

Vantage IPTV VOD 2022.1 Release Notes

Date 17th Feb 2022

About This Release

This release is a ComponentPac release for Vantage that includes new features, improvements, and bug fixes. The release build is: # 2022.1

These release notes are applicable to the IPTV VOD option for Vantage. Please 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 UP4 (or later). Vantage 8.0 UP4 also requires Vantage Patch:

Vantage_8_0_ComponentPac_Upgrade_Patch_Setup(8.0.958.135).exe. Both Vantage 8.0 UP4 and the Patch need to be installed on every Vantage server and every client only machine. If you are using Vantage 8.1, then just Vantage needs to be installed on every Vantage server and every client only machine.

Note: The support Nvidia Driver for this release is 472.47

New Major IPTV VOD Features in this Release

• <u>TXMF-6440</u> Implementation of the new Nvidia NVENC SDK – This significantly increases Quality and performance of the "Lightspeed GPU H.264 and H265 Codecs

Add support for B-frame insertion and offers far more control of the NVENC H264 and H265 Codecs including access to the NVENC command line.

Note: Please read known issues below

- TXMF-7187 InSync FrameFormer Standard conversion Filter, utilizing Insync 8.3 SDK
- TXMF-6997 Addition of ColorFront filter . Please note this is a chargeable option
- TXMF-6996 Addition Color Lookup table (LUT) filter .

Fixed and new features in this release Know Issues

- <u>TXMF-7438</u> **Resolved issue:** NVENC interlaced mode, where a job with Manzanita output aborts due to transcoder crash
- <u>TXMF-7404</u> **Resolved issue:** X265 HEVC output stutters on PanasonicTV/iOS devices.
- <u>TXMF-7390</u> Improvement: Upgrade Insync FrameFormer to v8.3.0 SDK
- <u>TXMF-7376</u> **Regression Issue:** error ingesting Pinnacle Liquid MXF files
- TXMF-7348
 Resolved Issue: Nielsen PreRender filter, giving wrong value for LastTimeStamp and results in wrong times when output is analyzed by NACAT
- <u>TXMF-7317</u> **Resolved Issue:** NexGuard Watermark(JWT License) Filter-Processing fails when Preset is blank/empty
- <u>TXMF-7071</u> **Resolved Issue:** Benchmark OES tests IPTV 8.0.5: Some files are processed slower compared to v8.0.4
- <u>TXMF-6995</u> **New Feature:** Add "Auto Multiple Tracks decoder to IPTV" (feature parity to Flip64)
- <u>TXMF-6868</u> **New Feature:** Expose HDR Metadata options for Lightspeed GPU H265 encoder
- <u>TXMF-6479</u> **New Feature:** Add 'Apply Peak Limits for Negative Gain' to Loudness Adjustment filter (Feature Parity with Flip GP)

Additional Cloud-Port capabilities

- TXMF-7309 Added Cloud Port Capability: Enables Dolby Atmos
- TXMF-7301 Added Cloud Port Capability: InSync FrameFormer
- TXMF-7290 Added Cloud Port Capability: NexGuard watermarking



Known Issues.

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

• <u>TXMF-6440</u> The capabilities of Nvidia NVENC "Lightspeed GPU" are different depending upon the Lightspeed Model you are using.

G7,G8,G10 Lightspeed - Utilizing the RTX4000 GPU- Interlacing mode is not possible on these server, however B-frame support is available for both H264 and H265 which significantly increases Quality

G5, G6 Lightspeed – Utilizing P4 or P4000 GPU – Interlace mode is possible utilizing H264, however B-frame support is only possible in H264, which significantly increases quality. B-frame support is not possible in HEVC

Note:- If you try and run an interlaced job on a G7, G8, G10 server you will receive the error message "Error creating GPU compressor: device does not exist" In a future release this error message will be made more clear (<u>TXMF-7440</u>)

Note:- Quality issues have been experienced when using P3 and above presets, when in NVENC interlaced mode. To alleviate this, it is recommended to use the following command line setting "--useBframeAsRef=0". This command turns of B-frame referencing.

• Color Space Conversion Behaviour May Differ from Earlier ComponentPacs

Since some of the major improvements to color space conversion and color processing rely on strictly accurate color space metadata in source essence, it is possible that missing or inaccurate source metadata will produce different results than previous ComponentPacs. Aside from correcting the source metadata, it is possible to achieve the old results by adding the legacy color space filter or by manually driving the modern color space conversion filter with specified color metadata.



• Overlays and Color Space Conversion

Overlays, such as the ratings system overlays (PG, MA etc.), added with the modern color space conversion filters applied may be corrupted. As a workaround the legacy color space conversion filters can be used in combination with these overlays without issue.

• Constant Quantizer Cannot be Set to Zero

The x264 CODEC rate control cannot utilize a constant quantizer value set to zero. This currently causes Vantage to report an unrecoverable error.

• Overlay Looping Control Has no Effect

In some cases, the control for requesting that an overlay loop, does not properly affect the output content.

• Media Expansion Convertor and Discontinuous Timecode

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

• 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, Vantage actions may not be used in Open Workflows. An action in the Open Workflow mode which attempts two pass encoding will hang and does not provide an error that two pass encoding is currently unsupported with Open Workflows.