

# 1 Table of Contents

l	Tab	le of Contents1	
2	Gra	yMeta Iris QC Pro4	
	2.1	Version 1.0.0.1	4
	2.2	Version 1.1.0.5	4
	2.3	Version 1.2.0.6	4
	2.4	Version 1.3.0.8	5
	2.5	Version 2.0.0.9	5
	2.6	Version 2.0.1.11	6
	2.7	Version 3.0.0.15	6
	2.8	Version 3.1.0.17	9
	2.9	Version 3.1.1.181	C
	2.10	Version 3.2.0.191	1
	2.11	Version 3.2.1.20 1	2
	2.12	Version 3.2.2.211	2
	2.13	Version 4.0.0.221	3
	2.14	Version 4.0.1.231	4
	2.15	Version 4.1.0.26 1	5
	2.16	Version 5.0.0.301	6
	2.17	Version 5.0.1.311	7
	2.18	Version 5.0.2.321	8
	2.19	Version 5.0.3.331	8
	2.20	Version 5.1.0.36 1	9
	2.21	Version 5.1.1.37 1	9
	2.22	Version 5.2.0.38	<b>:</b> 0
	2.23	Version 5.2.1.39 2	:1
	2.24	Version 5.3.0.45	:3
	2.25	Version 5.3.1.47 2	4
	2.26	Version 6.0.0.51	4
	2.27	Version 6.0.1.52	6
	2.28	Version 6.1.0.56 2	:6
	2.29	Version 6.1.1.59	7



2.30	Version 6.2.0.61	29
2.31	Version 7.0.0.64	31
2.32	Version 7.0.1.65	32
2.33	Version 7.0.2.67	33
2.34	Version 7.0.3.68	34
2.35	Version 7.1.0.69	34
2.36	Version 7.2.0.70	35
2.37	Version 7.3.0.73	36
2.38	Version 7.3.1.74	38
2.39	Version 7.4.0.75	38
2.40	Version 7.4.1.76	39
2.41	Version 7.5.0.78	40
2.42	Version 7.5.1.79	47
2.43	Version 7.5.2.80	48
2.44	Version 8.0.0.82	49
2.45	Version 8.0.1.83	51
2.46	Version 8.0.2.84	51
2.47	Version 8.0.3.85	51
2.48	Version 8.0.4.86	52
2.49	Version 8.1.0.88	52
2.50	Version 8.1.1.90	54
2.51	Version 8.1.2.91	54
2.52	Version 8.1.3.92	55
2.53	Version 8.2.0.94	56
2.54	Version 8.2.1.95	57
2.55	Version 8.2.3.97	58
2.56	Version 8.2.4.98	58
2.57	Version 8.3.0.100	58
2.58	Version 8.4.0.102	59
2.59	Version 8.5.0.103	59
2.60	Version 8.6.0.104	62
2.61	Version 8.6.1.111	63
2.62	Version 8.7.0.112	64



2.63	Version 8.7.1.113	67
2.64	Version 8.7.2.114	68
2.65	Version 8.8.0.116	68
2.66	Version 8.9.0.125	69
2.67	Version 8.9.1.126	71
2.68	Version 8.9.2.127	72
2.69	Version 8.10.0.128	73
2.70	Version 8.10.1.131	74
2.71	Version 8.10.2.132	74
2.72	Version 8.10.3.133	74
2.73	Version 8.10.4.134	75
2.74	Version 8.10.5.135	75
2.75	Version 8.10.6.136	75



# 2 GrayMeta Iris QC Pro

2.1	Version 1.0.0.1
2.1.1	Initial Release April, 2015.
2.2	Version 1.1.0.5
2.2.1	Changed architecture to use Projects and multiple media files.
2.2.2	Added Vidcheck QC report import.
2.3	Version 1.2.0.6
2.3.1	Added FTP file transfer support.
2.3.2	Added upload and download of attachments to and from server.
2.3.3	Added Wohler Tachyon Wormhole support.
2.3.4	Added Shareable asset metadata templates saved on per project basis.
2.3.5	Added 'Live Caption' and subtitle support as in Atlas. Passed to SDI.
2.3.6	Added GXF caption support for pre-processed caption viewer.
2.3.7	Added new IMF time-line view of packages.
2.3.8	Added complex IMF CPL support with seem-less playback.
2.3.9	Added thumbnail extraction of files in the project.
2.3.10	Added copy and paste from the system clipboard for the Message board and Annotation Window.
2.3.11	Added number of unread messages in Projects and files icons.



## 2.4 **Version 1.3.0.8**

- 2.4.1 Removed STL subtitle file editing from Atlas. This is now available in Iris.
- 2.4.2 Added <chroma\_sampling> tag to metadata file properties.
- 2.4.3 Added drop frame and non-drop frame mismatch warning and fix for captions/subtitles.
- 2.4.4 Fixed overlapping captions for certain 1080p23 formats.
- 2.4.5 Fixed multiline .CAP files not displaying correctly.
- 2.4.6 Added timecode, CTC, time and frame reference for annotation window tabs.
- 2.4.7 Added Project Markers so that pre-defined positions can be added to a file.

## 2.5 **Version 2.0.0.9**

- 2.5.1 Added GrayMeta Platform support.
- 2.5.2 Fixed thumbnails not being shown when refreshing and moving to other tabs.
- 2.5.3 Added support for running inside VMWare Fusion® and Parallels on Apple® computers.
- 2.5.4 Speed up checking of MXF files and improve their loading times.
- 2.5.5 Fixed command line support for specifying video to load.
- 2.5.6 Fixed use of Unicode when copying and pasting in message windows.
- 2.5.7 Added BGR24 format found in some AVI files.
- 2.5.8 Quadout now passes ATC timecode in SD.
- 2.5.9 Capture video now includes the annotations.
- 2.5.10 Fixed video files could not be opened when associated with Iris in Windows File Explorer.
- 2.5.11 Fixed looping issue where file playback would loop while in non-looped mode.
- 2.5.12 SD captions support CEA708.



## 2.6 **Version 2.0.1.11**

2.6.1 Fixed installer to update Bluefish driver to 5.11.0.39 when a previous version was already installed. No other changes to Iris application.

### 2.7 **Version 3.0.0.15**

- 2.7.1 Change licensing scheme to V3. All existing hardware licenses need to be updated to use this version of Iris. All users who log in to use Iris will be given a 30 day trial license until they get an updated Customer ID for their Iris server.
- 2.7.2 Added Spectrascope tool to plot the color space on a CIE1931 Chromaticity diagram. Converts all color formats to YCbCr->RGB->XYZ->xyY.
- 2.7.3 Added HDR support for SMPTE ST2084 (Dolby PQ) files. This converts HDR content to SDR levels for viewing on PC display. SDI output is not affected. New HDR setup page in Options box.
- 2.7.4 Fixed audio packing in SDI to accommodate irregular sample counts such as some SAMMA JPEG2000 SD files made with the MOG MXF wrapper.
- 2.7.5 Added "Close File" to unload and unlock access to file.
- 2.7.6 Update VDCP service to use .NET 4.5.2 and improved performance.
- 2.7.7 Improved shuttling of transport stream and other GOP based files. Fast Forward is much better than Rewind.
- 2.7.8 Fixed bug where SDI sometimes start on the 2<sup>nd</sup> field when jogging.
- 2.7.9 Modified RS422 remote dynamics to be more responsive.
- 2.7.10 Added support of .m2p file extension.
- 2.7.11 Added support for audio files with .ac3, .ec3 and .aac extension.
- 2.7.12 Added caption grid overlay for CEA608 (15x32) and CEA708 (15x42).
- 2.7.13 Added safe area markers overlay. Adjustable from 50% to 100% in Options box.
- 2.7.14 Fixed issue with encrypted DCP not decoding properly and protected against some files that have DisplayHeight=0.



- 2.7.15 Fixed captions with double single quotes "and other caption placement issues with extended characters.
- 2.7.16 Fixed accuracy of the last few frames for GOP structured files. Attempts to show all available frames.
- 2.7.17 Added more definitions for PictureEssenceCoding for Avid DNxHD into dict.xml.
- 2.7.18 Changed loading of audio waveform to be non-blocking. This allows the playback to start without waiting for the audio waveform to complete loading.
- 2.7.19 Added support for Omneon and MOG generated AVC-Intra MXF files with "open/incomplete" format.
- 2.7.20 Changed loading of media to be non-blocking and allows user to cancel (by pressing the ESCAPE key) the load at each stage of loading different track types.
- 2.7.21 Fixed prompting of frame count for single frame sequence file.
- 2.7.22 Fixed thumbnails showing as black for no UI mode.
- 2.7.23 Added support for graphics cards that do not support YCbCr. If content is YCbCr, it converts it RGB for the PC display. Obviously a slow process so not meant to perform well for 4K content.
- 2.7.24 Changed video tools Vectorscope, waveform and Spectrascope to update in frame mode for interlaced content.
- 2.7.25 Added support for drop frame and non-drop frame for each timecode track. Some files have different DF modes for different tracks.
- 2.7.26 Added "Color Matrix", "Color Primaries" and "Transfer Characteristics" for asset metadata and File Properties.
- 2.7.27 Fixed bug when loading a file that does not exist. Handles error gracefully now.
- 2.7.28 Fixed display of bitrate in status panel for multiple video assets such as DCP and IMF packages. Now displays highest bitrate across all tracks.
- 2.7.29 Changed to use Kakadu JPEG2000 quality limiter class instead of strip passes to reduce CPU usage. Huge improvement in picture quality given the same level of CPU usage. Settings range is now 0 (max quality) to 10,000 (lowest quality).



- 2.7.30 Fixed Timed Text version 1.0 subtitles now positioned correctly.
- 2.7.31 Added context menu to thumbnails to perform a GrayMeta Platform reharvest of the video file and associated metadata.
- 2.7.32 Dynamically created tool windows have their sizes and positions stored.
- 2.7.33 Subtitle viewer positions and sizes are now persistent.
- 2.7.34 Added shortcut keys to jump to previous/next markers.
- 2.7.35 Added refresh context menu for the project tree.
- 2.7.36 Fixed bug where 2 or more of the same user are not allowed to be logged in at the same time.
- 2.7.37 Fixed EIA608 and CEA708 preprocessed captions positioning the positions now match the live captions positioning.
- 2.7.38 Fixed EBU STL subtitles to be shown in correct position.
- 2.7.39 Fixed EIA608 preprocessed captions sometimes the text was missing a space.
- 2.7.40 Fixed EIA608 preprocessed captions where the single quote appeared twice but should only appear once.
- 2.7.41 Fixed CEA708 preprocessed captions some text had missing characters.
- 2.7.42 Added checkbox in sign in dialog for user to disable the sign in dialog on future Iris startups.
- 2.7.43 Fixed bug where when modifying a package, subtitle and audio files in packages were not saved.
- 2.7.44 Live captions can be shown at the same time as preprocessed captions viewer windows.
- 2.7.45 Fixed database connection hanging when the connecting the current network to a VPN.
- 2.7.46 Fixed Mark in and Mark out displays not being updated when switching timecode tracks.
- 2.7.47 Fixed captions viewer's time in and time out not being updated when switching timecode tracks or using CTC track.



- 2.7.48 Fixed annotation tabs not being updated when switching timecode tracks.
- 2.7.49 Changed font of the display panel, making the text clearer.
- 2.7.50 Fixed crash when no projects selected and file is opened.
- 2.7.51 Do not allow the root node of the projects tree to be dragged and dropped.
- 2.7.52 Added search to Captions Viewer window.
- 2.7.53 Added Save to CSV to Captions Viewer context menu.
- 2.7.54 Added full screen button on main control window.
- 2.7.55 Added message box to show number of days before license expires.
- 2.7.56 Fixed asset metadata loading issue when there are lots of files in the package.
- 2.7.57 Added operation without the need of a sound device in the system.
- 2.7.58 Added /audiorouting, /mute and /unmute command line options.
- 2.7.59 Added Venera Pulsar QC XML report import.
- 2.7.60 SD D10 (720x512 and 720x608) formats play in full screen without the vertical blanking visible.
- 2.7.61 Added some Preset docking layouts for reference.
- 2.7.62 32-bit version no longer prevents UHD/4K sizes. Instead, it warns the user to use the 64-bit version for better performance.

# 2.8 **Version 3.1.0.17**

- 2.8.1 Added MXF source package and material package timecode selection in options.
- 2.8.2 Added MXF source package (essence) duration selection and GOP timecode as start offset to simulate Grass Valley iTX playout system.
- 2.8.3 Added support for encrypted ISMC MXF caption files for DCPs.
- 2.8.4 Added individual selection of input audio tracks.
- 2.8.5 Added support of audio only files (MP3, WAV etc).



- 2.8.6 Support extended western characters for SCC files.
- 2.8.7 Added support for complex multi-segment encrypted DCPs with supplementary directories.
- 2.8.8 Added support for complex multi-segment HLS m3u8 playlists. Also supports audio only playlists. Items appear in the playlist tool window.
- 2.8.9 Added /deleteimportreport command line flag to automatically delete the imported XML report on close.
- 2.8.10 Modified SCC timecode handling to represent time. This allows the SCC file to be used for all frame rates.
- 2.8.11 Added automatic loading of SRT and SCC caption files if the name matches the video file and they reside in the same folder.
- 2.8.12 Added duration display between the mark in and out markers in the main timecode window. Also, added more warning and format indicators in the main display.
- 2.8.13 All variants of Iris (including OEM) now have their own OCX so they can be installed on the same OS without affecting the other. Installer no longer uninstalls other variants.
- 2.8.14 Added windowed mode full screen that has the transport control panel visible when the mouse is moved near the bottom of the screen. This always uses the desktop resolution and frequency but switches very quickly. Default short cut key is F11.
- 2.8.15 Added Interra Baton QC XML report import.
- 2.8.16 Fixed Venera Pulsar import position errors and added DCP/IMF reports.
- 2.8.17 Added additional information to track names of timecode, audio and captions.

#### 2.9 **Version 3.1.1.18**

2.9.1 Fixed issue with HLS files where the first few seconds may be missing (first I-frame could not be found hence started on the second I-frame).



