a text file so it is possible to schedule a banner to display such additional informations about the clip on playback (artist informations, etc.).
- As above, for clips randomly selected with the <RANDOM PATH> command, if a related TXT file is found with the same filename and base path, the text contained herein will be exported so a banner can display such additional informations.
- Sample Flash banners (for SD and HD) for displaying artist metadata are now supplied in the setup package.
- Fixed audio breaks on switching between playlist items
- Fixed correct frame order in UDP streams playback
- Lots of other improvements and fixes in the capture/playback engine.

- Version 2.3.9 - 1.7.10.9865 -24/04/2018

- The playlist is now showing events loaded from μ MAM with related title instead of filename.
- Core FFmpeg components updated to release 3.4.2 version
- Fixed audio/video synchronization issue after temporary loss of an input signal
- Fixed RTSP/RTMP streams reconnect problem on network failure
- Lots of other improvements and fixes in the capture/playback engine.

- Version 2.3.8 - 1.7.8.9793 - 22/02/2018

- The scheduler now offers 3 loading modes: Loop (as before, replaces the previous playlist), Insert (as before, inserts the playlist on top) and Append (appends the playlist to the bottom of the list).
- To further improve the stability, the CG now runs into a dedicated external process. Also, to avoid memory leaks when using Flash overlays (due to limitations in the Flash plugin itself), a new setting in the moviejay.ini allows to automatically reset the CG at regular intervals, after playing back a user-definable number of clips.
- Whenever items that belong to an insert mode playlist are on queue, playlist updating for RANDOM clips will now be hold. Such improvement avoids messing up clip titling after <BANNER> command are deleted from the insert mode playlist.
- Attempting to delete the latest item in the CG editor directly from the items list box, using the Canc key, a message "List index out of bounds (0)" was displayed. Fixed.
- Attempting to add a command as 1st item to the playlist, an access violation error was displayed. Fixed.
- Lots of improvements and fixes in the capture/playback engine.

Version 2.3.7 - 1.7.7.9727 - 08/01/2018

- The scheduler is now based on SQLite database. This greatly helps to improve compatibility with custom date/time formats. Also it allows to use the scheduling features from any moviejaySX Editing client in the LAN, without having to manually copy/paste the scheduler file.
- When playout format was set to PAL 16:9, Flash objects loaded inside the CG or used as Music Pack banner were overlaid stretched horizontally. Fixed.
- Updated ffmpeg to latest stable version - (N-86979-gf4ebdda-Reino)
- Improved GPU H264 encoding quality and performance on WebRTC.
- The encoder adds support for Direct Stream Copy, DNxHR encoder and Cisco OpenH264 encoder.
- Lots of improvements and fixes in the capture/playback engine.

- Version 2.3.6 - 1.7.1.9423 - 02/11/2017

- Added new playlist commands <REC START> and <REC STOP> allowing to start/stop the encoder to streaming or file.
- Inside the command tab, in the events loading window, to avoid confusion only boxes related to the specific selected command are now enabled.
- In case an expected duration is specified when adding new <RANDOM> events to the playlist, such duration is now added (queue length indication and expected end-of-list time in the bottom display).
- When adding <NETPLAY> command longer than 1 hour, the audio went silent after 1 hour of playback, despite the video running normally. Fixed.
- When loading a playlist as insert mode, if one or more files were missing from the list, clips might not be loaded in the intended position. Fixed.
- The CG now adds a Clear All button to batch remove all objects from overlay.
- The items list inside the CG Editor now allows selecting multiple items with Shift and Ctrl keys, and batch delete all selected items.
- When a ticker was set to track a text file, and subsequently the user changed font or color, the filename was rendered instead of file contents. Fixed.
- Several minor fixes and optimizations in the CG Editor.

