

Vantage Multiscreen 2022.3.0 Release Notes

Date 4th Oct 2022

About This Release

This release is a ComponentPac release for Vantage that includes new features, improvements, and bug fixes. The release build is: # 2022.3.0.148

These release notes are applicable to the Multiscreen 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 supported Nvidia Driver for this release is 471.41

New Major Multiscreen Features in this Release

- [TXMF-7304](#) Added support for Dolby vision signalling (Profile 5) in HLS output format.
- [TXMF-7852](#) Updated the CBR rate control feature in the NVENC HEVC encoder to support true CBR by inserting NALUs. The NALU FD_NUT is inserted. This update applies to G7, G8 & G10 lightspeed servers using RTX 4000 GPU's. The same Rate control type is also available via the NVENC command line option Command = (--enableFillerDataInsertion=1).
- [TXMF-7554](#) Added support for a new Dolby Vision HDR to SDR conversion filter. This feature is supported for the interleaved MXF Dolby Vision input files.

Known issues:

 - a) Side car input files not supported.
 - b) Post conversion to SDR, the HDR metadata is not cleared in the output file.
 - c) Not supported on cloud

- [TXMF-7720](#) Added support to provide the intelligent handling of audio tracks with new option called “Disable Processing in Audio Mixer” and transcoder sections.

The "Always create output" option has been renamed as "Ignore missing streams".

Ignore missing streams feature is supported on subtitle inputs also.

Known issues: The Ignore missing streams feature works on CMAF outputs only.

- [TXMF-2351](#) Added support for Tachyon converter and Dark Energy filters in Multiscreen using the lightspeed GPUs.

Known limitations:

Currently the tachyon converter and the Dark Energy filter features are not supported on cloud

New Features

- TXMF-7728 New option in CMAF Packager output called "CMAF Subtitle". This option can be used to add fragmented subtitle files in the CMAF output package.
- TXMF-7871 New input type called "Auto-Multiple Tracks" for decoding multiple input tracks have been added. This option supports single channel multi track and multi channel multi track input streams of types PCM and encoded audio (AAC, AC3 etc).
- TXMF-7040 Added support for a 3-letter language code in audio transcoders. An UI option "Language code" is provided in the audio transcoder section allowing the entry of a 3-letter language code.
- TXMF-7815 New insert option in Microsoft Smooth Streaming Packager, enabling "Insert Basename" in the Media Tokens of MSS. This is a work around for this particular issue where the insert variable with dynamic value updates is not working

Resolved Issues

- TXMF-7053 Fixed issue with the language code handling bound to a variable. Appropriate error messages are provided when the bound variable for language code is set with values other than 2 or 3
- TXMF-7837 An issue with key frame encoding, addressed when key frame generation is specified with time in milliseconds precision.
- TXMF-7838 An issue with the key frame encoding when the frame sizes are lesser than 16x16 pixels, has been addressed. An appropriate error message is provided in such cases.
- TXMF-7839 An issue with the Scene-change detection feature of Key Frame encoding has been addressed.

Known Issues.

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

The capabilities of Nvidia NVENC “Lightspeed GPU” are different depending upon the Lightspeed Model you are using. (TXMF-6440)

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 ([TXMF-7440](#))

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 off B-frame referencing.

- **Dolby Vision Support in Mpeg Dash (TXMF-7305)**

Currently only Segmented MP4 is supported, Segmented .TS is not supported using Mpeg Simple Profile.

- **Garbled Output when using P3-P7 preset's in NVENC H264 codec (Lightspeed GPU H264)**

When creating Interlaced outputs and setting Tuning to "High Quality" and Preset's are set to "P3" to "P7" the outputs will have jittery interlacing artifacts. If Frame Type Max B-frames is set to 0 the jittery interlacing artifacts disappear.

- **WebM Output Can Cause Playback Issues in This Release**

Customers needing WebM containers/encoding should continue to use previous ComponentPac versions under Secure Version Control until this issue is addressed.

- **Media Expansion Converter and Discontinuous Timecode**

There may be cases where the 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 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.

- **NexGuard Filter hangs when generating multiple outputs**

When utilizing the Nexguard filter, generating multiple outputs can cause a hang at 99%, which eventually results in an error.

- **Upgrading of Multiscreen actions with LightSpeed GPU H264 and H265 codecs**

As we have implemented a new Nvidia SDK with many more features, it is not possible to upgrade actions from older ComponentPacs , which use the Lightspeed GPU H264 or H265 codecs. It is advised that Multiscreen actions requiring these codecs are generated from scratch.

- **SCTE-35 Insertion filter**

It is not possible to use SCTE-35 insertion from DASH file in combination with SCTE-35 from the source (Passthrough). Please use either insertion or Passthrough.