## 2.10 **Version 3.2.0.19**

- 2.10.1 Updated to Bluefish driver version 5.11.0.45. This version requires KB3033929 for Windows 7 for 256-bit encryption for the signed drivers.
- 2.10.2 Updated to FFmpeg 2.7.7.
- 2.10.3 Improved Windows 10 compatibility, especially with video playback performance. Must use build 14393.
- 2.10.4 Added annotation timecode placeholders so that messages that contain real timecode references can be adjusted automatically.
- 2.10.5 Fixed GXF 720p duration error broken in 3.1.1.18.
- 2.10.6 Fixed IMF subtitle files not appearing in the open box.
- 2.10.7 Added support to open OPL file in IMF package.
- 2.10.8 Added Compression Mode into asset metadata to indicate lossy or lossless compression.
- 2.10.9 Added ColorMatrix, ColorPrimaries and EssenceProfile to asset metadata.
- 2.10.10 Updated MXF dictionary "dict.xml" with latest SMPTE-RA.ORG Labels.xml.
- 2.10.11 Added missing audio information on thumbnails in projects.
- 2.10.12 Added full XML tree browser in IMF asset opening dialog box.
- 2.10.13 Added IMF markers to the time line.
- 2.10.14 Added HDR split screen dragging. Double clicking in full screen mode now restores window. Mouse is hidden after 5 seconds of no mouse movement.
- 2.10.15 Added HDR ST 2084 handling for JPEG2000 MXF files.
- 2.10.16 Added extra IMF timecode track with starting value as defined in the CPL. DCP also generate extra timecode track starting at 00:00:00:00 always.
- 2.10.17 Fixed mute button crash when clicked if already muted.
- 2.10.18 Added extra GXF captions handling for 608 and 708 and XDS for captions viewer.
- 2.10.19 Added ability to draw onto the video surface without being online or in a project.



- 2.10.20 Added picture copy to clipboard menu regardless of project or online status.
- 2.10.21 Added AFD display in the Status Panel. AFD can be extracted from the ANC track of GXF and MXF files.
- 2.10.22 Added live caption support for ANC track in GXF files (in SMPTE RDD14-2007 format).
- 2.10.23 Added VANC track pass-through of GXF files to the SDI output.
- 2.10.24 Added import and export of projects in XML format. The XML report can be viewed in a browser. The entire Iris database can be exchanged using this option.
- 2.10.25 Added persistent audio routing settings and user profiles stored on the local machine.

#### 2.11 **Version 3.2.1.20**

- 2.11.1 Fixed audio offset bug in certain packing formats.
- 2.11.2 Fixed MOV files when it says its interlaced but frame rate is 23.98 fps.
- 2.11.3 Installer forces update of Bluefish driver as some systems do not read the driver version correctly.

#### 2.12 **Version 3.2.2.21**

- 2.12.1 Added separate short cut keys for single step jog and fast shuttle. Single step defaults to left and right arrow keys, rewind and fast forward is CTRL+left and CTRL+right keys. Short cut keys only work when main player window or transport control window has focus.
- 2.12.2 Audio routing settings can now be saved in online projects.
- 2.12.3 Fixed VDCPService for Windows 10.
- 2.12.4 Fixed bug where the DB connection was timing out too quickly.
- 2.12.5 Fixed capture size of video and annotations to file and clipboard.
- 2.12.6 Fixed export project XML bug where the frame number starts at 0 instead of 1 like in the annotation windows.



## 2.13 **Version 4.0.0.22**

- 2.13.1 Added fixed toolbar on title bar for quick access of tool windows.
- 2.13.2 Added jump to next and previous annotation buttons on the timeline control as well as in the Annotation Window.
- 2.13.3 Added new splash screen and application icons.
- 2.13.4 Added vertical style for audio meter. Selectable from context menu in the audio meter window.
- 2.13.5 Added search filter for projects to find keywords in project names, file names and metadata with next and previous buttons.
- 2.13.6 Added drawing toolbar to main video window and removed it from the tool windows menu. The drawing tools can now operate in off line mode and the video image can be saved to file or copied to the clipboard.
- 2.13.7 Added Avid DNxHR support using Avid SDK 2.2.4.25.
- 2.13.8 Added duplicate output (bottom BNC) when using channel 0 of Bluefish Neutron SDI card.
- 2.13.9 Added EssenceCodingSettings to metadata window. This shows the details of the GOP structure and any algorithms used in the encoder.
- 2.13.10 Added option for passing of digital VANC data (EIA 608/708/XDS) in SD (PAL & NTSC) SDI. If disabled, then only allow analog VANC data (VITC).
- 2.13.11 Added AFD change count indicator to main timecode display panel.
- 2.13.12 Added display of file duration and mark in/out duration with hours, minutes, seconds and frames.
- 2.13.13 Added /closefile command line flag to close currently loaded file.
- 2.13.14 Modified timecode search window to stay visible until user closes the window manually.
- 2.13.15 Modified licensing to be much simpler and to keep the local (.lic) file in sync with the Server (.plic) state. Each application now has its own AppID for its corresponding license.
- 2.13.16 Improved handling of MXF files to speed up loading time.
- 2.13.17 Improved the jogging and shuttling speed of JPEG2000 files.



- 2.13.18 Improved playback performance of 4K content, especially for HEVC using better distribution of threads.
- 2.13.19 Improved shuttling of MOV files, especially for I-frame only content.
- 2.13.20 Improved performance of loading projects by using virtual windows to load assets and thumbnails only when visible.
- 2.13.21 Changed behavior of playback to pause instead of stop when end of file is reached. This allows jog controls to remain active.
- 2.13.22 Fixed bug for certain Avid MXF files where the actual duration is only valid in the footer partition.
- 2.13.23 Fixed bug where XDS data was not decoded correctly.
- 2.13.24 Fixed bug where 708 services data were mixed up.
- 2.13.25 Fixed bug where the VANC lines for IMX/D10 were shifted down by 1 line.
- 2.13.26 Fixed bug where MXF CDP captions were not found in AS-02 packages.
- 2.13.27 Fixed bug where certain timecodes in MOV files were not displayed and has to be regenerated.

## 2.14 **Version 4.0.1.23**

- 2.14.1 Added support for PAC unicode caption files.
- 2.14.2 Added support for CAP Cheetah caption files.
- 2.14.3 Fixed crash for JPEG2000 decoder when using forced HDR.
- 2.14.4 Added delete of package in projects.
- 2.14.5 Added close of current file when project is closed.
- 2.14.6 Added both ANC EIA608 and CDP708 into SDI stream for SD formats.



## 2.15 **Version 4.1.0.26**

- 2.15.1 Added grid/list view for project asset packages.
- 2.15.2 Added Netflix Photon IMF validator.
- 2.15.3 Added audio loudness measurement for live operation. Modes include EBUR128, ATSC/A85, BS1770-1, BS1770-2 and BS1770-3. Includes graphs with adjustable time window and custom profiles.
- 2.15.4 Added audio loudness measurement into audio waveform window to calculate loudness across entire audio timeline.
- 2.15.5 Fixed bug where the MXF package checksum did not cancel even when the startup box has closed.
- 2.15.6 Fixed bug where AXUtilities.exe was left running after Iris is closed, causing files to be locked.
- 2.15.7 Fixed bug where DNxHD/R crashes in HDR conversion.
- 2.15.8 Added AFD and BAR data into SDI VANC space if present.
- 2.15.9 SDI always uses a 'live' caption track even when a pre-processed track is selected for PC display. Defaults to first live track.
- 2.15.10 Modified load open dialog box to clarify caption loading options.
- 2.15.11 Added SMPTE 385M timecode handling to detect no timecode values.
- 2.15.12 Removed special Omeon iTX MXF handling using Origin in the MXF file. Origin is now displayed in the asset metadata. Removed MXF options for Use essence duration and use GOP timecode.
- 2.15.13 Added audio track language to the asset metadata.
- 2.15.14 Added option to keep or close the search timecode box after search.
- 2.15.15 Added 608 cc1-4 and 708 services 1-6 and XDS in live caption handling. Context menu sets the caption source for PC overlay.
- 2.15.16 Added support for VTT subtitle files, including positioning information and justification.
- 2.15.17 Added quick access toolbar buttons for Audio loudness window.



- 2.15.18 Added PC display overlay with rating, CGMS, AFD, caption source, and file properties. These also appear in the Status Panel window.
- 2.15.19 Added support for AJA Kona 3G and Kona 4 family SDI cards. Functions currently not supported are VANC pass-through in SD formats. UHD/4K P50/60 maybe slow and drops frames, UHD/4K 16-bit RGB drops frames.
- 2.15.20 Added short cut keys to jump in configurable frame steps.

## 2.16 **Version 5.0.0.30**

- 2.16.1 Changed license scheme so that all previous versions are invalidated. Users must obtain new license for v5.
- 2.16.2 Added auto-log in for stand-alone operation to obtain hardware license from Iris Server. Each instance of Iris will use one of the concurrent licenses belonging to the assigned customer ID.
- 2.16.3 Added NTSC line 21 decoding for live captions.
- 2.16.4 Added AC3 "dialnorm" display into the metadata for audio tracks. The dialnorm value has also been added to the audio loudness measurement display with error range indication in red.
- 2.16.5 Added creation of new audio tracks down mixed from existing audio channels. This allows 5.1 channels to be down mixed into stereo and then routed to the output channels. User profiles can be saved and loaded.
- 2.16.6 Improved GXF and MKV file handling for scrubbing.
- 2.16.7 Added "Instant Sync" feature to allow two or more instances of Iris to be slaved off a master instance of Iris. Connections between Iris are made through the IP protocol. The transport commands are echoed from the master to the slave devices.
- 2.16.8 Added support of IMSC1 subtitles for IMF.
- 2.16.9 Added support of transparency, colors and regions in TTML.
- 2.16.10 Added support for Apple MOV reference files (links to other essence files).
- 2.16.11 Added support for two sample interleave dual-link (2 x 3G) 4K YCbCr 10 bit operation for the Bluefish SDI cards.



- 2.16.12 Improved performance of 4K content for AJA SDI Kona 4 card and updated to driver 13.0.0.18.
- 2.16.13 Added SD VANC for AJA SDI cards.
- 2.16.14 Added NBCU's "Name Dropper" log of VANC data events.
- 2.16.15 Fixed bug where AJA driver is not released on exit.
- 2.16.16 Fixed roll-up command for 608 and 708 captions.
- 2.16.17 Fixed bug where a valid license's host ID is shown incorrectly.
- 2.16.18 Added support for RAWVIDEO format. Generally uncompressed format in MOV files.
- 2.16.19 Fixed bug where AFD is not displayed when no subtitle track is found.
- 2.16.20 Fixed bug where users could not be added into projects with large number of assets.
- 2.16.21 Fixed bug where external SCC files drifted when used with timecode offset.
- 2.16.22 Fixed bug where the number of concurrent users was reported incorrectly.

## 2.17 **Version 5.0.1.31**

- 2.17.1 Added AJA driver 12.5.1 option.
- 2.17.2 Added AJA two sample interleave mode for 4K SDI using 2 x 3G level B links. Only supported on Kona 4.
- 2.17.3 Fixed issue with trial licenses across time zones.
- 2.17.4 Changed DCP default RGB offsets to 0.



## 2.18 **Version 5.0.2.32**

- 2.18.1 Fixed issue with captions not showing when paused.
- 2.18.2 Fixed SCC drifting with certain files.
- 2.18.3 Added saving of settings for all users on the local machine.
- 2.18.4 Added sharing of layouts when connected to Iris Server.
- 2.18.5 Added command line switch /dockingLayout "LayoutName" to load a layout on startup.
- 2.18.6 Fixed Videotron CAP files to use SHIFT-JIS for Japanese fonts.
- 2.18.7 Fixed cancellation not working with the ESCAPE key when loading preprocessed captions.
- 2.18.8 Removed Metafarm v1 tool window and menu.

## 2.19 **Version 5.0.3.33**

- 2.19.1 Added segmented WebVTT support for HLS playlist files.
- 2.19.2 Fixed crash when loading SD non-interlaced content.
- 2.19.3 Fixed crash when de-selecting audio tracks with the audio waveform window active.
- 2.19.4 Fixed incorrect timings for TTML caption files.
- 2.19.5 Added co-ordinates and style for Caption Viewer.



## 2.20 **Version 5.1.0.36**

- 2.20.1 Added Active Directory groups and users. If Iris Server is configured for Active Directory, Iris can log into account using authentication from AD. Iris can also changes its options (menus and tool windows) according to settings for the group policy. (See Iris Server for more details).
- 2.20.2 Added support for Black Magic Design SDI cards. Requires BMD Desktop Video v10.9.5 onwards.
- 2.20.3 Added ability to save layout under groups.
- 2.20.4 Fixed bug with caption fonts being too big when the picture size is small.
- 2.20.5 Fixed crash when scrubbing backwards randomly.
- 2.20.6 Fixed crash when background desktop or PC monitor mode changes while playing.
- 2.20.7 Updated Bluefish driver to version 5.11.0.51 and uses new Bluefishlib.dll.
- 2.20.8 Fixed color font tags in STL caption files.
- 2.20.9 Fixed live line 21 caption not displaying correctly for some files.
- 2.20.10 Fixed distorted audio on PC device for non-standard frame rates.
- 2.20.11 Fixed AES3/Dolby-E not being muted on the PC audio in MXF files.

#### 2.21 Version 5.1.1.37

- 2.21.1 Added support for nested Active Directory groups.
- 2.21.2 Added customer ID into Active Directory setup in Iris Server so that the customer ID in Iris is no longer used when signing in using AD.
- 2.21.3 Removed 5000 frame trial/demo mode. A valid license must be found either locally or via an Iris Server before Iris will load file for playback.
- 2.21.4 Fixed issue of project thumbnails consuming network bandwidth even when there is no activity.



## 2.22 **Version 5.2.0.38**

- 2.22.1 Added Live Captions/Subtitles Viewers for CC1-4, Services 1-6 and XDS.
- 2.22.2 Added GXF line 21 VBI caption processing.
- 2.22.3 Fixed TTML subtitles (and similar types) where text background was not shown inside region.
- 2.22.4 Text in TTML subtitles (and similar types) are no longer displayed inside a grid
- 2.22.5 Captions/Subtitles Viewer now shows the display type (paint-on, pop-on, etc) for SCC subtitles.
- 2.22.6 Fixed bug where field 2 of SD VANC contained random data.
- 2.22.7 Allow user the option, upon opening a file, to add the file to the playlist.
- 2.22.8 Fixed bug where captions/subtitles viewers could not be disabled if a file is not loaded.
- 2.22.9 Add XDS support for line 21 captions.
- 2.22.10 Fixed bug where captions/subtitles viewers became blank when applying docking layout.
- 2.22.11 Default size for subtitle viewer now set to a sensible size it was previous zero width and height.
- 2.22.12 Fixed crash when subtitles at the end of the file had incomplete information.
- 2.22.13 Fixed P50/60 timecode in AJA and BlackMagic SDI.
- 2.22.14 Added SDI overlay to allow all overlay data to be shown on SDI display.
- 2.22.15 Added line21 subtitle processing for SDI overlay to work correctly.
- 2.22.16 Added options for custom image and text overlays.
- 2.22.17 Fixed pre-processed captions not appearing in paused mode.
- 2.22.18 Changed the fonts in TTML subtitles (and similar types) to nicer looking fonts.
- 2.22.19 Fixed background transparency in live subtitles was always using the one specified in the options even when it was disabled in the options.
- 2.22.20 Audio routing now allows output to be routed from any valid input channel.



