

Vantage Flip64 2023.1.0.331771 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: 2023.1.0.331771

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 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 has been removed in Vantage 8.1 UP1.

Major Features in the 2023.1 Release

- TXMF-7884 – Added decoding support for Interlaced AVIWest HEVC files
- TXMF-7645 – The JPEG XS codec is now supported in Flip64 and can be found in MPEG-4, MXF OP1a, and QuickTime containers
- TXMF-7790 – An x265 codec option has been added to the MXF Op1a container
- TXMF-7794 - Added decode support for ARRI RAW camera files
- TXMF-7745 - The new Nvidia NVENC SDK has been implemented for AVC (H.264) and HEVC (H.265)
- TXMF-7802 – Flip64 now includes sample open source LUT files (developed by NBCUniversal Media) that are available for customer use. These can be found in your Vantage installer

location under Components\Flip64 (ex. C:\Program Files (x86)\Telestream\Vantage\Components\Flip64.X.X.X\NBC_LUTs where X.X.X.X is your Flip64 ComponentPac version).

- TXMF-8107 - “Spoken Language” option has been added to the IMF encoder in the Audio Track settings
- TXMF-8047 – Expanded the Blur filter’s capability to make outputs have a more extreme blurry effect
- TXMF-7858 – Added the Ross-Abekas.clip encoder. The current use cases are limited. Input frame rate and frame dimensions MUST match the output frame rate and dimensions.
- TXMF-8000 – Added XDCAM HD 4.2.2 50 Mbps support to MXF OP1a
- TXMF-8021 – Added a TIFO Flush period setting to help speed up open workflows; this option is in the TIFO container
- TXMF-7597 - Added Variable Bitrate settings to the MPEG-2 codec in these Flip64 containers: Elementary Streams, MPEG-2 Program Stream, MXF Op1a, MXF AS-03, and TIFO
- TXMF-7712 – Added Logarithmic Algorithm option to the Audio Fade In/Fade Out filter
- TXMF-7328 - Added decoding support for 10 Bit AV1 sources
- TXMF-7400 – Added the SD AS-11 DPP (IMX) spec to the MXF AS-11 encoder
- TXMF-7976 - Added the ability for the Flip64 action to emit a specific state in the event of a Failure condition. Useful for supporting NexGuard watermarking workflows.

Improvements, Features, and Fixes in the 2023.1 Release

TXMF-8247 – Fixed a Camera Ingest truncation issue with outputs based on Sony camera files

TXMF-8318 – Fixed an edge case where Tachyon jobs were timing out with specific sources

TXMF-7628 – Added ADIFileName to the Nielsen VOD watermarking list of metadata fields

TXMF-8033 – Fixed an edge case where MXF wrapped AVC 25 fps with PCM audio sources would fail when doing NexGuard JWT watermarking

TXMF-7633 – Fixed an edge case where DPX sequence input transcoded to MPEG-4 produced poor quality output

TXMF-7527 - Added the ability for Channel Designation Filter tags to be written to the MXF Container in the XDCAM encoder

TXMF-7725 - Added the ability to enable Flip64 (via CML) to support data track from Avid OPAtom as ANC data source

TXMF-7805 – Fixed an issue where timecode preserved from MP4 XAVC-S sources did not match source timecode displayed in Sony's Catalyst Browse

TXMF-8237 – Fixed an issue where FrameFormer outputs were truncated by 1 frame

TXMF-8183 – Fixed an issue where MPEG-PS sources created with Adobe Media Encoder V 23.1 would cause jobs to fail

TXMF-8181 – Fixed a trimming issue with CPL (from DCP) sources

TXMF-8137 - Fixed an issue where jobs failed if trimming was based on 'use source media video timing'

TXMF-8106 - Resizing filter is no longer ignored when the Color Space filter is used

TXMF-8049 – Fixed a source specific AVIWest decode issue

TXMF-8034 – Fixed a Transform Rotation issue in QuickTime outputs

TXMF-8029 - Fixed an issue where MXF OP1a audio only encoder jobs failed in CloudPort mode

TXMF-8028 – Fixed an issue where the Nielsen Watermarking V3 Filter would fail when using a TIC server failover broadcasting IP Address

TXMF-8022 – Fixed a source specific R3D decode issue

TXMF-8017 - Movie Overlay is now working in CloudPort mode

TXMF-8008 – Fixed an issue where MXF OP1a XDCAM HD Omneon specific timecode was not being set correctly

TXMF-7995 – Fixed an edge case where the progress status was not reported correctly when making a Keyframe output

TXMF-7988 – Fixed an Image Overlay issue that occurred when using the LUT filter

TXMF-7985 – Fixed a source specific Canopus HQX AVI decode issue

TXMF-7981 – Fixed a source specific issue that occurred when stitching files together

TXMF-7948 – Fixed a metadata tagging issue with IMF Packager CMLs from Colorfront

TXMF-7893 – Improved Text Overlay filter “Outline/Shadow” effect

TXMF-7870 – Fixed a Color Space filter issue with MXF outputs

TXMF-7824 – Fixed an issue where QuickTime audio only outputs showed two timecode tracks in MedialInfo

TXMF-7823 – Fixed an issue where QuickTime audio only timecode track showed an incorrect duration of 1 frame

TXMF-7819 – Fixed a truncation issue with wav outputs that could occur when using the Audio Mixer

TXMF-7798 – Fixed an issue with QuickTime audio only outputs where the timecode always had a 29.97 timebase

TXMF-7784 – Fixed an issue where using repeating keyframes in conjunction with the Time interval would result in a failure if the source video was using drop frame timecode

TXMF-7769 – Fixed a decode issue with MXF OP1a DNxHD sources from Black Magic devices and Davinci Resolve

TXMF-7758 – Fixed an issue where captions from MPEG-TS source files with RDD 11 caption data were not getting passed through to the output files

TXMF-7756 – Removed the Language dropdown option from the SCC Input component. This UI element was mistakenly exposed in previous Flip64 ComponentPacs but does nothing.

