

### Vantage IPTV VOD 2022.3 Release Notes

Date 30th August 2022

# **About This Release**

This release is a ComponentPac release for Vantage that includes new features, improvements, and bug fixes. The release build is: # 2022.3.0.103

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 471.41

# **New Major IPTV VOD Features in this Release**

- TXMF-7555 Implementation of the Dolby Vision HDR to SDR Filter
- TXMF-7408 Upgrade of the Nexguard Watermarking SDK to V 1.12.1
- <u>TXMF-5815</u> Added Support for True CBR in NVENC HEVC, This utilizes the NALU (Network Abstraction Layer Unit) insertion to maintain constant bitrate that is HRD compliant.



## Fixed and new features in this release Know Issues

• <u>TXMF-7200</u> Added capability that tells the user which rate control type is used for x264 and x265.

	<ul> <li>Transcoders</li> </ul>	© ≜ <b>≢ ▲ +</b>	Ľ	Encoder Definition:
L	▲ 🎇 x264 1920 by 1080	×		🗄 Stream: (unnamed stream)
<	Video	1 9000 kbps (CBR)		Codec x264 V
k				Arate Constant Bit Rate
ł	Outputs	±±±+		Bit Rate: 9,000 🗘 kbps (CBR) 😑

- <u>TXMF-7830</u> Fixed issue with the Keyframe encoder where sizes below 16 x 16 pixels resulted in a transcode crash.
- <u>TXMF-7818</u> Resolved Issue with the Keyframe encoder, where "Scene change mode" was not working.
- <u>TXMF-7574</u> Resolved Issue where transcoded media with x264 Video and AC3 Audio, packaged with the Manzanita Multiplexor showed extra "Dolby Frames"
- <u>TXMF-7567</u> Enhancement to MP4 packager, enabling Mpeg1 Layer 2 Audio to be flagged as MP3, The new setting can be found in the Mp4 Packager, under "Advanced Audio setting. When enabled the Codec ID parameter will be "mp3" when disabled it will be flagged mpga.



• <u>TXMF-5925</u> Resolved Issue, where the video and Audio lengths are different in length( >10ms) utilizing the Manzanita Multiplexor. This was specifically an issue when generating content for Sky.



## Known Issues.

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

• Nvidia NVENC Limitations

The capabilities of **Nvidia NVENC** "Lightspeed GPU" are different depending upon the Lightspeed Model you are using.

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.

#### • Kantar Watermarking

Currently the Kantar Watermarking filter does not operate in cloud port mode, this will be address in a forth coming release.



#### • 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.

#### • Dolby Vision HDR to SDR conversion filter

When Utilizing the new "Dolby Vision HDR to SDR conversion filter" the output of the resulting file will always be "Full range" The work around for this is to utilize a "Color Space Filter" setting the Output Video range to be "Studio Range"

Transcoder: x264			
Color Space Filter 📟			
Input Color Primaries: Auto			
Input Transfer Function: Auto 🔽 🖃			
Input Color Matrix: Auto			
Input Video Range: Auto 💌 😑			
Output Color Primaries: Auto			
Output Transfer Function: Auto 🔽 😑			
Output Color Matrix: Auto			
Output Video Range: Studio Range 💙 🖻			
🔹 🗌 Color Lookup Table Filter 🗧			
Colorfront Filter 📟			
🔹 🗹 Dolby Vision HDR to SDR conversion Filter 🗧			
Input Color Space: PQ_2020 🗸 😑			
Input Video Range: Same as source 🔽 😑			
Output Color Space: Always 709 YUV Studio Range			
Sauge Cancel			
Save Cancer			