- 2.22.21 The total output channel count is now the maximum channel used.
- 2.22.22 Added setting to allow display of bad frames as a grey frame.
- 2.22.23 All output channels are enabled for audio routing regardless of number of channels in file.
- 2.22.24 Fixed 608 subtitles were not reset to 32 columns. When the current subtitle format is using 42 columns and after switching to 608, the number of columns is now set correctly back to 32.
- 2.22.25 Fixed full screen issues that occur in Windows 10 Build 1709 (but still reports wrong size and refresh rate).
- 2.22.26 Revised the audio mixer tool window to only mix as stereo or mono channels. Added "Solo" button to listen to that channel while muting all other channels. Added pan control to direct sound to left or right channels.
- 2.22.27 Fixed bug where SDI always outputted YCbCr in SD/HD even for RGB formats for the AJA SDI cards.
- 2.22.28 Fixed bug where the 4<sup>th</sup> quadrant of a 4K picture did not configure correctly with the other 3 quadrants for the AJA card.
- 2.22.29 Enabled the HDMI port for the AJA Kona 4 card. (But no audio appears).

# 2.23 **Version 5.2.1.39**

- 2.23.1 Added support for TIF and GIF files for image overlay.
- 2.23.2 Fixed image overlay position for SD D10 content on SDI output.
- 2.23.3 Fixed thumbnail preview not showing up in Projects.
- 2.23.4 Added option to hide and show SD D10 VANC lines on PC display.
- 2.23.5 Fixed 'SetActive' option in live caption tool windows.
- 2.23.6 Revised audio mixer to allow configuration of number of input channels, muting of unmixed channels and selection of router cross-points.
- 2.23.7 Added more settings for AJA SDI card. Includes 3G RGB Level B and forced YCbCr / RGB color space and component depth.



- 2.23.8 Added multi-channel operation for AJA SDI card. Multiple instances of Iris can now use different cards and output channels.
- 2.23.9 Added option to force TCR timecode to be striped (contiguous).
- 2.23.10 Added timecode search directly from the main display.
- 2.23.11 Updated MXFDUMP.EXE to use MCF140 libraries.



## 2.24 **Version 5.3.0.45**

- 2.24.1 Fixed video, audio and subtitle timing for MOV files with negative start PTS.
- 2.24.2 Fixed annotation markers sometimes displayed in incorrect height.
- 2.24.3 Added HDR metadata to the Asset Metadata tool window.
- 2.24.4 Added HLG uuids to MXF dictionary.
- 2.24.5 Re-arranged HDR options to clarify HDR PQ operation.
- 2.24.6 Optimized HEVC threading parameters.
- 2.24.7 Fixed some files not starting playback correctly.
- 2.24.8 Improved seek speed for M2V files.
- 2.24.9 Fixed HLS issues with FFmpeg 3.3.6.
- 2.24.10 Improved PTS search speed for GOP structured files.
- 2.24.11 Added support for Aja SDK v14.0.1.
- 2.24.12 Enabled mini-HDMI on AJA Kona 4 to output HDR signal.
- 2.24.13 Updated to use FFmpeg version 3.3.6.
- 2.24.14 Updated to use Avid SDK version 2.3.5.43.
- 2.24.15 Update to use Microsoft .NET v4.7.1.
- 2.24.16 Fixed bug where unknown subtitle types were being assumed to be VOB subtitles they should be ignored.
- 2.24.17 Re-arranged audio mixer operation with panning of left-right and mix output to be assigned to a fixed output pair.
- 2.24.18 Fixed pre-processed captions when caption data do not appear at the beginning of the file or when there are gaps of missing caption data.
- 2.24.19 Added interlace jog mode button to main player control area.
- 2.24.20 Fixed encrypted DCP audio not being recognized correctly.
- 2.24.21 Fixed ISMC1 DCP/IMF subtitles starting from wrong location when multisegments are used.



## 2.25 **Version 5.3.1.47**

- 2.25.1 Fixed TTLM caption positioning when embedded in MXF.
- 2.25.2 Fixed JPEG2000 settings to take on play restart.
- 2.25.3 Fixed bug where screen capture in display size was missing annotations.

## 2.26 **Version 6.0.0.51**

- 2.26.1 Added Advanced Pack to Iris QC Pro. This includes HDR waveforms, HDR line range, HDR histograms and Dolby Atmos decoding. This option requires a new license option.
- 2.26.2 Added HLG HDR simulation.
- 2.26.3 Enhanced PQ HDR simulation with Color Primaries, Mastering display luminance max/min, MaxFALL and MaxCLL.
- 2.26.4 Added draft SMPTE 291 HDR metadata to AJA SDI cards. When used in conjunction with Hi5-4K Plus, Mini Config version 2.21.0 BETA, metadata can control the HDR switching of the HDMI to a HDR TV. Currently PQ and HLG are supported.
- 2.26.5 Added HDR light level display in waveform monitor. PQ levels are shown in nits and HLG are in percentage of light level.
- 2.26.6 Added PC screen overlay of HDR Line Range. This feature plots the minimum and maximum light levels for each line of video to give a dynamic trace of the range of levels used across the entire frame.
- 2.26.7 Added PC screen overlay of HDR Histogram. This feature plots the distribution of light levels across the frame as a percentage.
- 2.26.8 Changed method of setting database configuration for online use. Must now generate database settings file from the Iris Server Web Admin and import them in Iris.
- 2.26.9 Allow audio mixing configuration to be saved to the database or to a group.
- 2.26.10 Added audio level meter display of up to 64 input channels. New controls in the tool window for easy access.
- 2.26.11 Added new environment profiles to save and restore complete setup states.



- 2.26.12 Added input and output side monitoring for audio phase tool, audio meters, audio waveform and audio loudness monitor. Audio data directly outputted from the file is referred to "Input side data". Audio data that has passed through the router and processed by the mixer is referred to as "Output side data".
- 2.26.13 Added audio loudness channel configuration and channel mapping. Also moved all configuration to Options dialog and rearranged graticules and legends for clearer view.
- 2.26.14 Modified audio waveform to use the same channel and loudness configuration as the Loudness Monitor.
- 2.26.15 Added drop-frame option for auto-generated timecode tracks (when there are no timecode tracks in the file).
- 2.26.16 Added BT.2020 75% color bar boxes for Vectorscope.
- 2.26.17 Added specific Dolby Vision metadata view in Asset Metadata window. Tree is currently dump of the extracted global and shot XML metadata merged into one. The Mastering Display parameters are now used to populate the HDR parameters so that Iris can perform static PQ simulation.
- 2.26.18 Modified decoder thread affinity to give more even distribution of CPU load.
- 2.26.19 Fixed SCC drift due to video rate error.
- 2.26.20 Fixed issue where the CTC was not being updated when changed in the Options box.
- 2.26.21 Fixed issue with not releasing the AJA SDI card on exit.
- 2.26.22 Fixed MXF Ancillary track for subtitles not seeking correctly.
- 2.26.23 Fixed issue with subtitle track selection when there are invalid tracks present.
- 2.26.24 Fixed issue with TTML wrapped in MXF not being loaded.
- 2.26.25 Fixed issue with caption grid not appearing until captions actually appears.



## 2.27 **Version 6.0.1.52**

- 2.27.1 Fixed issue when fast forwarding or rewinding and then pressing pause causes the time display to show a negative number.
- 2.27.2 Fixed issue when fast rewind or forwarding occasionally causes the application to crash.
- 2.27.3 Added "Show Loudness Panel" menu in Audio Waveforms to show or hide loudness controls.
- 2.27.4 Added message box when SCC files do not appear to be 29.97 fps. Prompts user to select the correct frame rate for the SCC file.
- 2.27.5 Changed default number of decoder threads to be the same as the number of CPU threads in the system.

## 2.28 **Version 6.1.0.56**

- 2.28.1 Added support for Dolby E decoding to PCM.
- 2.28.2 Changed audio meters and audio router not to show downmix tracks and channels on the input created by the audio mixer.
- 2.28.3 In audio routing tool window, audio downmix channels are highlighted in blue.
- 2.28.4 Added invert phase control in Audio Mixer to allow for LtRt downmix mode.
- 2.28.5 Changed behaviour of annotation markers. Previous and next marker will be relative to current frame position, rather than relative to current highlighted annotation marker.
- 2.28.6 Fixed issue where XDS data was not always being detected.
- 2.28.7 Simulate roll up subtitles in SCC files.
- 2.28.8 Fixed issue with start PTS that caused incorrect timing of live captions.
- 2.28.9 Fixed Audio Meter not showing input data on channel number greater than 16.
- 2.28.10 Fixed issue when generation of DCP certificates sometimes fails.
- 2.28.11 Added support for specifying more than one shortcut key per command.



- 2.28.12 Added downmix stereo LoRo and stereo LtRt preset profiles in the Audio Mixer.
- 2.28.13 AJA Kona IP card is limited to run in exclusive mode to fix p23 frame rate error.
- 2.28.14 Fixed Prores shuttling performance issue.
- 2.28.15 Changed Name Dropper tool window to show timecode instead of frame number.
- 2.28.16 Fixed issue where drop frame timecode was not always being detected in MOV files.
- 2.28.17 User inactivity timeout removed in Iris and moved to Iris Server Admin page.
- 2.28.18 Fixed issue where HDR graticules in the waveform monitor did not appear in Auto mode for HDR content.

#### 2.29 **Version 6.1.1.59**

- 2.29.1 Added option to extract and display Dolby Vision Metadata in the Asset Metadata tool window.
- 2.29.2 Fixed bug where the program rating was also showing the program type.
- 2.29.3 Removed the option to allow user to choose if forced subtitles should be merged with non-forced subtitles. According to the spec, this is not optional.
- 2.29.4 Changed dynamics of audio meters for more accuracy.
- 2.29.5 Added new Dolby Digital Plus decoder for support of coupling channels.
- 2.29.6 Fixed bug when adding users to a project failed if the project had no assets.
- 2.29.7 Improved performance of playing frame sequences, especially 16 bit TIFF and DPX files up to 4KP30.
- 2.29.8 Fixed issue when pausing the file but timecode is not updated until a second after the file had been paused.
- 2.29.9 Added 2K/4K 47.95Hz for AJA Kona 4.
- 2.29.10 Allow current Windows Active Directory user to be automatically logged in to Iris.



- 2.29.11 Added ability to create custom video scaling menu.
- 2.29.12 Fixed crash when displaying TV Rating text that exceeds a certain number of characters.
- 2.29.13 Fixed bug where jogging and shuttling caused the PC display to be out of sync with the SDI output.
- 2.29.14 Fixed bug when Iris would not produce pre-processed subtitles when a file is opened via association with File/Windows Explorer.
- 2.29.15 Added support for the "TTML Simple Delivery Profile for Closed Captions (US)" subtitles.
- 2.29.16 Removed restriction of 12 or more bits for RGB 4K p23/24 for the Bluefish SDI card. 4K p25 or above is limited to 10 bits only as the DMA bandwidth is not enough for RGB48 format.
- 2.29.17 Added silence audio frames to DS8 when SDI drops frames. This keeps the PC audio in sync with the SDI.
- 2.29.18 Fixed a memory leak in subtitle processing.
- 2.29.19 Ensure STL subtitle text is of a minimum size so that they are not too small to read.
- 2.29.20 Fixed bug where TTML subtitle timing were incorrect when the TTML file contains mixture of frames, timecode and time.
- 2.29.21 Fixed bug with incorrect timings in subtitles due to wrong calculations of drop frame timecodes.
- 2.29.22 Added ability to read registry to determine which SDI card to use if there are more than one type present.
- 2.29.23 Removed "Always use dual SDI cards" option from Bluefish SDI card. No longer required because Bluefish Supernova/Neutron always use 2 cards for 4K and AJA and BMD always use 1.
- 2.29.24 Bluefish 3G Level A re-enabled for RGB.
- 2.29.25 New buffer swapping for SDI without copying fixes stutter on pause/play.
- 2.29.26 Fixed TTML region background color was not being set.
- 2.29.27 Added Dolby E handling in MXF files.



- 2.29.28 Fixed display of pre-processed caption track name and CC type to be in line with the live caption mode.
- 2.29.29 Fixed ATSC A53 AFD parsing. It was not correctly picked up before.
- 2.29.30 Try to test for limited and full range for more content to be more accurate.
- 2.29.31 Fixed bug where Bluefish CGI/SMPTE range option was not working. CGI option only provides restricted conversion modes and is not bi-directional.
- 2.29.32 When opening DPX files, the subtitle pre-processing option has been removed as it does not apply.
- 2.29.33 Add option to specify number of threads to use when processing JPEG2000 content.
- 2.29.34 Modified frame sequence threads so that automatic values work better.
- 2.29.35 Fixed bug with culture info that caused parsing of double-precision numbers resulting in 0. The upshot was that some of the asset metadata were showing values of 0 due to this bug.
- 2.29.36 Fixed bug, if current project has been deleted by another user, Iris has to close the project.
- 2.29.37 Fixed bug where inserting a user into an empty project would fail.

# 2.30 **Version 6.2.0.61**

- 2.30.1 Added use of groups in projects.
- 2.30.2 Added HDR into VANC space for Bluefish and Black Magic Design SDI cards.
- 2.30.3 Added VANC space data for 4K/UHD formats (captions, HDR and AFD).
- 2.30.4 Updated Black Magic SDI version to 10.11.2.
- 2.30.5 Updated AJA SDI version to 14.2.0.9.
- 2.30.6 Added support for .JP2 file extensions in frame sequences.
- 2.30.7 Fixed RAWVIDEO codec GBR component ordering.
- 2.30.8 Fixed crash when applying offset to external subtitles.



- 2.30.9 Fixed bug when pre-processing multiple subtitle tracks that resulted in subtitle text from each track being merged together.
- 2.30.10 Fixed JPEG2000 decoding only part of a frame in RGB formats of certain sizes.