- Version 2.3.5 - 1.7.1.9423 - 23/10/2017

- A new printing tool now allows exporting and printing playlists, scheduler list and μMAM database. The printing features are based on a powerful reporting tool that includes an editor module to create and customize reports, plus exporting to a wide choice of formats, among others: plain text, RTF, Word, Powerpoint, PDF, HTML5, Excel table (XML, CSV), Open Document Text/Spreadsheet, BMP/JPG, TIFF, etc. The editor also allows to load/save custom print templates to match specific requirements or language.
- When adding new <RANDOM> events to the playlist, it is now possible to specify an expected length to such events in order to ease calculation of playlist's items start times, in case all items to be randomly selected have a similar average length (for example, 30" commercials).
- With moviejaySX started in editing mode, trying to set a starting time for the playlist via the context menu (via right-click), all the items above the (*) = on-air sign were not recalculated. This issue was especially annoying after moving the playlist item with the (*) among the playlist. Fixed.
- When moviejaySX is started in editing mode, the (*) = on-air sign or the ONAIR label (playlist in graphics mode) are not shown anymore, to avoid possible misunderstanding, since in editing mode playback features are disabled.
- Triggers events are now added to the asrun log.
- Small minor fixes and improvements.

- Version 2.3.4 - 1.7.1.9423 - 15/09/2017

- When the SecureDongle based licence is in use and the rent period needs to be extended (no changes to the enabled plug-ins), changes applied to the SecureDongle will be validated within one minute, so there is no need to restart the application.
- The <CG LOAD> command now allows to specify both a delay (so you can load the CG project some time after the clip has started) and a show time (so the CG project will be displayed for this specified time and then hidden automatically).
- The virtual device output was not correctly terminated when the application was closed down, so multiple virtual devices could still be listed on 3rd party streaming applications. Fixed.
- WebRTC adds H.264 hardware encoding (NVEnc) and single encoding for all outgoing streams.
- Added YUY2->UYVY/HDYC conversion to handle input video from WebCams
- Fixed audio buffer overflow during receiving of RTSP stream with network errors.
- Fixed freezing issue after reconnecting to network stream.
- Lots of improvements and fixes in the capture/playback engine.

Version 2.3.3 - 1.7.1.9351 - 20/07/2017

- Improved subtitles management: the application now sequentially scans for CG projects or SRT files as each new file is starting, and if found with the same filename as the clip, they will be automatically loaded. It is also possible to use a CG project as generic template for subtitles objects (more details into the users' manual). This feature automates subtitles management, without having to specifically add <CG LOAD> command into the playlist. Apart from subtitles, it also allows to automatically load a CG project associated to each specific clip.
- When a playlist was loaded into insert mode, in some special cases one or more commands (if any) were not automatically removed after successful playback. Fixed.
- The asrun log now also lists graphic overlay commands such as <LOGO OFF>, <CG LOAD> etc.

- Version 2.3.2 - 1.7.1.9351 - 05/06/2017

- moviejaySX application and setup packages are now digitally signed in order to verify the author's identity and ensure that the code has not been tampered or corrupted. This increases trustworthiness against various anti virus software.
- Improved Music Pack section: it is now possible to schedule multiple overlays of both intro and outro banners within the clip. This allows using the banner for overlay titling on regular programming as well.
- An improved options from the setup window now allows to set automatic reloading of the latest playlist at application startup to Disabled, Enabled from start of playlist or from the latest clip and relative position at application shutdown. This feature obviously does not reload playlists added as "insert mode".
- Added protocol for remote control of Blackmagic Videohub via TCP.
- For the subtitles objects added to the CG, the "Image properties" tab is now shown to allow editing the SRT filename, thus allowing to reuse the same CG project.
- The µMAM adds date start/end fields, so events outside the range of specified dates will be automatically discarded. This feature is enabled when playlists are loaded in Insert Mode, and turns especially useful for commercials management.
- Lots of improvements and fixes in the playback engine.

- Version 2.3.1 - 1.6.12.9207 – 24/04/2017

- moviejaySX is now available as both 32 and native 64 bit application. Stability wise there is no difference between 32 and 64-bit versions, but in general you may expect a slight performance gain thanks to architectural changes in 64-bit processors. Support for Smartkey dongle is dropped in the 64 bit version due to product obsolescence.
- Added uppercase and word wrap button for the Text object inside the CG editor.
- The playout engine now includes an experimental direct output to Blackmagic Decklink Duo 2 e Decklink Quad 2 in order to fix a bug in the Blackmagic drivers for the above models.
- Fixed bug related to conversion and overlaying images with mask, and overlaying of ARGB32 images.
- Improved MPEG-DASH streams playback.
- The NewTek NDI has been updated to the newest SDK v2.0
- A "Can't set this device" error message might appear at application startup if the video passthrough device was incorrectly set to a null value. Fixed.

