Vantage Flip64 2023.2.0.5093 Release Notes

About This Release

This is a ComponentPac release for Vantage that includes new features, improvements, and bug fixes. The release build number is: 2023.2.0.5093

These release notes are applicable to the Transcode and Transcode Pro option for Vantage. Refer to separate Version 8.0 / 8.1 release notes for Vantage Platform and other components of Vantage for additional information.

Note: This release requires Vantage 8.1 or Vantage 8.0 UP5 (or later).

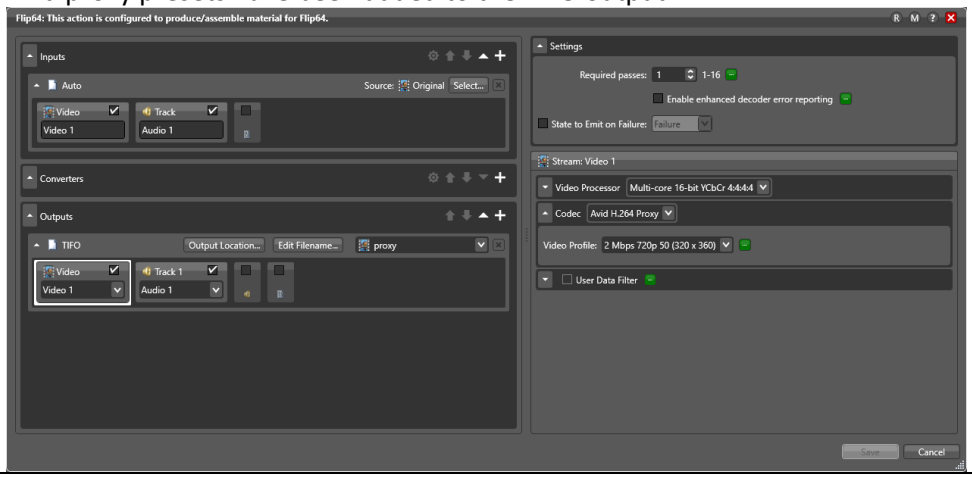
Note: For customers using Vantage 8.0 UP5, this release requires OpenCL version 16.1.2 or later. Flip64 8.0.8 and later removed support for MxPA. As a result, jobs may fail with an OpenCL error. To resolve this error a compatible version of OpenCL must be installed on every server where Vantage Flip64 jobs are executed. Note: Different versions of the OpenCL driver may break other Vantage functionality, so we recommend using version 16.1.2 where possible. This OpenCL version is automatically included in the Vantage 8.1 release.

Note: Testing for this release was performed using Nvidia Driver version 528.89 for use with the new Tachyon SDK and is ONLY needed for Tachyon workflows. For customers not using Tachyon stay on Nvidia Driver version 471.41.

Note: When installing this ComponentPac, the Vantage Management Console will give a popup warning saying that this ComponentPac is designed for a future version of Vantage. This warning is triggered by the new versioning Telestream is using and will not cause issues. This warning was removed in Vantage 8.1 UP1.

New Major Features in the 2023.2 Release

Stadium Content	
TXMF-6014	Add Decode and Encode support for Ross XPression. Flip64 now supports decoding and encoding Ross XPression codec used by many sport stadiums and public venues displays. The Ross XPression encoder supports Alpha channel, Interlaced, and HDR. Note – The Ross xpvCodec must be installed on the Vantage System to decode Ross Xpression AVI files: https://transfer.rossvideo.com/f/6d21d92a2c21ce20