## 2.31 Version 7.0.0.64

- 2.31.1 Added Dolby Vision HDR IMF simulation (soft CMU version 2.9) for PC display.
- 2.31.2 Added feature in Iris to respond to API commands. Requires matching Iris Enterprise Server v7.0.0.64.
- 2.31.3 Fixed audio meter accuracy when in paused mode.
- 2.31.4 Added context menu option to copy a textual representation of the current playback position (frame number, timecode, CTC, time) to the clipboard.
- 2.31.5 Fixed audio meter threshold values were not being observed.
- 2.31.6 Slight improvement in Iris startup time.
- 2.31.7 Fixed bug when logging out of Iris during the middle of editing annotation which erroneously resulted in a message "The current annotation was deleted by another user".
- 2.31.8 Fixed bug where ancillary captions in AS02 packages were not decoded.
- 2.31.9 Fixed bug where Dolby E was not being decoded and appears to play at half speed.
- 2.31.10 Fixed bug where the annotation position context menu option within the Projects tool window was showing frames as default but it should show timecode as default.
- 2.31.11 Fixed bug where preset annotations were not shown after creating a new project.
- 2.31.12 Fixed bug where attempting to load a file from command line sometimes fails and the file does not get loaded.
- 2.31.13 Added setting in the Open File Dialog called "Enable auto load external captions / subtitles with matching name". When enabled, external subtitle files with filename that matches the video file will also be opened.



## 2.32 **Version 7.0.1.65**

- 2.32.1 Changed the default justify of TTML subtitles from left justify to center justify, if the justify setting is not specified.
- 2.32.2 Added setting in the options page to toggle on/off display of rolled up text in the subtitles viewer.
- 2.32.3 Added support for roll up text in 708 decoding.
- 2.32.4 Fixed bug in 608 and 708 decoder when Iris failed to display the captions / subtitles when there is only one line of text in the entire subtitle track.
- 2.32.5 Added feature to assign environment profiles for an asset package in a project.
- 2.32.6 Fixed bug with CultureInfo whereby manually replacing the representation of a decimal point for US settings, to some other character would result in incorrect parsing of floating point numbers.
- 2.32.7 Fixed bug where some IMSC captions were not being processed.
- 2.32.8 Fixed bug where 12 bit RGB DPX color component is swapped.
- 2.32.9 Optimized Bluefish SDI card DMA transfer to reduce dropped frames.
- 2.32.10 Fixed bug where MJPEG wrapped in MOV does not seek.
- 2.32.11 Added handling of SD line 21 caption decoding even if scaled to HD resolution.
- 2.32.12 Fixed bug where MOV file has a negative starting offset causing picture to be delayed. Not sure this is intentional and the offset may be required for certain files.
- 2.32.13 Non-HDR content no longer shows HDR metadata values in the asset metadata window.
- 2.32.14 Added support of AJA driver v15.0.1.1. This is now the default version for the installer.
- 2.32.15 Removed message box warning of no audio in MXF files.



## 2.33 **Version 7.0.2.67**

- 2.33.1 Fixed bug pre-defined annotation was not created when adding it at zero frames from the end or 100% from start.
- 2.33.2 Fixed slow startup of Iris when a database connection cannot be made.
- 2.33.3 Disable the Open File menu option while a project is already opened. Previously, opening a file while a project is opened would cause the project's video file to be replaced by the new one that was opened (upon confirmation by the user) but this caused a lot of confusion with some users so it is now disabled.
- 2.33.4 Fixed audio overlays were not updated after audio playback had stopped.
- 2.33.5 Reduced the time delay in which video starts playing from a paused or stopped position.
- 2.33.6 Fixed issue when sound continues a bit after pause is invoked.
- 2.33.7 Changed minimum play buffers from 5 to 10 to avoid playback hanging in certain situations.
- 2.33.8 Added text positioning for Cheetah (.CAP) subtitle files.
- 2.33.9 Fixed Cheetah (.CAP) subtitle file timings. They were being processed as time in hh:mm:ss,ms but should be processed as timecode.
- 2.33.10 Added audio resampling from 96K, 192K etc to 48K in MXF files. Only multiples of 48KHz is supported.
- 2.33.11 Added code to convert subtitle timecodes to time using timecode calculations rather than the current method of searching within the timecode track, which could take a very long time.
- 2.33.12 Fixed RGB24 component order which was broken in 7.0.1.65.
- 2.33.13 Updated to AJA SDK v15.0.2.2..



## 2.34 **Version 7.0.3.68**

- 2.34.1 Projects tool window can show custom metadata generated by the API.
- 2.34.2 Added MXF OP47 SDI VANC pass-through.
- 2.34.3 Added Live and PreProcessed Teletext decoding.
- 2.34.4 Added CSMPTE12M class to handle timecode values above 30Hz counts. 48/50/59/60p now counts correctly up to 59 frames.
- 2.34.5 Added support for ETSI EN 300 472 teletext in transport streams.
- 2.34.6 Pre-defined annotations can now be represented as time, timecode and CTC as well as frames.
- 2.34.7 Fixed a bug when selecting how annotations are stored. If the annotations were selected to be stored as Time or Timecode, it was not possible to change it back to Frame number.

# 2.35 **Version 7.1.0.69**

- 2.35.1 Revised hardware licensing scheme to avoid multiple machines having same Host IDs.
- 2.35.2 Added Work List tool window that can be populated via the API.
- 2.35.3 Fixed context menu for teletext page numbers not being checked.
- 2.35.4 Fixed OP47 track not being found when 708CDP data is present.
- 2.35.5 Fixed teletext subtitles can exist on multiple lines of OP47 data. Previously only one line of OP47 data was handled.
- 2.35.6 Set VTR status on RS422 to unloaded state when the current video file is closed.
- 2.35.7 Fixed a crash when captions/subtitle tags exceed 20 characters.
- 2.35.8 Support extended timecodes for video frame rate greater than 30 fps.
- 2.35.9 Fixed issue with certain files where packet duration was wrongly calculated and resulted in 608 captions/subtitles drifting.



- 2.35.10 Fixed pre-processing of captions/subtitles fails if the video file is being opened via symbolic links.
- 2.35.11 Display wait cursor on the project user's page as it is loading (which could take a couple of seconds if there are a large number of projects.)
- 2.35.12 Fixed stuttering when jogging with the SDI present.
- 2.35.13 Vastly improved performance of adding users to a project that contains a large amount of asset packages.

## 2.36 **Version 7.2.0.70**

- 2.36.1 Teletext captions now support the entire G2 character set.
- 2.36.2 Handle Teletext display of colors from a color lookup table (CLUT).
- 2.36.3 Handle double height, double width, double size and normal size Teletext characters.
- 2.36.4 Handle Teletext mosaic characters.
- 2.36.5 Fixed Iris crashing when it is being accessed through a Remote Desktop session.
- 2.36.6 Fixed incorrect handling of the timeBase property of TTML files when it is set to "media".
- 2.36.7 Loading of external captions files are quicker in some cases since timecodes used for the caption timings are no longer validated against the timecodes in the video file, which resulted in slow loading of the external captions files.
- 2.36.8 Fixed a crash when loading a file consisting of more than 64 audio channels.
- 2.36.9 Fixed bug when OP47 teletext was not available due to incorrect detection of the OP47 track.
- 2.36.10 Fixed bug when deleting every single annotation via API was not reflected in the Iris client.
- 2.36.11 Added support for opening a Dolby Vision Metadata XML file for Dolby Vision encoded files that do not contain Dolby Vision metadata.



- 2.36.12 Fixed bug in the captions context menu where it would incorrectly display 608 and 708 menu items after opening an MXF file that only contains an embedded TTML captions file.
- 2.36.13 Added support for AJA driver v15.1.0.2.
- 2.36.14 Fixed a bug with Vizrt AMF MXF files where the last audio PCM track would drift out of sync with the video.
- 2.36.15 Fixed interlace error on the AJA, BMD and Bluefish SDI for field packed J2K files.
- 2.36.16 Use latest Photon IMF validation.
- 2.36.17 Improved speed of YUV444 planar shuffling.
- 2.36.18 Fixed bug when caption positions that are represented as frame numbers (in TTML files only) were not correctly converted when changing captioning display mode from timecode to time, or vice versa.
- 2.36.19 Handle 608 text that has been incorrectly encoded to contain more than 32 characters, by truncating the redundant characters.
- 2.36.20 Fixed incorrect 608 subtitle timings when video file has been trimmed.

#### 2.37 Version 7.3.0.73

- 2.37.1 Added customizable QC Report generator to generate report files in various formats such as PDF, HTML, plain text. This requires an XLST import at the Iris Admin interface.
- 2.37.2 Added support for Dolby Dialogue Intelligence loudness measurements.
- 2.37.3 Use video mark in and mark out positions to define a range for generation of loudness measurements.
- 2.37.4 Fixed issue where certain video files produced grey frames.
- 2.37.5 Added support for captions/subtitles that are graphics based. Will now support SMPTE 428-7 sidecar files that contains text, bitmaps or combination of both.
- 2.37.6 Added support for dynamically loading font files for captions/subtitles that require them.



- 2.37.7 Show the Dolby E program name in metadata tool window.
- 2.37.8 Added support for TSI RGB on AJA Kona range for 8 and 10 bits only due to firmware limitation. 12 bits only work in quadrant mode. Onboard HDMI also supports YCbCr UHD/4K in TSI mode.
- 2.37.9 Fixed issue where Drop Frames and Non-Drop Frames were incorrectly detected in certain H264 files.
- 2.37.10 Fixed incorrect dropped frame counter after a Pause/Resume.
- 2.37.11 Speed up rendering of annotation markers.
- 2.37.12 Fixed issue whereby starting and stopping caused a big audio glitch on the AJA SDI cards.
- 2.37.13 Fixed bug when editing STL files and the display mode is set to TCR it was showing time and not TCR.
- 2.37.14 Fixed crash when importing Baton QC report file.
- 2.37.15 Fixed incorrect handling of composition packages when audio is not present.
- 2.37.16 Support import of Tektronix Aurora QC report files.
- 2.37.17 Fixed EBU STL subtitle using the wrong maximum number of textual rows it caused text to be smaller than normal.
- 2.37.18 Added name dropper support in MXF ANC Track.
- 2.37.19 Fixed incorrect bitrate shown in the metadata display.
- 2.37.20 Fixed display of CPL timeline showing tooltip with wrong frame number.
- 2.37.21 Fixed display of CPL showing incorrect start and end frames.
- 2.37.22 Enabled AJA genlock on external reference connector by default.
- 2.37.23 Added support for Spruce STL sidecar files.
- 2.37.24 Fixed issue when logging in to use projects and the hardware license is activated, a message box incorrectly displayed that there is no valid license.
- 2.37.25 Fixed issue when opening file from command line or double clicking file from Windows Explorer to launch in iris, the hardware license from server was not being used.



## 2.38 Version 7.3.1.74

- 2.38.1 Need to set SHOW\_ALL frames for H264 as it skips errors that cause the audio to go out of sync.
- 2.38.2 Fixed issue with captions when file exceeds 90 minutes of play time.
- 2.38.3 Fixed DCSubtitles were incorrectly being shown as SMPTE 428-7 subtitles.
- 2.38.4 Fixed issue where XML subtitles embedded inside MXF files were not found.
- 2.38.5 Added more region and style processing for TTML sidecar files.
- 2.38.6 Handle DCSubtitle files where times are stored as "ticks".
- 2.38.7 Handle situation where an Aurora Report XML file is not encoded in the same format as specified in the XML data. For example, the XML data specifies UTF8 but the file is encoded in UTF16.
- 2.38.8 Fixed bug when logging in with Active Directory failed if Hardware License from Server is enabled.
- 2.38.9 Fixed bug where progressive files with exact PAL or NTSC sizes are always treated as interlaced.
- 2.38.10 Fixed bug when timecode display was incorrect due to error in conversion of a dropped frame timecode to a frame number.

#### 2 39 Version 7.4.0.75

- 2.39.1 Fixed issue with Elemental HE-AAC tracks fails to read past the half way mark due to an "edit list" box present and the MP4 demuxer assumes the end of stream.
- 2.39.2 Only display valid HDR metadata if present, otherwise leave blank.
- 2.39.3 Added audio track duration from MediaInfo. Certain files that do not have a duration from FFmpeg can be found with MediaInfo now.
- 2.39.4 Uses latest MediaInfo v19.07.
- 2.39.5 Display PC Audio Mode in status panel, whether PCM, AC-3 or E-AC-3.
- 2.39.6 Added AC-3 and E-AC-3 pass-through on HDMI/SPDI audio devices.



- 2.39.7 Prevent crash when there is no subdescriptor found in MXF files.
- 2.39.8 Project Folders are now shareable between groups.
- 2.39.9 Fixed bug in Aurora and Baton QC import getting incorrect start times.
- 2.39.10 Fixed Aurora QC import not setting the error level.
- 2.39.11 Fixed 608 and 708 captions not showing paint on text correctly.
- 2.39.12 Fixed 708 captions not clearing up rolled up text in some situations.
- 2.39.13 Handle situation where subtitle text exceeds the rightmost boundary of the subtitle display area the text is repeatedly moved left until it fits. This is in line with EZConvert and CaptionMaker.
- 2.39.14 Handled timebase media setting for TTML start and end times.
- 2.39.15 Fix bug where Western Character sets were not being selected for SCC subtitles.
- 2.39.16 Added support for RGBA and YUVA alpha channel files to show transparency as 50% grey. Only supports basic graphics formats such as PNG, BMP, JPEG, QTRLE, Prores. DNX and J2K currently does not support alpha channel.
- 2.39.17 Added support for 0 host ID for trial licenses.

#### 2.40 Version 7.4.1.76

- 2.40.1 Added support for importing EditShare's QScan reports.
- 2.40.2 Allow captions background color to be shown in SDI.
- 2.40.3 Added support for 16 RGBA big endian alpha channel display.
- 2.40.4 Dolby Vision 3D LUTs now used in simulation.
- 2.40.5 Fixed bug where new MediaInfo omits fields with no value. This causes the wrong metadata to appear.
- 2.40.6 Fixed issue of displaying the wrong Mastering Display Maximum Brightness for Dolby Vision content. It is different to the target display being simulated.



- 2.40.7 Fixed bug when processing IMF packages contains files that are not PackingList files, which caused failures to open the IMF packages.
- 2.40.8 Show DPP metadata from IMF package.
- 2.40.9 Fixed a bug with TTML subtitles where regions were the wrong size.
- 2.40.10 Added support for outlined text when showing captions.
- 2.40.11 Fixed a 608 captions issue where paint on text could have the incorrect end time.
- 2.40.12 Added support for tts:textdirection property in TTML and SMPTE 428-7 sidecar files.