- Version 2.3.0 - 1.6.9.9142 – 20/03/2017

- moviejaySX virtual output device now adds support for Skype and other 3-party application, that will now 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 CG LOAD playlist command now also allows to load a CG project with a specified delay.
- After a playlist was loaded as insert mode, the temporary decoding processes were not properly cleared afterwards. As a consequence, repeated loading of playlists as insert mode could lead to potential crashes in the long term. Fixed.
- When the on-air module played back a passthrough video, virtual device or NETPLAY event, it was erroneously truncated to 1 hour. Fixed.
- When a CG project was used as "station logo" feature, the graphics was not displayed in case the project was saved into same specific Unicode formats. Fixed.
- Improved internal XML parsing and its thread safety
- Updated ffmpeg to latest stable version - N-83458-g53234b9 (09.02.2017)
- When removing a file before 'last' command, an infinite loop might be generated. Fixed.
- 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 output to MPEG file. Fixed.

- Version 2.2.9 - 1.6.7.9089 - 15/02/2017

- After a copy and paste action into the playlist grid, input/output settings for external feeds events were not pasted correctly. Fixed.
- After a copy and paste action into the playlist grid, if the cursor was outside the grid such as in the blank area after the end of the playlist, those items were pasted at beginning of the playlist. In this special situation, items are now correctly pasted at the end of the playlist. Also, after a copy and paste action the cursor is now set again to the same row where the paste action is performed.
- When the list display was set to graphic mode (with video snapshots), Unicode filenames were erroneously displayed as question marks. Fixed.
- New graphics on digital counters and better precision on VU-meters.
- When starting moviejaySX in Editing mode, initialization of the video passthrough device is disabled to avoid accidental input switching. Also, more unnecessary buttons and features (such as Setup) are now disabled to avoid operating issues.
- On the setup window, some settings related to External Feeds video capture device were not operating properly. Fixed.
- Improved playlist loop when there is a single file to be played.
- Improved file switching performance.
- Fixed NVENC crash on certain systems.
- Lots of other improvements and fixes in the playback engine.

- Version 2.2.8 - 1.6.2.8879 - 10/01/2017

- The Music Pack banner was sometimes displayed even when the specific clip was not enabled with the <BANNER ON> or <BANNER PATH> commands. Fixed.
- The duration for all the commands added to the playlist was incorrectly displayed with the same value as the immediately previous item. Fixed.
- When the playlist was set in dynamic mode, commands were not correctly removed after playback. Fixed.
- On the External Feeds setup window, value set for the video capture format box was not correctly stored and recalled at next application startup. Fixed.
- In order to avoid issues in case write permissions are not set into the application's installation folder, the installer now automatically sets modify permissions appropriately.
- Added GPU-powered H.264 and H.265 decoding via NVIDIA and Intel Quick Sync. To find out whether your NVIDIA graphics card supports H.264 or H.265 decoding, please check the chipset model of your card and refer to [Nvidia's documentation](#). For Intel QuickSync a Intel HD Graphics 4200 or higher is required. Note, that for all XEON processors a mainboard with C226 chipset is required.
- Added background indexing for MXF files to speed up reading and seeking.
- NewTek NDI has been updated to the latest version.
- Improved playback quality for still pictures (such as JPG).
- Fixed bug in DV deinterlacing logic for FFmpeg DV decoder.
- Lots of improvements and fixes in the playback engine.

- Version 2.2.7 - 1.6.1.8376 - 14/10/2016

- The In, Out and Duration columns inside the playlist grid now also show the frames (previously displayed as :00) according to the user set video format and framerate.
- In order to minimize the time shifting between the Start times calculated at playlist start, and the same times updated as the playlist runs, the initial values are recalculated based on a more accurate routine.
- After a copy-paste operation inside the playlist grid, the pasted clips were erroneously displayed with the same In and Out values. Fixed.
- After saving a playlist, the 1st row was highlighted instead of the row corresponding to the current clip on the air. Fixed.
- When the scheduler was set by date, in some cases a wrong event was scheduled as the next one. Fixed.
- After a copy and paste task inside the playlist grid, in the special case of pasting inside an empty list, the last item in the list was erroneously swapped to the 1st place. Fixed.
- The station logo was not automatically overlayed to the foreground level in case other CG items were displayed. Fixed.
- When a playlist containing <LINEIN> commands was scheduled as insert mode, the command was not executed for some specific matrix switchers. Fixed.
- Added new logic that improves the QuickSync encoding performance.
- Added support of BMD MJPEG decoder for MJPEG encoded live sources.
- The FFmpeg was updated to revision N-81786-g2586668 (28.09.2016).