TXMF-8365	Increase max width of QuickTime Animation encoding. To improve support for sport stadiums and public venues displays the QuickTime Animation encoding has increased the max width and height to 65,534 pixels.
Avid Proxy	
TXMF-8307	Add Avid proxy presets to Flip64 (H.264 + MPEG1L2 audio). Avid proxy presets have been added to the TIFO output: 
TXMF-8411	Added bindable Avid Proxy Audio Channel Setting. The Avid Proxy audio codec makes MPEG-1 Layer 2 mono channel tracks at a bit rate of 96 kbps each and a sample rate of 48000 Hz. The number of channels can be bound to a variable and is a drop-down list containing values of 2, 4, 6, 8, 10, 12 and 16. For example if 8 is chosen then the output will have 8 tracks each with an MPEG-1 Layer 2 mono channel.
New Features	
TXMF-4781	Added "looping" functionality to Video Overlays.
TXMF-6148	Added WMV encoder container. The WMV encoder is supported in Cloud Port mode.
TXMF-7897	Added Open decode support to CML for a referenced but growing TIFO file.
Improvements and Fixes	
TXMF-8518	**Improvement** – Increased the bitrate ceiling limit on the J2K IMF lossy single tile so it can go above 250Mbit / sec. for IMF Packages. J2K IMF 2K lossy single tile can go up to 800 Mbit per sec. J2K IMF 4K lossy single tile can go up to 1.6 Gbit per sec.
TXMF-8455	**Fixes** – Parameters/variables are no longer bound after upgrading the Flip64 action. True/False variables remain bound to their associated parameters after an upgrade of the Flip64 action.
TXMF-8432	**Fixes** – MXF AS-11 DPP HD output shows Format Profile "High 4:2:2@L4.1". MXF AS-11 DPP HD output now shows the correct Format Profile "High 4:2:2 Intra@L4.1"

TXMF-8369	**Fixes** – MXF XDCAM camera files getting transcoded to MP4 x264 when played back in an HTML 5 based player are skipping the first two frames. When transcoding MXF XDCAM camera files with edit lists to MP4 x264, enabling a new parameter called “Suppress edit lists” found in the MPEG-4 container allows for correct playout in an HTML 5 based player.
TXMF-8363	**Fixes** – An AV1 decompressor issue which caused intermittent artifacts in the outputs when transcoding AV1 UHD sources.
TXMF-8361	**Improvement** – Added capability to specify/edit Kantar Metadata10/File Duration in Flip64 UI (Custom Metadata). A new File Duration checkbox has been added to the Metadata manual entry selection. If enabled, Flip64 will use the value entered; if not enabled, Flip64 will use the duration the file. The default is the checkbox not enabled.
TXMF-8343	**Improvement** – Improved performance when writing MXF OP1a output with multiple tracks of PCM audio.
TXMF-8340	**Fixes** – Media to Keep set to 1 frame before actual start of media no longer causes the Flip64 action to hang for 29.97 fps, 50 fps, and 59.94 fps source files.
TXMF-8332	**Fixes** – Customer's png image sequences can now be processed properly.
TXMF-8308	**Fixes** – Applying Cropping or padding with RGB values AND using the Color Space Filter now results in correct RGB values in the crop and pad section.
TXMF-8294	**Improvement** – Improved error message when an LUT file cannot be found.
TXMF-8287	**Fixes** – RED decoding no longer shows intermittent failures when enabling the checkbox "Use Lightspeed Acceleration if available".
TXMF-8283	**Fixes** – Vertical blanking can now be removed from IMX sources when using the Tachyon Converter by setting the Resize Mode to Stretch and configuring the crop and pad settings to customize the outputs.
TXMF-8240	**Fixes** –Nvidia Lightspeed GPU (H264) encoder now correctly preserves source timecode.
TXMF-8206	**Improvement** – Improved UI for the Deterministic Mode option in the Tachyon converter.
TXMF-8154	**Improvement** – Added support for QT-style timecode tracks to MPEG-4 container writer. A new “Insert a Timecode Track” parameter at the MPEG-4 container level has been added.
TXMF-8108	**Improvement** – Improved error message from Nielsen watermark filter when you get the Failed to end encode error.
TXMF-8076	**Improvement** – Added a "Connection Failure Sleep Time" to the Neilsen V3 filter.
TXMF-7983	**Improvement** – Updated Flip64 to use the NexGuard SDK v1.14.7.
TXMF-7980	**Improvement** – Updated Flip64 to use the Tachyon SDK version Space Time 10.0 version 10.0.010898.
TXMF-7881	**Improvement** – Expanded the formats of BRAW file support for Flip64 decoding.
TXMF-7596	**Fixes** – Transcodes now complete when applying Media To Keep option on Transport stream sources.
TXMF-7491	**Improvement** – Added decoding support for EXR source files made with Nuke v10, 11, or 12.
TXMF-7432	**Fixes** – Performance when decoding R3D files has improved since you can now use the Lightspeed Acceleration option.