# 2.41 Version 7.5.0.78

- 2.41.1 Added DCP/IMF/Dolby Vision in the timeline window.
- 2.41.2 Show Curio emotion tooltip for unknown people in the timeline window.
- 2.41.3 Added Encompass markers in the timeline.
- 2.41.4 Updated the search in Curio Tags and Descriptions to perform search on both tags and descriptions and not just descriptions only.
- 2.41.5 Fixed a bug in the Curio Tags and Descriptions where tags were not shown if there were no descriptions.
- 2.41.6 Fixed bug in Curio Search where search results may sometimes be empty.
- 2.41.7 Make the Signal Range an optional field in the settings and give it a default value "computer" if it does not exist in Dolby Vision Metadata XML.
- 2.41.8 Fixed a bug in Curio Speech to Text window not showing any data.
- 2.41.9 Highlight insights in the Curio OCR and Speech to text windows.
- 2.41.10 Fixed bug in Curio Search window where pressing Enter key would not initiate a search if the Search window was docked.
- 2.41.11 Added a context menu option in the timeline window to scroll to specific location.



- 2.41.12 Added a combobox in the Curio Captions window to allow selection of a caption source.
- 2.41.13 Added captions support for Unicode Standard Annex #9 of the Bidirectional Algorithm (usually used for Arabic and Hebrew characters)
- 2.41.14 Curio windows now support Copy of text to the clipboard.
- 2.41.15 Changed default filename for downloading Curio proxy files to be suffixed with the text "\_proxy".
- 2.41.16 Fixed bug in Curio Tags and Descriptions window when navigating to the previous search result failed.
- 2.41.17 Fixed bug in the Live Captions Viewer not showing correct text.
- 2.41.18 Added support for aspect ratio setting in TTML captions.
- 2.41.19 Fixed bug in TTML captions where timings were incorrect if the video has a starting timecode greater than "00:00:00:00".
- 2.41.20 Fixed a problem where the Curio Tags and Description window was not responsive if there are many tags.
- 2.41.21 Added sort to the Curio Search window.
- 2.41.22 Fixed bug in Live Captions window when multiple lines of text would overwrite one another.
- 2.41.23 Fixed problem where preloading font characters and glyphs takes too long and causes stuttering of video playback.
- 2.41.24 Added sort buttons in Curio Search window.
- 2.41.25 Improve accuracy of region bounding rectangles used in TTML captions.
- 2.41.26 Handle legacy value for encoding BT.1886 in Dolby Vision metadata.
- 2.41.27 Added context menus and controls for manual color matrix selection for the Vectorscope.
- 2.41.28 Added integrated speech gating in the Audio Loudness Meter.
- 2.41.29 Added support for full range JPEG YCbCr format. This fixes bug where all full range JPEG content was converted to limited range YCbCr.
- 2.41.30 Fixed bug where conversion from frame to timecode was incorrect.



- 2.41.31 Added control to enable and disable alpha channel processing so that grey backgrounds do not appear for certain 4444 content.
- 2.41.32 Fixed SMPTE4287 captions incorrectly processing font data.
- 2.41.33 Fixed bug where any of the Curio windows would sometimes not show any data.
- 2.41.34 Added enable alpha channel option in the settings.
- 2.41.35 Fixed an issue where the same tag name is repeated and hovering over one tag highlighted both tags (this should not happen as tags should be unique but there are instances in Curio where it does occur).
- 2.41.36 Fixed crash when error entries do not have description attributes in Baton reports.
- 2.41.37 Added variable percent color box graticules from 1 to 100% for the Vectorscope. Also added mode for auto range and full/limited range.
- 2.41.38 Fixed a bug when adding a tag in Curio tags and Descriptions window were not selectable.
- 2.41.39 Removed Nit100\_r2020\_1886\_computer\_V66\_RGB predefined target display in Dolby Vision.
- 2.41.40 Modified vectorscope to use colored boxes and more accurate using angles and length to draw target boxes.
- 2.41.41 Fixed bug when the curio timeline was not cleared after signing out.
- 2.41.42 Added context menus for limited, full and JPEG range in waveforms window.
- 2.41.43 Added emotion filters in curio unknown people timeline.
- 2.41.44 Added support for duration in annotations and QC Report Files.
- 2.41.45 Added information on the current logged in custom QC Reports.
- 2.41.46 Modified waveform graticule menus and display modes in Waveforms windows.
- 2.41.47 Dynamically update annotations in timeline window.
- 2.41.48 Support edit and save for Encompass metadata file.



- 2.41.49 Fixed bug in Curio tags and descriptions when exiting edit mode did not restore the previous AutoScroll setting.
- 2.41.50 Removed Wohler Tachyon Wormhole from Iris as it is no longer used.
- 2.41.51 Added annotations to the timeline window.
- 2.41.52 Optimised annotation messages for speed.
- 2.41.53 Optimised annotations in timeline and annotation tool window for speed.
- 2.41.54 Fixed bug in TTML captions where text was not aligned correctly.
- 2.41.55 Fixed crash when changing annotation representation from frames to timecode caused a crash.
- 2.41.56 Fixed bug in the 708 captions where old text sometimes were not deleted.
- 2.41.57 Improved timing for Bluefish 4K SDI so that it does not drop frames.
- 2.41.58 Added registered trademark symbol to Dolby keywords as part of Dolby certification process.
- 2.41.59 Log changes to annotation timings in the General Messages window.
- 2.41.60 Added import of Aurora and Qscan report from the command line.
- 2.41.61 Modified Spectrascope to take into account the YUV color matrix and full/limited range. Optimized for improved performance and XYZ space in 16 bits.
- 2.41.62 Added controls for Default Colour Range in Options page.
- 2.41.63 Added frame offset for Dolby Vision metadata xml.
- 2.41.64 Changed line range and histogram to use the active color range.
- 2.41.65 Added Dynamic Range Control (DRC) to Dolby Digital Plus decoder. This fixes the issue where E-AC3 levels where much lower than expected.
- 2.41.66 Added 75% zoom size to main context menu.
- 2.41.67 Dolby Vision frame offset should be applied before frame number conversion when frame rate is not matched to the Dolby Vision metadata file.
- 2.41.68 Added tooltip of dB value for each block in audio meter.



- 2.41.69 Fixed bug when uploading captured video frames in Annotation Messages window would fail.
- 2.41.70 Fixed issue with spurious unused outputs on AJA and Bluefish SDI cards. Black Magic cannot use multi-channel.
- 2.41.71 Fixed timeline window not reflecting changes for markers.
- 2.41.72 Fixed not showing color properly for priority of annotation markers for priority with value 12.
- 2.41.73 Fixed SMPTE 4287 captions files not setting the font correctly.
- 2.41.74 Added support for bitmap captions in encrypted DCP files.
- 2.41.75 Fixed bug where graticules are not redrawn when changing style or size.
- 2.41.76 Use licensed MainConcept DVCPro and ProRes decoders.
- 2.41.77 Access Curio via a proxy installed at the Iris Admin server. This means that Iris does not have direct access to Curio but will access Curio via the proxy.
- 2.41.78 Input channel number can now be changed in audio mixer.
- 2.41.79 Fixed bug where some files have FCP anc track 608 data but is intermittent packets are missing (when there are no captions). This caused 608/708 captions to flash briefly on the screen. Modified to allow missing PTS in captions.
- 2.41.80 Handle CC2 "cdt2" packet in FCP ANC track.
- 2.41.81 Fixed the subtitle viewer being unresponsive when displaying subtitle text represented as images.
- 2.41.82 Use correct font point sizes for SMPTE 4287 captions.
- 2.41.83 Fixed problem when handling preprocessed captions could be slow.
- 2.41.84 Frame offset now can be adjusted in timeline window for current Dolby Vision metadata.
- 2.41.85 Prompt the user if they wish to use the start frame stated in Dolby Vision metadata as the frame offset.
- 2.41.86 Change the size of images in the Subtitle Viewer to be smaller as it was too big.



- 2.41.87 Added button to set adjusted frame offset from metadata frame offset in edit dialog.
- 2.41.88 Added support for Active Directory login using SAMAccount Names (i.e. of the format domain\user).
- 2.41.89 Fixed an issue with timing that caused painted subtitles in WebVTT to have wrong end times.
- 2.41.90 Fixed a 708 bug where positions of text could be incorrect.
- 2.41.91 Added support in TTML file to handle actual time (not TCR) where the timebase is media.
- 2.41.92 Fixed memory leak leading to crash when running Iris for a long time.
- 2.41.93 Fixed audio timing issue when jogging so that the audio heard on that frame matches the video frame position accurately. It also matches the audio waveform and audio meters.
- 2.41.94 Fixed audio to video timing for certain files that have different start PTS times.
- 2.41.95 Fixed bug when inserting annotation messages where the messages would be associated with the wrong annotation.
- 2.41.96 Changed to use timecode reference in Aurora Report.
- 2.41.97 Fixed 708 captions where old rolled up text wasn't being deleted.
- 2.41.98 Fix timecode search bug where it cannot find timecodes that wrap around 23:59:59:XX.
- 2.41.99 Fixed the grid cell height for captions display being one pixel too short.
- 2.41.100 Fixed captions text containing spaces where the background color were not applied to the spaces.
- 2.41.101 Fixed TTML captions were using wrong font family.
- 2.41.102 Fixed bug when changing number of input channels in audio mixing were not being applied.
- 2.41.103 Added handling of audio mix with multiple input channels in any order.
- 2.41.104 Modified audio mixer normalization calculation. It now prevents overflow of output but only attenuates and does not amplify.



- 2.41.105 Fixed bug in displaying captions would become slower and slower during video playback.
- 2.41.106 Fixed issue with certain MKV files where the MediaInfo track ID does not match the FFmpeg stream ID and hence cannot find duration for the track.
- 2.41.107 Replaced all Dolby text with TM except Dolby(R) and Dolby Atmos(R).
- 2.41.108 Fixed 708 captions paint on issue where multiple lines of paint on were all drawn on one single line.
- 2.41.109 Added support of italics and underline in midrow for 608 captions.
- 2.41.110 Added support for drawing captions text vertically used by some Japanese sidecar files.
- 2.41.111 Fixed incorrect mark in/ mark out duration caused by rounding errors.
- 2.41.112 Fixed bug where tooltip on the trackbar sometimes would appear on the other screen.
- 2.41.113 Process character entity references (&, ', <, &gt;, and &quot;) in ttml files.
- 2.41.114 Get MaxFALL (Maximum Frame-Average Light Level) / MaxCLL (Maximum Content Light Level) values from CPL in IMF for video file with HDR content.
- 2.41.115 Added a Curio Tool windows toggle button in the guick action bar.
- 2.41.116 Fixed Curio timeline did not get cleared when importing metadata.
- 2.41.117 Fixed bug when downloading proxies from Curio. The filenames had the wrong extension they should use the ".mp4" extension.
- 2.41.118 Fixed the Curio download progress bar showing incorrect progress when download proxies.
- 2.41.119 Fixed crash when copying projects when using older versions of Iris Admin.
- 2.41.120 Fixed crash when randomly scrubbing the trackbar very fast.
- 2.41.121 Added support for Cinecanvas XML sidecar files.
- 2.41.122 Fixed issue with the project tree flashes as it updates after copying and pasting an asset into the project.
- 2.41.123 Fixed bug when opening a file from command line would sometimes fail.



- 2.41.124 Added overlay display of HDR histogram and line range for SDI output.
- 2.41.125 Handle the case where lines of text containing more than 32 characters in TTML sidecar files will now be split into multiple lines. This is a workaround because the spec mandates that TTML files can only use a maximum of 32 characters per line of text.
- 2.41.126 Fixed bug when double clicking Speech to Text on the timeline, it wasn't selected in the Speech to Text tool window.
- 2.41.127 Added overlay display of name dropper events.
- 2.41.128 Fixed bug when both a server license and hardware license from Iris Server were being used at same time. It should use the hardware license and not the server license.
- 2.41.129 Fixed crash when logging in and out of Remote Desktop.
- 2.41.130 Fixed bug where captions for another 708 service are appended to existing 708 captions and were appearing as garbled text in Iris.
- 2.41.131 Changed 608 and SCC captions to use black background by default this is the recommendation from the 608 spec.
- 2.41.132 Modified pre-processed caption windows to load content automatically without the need to set a pre-processed track to active first.
- 2.41.133 Modified live caption windows to use highlighted text to indicate active track in line with the pre-processed tracks.
- 2.41.134 Fixed bug where starting the audio waveform window stops live captions from appearing in the live captions windows.
- 2.41.135 Updated AJA SDI driver to version 15.5.1.2.

### 2.42 Version 7.5.1.79

- 2.42.1 Limited waveform graticule text size to 10 point font.
- 2.42.2 Fixed issue with SDI being reset causing a glitch whenever play was started.
- 2.42.3 Fixed issue with PC audio clicking in order to sync up with SDI audio at start of playback.



- 2.42.4 Allow Bluefish SDI to playback 12-bit UHD/4K YCbCr p50/59/60 content in 10 bit mode.
- 2.42.5 Fixed issue with SCC captions missing some words.
- 2.42.6 Added YCbCr limited range to RGB full range and RGB full range to YCbCr limited level conversion in AJA SDI v15, v14 and v13 drivers.
- 2.42.7 Fixed issue with loading Dolby Vision MXF files where the picture track was not called "PHDR Image Track".

## 2.43 Version 7.5.2.80

- 2.43.1 Fixed SCC caption timings with frame rate conversion.
- 2.43.2 Fixed issue with message boxes appearing under the file loading message window preventing it from being pressed.
- 2.43.3 Fixed issue with mixed attributes on the same line with EIA-608 captions causing letters to disappear.
- 2.43.4 Fixed issue with unused packets of data causing caption data to be thrown away and skipping words.
- 2.43.5 Fixed issue with mid-row tabs causing extra spaces in the line for EIA-608 captions.
- 2.43.6 Fixed issue with EIA-608 captions staying on the screen longer than expected.
- 2.43.7 Fixed issue with incorrect bottom line placement for some EIA-608 captions.
- 2.43.8 Fixed issue with leading spaces showing underline attribute for EIA-608 captions.
- 2.43.9 Added red text color when caption text is outside of the caption grid.
- 2.43.10 Fixed issue with some MP4 files not displaying correct start timecode when present.
- 2.43.11 Fixed issue with duration display for certain files with drop frame timecode.
- 2.43.12 Fixed issue with last frame CTC timecode for certain files with drop frame timecode.