- Version 2.2.6 - 1.6.1.8021 - 12/09/2016

- The passthrough feature is now independent from the Decklink keyer and has been completely re-engineered based on a dedicated A/V capture thread. This new approach allows absolute seamless switching between Hard Disk playback and external feeds, use of different A/V formats between input and output, streaming of the live feed exactly as a local Hard Disk clip. A Blackmagic card with full duplex capabilities and/or dedicated capture card is now required.
- It is now possible to add a <LINE IN> command without specifying any event duration, in that case the application will execute the switching and immediately skip to the next event in the play queue. This turns useful to combine a matrix switching event with a following passthrough feed.
- The Music Pack now includes a Coming next feature, so the play queue is scanned for the next available clip and the required informations are saved to the text file to be read from the Flash banner.
- New <BANNER PATH> command allows to set for a playlist or section of it a custom banner for Music Pack titling instead of the default banner.
- The "refresh" feature available from the on-air right-click menu now also checks and removes from playlist any file not found on Hard Disk.
- A new setting in the setup window now allows to enable the above playlist check and refresh feature so it is run automatically each time a playlist is loaded in the play queue.
- The "moviejaySX on-air" virtual device was sometimes not available from external applications (Adobe FMLE and similar ones). Fixed.

- Version 2.2.5 - 1.6.1.8021 - 25/08/2016

- 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.
- The CG Editor now supports playing of media files (video clips) as CG items to overlay.
- New "refresh" feature available from the on-air right-click menu allows to retrieve actual duration for those playlist items that have been overwritten with a new version (such as newscasts) after the playlist has been already loaded in the queue, and consequently recalculates items' start times for the whole playlist.
- When the playlist layout is set to text mode, the row corresponding to the current clip on the air is now highlighted with a red background.
- On the CG Editor window, when adding/replacing a CG project the file open dialog now stores and recalls the latest used folder.
- Added QuickSync H.264, MPEG-2 and VC-1 hardware-powered decoding support.
- Any command added as 1st item in the playlist was skipped and ignored. Fixed.
- Updated FFmpeg codecs to version N-81118-gfb91850 (July 2016).
- Several other minor fixes, improvements and optimization in the playout engine.

- Version 2.2.4 - 1.6.0.7376 – 20/06/2016

- 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. Also, playlist scheduling of received WebRTC streams is now supported via the capturejayHX. 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 moviejaySX in any other location in the world via the internet.
- Starting moviejaySX with the command line switch MODULES now pops up a dedicated window that allows to selectively enabled/disable each single available plug-in so to reproduce what exact features the application will offer with just those specified plug-ins enabled. This turns useful, for example, before purchasing a licence to make sure the selected plug-ins include the all requested features.
- A new encoder statistics window is now available when output to WebRTC, streaming or writing to file are running. To show the window, click on the orange camera or WebRTC icon from the main on-air screen.
- The orange camera now reflects the current encoder state, so it turns off if encoding stops for any reasons.
- A new optional plug-in adds support for 4K (including 50p, 59p, 60p) and 3D video formats.
- After a copy-paste operation of <LOGO LOAD> or <CG LOAD> items, the pasted items didn't load the indicated logo. Fixed.
- After manually resizing the playlist grid, on start of each playlist item the filename column was reset to the default size. Fixed.
- The Delete feature from the playlist's grid right-click menu just deleted the 1st highlighted playlist item, even if more items were selected. Fixed.