TXMF-7719 – Fixed a CloudPort specific issue where the timecode overlay's last digit would get cut off

TXMF-7708 - Fixed an issue where the Audio Fade-In value overrode the value specified for Audio Fade-Out

TXMF-7695 – Fixed a source specific issue where MP3 audio files made with the LAME 3.99 library would fail to decode

TXMF-7693 – Fixed an issue where using Media To Keep would lead to A/V sync issues

TXMF-7674 – Fixed an issue where transcoding XDCAM MOV files with ADPCM audio source files produced silent audio in the outputs

TXMF-7647 – Fixed a source specific issue where HEVC UHD Transport Stream files would time out when Media to Keep marks were applied

TXMF-7624 – Fixed an issue where the Timecode from TIFO wrapped XDCAM HD source files was not being preserved during direct convert

TXMF-7623 – Fixed an upgrade issue with Flip64 actions that contain the Audio Levels converter with multiple items defined under the Loudness Adjustment option

TXMF-7604 – Fixed a decode issue with MXF DNxHD files created with Premiere v22.0

TXMF-7575 - Fixed a playout issue with MXF Class 200 XAVC 4K Long GOP outputs on Sony PZW-4000 devices

TXMF-7282 – Fixed a decode issue with MXF OP1a XDCAM HD files created with legacy GP Flip

TXMF-7170 – Fixed a timeout error when creating Dolby Vision MPEG-4 x265 outputs with AAC audio from Dolby Vision IMF packages made with DaVinci Resolve

TXMF-7023 – WAV outputs no longer have the Encoded Date metadata tag so they will now match the WAV outputs from the legacy GP Flip

TXMF-6771 – The Keyframe encoder will now show a progress bar during transcodes

TXMF-6328 – Fixed an issue where the Keyframe encoder failed when transcoding JPEG to JPEG

TXMF-5458 – Fixed a source specific failure when using the Image Overlay Filter

TXMF-5189 – Added the "Outline/Shadow" option to Text Overlay

TXMF-4834 – Fixed an issue where 25 fps source files submitted to a workflow which had the Flip64 action using the Tachyon Converter with the "Allow Telecine/Pulldown Removal" option enabled would cause the transcodes to hang

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

The NVIDIA Lightspeed GPU encoders currently cannot preserve source timecode. This is affecting both H.264 and H.265 (TXMF-8240). A fix is in progress but not available in this release.

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 new feature (TXMF-7070).

$\text{abs}(\text{src framecount} * \text{framerate_conv_factor}) - \text{output frame count}$ must be less than 5 frames.

We recommend that users only adjust the output frames by + or – 1.

Tachyon Quality Issues

There are many known quality issues with Tachyon since the Flip64 8.0.11 release. Telestream recommends not using Tachyon for these ComponentPacs. We are working with CinnaFilm to get these issues resolved. The Flip64 2023.2 will have an updated Tachyon SDK which will hopefully address many of these issues.

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

This is currently being tracked in TXMF-8138.

MXF ARD ZDF HDF02a and HDF02b errors:

*The AVC Maximum Bitrate of the file does not meet the minimum AVC Maximum Bitrate requirements of the Application Specification. The value was not computed but taken from the files Metadata.
Incorrect value for Generic Picture Essence Descriptor Signal Standard.
Incorrect value for the AVC Sub Descriptor AverageBitRate.*

MXF ARD ZDF HDF03a errors:

The DisplayF2Offset of at least one track does not meet the minimum Display2Offset requirements of the Application Specification. The value was not computed but taken from the files Metadata.

*The AVC Maximum Bitrate of the file does not meet the minimum AVC Maximum Bitrate requirements of the Application Specification. The value was not computed but taken from the files Metadata.
Incorrect value for Generic Picture Essence Descriptor Signal Standard.
Incorrect value for the AVC Sub Descriptor AverageBitRate.*

MXF ARD ZDF HDF03b errors:

*The DisplayF2Offset of at least one track does not meet the minimum Display2Offset requirements of the ApplicationSpecification. The value was not computed but taken from the files Metadata.
The AVC Maximum Bitrate of the file does not meet the minimum AVC Maximum Bitrate requirements of the Application Specification. The value was not computed but taken from the files Metadata.
Incorrect value for Generic Picture Essence Descriptor Signal Standard.*

In R3D Decoding, the “Use Lightspeed Acceleration if available” checkbox is not working correctly

If this checkbox is enabled, the job will fail. The fix for this is in progress and will be included in the Flip64 2023.2 release (TXMF-8287).

XDCAM 1080i MXF ARD_ZDF outputs show ClosedGOP error in MXF Analyzer

XDCAM 1080i MXF ARD_ZDF outputs show the following error in MXF Analyzer:

Error: The correct value for property ClosedGOP is false and not true as encoded in the file.

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.