## 2.44 Version 8.0.0.82

- 2.44.1 Fixed PC audio to video timing drifting out of sync occasionally, causing clicks to be heard.
- 2.44.2 Fixed issue with playback when machine does not have a sound device.
- 2.44.3 Fixed issue with green line at the bottom of some NTSC (486 lines) content.
- 2.44.4 Fixed SMPTE428-7 captions not processing VAlign parameter correctly.
- 2.44.5 Fixed issue of Dolby Vision XML not loading when the level 6 MaxFALL and MaxCLL parameters are missing.
- 2.44.6 Fixed missing caption characters in certain files with discontinuous VANC data packets.
- 2.44.7 Fixed bug where the audio waveform window title shows wrong channel numbers.
- 2.44.8 Fixed bug where it could not play IMF packages from the Playlist.
- 2.44.9 Changed audio waveform temporary .RAW files to auto delete on close.
- 2.44.10 Changed Dolby Digital Plus decoder to handle more features in line with Dolby Certification.
- 2.44.11 Removed special handling of Vizrt AMF MXF files with audio errors. These file are none compliant and should not be masked.
- 2.44.12 Added display of AS11/DPP metadata in Asset Metadata window.
- 2.44.13 Updated to MediaInfo version 20.03. This fixes the issue of reading some MOV timecodes incorrectly.
- 2.44.14 Added import of Sony VTR ISR XML report file.
- 2.44.15 Changed audio waveform to not use memory mapped file access to reduce memory requirements.
- 2.44.16 Added Dolby E metadata display in Asset Metadata window.
- 2.44.17 Added Dolby Digital/Dolby Digital Plus evolution and BSI information including BSID, RoomType, LFEMixLevel, CenterMixLevel, SurroundMixLevel etc in the Asset Metadata window.
- 2.44.18 Added Dolby Atmos metadata display in Asset Metadata window.



- 2.44.19 Added .FLAC file extension to known formats in dropdown listbox.
- 2.44.20 Fixed hanging when scrubbing content that has non-48KHz audio.
- 2.44.21 Updated Dolby E decoder to version 2.1.2 that fixes crash on AMD Ryzen CPUs.
- 2.44.22 Enabled HDR simulation on the SDI path to be the same as the PC video path.
- 2.44.23
- 2.44.24 Changed STL captions to use Lucida Console font for better clarity.
- 2.44.25 Changed audio loudness monitor to pan and zoom with buttons and scroll bar. Also tidied up some of the legends.
- 2.44.26 Added display of IMF MCA audio labels in the Asset Metadata window.
- 2.44.27 Fixed bug in OP47 subtitles when there are '<' characters that are not tags.
- 2.44.28 Changed audio level meter to be rendered in the OCX.
- 2.44.29 Optimized video waveform, vectorscope and spectroscope to draw faster to handle 4K content.
- 2.44.30 Optimized timing of AJA SDI card so that it can handle 4Kp60 content better.
- 2.44.31 Removed warning about display driver not supporting YUV color space.
- 2.44.32 Fixed incorrect tooltips on the audio router when audio tracks are disabled.
- 2.44.33 Fixed bug in 708 caption when "DefineWindow" command is used.
- 2.44.34 Changed Cheetah .CAP captions to use Lucida Console font.
- 2.44.35 Fixed bug when entering blank Customer ID to remove it from a specific Iris app caused the same customer IDs to be removed from other all other apps
- 2.44.36 32-bit (x86) build no longer available.
- 2.44.37 Changed to use license version 8. All previous versions are now incompatible with this version.



## 2.45 Version 8.0.1.83

- 2.45.1 Fixed TTML "media" timebase was wrong when video 1st timecode is not 00:00:00:00.
- 2.45.2 Fixed Adobe MXF files where RGB component depth was missing. Look at PixelLayout as well.
- 2.45.3 Added separate horizontal and vertical safe area marker adjustments.
- 2.45.4 Added individual Dolby E program selection in Options.
- 2.45.5 Set centered as default for vertical and horizontal justify for SMPTE428-7 captions.
- 2.45.6 File Properties dump now shows OS version correctly by name.
- 2.45.7 Added support for font changes per line in SMPTE428-7 captions.
- 2.45.8 Fixed SMPTE428-7 subtitle type not being displayed in Subtitle Viewer because it had not been set.

## 2.46 Version 8.0.2.84

- 2.46.1 Fixed issue when dragging mark in/out markers causes application to hang while video is playing.
- 2.46.2 Fixed issue with some files where data tracks appear as caption tracks and cannot be seeked. This causes the caption processing to hang.
- 2.46.3 Fixed issue with handling anchor points correctly in 708 captions. Old code may cause horizontal positioning to be incorrect.

### 2.47 Version 8.0.3.85

- 2.47.1 SCC parsing now uses the 608 decoder. This resolves an issue where the SCC parser did not handle italics and other formatting.
- 2.47.2 Fixed captions overlays were missing in SDI path.



## 2.48 Version 8.0.4.86

- 2.48.1 Fixed an issue where a dialogue incorrectly popped up a message about the wrong product.
- 2.48.2 Most recent files are now stored on a per user account basis.
- 2.48.3 Fixed 708 captions that use anchor point set to "bottom" which caused a situation where 2 lines of text were displayed in the wrong order.

## 2.49 Version 8.1.0.88

- 2.49.1 Added support for 625p25 and 525p29 formats as interlaced for AJA and BMD SDI cards.
- 2.49.2 Rework of Active Directory authentication where Iris Client no longer requires direct access to the Active Directory server but instead, triggers the Iris Admin server to make the authentication.
- 2.49.3 Added in the Audio Phase Meter's context menu the option to show as log scale.
- 2.49.4 In the options pages, under SDI section, there is now the option "Enable HDR Simulation". This enables independent HDR simulation from PC display.
- 2.49.5 Use the HDR10 options for default values when there is missing metadata.
- 2.49.6 Updated Dolby Vision ® trademarks and text according to latest guidelines.
- 2.49.7 Active Directory login now supports SAMAccount name (eg. MyDomain\John).
- 2.49.8 Fixed popup marker list missed some hit markers when hovering markers under main track bar.
- 2.49.9 Fixed bug where PQ files that have no Max Brightness Display parameter causes overlays to go black on the SDI.
- 2.49.10 Fixed bug for Telestream MPG proxies that show 2 frames too short. Use MediaInfo to find duration of those files.
- 2.49.11 Fixed bug where J2K MXF with 720x608 PAL D10 shows aspect of 1.18.
- 2.49.12 Added support for Domain Local and Universal groups for Active Directory login.



- 2.49.13 Fixed incorrect timecode calculations in XML captions when video framerate is 59.94 but the XML file specified 29.97.
- 2.49.14 Fixed SCC captions with incorrect end time which occurs when 608 transitions from roll up to pop on.
- 2.49.15 Fixed open IMF crash bug when audio channel label sub descriptors is missing MCA tag symbol.
- 2.49.16 Added interface to open first DCP / IMF CPL by default for Iris Anywhere API.
- 2.49.17 Fixed hotkeys for pre-defined annotations was inserting text into wrong annotation.
- 2.49.18 Fixed QC Report not showing annotations if there are no messages in those annotations.
- 2.49.19 Fixed Iris QC report display wrong time value due to rounding issue.
- 2.49.20 Prevent showing tool window when login user under group does not have privileges for certain tool windows.
- 2.49.21 Added support for SRT subtitles timings to use timebase media via a setting in the Options page.
- 2.49.22 Fixed Dolby Vision timeline data not cleared when another file is opened or closed.
- 2.49.23 Remove audio mixing track when track is deactivated.
- 2.49.24 Fixed pre-defined annotations having wrong timecodes.
- 2.49.25 Fixed SCC captions timecodes could be 1 frame out.
- 2.49.26 Fixed SMPTE 4287 captions right justified text could sometimes end up being too far to the right.



## 2.50 Version 8.1.1.90

- 2.50.1 Fixed issue with captions processing causing video to drop frames after a long period of playback.
- 2.50.2 Modify HDR10 S curve to lift low and mid tones.
- 2.50.3 Fixed timeline markers were not being re-rendered when dragging the scrollbar.
- 2.50.4 JPEG range can apply to other coded formats not only MJPEG.
- 2.50.5 Fixed bug when checking sidecar caption file types where a failure in SRT checking caused all further check for other types to fail.
- 2.50.6 Modified Dolby Vision, HDR10 and HLG simulation to use pre-generated S-Curve (from SCurve app) and apply RGB2020 to RGB709 matrix.
- 2.50.7 Audio mixer allow resampling of depth.
- 2.50.8 Fixed 608 roll up captions where, for 1 frame only, the current line of text is sometimes merged with previous line.
- 2.50.9 When entering Customer ID to enable an account for collaboration, there is now no need to restart the Iris the changes are applied immediately.
- 2.50.10 Fixed bug where a non-licensed Iris detects a worklist, tries to open it but repeatedly pops up a message box telling the user that Iris is not licensed.
- 2.50.11 Fixed bug auto login via Active Directory did not work even when this setting was enabled.

## 2.51 Version 8.1.2.91

- 2.51.1 Fixed MXF index table bug which caused application to crash unexpectedly.
- 2.51.2 Fixed Dolby Vision metadata appearance on timeline.
- 2.51.3 Fixed Interra Baton QC import bug.
- 2.51.4 File access by logged in users and user login/logout are now logged via Iris Admin.



## 2.52 Version 8.1.3.92

- 2.52.1 Added support for vertically displayed text (eg. Japanese) in TTML captions files.
- 2.52.2 Made some speed improvements so that high bit rate MXF files can be read across a network.
- 2.52.3 Read file directly into user buffer to improve performance.
- 2.52.4 Speed up reading of MXF files.
- 2.52.5 The use of Curio API key has been deprecated. This is has now been replaced by a Curio sign in dialog.
- 2.52.6 Fixed a crash when clicking sign out button while Iris is already trying to sign out.
- 2.52.7 Fixed issue with unnecessary processing of IMF files after they have already been opened.
- 2.52.8 Added support for Greek characters in PAC captions.
- 2.52.9 Change asset metadata validation to use display value instead of actual value for loudness.
- 2.52.10 Fixed bug in SMPTE4287 captions where the font colors were not being reset.
- 2.52.11 Fixed thumbnails in Curio Search Tool Window being of the wrong size.
- 2.52.12 Fixed incorrect processing of HTML block elements in TTML files.
- 2.52.13 Log invalid SCC captions data to the Logging Tool Window.
- 2.52.14 Fixed deletion of tags not working in the Curio Tags and Descriptions Tool Window, due to change in the Curio API.
- 2.52.15 Fixed QC reports not showing start and end positions when there is no associated project.



## 2.53 Version 8.2.0.94

- 2.53.1 Removed checking for API key in Iris Admin Curio page.
- 2.53.2 Fixed Curio Insight Text were not being highlighted.
- 2.53.3 Added fetching tag / description insight data in timeline.
- 2.53.4 Force keep alive to be on by default and change the keep alive to send an SQL that selects something rather than just select null.
- 2.53.5 Added automatic re-connection of database when connection is broken or closed.
- 2.53.6 Fixed bug when dragging and dropping assets from one project to another, other users in the project do not see the new assets.
- 2.53.7 Changed not to process subtitles from video file for DCP / IMF. This caused long delays in opening and loading of packages.
- 2.53.8 Fixed clean up of temporary files used for multi-segment DCP/IMF decoding. It only cleaned up the most recently processed one and not all of them.
- 2.53.9 Fixed bug where encrypted MXF subtitle files take a very long time to open and load.
- 2.53.10 Fixed incorrect temp location when extracting from mxfsplit and made temp location more consistent across all libraries and components.
- 2.53.11 Fixed issue where AS-02 captions were not being decoded correctly.
- 2.53.12 Fixed issue with PNG DCP subtitles stuttering during playback.
- 2.53.13 Fixed issue with loading bitmap and text overlays not working for the first file loaded.
- 2.53.14 Fixed issue with font file from SMPTE4287 captions not being loaded and used.
- 2.53.15 Changed the colour of upcoming text in subtitleviewer to black.
- 2.53.16 Fixed issue with cancelling previous file opening before opening other file.
- 2.53.17 Update to use FFmpeg version 4.4.0.



- 2.53.18 Added processing of Dolby Vision HEVC streams. Supports profiles 4, 5 and 8 currently. Profile 7 is under review. Simulation to SDR display equivalent to SDR, 100 nits, BT.709, 10 bits. Other formats are available.
- 2.53.19 Fixed search algorithm to find TCR when it wraps from 23:59:59:xx to 00:00:00:00 and generally improve search speed.
- 2.53.20 Added support for EXR files with ACES color space, original output is GBR 32-bit floating point converted to GBR 16-bit integer little endian.
- 2.53.21 Added support for RGBA backgrounds in TTML/XML captions.
- 2.53.22 Fixed application crash when MXF files do not have a "Product" UL (Universal label).
- 2.53.23 Fixed issue with not automatically signing into Active Directory when invoked from Windows Explorer or other file association.

#### 2.54 Version 8.2.1.95

- 2.54.1 Added results of asset metadata validation templates in Iris generated QC report.
- 2.54.2 Slight change to QC report styling.
- 2.54.3 Added QC Result dialog to enable marking the results as Pass or Fail.
- 2.54.4 Show tooltips in the Playlist window.
- 2.54.5 Fixed auto login via Active Directory wasn't enabled when opening a video file via Windows Explorer.
- 2.54.6 Handle webvtt files that contains multiple "WEBVTT" and "X-TIMESTAMP" headings.
- 2.54.7 Fixed adjusting of captions offsets using the wrong framerate. It should use the framerate specified in the captions file (if available) and not the video frame rate.
- 2.54.8 Right-aligned vertically displayed captions now have a gap on the right so that the text looks neater rather.
- 2.54.9 Use the correct error message when entering invalid data for annotation start frame.



- 2.54.10 Fixed bug in TTML that could cause "Out of memory" error, resulting in no captions data being parsed.
- 2.54.11 Fixed bug in TTML whereby <style> tag inside a <div> block was not parsed.

# 2.55 Version 8.2.3.97

- 2.55.1 Fixed bug where it is fail to parse drop frame field for composition timecode in IMF package.
- 2.55.2 Parse audio assets from "IABSequence" in IMF package.
- 2.55.3 Revert to standard login when active directory is enabled and license for active directory is not valid or expired.

### 2.56 Version 8.2.4.98

2.56.1 Fixed bug where pausing, stopping or scrubbing the main playback controls terminates the loading of the audio waveforms.