- Version 2.2.3 - 1.6.0.7070 – 22/04/2016

- 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. moviejaySX now offers simultaneous playing out to a NDI stream, to playout card (Decklink or others) and to streaming output. Also, playlist scheduling of received NDI streams is now supported via the capturejayHX. 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 moviejaySX on any other workstation in the LAN.
- Implemented μ MAM (micro MAM) optional plug-in. This new options adds a dedicated, SQLite based database for filing / indexing clips together with their related metadata such as title, category, keywords, markers etc. to ease later search and retrieval.
- A dedicated button now allows off-the-air preview from both the μ MAM and the event selection window.
- Comprehensive asrun log is now created as SQLite monthly tables when the μ MAM plug-in is active.
- The <NETPLAY> feature adds network reconnect option (enabled by default), that tracks the network state and tries to reconnect to the source stream in case of lost connection.
- 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.

- Version 2.2.2 - 1.6.0.6613 – 08/02/2016

- Specific optimizations in the playout engine now substantially reduce the CPU load of around 20% on standard Intel HD Graphics card, around 35% with a nVidia card installed, and more than 50% when using nVidia card while playing back h264 clips with the GPU based decoder option enabled. This allows to run multiple HD playout channels and CG even on consumer grade core i7 PCs.
- Network playback now offers support for 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).
- The encoder now adds AAC audio codecs for .FLV and MPEG-TS formats.
- On the CG Editor, it is now possible to set the frame speed for image sequence objects.
- On the CG Editor, tickers section, it is now possible to set Font and font attributes, intro, show and exit time for Ticker objects.
- On the CG Editor, when adding new text to a text object, the object is automatically resized accordingly, so the new text is not shrunk into the original size.
- On the CG Editor, after adding an image, or image sequence, Flash animation, it was not possible to further edit the link to the filename without deleting and creating a new object. Fixed.
- On the CG Editor, after adding any new object, this object is now automatically selected to allow further editing.
- On the CG Editor, it is now possible to set a background color (with Alpha transparency setting) to objects like Text, transparent images, and others.
- On the CG Editor, it is now possible to enable/disable the uppercase for Ticker objects.

- On the CG Editor, new dedicated buttons now allow to add SRT subtitle files and tables as XML files.
- On the CG Editor, added support for ICO image files.
- On command selection window, the URL / File path box now offers a MRU (Most Recent Used) list to make easier reusing of typed informations.
- Every time loading a new playlist, the clip left playing from the old playlist will be automatically removed after it is completed, so it will not play again if the playlist loops.
- The right-click menu available from the playlist grid now also offers direct access to clips and commands selection window, event loop toggle, delete and preview / trim.
- The preview window now also allows to set end markers for <LINEIN> and <NETPLAY> events, including on-the-fly editing of the event playing on-air.
- When a CG project was used as "station logo" feature, the <CG CLEAR> was erroneously clearing also the station logo related items. Fixed.
- On any text box inside the CG Editor window it was not possible to type space characters or use any other keystroke configured as keyboard shortcuts. Fixed.
- Added translation to the CG Editor window according to the available language files.
- Added a dedicated CG Editor section inside users' manual.
- 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.
- Several other minor fixes, improvements and optimization.

- Version 2.2.1 - 1.5.4.5342 - 03/12/2015

- The CG editor has been completely reengineered to be integrated into the moviejaySX application and replace the existing CG window. It now offers skin support, live editing and much more user friendly interface comparing to the previous implementation. The CG editor can also be used with the moviejaySX started in editing mode, so it completely replaces the standalone version while offering a more optimized approach.
- From the integrated streaming and file writing feature, NVIDIA NVEnc H.265 (HEVC) Encoder is now available on Nvidia's latest Maxwell GM20x GPUs (GTX980, 970, 960) and future Quadro/Tesla/GRID platforms based on GM20x GPUs.
- When attempting to add a <RANDOM> playlist event without specifying a browsing path, an access violation error was generated. Fixed.
- Attempting to copy/paste playlist commands sometimes generated empty or duplicated events. Fixed.
- Inside the scheduler window, the vertical scrollbar was not visible and the mouse wheel support for scrolling the grid was not enabled. Both Fixed.
- Attempting to load a playlist containing only <RANDOM> events while the moviejaySX is playing crashed the application. Or in case the playlist contained at least a valid clip, playing skipped all the <RANDOM> events and went straight to that clip. This occurred if playlist was loaded manually or by schedule but it didn't occur if moviejaySX was in STOP or if the playlist was loading in insert mode. Fixed.
- When loading a playlist in insert mode, all the <RANDOM> events contained, if any, were not deleted nor replaced after having been played. This same occurred if playlist was loaded manually or by schedule. Fixed.
- When loading a playlist in loop mode, such playlist started playing immediately cutting the previously event on the air, even if the "instant" flag was not checked inside the scheduler. Fixed.
- When using the pause on last frame feature, moviejaySX always stopped after each clip even when in Auto Sequence mode. Fixed.