TXMF-7258	**Fixes** – VANC User Bits metadata info is removed when transcoding. New parameter, SMPTE 328 Processing, has been added to the XDCAM codecs (XDCAM EX, XDCAM HD, and XDCAM HD 4.2.2). This new parameter provides these options: Do not preserve, Preserve Original, and Update timecode. When selecting Preserve Original the VANC User Bits metadata is preserved and not removed in the output.
TXMF-7007	**Improvement** – Tachyon Filter missing Vertical Blanking settings. Tachyon converter now includes additional settings when the Resize Mode is set to Stretch. You can configure the crop and pad settings to customize the outputs.
TXMF-6960	**Fixes** – Tachyon PAL to NTSC Borders/Framing issue. Tachyon PAL to NTSC now produces correct black frame borders when using the Stretch setting in the Tachyon Resize Mode and setting the crop and pad settings appropriately.
TXMF-6688	**Fixes** – Tachyon SD quality output has improved with Tachyon SDK version 10.0.0.10898.

Known Issues in This Release

The following are known issues in this release, which may be fixed in a future version.

Numa utilization and job performance differences in machines that have 96+ virtual cores (48 without hyper-threading)

This can be resolved by using OpenCL version 18.1 or newer (TXMF-7444). When updating OpenCL versions, a machine restart is required.

Known NVIDIA Lightspeed GPU encoder issues

Flip64 actions that use an older version of the Lightspeed GPU encoder are not upgradeable to the new version of the NVIDIA Lightspeed GPU encoder. If you wish to use the new encoder, you will have to remake those Flip64 actions.

There is also a change in the GOP length limitation in the new encoder. The old encoder had a GOP Length maximum value of 1024 (GOP Length option under Codec Configuration). The new encoder has a GOP Length maximum value of 1000 (Max IDR-frame Interval (GOP length) option under Frame Type).

Tachyon Deterministic Mode limitations

There are some known limitations of this feature:
abs((src framecount * framerate_conv_factor) - output frame count) must be less than 5 frames. We recommend that users only adjust the output frames by + or – 1.

When upgrading the Tachyon converter from Flip64 2023.1 to 2023.2, the variables for the Determinism option are not preserved. (TXMF-8469).

Tachyon Quality Issues

The Flip64 2023.2 release includes an updated Tachyon SDK which has improved the quality of our Tachyon outputs. However, customers should do testing with their own Tachyon workflows before upgrading to this component pac in a production environment to ensure the quality in the outputs meet their standards.

Media Expansion Converter and Discontinuous Timecode

There may be cases where use of the Media Expansion Converter will produce discontinuous timecode due to inserted media. In the future there may be more options to control this behavior.

Using Multi-Pass Encoding with x265

Multi-pass encoding in x265 is currently limited to two passes. Attempting more passes will result in an error.

Two Pass Encoding and Open Workflows

When two pass encoding is enabled in Vantage, actions may not be used in 'Open Mode'. An action in the Open Workflow mode which attempts a two pass encoding will hang and does not provide an error that two pass encoding is not supported.

MXF ARD ZDF HDF02 and HDF03 are showing errors in the MXF Analyzer

There are known issues with this technology due to its age and the direction of the industry.

FFV1 Encoding may fail when Flip64 is in Cloud Mode

FFV1 encoding of long form content may fail when Flip64 is in Cloud Mode. With Flip64 8.0.8 and later, Cloud Mode will be unavailable if FFV1 encoding is configured.