#### 2.57 Version 8.3.0.100

- 2.57.1 Fixed issue where a new subtitle viewer window is opened rather than using an existing one.
- 2.57.2 Enabled selection of PAC code page on demand. This allows multiple PAC files to be loaded and each one requiring user to choose the code page. Only applies when the code page in Options is set to "Select on Demand".
- 2.57.3 Fixed bug where playback hangs when there are no audio tracks.
- 2.57.4 Added support for Dolby Atmos mastering formats, ADM (.wav), DAMF (.atmos), DCP IAB (.mxf) and IMF IAB (.mxf). Dolby certified in this version.
- 2.57.5 Dolby Vision HEVC profiles 4, 5 and 8 certified in this version.
- 2.57.6 Added Dolby Vision display management version 3.1 and 4.0 to options.
- 2.57.7 Added Dolby Vision display management for HLG 10 and 12 bits.



- 2.57.8 Added BS 1770-4 with 7.1, 5.1.2, 5.1.4, 7.1.2, 7.1.4 and 9.1.6 channel configuration loudness measurement.
- 2.57.9 Improved resampling of audio bit depth using double precision floating point numbers.
- 2.57.10 Fixed bug where it fails to delete asset metadata template when it is selected for a project.
- 2.57.11 Captions/Subtitles context menu now shows detected teletext pages.

#### 2.58 Version 8.4.0.102

- 2.58.1 Updated Dolby Vision Professional Decoder SIDK to version 3.1.0.
- 2.58.2 Added Dolby Vision HDMI pass-through to TV for PC display and AJA Kona 4/5 SDI card.
- 2.58.3 Replaced Netflix Photon package with Log4J module version 2.16.0. This fixes the Log4J vulnerability CVE-2021-44228.
- 2.58.4 Fixed bug where negative line numbers in WebVTT caption files were not handled correctly.

#### 2.59 Version 8.5.0.103

- 2.59.1 Fixed crash when Korean fonts are used in TTML file. In fact, any fonts that are not supported by Arial Unicode MS had the same issue.
- 2.59.2 Changed default font of captions to use Arial Unicode MS for better clarity.
- 2.59.3 Added support for segment data which can be used to specify a user-defined property for an annotation. These properties are obtained from importing XML files.
- 2.59.4 Fixed bug in 708 captions whereby during rollup, the line position of the text could be incorrect.
- 2.59.5 Fixed bug in 708 captions where the text was not cleared upon receiving the reset command.
- 2.59.6 Added support for AJA 16.0.2.24 support.



- 2.59.7 Added ntv2playerlib16 support. This is now the default.
- 2.59.8 Allow user to specify minimum display time of SCC captions text before warning is given.
- 2.59.9 Ensure WEBVTT captions are displayed in safe area.
- 2.59.10 Added Korean, Japanese and Turkish language support for PAC captions files.
- 2.59.11 Fixed fail to import Dolby Vision metadata xml when image sequence is opened.
- 2.59.12 Fixed text from TTML files were not displayed in safe area.
- 2.59.13 Fixed bug where Iris hangs when playing a very short file that consists of a single or very few frames in no-repeat mode.
- 2.59.14 Fixed bug where TTML timecodes did not match the timecodes of the video files and Iris made adjustments to match them up. This should not be done and iris should use the TTML timecodes as-is and the user should use the captions timing offsets to make the necessary adjustments.
- 2.59.15 Fixed issue with waiting for completed buffers when content has fewer frames than the buffer queue set in Options (default is 50).
- 2.59.16 Fixed bug where AC-3/E-AC-3 pass-through does not work after scrubbing.
- 2.59.17 Fixed bug when importing Baton QC report files where the frame rate was not parsed.
- 2.59.18 Fixed bug where login dialog appeared twice when Iris QC Pro is using hardware license from server.
- 2.59.19 Subtitles/Captions viewer now shows in red the times that are invalid, eg. end time is before start time or end time is greater than start time of the next line of text.
- 2.59.20 Changed the default value for J2K decoder settings in performance section of the options page.
- 2.59.21 Only set XYZ color space when the metadata says its RGBEssenceDescriptor. If it is CDCIEssenceDescriptor, it must be YCbCr and hence do not perform XYZ conversion.



- 2.59.22 Updated photon IMF validator to the latest version due to previous version using log4j, which had security issues.
- 2.59.23 Added panning of video display using left mouse click when picture is bigger than the display window. This only applies to Iris QC Pro when not played through SDI. Also, it is not applicable to Iris Anywhere.
- 2.59.24 Display size mode is now persistent and correctly restored even when a new file is loaded.
- 2.59.25 Show more accurate CPU usage.
- 2.59.26 Fixed an issue where 2 lines of captions text merge when the end time of captions text is same as start time of next line of caption text.
- 2.59.27 Fixed bug when copying a project into a folder failed.
- 2.59.28 Fixed E-AC-3 pass-through to HDMI works correctly.
- 2.59.29 Improved performance of loudness measurement during loading of audio waveform.
- 2.59.30 Fixed bug where Dolby E across two mono tracks failed to be recognised.
- 2.59.31 Fixed bug where delete, copy and paste of asset packages were still enabled when the user did not have the permissions.
- 2.59.32 Added support for generating qc reports in json.
- 2.59.33 Display a warning to user if license is due to expire within 14 days.
- 2.59.34 Fixed MainConcept AAC LATM, must use the "latm" stream format or else it won't decode audio.
- 2.59.35 Fixed bug importing the qc report from Iris Admin API doesn't import position end.
- 2.59.36 Fixed bug where the selected shortcut key profile was not remembered and would revert to user-defined.



## 2.60 Version 8.6.0.104

- 2.60.1 No longer supports Postgres 9 database and requires Postgres 14 database which is available via an install of Iris Admin 8.6.0.104.
- 2.60.2 Added support for style sheets in WebVTT captions
- 2.60.3 Fixed deleted annotation messages that didn't get synchronized for all users.
- 2.60.4 Fixed crash when showing Asset Metadata tool window that occurs when an asset package from a project is loaded after a first time sign in.
- 2.60.5 Modified Dolby Vision HEVC pass-through so it no longer depends on SDI HDR simulation switch.
- 2.60.6 Fixed bug where HDR10 signaling is enabled on the Kona HDMI port when performing software HDR simulation.
- 2.60.7 Fixed AJA Kona AudioSystem2 silence issue.
- 2.60.8 Added support for AJA Control Panel / driver version 16.2.0.9.
- 2.60.9 Added support for AJA Kona 5, 8K/12G firmware operation. Single link operation from SD to 4K (270Mbps to 12Gbps).
- 2.60.10 Added support for Black Magic Design Desktop Video / driver version 11.7.
- 2.60.11 Added support for Black Magic Design Desktop Video / driver version 12.3.
- 2.60.12 Installer no longer has options for SDI driver versions. Iris now auto-detects which driver version is installed in the system and copies the appropriate DLLs for operation. User will be prompted to allow the changes if required. All SDI card driver installations must be done before installing Iris.
- 2.60.13 Enabled SDI output (without audio) when AC-3/E-AC-3 HDMI pass-through is enabled.
- 2.60.14 Fixed wrong display for playing format in status panel in IA.
- 2.60.15 Fixed smearing artefacts on fast movement introduced by the 4:2:2 to 4:2:0 down-sampling.
- 2.60.16 Display customer id status in user's page.
- 2.60.17 Lock user sign in for 10 minutes after multiple failed login attempts.



- 2.60.18 Created projects are now automatically shared with all members of the same group as the project creator.
- 2.60.19 Fixed QC report using wrong timings.
- 2.60.20 Added support for G2 table in 708 captions decoding.
- 2.60.21 QC Result and Import Segment Data context menu now disabled if user does not have project rights.
- 2.60.22 Fixed a bug when accessing project context menu after expanding the project tree. It was giving the context menu of the project's parent folder and not the project itself.
- 2.60.23 Fixed issue of taking a very long time to load some MXF files that do not have audio tracks.
- 2.60.24 Fixed issue with some files that appear to hang when seeking.
- 2.60.25 Fixed issue with MOV files that have a caption delay time. This value is now displayed as the "Origin" of the caption track.

# 2.61 Version 8.6.1.111

- 2.61.1 Fixed issue with loading WAV (or any other non-MXF) files with MXF video files.
- 2.61.2 Fixed issue with not detecting line 21 captions from SD files.
- 2.61.3 Fixed crash when default PC audio device is missing or changes to another device.
- 2.61.4 Fixed issue with not detecting OP-47 subtitles in MXF files.
- 2.61.5 Fixed issue with pre-processing OP-47 subtitles in MXF files.
- 2.61.6 Fixed issue with calculating the start time offset of segments in IMF / DCP packages.
- 2.61.7 Fixed issue with IMF segments with audio tracks of different durations not loading correctly.
- 2.61.8 Fixed issue with Audio Waveform tool measuring loudness between the start marker and the end of file instead of to the end marker.



- 2.61.9 Added Black Magic's latest modes for 2K and 4K DCI @47.95, 48, 50, 59.98 and 60 Hz. Supported functionality depends on the card's firmware.
- 2.61.10 Set default WebVTT text to bottom of screen instead of top. Set WebVTT default size to 100% if not specified in the file.
- 2.61.11 Fixed issue with frame-based timestamps in TTML. Should not be using the video start timecode as an offset when the timebase is media. Only applies when timebase is SMPTE.
- 2.61.12 Added display of the number of audio channels for each track of audio and not just the first track in the asset package in projects.
- 2.61.13 Fixed issue with opening an IMF package from a project not loading some audio assets.
- 2.61.14 Fixed issue for WebVTT showing italics on first line only.
- 2.61.15 Added support for vertical alignment in PAC subtitles.

#### 2.62 Version 8.7.0.112

- 2.62.1 Added multiple groups feature which allows a user to be a member of more than one group.
- 2.62.2 Group rights for users in multiple groups are merged together. For example, a user in 2 groups where 1 group does not have rights to Manage Projects but the other group does have the right to Manage Projects, will result in that user having the rights to Manage Projects.
- 2.62.3 Added a document viewer.
- 2.62.4 Display file load errors in the Logging Viewer.
- 2.62.5 Fixed issue where files with very long names could not be opened.
- 2.62.6 Added extra logging for user sign in, sign out, LDAP authentication and 2 factor authentication.
- 2.62.7 Improved speed of getting groups from Active Directory server.
- 2.62.8 Fixed bug where Iris QC Pro's docking layout was overwritten by Iris Anywhere's docking layout.



- 2.62.9 Added Priority, End Position and Duration information in QC reports.
- 2.62.10 Fixed errors shown in the File Open dialog when opening supplemental IMF packages.
- 2.62.11 Fixed Photon validation showing incorrect status of an IMF package.
- 2.62.12 Each paragraph of text in the subtitle viewer is now numbered.
- 2.62.13 Fixed vectorscope settings were not included in the environment profile.
- 2.62.14 Improved captions rendering speed when they have transparent background.
- 2.62.15 Fixed Audio Mixer tool window where online profiles were not shown.
- 2.62.16 Added search for the Logging Viewer.
- 2.62.17 Optimized Logging Viewer so that it doesn't slow down when it is filled with a lot of data.
- 2.62.18 Fixed bug in the Project tool window whereby the number of audio channels was shown for the first track of an asset package containing multiple audio tracks.
- 2.62.19 Fixed bug when opening a project, some of the audio assets from the asset package were missing.
- 2.62.20 Fixed bug in the Loudness Monitors settings where the settings pop up window was displayed in the wrong position.
- 2.62.21 Increased the database connection timeout when user signs in. Some users with very secure networks observed very slow database connection times, so the timeout value has been increased a lot.
- 2.62.22 Added individual offset setting for subtitle viewer.
- 2.62.23 Added support for playing audio files with different edit unit rate, including field KLV format for MXF files. Any audio file can now be played with video at any frame rate.
- 2.62.24 Fixed Bluefish444 720p50/59/60 SDI format error.
- 2.62.25 Changed vectorscope, video waveform, spectrascope, audio meter, audio waveform and audio phase tools to use Direct3D instead of Windows GDI to improve performance of the tools and general UI responsiveness.



- 2.62.26 Added "Line Select" toolbar for global selection of lines to process for video vectorscope, waveform and spectrascope tools. Each tool window has its own toolbar and controls to override the global selection. Line Range selection includes "All Lines", "Field 1", "Field 2", "Single Line", "Line Range". All line numbers start at 0 for the first line of active video. When "Single" or "Line Range" is selected, the on-screen markers (PC display only) can be adjusted with the mouse.
- 2.62.27 Added toolbar to the vectorscope window to allow manual override of line range selection. Also has option to enable logging of error events to the timeline window.
- 2.62.28 Added 100% marker to vectorscope window to show limit of legal gamut.
- 2.62.29 Added display of gamut errors in the vectorscope window. When the "Errors" checkbox is enabled, pixels that are outside of the 100% boundary markers are shown in yellow. The limit can be adjusted within the range of -25% to +25%. A positive value is percentage higher than 100%, a negative value is percentage below 100%. Errors are also logged to the "Timeline" window.
- 2.62.30 Removed "Size" options from context menu of the vectorscope.
- 2.62.31 Added toolbar to the video waveform window to allow manual override of line range selection. Also has option to enable logging of error events to the timeline window.
- 2.62.32 Added display of level errors in the video waveform window. When the "Errors" checkbox is enabled, levels that are outside of the 100% (white) and 0% (black) boundary markers are shown in yellow. The white and black limits can be adjusted within the range of -50% to +50%. A positive value is percentage higher than white/black levels, a negative value is percentage below the white/black levels. Errors are also logged to the "Timeline" window.
- 2.62.33 Added toolbar to spectrascope window to allow manual override of line range selection. Currently there are no error events.
- 2.62.34 Added "Auto" graticules menu to the spectrascope window. This shows the triangle of the current color primaries being used.
- 2.62.35 Added safe clipping for colors that are close to black or white so that dots do not lie outside of the color primaries triangle of the spectrascope. Any YCbCr or RGB originated source when converting to xyY cannot produce out of bounds values.



- 2.62.36 Added minimum and maximum levels for audio meter window. Range is -90 to 0 dBFS. The number of steps per segment can also be adjusted from 1 to 6 dB. Added more level markers for display.
- 2.62.37 Removed "Size" options from context menu of the audio phase window.
- 2.62.38 Improved rendering performance of the audio waveform window. Changed trace to purple color so that the overlay markers are easier to see.
- 2.62.39 Added "waveform" and "vectorscope" to Timeline window. These display the number of pixel errors per frame when enabled.
- 2.62.40 Improved performance of the Timeline window to handle possible high number of events.
- 2.62.41 Added support for Bluefish444 Kronos K8 SDI card using SDK v6.5.1.22.
- 2.62.42 Dialog for selecting SCC file frame rates have 2 extra options (29.97 drop frame and 29.97 non drop frame). This allows SCC files that incorrectly contained drop frame timecodes to be converted to non drop frame, and vice versa.