- **Version 2.2.0 - 1.5.4.5342 – 05/10/2015**

- New graphic layout for the main playback screen allows to accommodate an additional column of buttons to implement new user features.
- Added security lock feature that locks main buttons from the on-air window to prevent unwanted activation.
- Added a special button to skip playing to the selected file in the playlist grid.
- Added buttons to Start/Stop export to file or streaming from the main on-air screen.
- Added CG RESUME playlist command allowing to reload the last used CG project.
- The play queue length indicator in the bottom display now also shows expected queue ending time.
- 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.
- If streaming output is running, it now attempts to automatically reconnect in case the connection is dropped for any reason.
- A couple of new options inside the setup window allow to enable/disable automatic reload of the latest playlist and automatic start of capture to disk or streaming when application is restarted.
- Redesigned registration window now also allows to request an evaluation licence.
- Added support for simultaneous playback/capture (such as moviejaySX and CapturejayHX) on the same Decklink card. May not work on older Decklink cards.
- Updated FFmpeg codecs to version 2.5.8 (build 2015-07-31, Git revision 1bf999).
- Added support for older DeckLink drivers.
- Format auto-detection for new Blackmagic devices (this might require updating your drivers to the latest version).
- In the specific case of adding clips to a playlist with drag and drop, with the 1st event being a command, clip duration was always set to 0. Fixed.

- 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.
- Various minor fixes and improvements.

- Version 2.1.0 - 1.5.4.4732 - 27/05/2015

- The playlist grid now also implements copy/paste features so it is possible to select multiple items to be copied/pasted as required. A mouse right-click allows to access a specific menu to enable the Edit mode.
- For both on-air and preview monitoring windows a new dedicated button allows to enable/disable audio monitoring through the PC soundcard.
- New version of CG Editor adds Image Sequence object, Outline and Font menus for Ticker objects.
- When moviejaySX is restarted, it now automatically reloads the latest selected playlist (except for insert mode playlists).
- When a new folder was created, the file browsing window was not automatically updating to reflect the changes. Fixed.
- On the upper display, to the left of the countdown display, a new feature now shows the current playing file, next file in the playlist and the playlist to which the current playing file belongs.
- On the bottom display, under the next scheduled playlist indicator, a new feature now shows the total duration of the play queue.
- When a playlist is scheduled for insert in instant fire, a new Resume feature allows to automatically add the same clip that was playing at the end of the inserted playlist, so the clip is resumed from the same marker where it was interrupted. To enable such feature you shall set inside moviejay.ini, in the [Options] section:

EnableResume=1
- Every time loading a playlist (manually or by schedule), the application now continues to play the current clip until the new playlist is loaded, so there will be no gaps in the playout process while waiting for the new playlist to complete loading.
- The commands section now offers a CG DISPLAY command allowing to add a playlist event to show/hide each CG object individually.
- The drag-and-drop to the main playlist window now also accepts image files (JPG, PNG, BMP, etc.)

- 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.
- To avoid DVD-ROM tray opening (depending on specific hardware configuration) when adding clips to the playlist from the tree browsing window, refreshing of new created folders is now disabled by default. To force such directory refresh you shall specifically set inside moviejay.ini, in the [Options] section:

ForceDirectoryRefresh=1

- Version 2.0.15 - 1.5.3.4543 – 10/04/2015

- The integrated scheduler has been re-engineered to work both on weekly programming or date-based. The operating mode can be selected from the Setup window -> various tab.
- The scheduler now offers better support for US date/time format with AM/PM indications.
- The "station logo" button and the <LOGO> command now also allow to automatically load at startup any previously made CG project, so inside the CG project, you can easily add more items such as station logo + watermark and/or other graphic objects.
- Added vertical scrollbar to the playlist grid. You can still use the mouse scroll wheel.
- The 'Go to Play' button was not disabled when the application was started in editing mode. Fixed.
- 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 extension for Microsoft Internet Information Server (IIS), that makes it possible to stream video via the HTTP protocol to players like Silverlight.
- After moving a clip in the playlist queue with a drag-and-drop, the (*) indication disappeared. Fixed.
- When a playlist containing <RANDOM> commands was loaded in insert mode (manually or by schedule), the <RANDOM> commands contained herein were not translated into physical clips. Fixed.
- When the application was started into EDITING mode while in demo mode (i.e. no valid licence code or USB dongle), the sample playlist was loaded and run anyway. Fixed.

- Version 2.0.14 - 1.5.2.4123beta - 03/02/2015

- It is now possible to vertically resize the on-air window, so more 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.
- A new Dynamic Playlist feature allows to automatically delete from the play queue the items as they are played back. To enable such feature you shall set inside moviejay.ini, in the [Options] section:

DynamicPlaylist=1

Clearly if this feature is enabled, it is not possible to use playlist loop mode.

- The scrolling text panel that appears when you click on the customer logo from the main application window now shows more detailed informations about the software, such as the current version, enabled features, expire date for updates subscription.

- Version 2.0.13 - 1.5.2.3832 - 19/11/2014

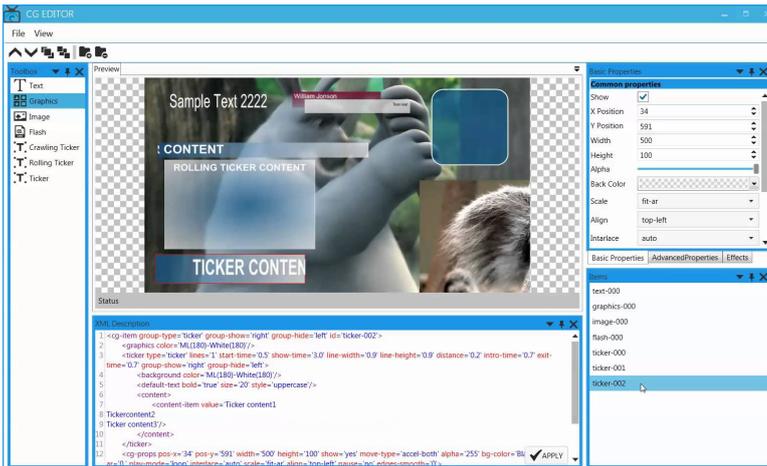
- When using the Set Time feature and after exchanging playlist items position with Up and Down buttons, start time for the clip currently on air was erroneously updated to the same value in the Set Time window, and the start for next items recalculated based on the same value. Fixed.
- Exchanging one or more clips position with Up and Down buttons, the asterisk indicating the clip currently on air disappeared until the start of a new clip or any other action calling the list update routines. Fixed.
- When loading any previously saved playlist, media informations was shown for the first 2 items only, while the next ones showed: 0x0@0,00 0:0 NO AUDIO until the items themselves were not started in play. Fixed.

Version 2.0.12 - 1.5.2.3753 – 08/11/2014

- On clips' preview window, added setting of default in/out markers. When set, such default markers will be automatically recalled each time the same clip is added to a new playlist or selected randomly.
- Improved asrun log output, now showing more detailed informations: start/end date/time, event type, full filename complete with path informations.
- Duration of live events could be not exact depending on the output video format set. Fixed.
- After adding a new item after the item currently on air, the start time of the item on air was erroneously recalculated based on current system time. Fixed.
- After using the Set Time feature, at the start of each new clip, its start time was erroneously set to the same time set in the Set Time window. Fixed.
- After using the Set Time feature, the asterisk marking the current file (or the ON AIR picture in case of playlist in graphic mode) was not shown until the next playlist change like switching to a new clip or adding/deleting a clip etc. 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.
- Various minor fixes and improvements.

Version 2.0.11

- 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 moviejaySX playout application (manual loading, scheduling, etc.).