## 2.63 Version 8.7.1.113

- 2.63.1 Fixed issue where scrubbing backwards caused the audio to go out of sync.
- 2.63.2 Fixed issue where sometimes playing virtual audio tracks created from the mixer hangs the application.
- 2.63.3 Fixed issue where scrubbing of MXF audio files become slow and appears to hang application.
- 2.63.4 Fixed issue where it failed to find VANC subtitles in certain MXF files.
- 2.63.5 Fixed issue where IMF/DCP with durations shorter than the main video causes incorrect audio playback.
- 2.63.6 Fixed issue with playing IMF/DCP packages with large number of files.
- 2.63.7 Fixed issue where the Audio Waveform hangs the application at random times.
- 2.63.8 Fixed issue where the Audio Waveform shows slightly different positions based on zoom and size of window,



- 2.63.9 Fixed issue with subtitle viewer not jumping to correct position when double clicking on the text.
- 2.63.10 Fixed issue with DCSubtitles sometimes not showing text in italics, bold or underlined due to nested <font> tags in the files.
- 2.63.11 Negative time codes in subtitle viewer (caused by applying negative subtitle offsets) are now shown correctly.
- 2.63.12 Server settings .dbs file can be auto-imported by Iris from the "C:\Users\Public\Documents\GrayMeta\Iris\ServerSettings". Iris will look for a "IrisAutoImportServerSettings.dbs" file in that location and import it automatically if it exists.
- 2.63.13 Fixed issue with Iris crashes when user try to save environment profile where it is not signed in.

### 2.64 Version 8.7.2.114

- 2.64.1 Fixed issue where the language code from STL subtitle files were not extracted and displayed.
- 2.64.2 Fixed issue where timeline settings were not saved to environmental profiles.
- 2.64.3 Fixed issue where YCbCr does not work natively on some PC graphics devices such as the Intel Iris Xe chipset. Changed from FOURCC\_UYVY to FOURCC\_YUY2.
- 2.64.4 Fixed issue where SDI overlays for UHD/4K were twice as big as expected resulting it appearing off-screen.
- 2.64.5 Fixed seeking issue with some HEVC Dolby Vision files where it hangs for a very long time (about 5 minutes).
- 2.64.6 Fixed issue where some files fail to find the correct codecs for video and audio essence.

#### 2.65 Version 8.8.0.116

2.65.1 Fixed crash when switching from one project to another project that inserts a lot of annotations into the annotations tool window.



- 2.65.2 Added extra group permissions to enable/disable import of segment data, set QC result, edit project, delete project, rename project.
- 2.65.3 Added support for DVB image captions/subtitles.
- 2.65.4 Fixed bug where YCbCr Dolby Vision master files do not get mapped correctly.
- 2.65.5 Added a user setting to specify the value of the first frame number (for example, display the first frame as 1 rather than 0).
- 2.65.6 Fixed bug with encrypted DCP subtitles not being shown. Replaced mxfdump.exe with correct 64-bit version.

## 2.66 Version 8.9.0.125

- 2.66.1 For SCC files that do not have required blank lines at specific places, Iris will now attempt to process them (even though this is not valid). This will be logged in the Log Viewer.
- 2.66.2 Fixed crash when setting the subtitle start offset for an opened project.
- 2.66.3 Process text in STL files in the order they are stored in the file and don't sort them in chronological order. Previously, Iris would sort these but it appears that they should be in the order they are stored, even if they are stored out of order. This will be reported in the Log Viewer.
- 2.66.4 Fixed bug in preprocessed 708 captions where text consisting of multiple lines may have incorrect start times.
- 2.66.5 Added a pre-roll setting when jumping to captions text start/end time.
- 2.66.6 Added extra logging for Active Directory sign ins.
- 2.66.7 Fixed bug with SCC captions having incorrect timing when the display format is PAINT ON and the text spans multiple lines.
- 2.66.8 Added support for DVB captions/subtitles in the Live Captions Viewers.
- 2.66.9 Fix for ITT files where font overhangs are not shown within a region, eg. for letter g, the overhang on the letter g is outside of the region.
- 2.66.10 Added support for 2 code pages in PAC subtitles.



- 2.66.11 Fixed subtitle/captions text may be missing a space in rare cases.
- 2.66.12 Fixed issue where Iris may hang for a long time after signing in.
- 2.66.13 In the Curio API page of iris Admin, the enabled option is now disabled by default and saving of the page will validate the specified URI.
- 2.66.14 Modified the audio track context menu option to allow more than one audio track to be selected at once.
- 2.66.15 Added project id / asset package id to QC report in xml/json/pdf.
- 2.66.16 Fixed issue when opening a project could hang for a long time if the database contains a lot of projects.
- 2.66.17 Allow user defined metadata to be specified in the API, for audio and captions/subtitle tracks. These will be shown in the context menu. For example, the captions language can be supplied using this method and will be shown in the context menu.
- 2.66.18 Added functionality to allow user to set active line numbers of video where the values will be displayed in Asset Metadata tool window and will be saved in opened project.
- 2.66.19 Added extra logging for Active Directory sign ins.
- 2.66.20 Added extra logging for loading of asset packages.
- 2.66.21 Display error message to show reason upon failure to open an asset package.
- 2.66.22 Fixed bug where temp folders used to store cached data for captions could not be created.
- 2.66.23 Fixed bug whereby a failure in loading file caused the scrubbing bar to stop working correctly.
- 2.66.24 Reworked handling of fonts in SMPTE 4287 captions to handle multiple font definitions within a <DCSubtitle> tag.
- 2.66.25 Improved performance of code that monitors changes in projects and asset packages.
- 2.66.26 Fixed failed to open image sequence folder bug.
- 2.66.27 Fixed incorrect positioning of DVB subtitle text
- 2.66.28 Fixed bug where SCC timings could be one frame out.



- 2.66.29 Fixed issue with LDAP sign in where the domain of the email used for signing in does not match the domain of the Active Directory server.
- 2.66.30 Added the ability to perform validation on individual components of an asset package so that these components can be flagged for certain statuses.
- 2.66.31 Added the ability to apply subtitle offsets within a project (from both the API and Iris Desktop) any changes to subtitle offsets while a project is opened while be saved back to that project.
- 2.66.32 Fixed bug with uneven CPU thread distribution on systems with more than 64 threads.
- 2.66.33 Removed the need to manually stop and start playback whenever settings are changed. Playback resumes automatically.
- 2.66.34 Externally added pre-process caption files are no longer listed in the Asset Metadata display.
- 2.66.35 Fixed audio mixer normalization bug where it can be much louder than expected.
- 2.66.36 IrisPlayerControl.ocx is now version locked to the main application Iris.exe.

  This allows multiple versions of Iris to co-exist on the same computer without having to re-register the OCX for each version.
- 2.66.37 Added option for Dolby Atmos Mastering Format to use "first\_frame\_of\_action" (FFOA) to align audio to video.
- 2.66.38 Added support for raw 16, 24, 32 and 64 bit PCM in MP4 files.

# 2.67 Version 8.9.1.126

- 2.67.1 Always apply the application settings to the asset package of project.
- 2.67.2 Added setting to enable/disable pre-processing of captions/subtitles in the Options dialog box.
- 2.67.3 No need to show the SCC frame rate selector or PAC code page dialogues when the user has turned off pre-processing of captions.



- 2.67.4 Removed the option of enabling/disabling pre-processing of subtitles/captions in the Open Project dialog box. This option has been added as a global setting in Options page so no longer needed in the Open Project.
- 2.67.5 Added logging when opening external subtitle files.
- 2.67.6 Fixed bug when playing interlaced MXF files that causes the audio to play twice as fast.
- 2.67.7 Fixed bug when Iris crashes playing clipped wrapped DNXHD MXF content.
- 2.67.8 Fixed bug with DNXHD MXF files that show multiple audio tracks but have no data and cannot be played.
- 2.67.9 Added custom metadata of asset package to Iris QC report.
- 2.67.10 Increased SRT files font size as they appeared small.
- 2.67.11 Fixed issue in 708 roll up captions where the y positioning could be wrong.
- 2.67.12 Fixed bug where LDAP login failed with SSL enabled.

### 2.68 Version 8.9.2.127

- 2.68.1 Added support for Telestream Cloud format QC report.
- 2.68.2 Fixed bug where turning off alpha channel display causes the picture to shift and misalign the pixels.
- 2.68.3 Fixed bug where muting a channel causes the audio waveform to draw spurious data.



## 2.69 Version 8.10.0.128

- 2.69.1 Added group licensing feature to allow a customer ID to be specified for a specific group.
- 2.69.2 Fixed bug where the scrubbing bar became inoperable if loading of an asset package failed.
- 2.69.3 When importing segment data files, the user is now given the choice of replacing or appending to existing segment data.
- 2.69.4 Prevent user timeout due to inactivity while file is loading.
- 2.69.5 Changed the text "Captions / Subtitles" in Asset Metadata tool window to "Live Captions".
- 2.69.6 Fixed bug whereby after opening external subtitles, this was not reflected in the Asset metadata tool window.
- 2.69.7 Fixed bug where custom metadata was not shown for a project.
- 2.69.8 Show custom metadata in Iris QC report files generated from Iris.
- 2.69.9 Added setting in the options pages to enable/disable pre-processing of captions or subtitles during file load.
- 2.69.10 Removed the option to enable/disable pre-processing of captions or subtitles in the Open Project dialog. This has been superceded by the setting in the options pages.
- 2.69.11 Fixed issue with SMPTE 334-2 CDP caption tracks not being detected in files where VANC packets are only present for the first few minutes.
- 2.69.12 Added setting to select the audio output device in the options pages.
- 2.69.13 Fixed an issue where LDAP SAMAAccounts (of the format domain\name) and email type accounts for the same user was incorrectly treated as 2 separate users.
- 2.69.14 Fixed bug where the "Add Package" and the "Paste" context menu items in the Projects window were enabled when the user does not have the permissions for it.
- 2.69.15 Removed a message under the tooltip for the username on the top right that incorrectly states the license is "controlled by hardware license".



## 2.70 Version 8.10.1.131

- 2.70.1 Fixed bug where sometimes signing in will fail with an error message that the database connection was lost.
- 2.70.2 Fixed an issue whereby in Windows Explorer, when a file is set to open with Iris, the file would not open when auto login to Active Directory is enabled.
- 2.70.3 Fixed bug where searching in the project viewer will not find items if the current user is in the same group as the original creator of the project.
- 2.70.4 Fixed bug with 708 captions where text in italics were sometimes not shown as italic but were being shown with "<i>"prepended to the text."

## 2.71 Version 8.10.2.132

- 2.71.1 Ensure VCHIP display is turned off when the last signal from XDS was encountered more than 35 seconds ago.
- 2.71.2 Fixed bug where the XDS program rating and CGMS values were occasionally not shown in the subtitle viewer. It would show something like "Program Rating:" without specifying what the program rating would be or "CGMS:" without specifying the actual CGMS value.
- 2.71.3 Fixed bug where extra spaces could have been incorrectly added in 608 and SCC captions.
- 2.71.4 Fixed issue where searching projects did not cause the tree to scroll to matched search result.
- 2.71.5 In the server settings the "Use Imported Database Connection" setting is now the default setting, rather than the "Use Iris CloudService"

### 2.72 Version 8.10.3.133

- 2.72.1 Fixed an issue where Server Settings could be switched from using imported database settings to using the Iris Cloud Service, after an environment profile has been loaded.
- 2.72.2 Removed the ability to use Iris Cloud Service. This is now deprecated.



## 2.73 Version 8.10.4.134

2.73.1 Reworked the search in Project Window. Upon a search, project tree will only show projects and folders that match the search results and/or their asset packages match the search results.

### 2.74 Version 8.10.5.135

- 2.74.1 When importing server settings from a file named "PersistentIrisAutoImportServerSettings.dbs", this file will remain in its current location (C:\Users\Public\Documents\GrayMeta\Iris\ServerSettings) rather than being moved to the imported server settings folder (C:\Users\Public\Documents\GrayMeta\Iris\ServerSettings\ImportedServerSet tings).
- 2.74.2 Fixed bug in Project Tree search where search results did not fetch every matched item.
- 2.74.3 Some minor improvements in the performance in adding/deleting projects/folders in the Project Tree.
- 2.74.4 Removed access to Iris Cloud Service which is now defunct.

### 2.75 Version 8.10.6.136

- 2.75.1 Fixed issue where adjusting subtitle offsets could take a long time.
- 2.75.2 Improved loading time of the project tree.
- 2.75.3 Added a setting in options page to allow playback to continue after selecting an annotation. Default is off which means selecting annotation will pause playback at the annotation's position.
- 2.75.4 Added enhanced search in the Project Viewer, allowing searching using logical operators, eg. search for name that contains the text "21" and also contains the text "project".
- 2.75.5 Fixed bug in Project Search where projects without asset packages were not found.
- 2.75.6 Improved performance of project search.



- 2.75.7 Fixed bug with DVB subtitles not always appearing.
- 2.75.8 Fixed bug where very small STL files could not be opened, due to the size of the files being rejected for being too small.
- 2.75.9 Added keyboard shortcut CTRL + Q (can be modified) to open the QC Result dialog.
- 2.75.10 Added context menu in asset metadata tool window to export Dolby Vision Metadata XML file.
- 2.75.11 Fixed the "Select All" check box being wrong size in the Annotation Messages tool window.
- 2.75.12 Added support for SMPTE ST422-2019 I1 and I2 interlaced JPEG2000 wrapping format.
- 2.75.13 Fixed bug where loading certain files with a video track and bitmap track would hang for a very long time.
- 2.75.14 Fixed bug where audio only files that contained bitmap images would not load.
- 2.75.15 Changed audio waveform window to show minimum level of -96dBFS instead of -60dBFS.
- 2.75.16 Fixed bug where audio waveform window shows corrupted waveform for input mixer channels.
- 2.75.17 Fixed bug where the video duration was wrong for Telestream generated AVI files with Matrox M701 codec (MPEG2).
- 2.75.18 When opening SCC file, Iris now checks if that file is compatible with the video and if not, will pop up a warning message.
- 2.75.19 Fixed issue with black background fill color not matching content's color range (limited or full) on SDI output.