- Added detachable and resizable secondary preview window for cueing, exactly like the on-air window you can just double-click on the main preview window to open the secondary preview.
- In the file selection window, a new button allows to switch the event loading mode between single and multiple events. The new "multi" mode allows to keep the selection window open to add multiple files in case they are located in different folders without having to open add file window each time.
- When a <LINEIN> event is added, it is now possible to specify a name in the Event name/File Path/URL box.
- Vertical scrollbar for the file selection window was missing. Fixed.
- Various minor fixes and improvements.

Version 2.0.10

- Added special Youtube playout settings for streamcasters: 240p, 360p, 720p and 1080p - because these are standard formats, they can be used with other streaming providers as well.
- The station logo feature now allows to browse for SWF files.
- <NETPLAY> command did not allow to play back http streams. Also the same command didn't load the supplied URL in case of leading or trailing spaces. Fixed.
- When loading a playlist in insert mode, just the clips were loaded, while the commands were ignored. Fixed.
- When the playlist contained 2 consecutive commands (for example <CG LOAD> and <LOGO OFF>) only the 1st command was executed. Fixed.
- Various minor fixes and enhancements.

Version 2.0.9

- 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 to force the aspect ratio depending on the specific requirement, in case you need to play back a mix of 4:3 and 16:9 clips.
- Completely rewritten from scratch the routine for real time update of playlist items' start times. These are now correctly updated also if a playlist item is manually forced. Furthermore, start times for events preceding the current played item are not altered anymore when the playlist is changed.
- On playlist commands such as <JUMP>, <STOP> etc. the indicated length was wrong, resulting in erratic updates on the start times for the subsequent items. Fixed.
- In the playlist scheduler, added a flag to enable/disable instant start (or wait for end of previous clip) for each individual playlist.

Version 2.0.8

- Application ported to Unicode. It is now possible to use non-Latin fonts inside all the software interface and CG texts.
- Improved licensing scheme now allowing to enable up to 8 channels on the same playout PC.
- Playlist loaded in insert mode from the scheduler are now automatically removed from the play queue once the related clips have been played. This turns very handy when creating complex schedules with several breaks such as commercial breaks, etc.

Version 2.0.7

- Inside the CG window, it is now possible to specify a user/defined macro for dat/time display.
- Inside the playlist scheduling window, after deleting a playlist, changes were not saved. Fixed.
- A new feature allows to call an external encoding application when streaming from virtual device.
- Various improvements for the virtual devices feature.

Version 2.0.6

- In the setup window, streaming tab, added a new button for setting muxer parameters.
- In the setup window, streaming->muxer and audio/video parameters, added a new button to reset all the parameters to default values.
- Several minor improvements inside the streaming parameters save/load.
- Several minor improvements inside the playlist insert mode save/load procedures (insert position).
- New Virtual Objects feature: like the DirectShow virtual device, moviejaySX 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 moviejaySX playout, or in case multiple channels of moviejaySX 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 moviejaySX playout, and so on.

Version 2.0.5

- Added setting for RS232 speed (remote control of video switchers).
- Added protocol for remote control of Blackmagic Videohub.
- Added special setting to force the playout interlace as top, bottom or progressive.
- Inside the file selection window, added video format .m4v
- The CG LOAD command was sometimes giving wrong results. Fixed.
- Added CG CLEAR playlist command to remove all CG objects (such as a project previously loaded).
- In the on-air window, for the playlist text modes, added drag and drop feature to quickly swap files in playlist.
- Inside the file selection window, a dedicated label now shows the currently selected folder.
- Inside the CG windows, after selecting the font colour, the foreground colour selection panel is now automatically updated.
- Inside the CG window, it is now possible to set type, size and font colour for ticker objects.
- Inside the CG window, after adding a Flash object, attempting to add another objects an error was notified. Fixed.
- Updated translations inside the CG windows and various other objects.
- Various bug fixes and enhancements.

Version 2.0.0

- 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

- Audio/video formats and volume controls have now immediate effects, without having to restart the software.
- Supports full range of Blackmagic, Deltacast, Stream Labs cards.

- Integrated audio/video streaming to UDP, RTMP, RTSP, Adobe FMLE, WMV and playlist file writer (playlist 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.
- A new playlist graphical mode now includes a snapshot of the video clip.
- 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.
- New graphics for displays and VU-meters
- New policy with some features moved to optional plug-ins allows to offer the moviejaySX Starter at an even lower price.
- Several minor bug fixes and enhancements.