Vantage Multiscreen 2023.2 Release Notes

Date 27th June 2023

About This Release

This release is a ComponentPac release for Vantage that includes new features, improvements, and bug fixes. The release build is: **# 2023.2.0.299**

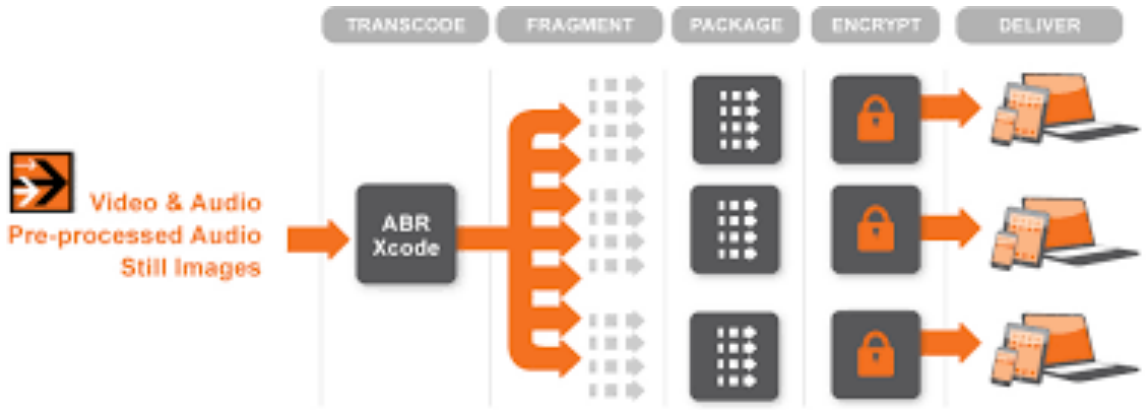
These release notes are applicable to the Multiscreen option for Vantage. Please refer to separate Version 8.0 / 8.1 release notes for Vantage Platform and other components of Vantage for additional information.

Note: This release requires Vantage 8.1 or Vantage 8.0 UP4 (or later). Vantage 8.0 UP4 also requires the following Vantage Patch:

Vantage_8_0_ComponentPac_Upgrade_Patch_Setup (8.0.958.135).exe.

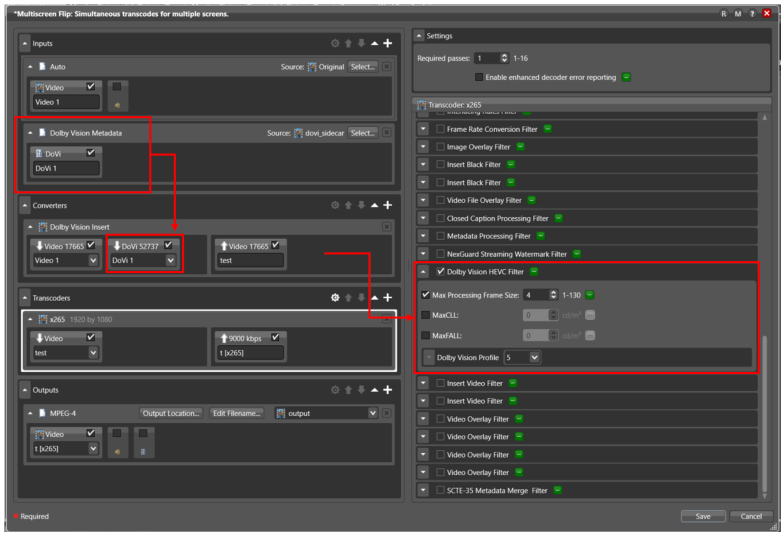
Both Vantage 8.0 UP4 and the patch need to be installed on every Vantage server and every client only machine. If you are using Vantage 8.1 or above, then the patch is not required

Note: The supported Nvidia Driver for this release is 471.41



New Major Multiscreen Features in this Release

Dynamic Ad-Insertion	
TXMF-7974	Added Support for SCTE35 insertion into CMAF packaging. Multiscreen can now insert SCTE-35 Ad-insertion markers with their corresponding IDR Frames into CMAF packages, comprising of Mpeg Dash and HLS Outputs.
TXMF-7497 + TXMF-7496	Improvement to SCTE35 insertion to Mpeg Dash & HLS package types, providing more precises insertion of Event PresentationTime and SpliceTime ptsTime.
TXMF-8245	Added support for PTS adjustments into SCTE35 timing. As default the PTS adjustment is set to 2 seconds, if this new parameter is ticked, then the PTS adjustment specified in the .mpd is then utilized.
TXMF-8144	New GLIM plugin, enabling users to visually add DAI Markers in the GLIM interface using the "Clip list" feature. The plugin dynamically generates an .mpd file with the appropriate data and sending it via the Vantage API.
Dolby Vision Profile 8.1 Support	
TXMF-7972	*New* Implementation of Dolby Vision Profile 8.1 in Syntactic TS Packager
TXMF-7971	*New* Implementation of Dolby Vision Profile 8.1 in MPEG Dash Packager
TXMF-7970	*New* Implementation of Dolby Vision Profile 8.1 in HLS Packager
TXMF-7969	*New* Implementation of Dolby Vision Profile 8.1 in Adaptive Transport Stream (ATS) Packager
TXMF-7968	*New* Implementation of Dolby Vision Profile 8.1 in MP4 Packager
TXMF-7706	*New* Implementation of Dolby Vision Profile 8.1 in X265 Codec
TXMF-7689	*New* Implementation of Dolby Vision Profile 8.1 in CMAF Packager (Segmented MP4 Only)

TXMF-8381 + TXMF-8196 + TXMF-7990	*New.* Implementation of a new convertor module called "Dolby Vision Insert". This should now be used in conjunction with the Dolby Vision HEVC video filter. The workflow now utilizes the output of the convertor, so the user no longer needs to specify the sidecar Dolby Vision metadata file in the video filter. (this option has been removed) This file is specified in the Input section of the multiscreen action as an additional input. (As seen the screenshot below) Note. Old workflows utilizing the legacy Dolby Vision HEVC filter need to be re-built. An upgrade of the action will not work. 
New Features	
TXMF-8124	Tachyon standards conversion processing in Multiscreen can now be run in Cloud Port Mode. Note. The Cinnafilm Dark Energy filter is not currently supported in cloud port mode.
TXMF-7926	Added Dolby Vision HDR to SDR filter, enabling processing with sidecar Dolby Vision metadata files.
TXMF-8513	A change has been made to the Syntactic Multiplexor, enabling HEVC descriptors to be inserted, enabling Dolby Vision signalling.
TXMF-8485	A new feature has been implemented enabling both the Mpeg-Dash and CMAF package types, enabling roles and accessibility parameter in the Manifest. This enables multiple audio tracks with the same language and same codec definition to be in one adaption set.

TXMF-8385	New Feature enabling SCTE35 insertion using the "Lightspeed H264 (NVENC)" codec.
TXMF-8326	TTML subtitle segmentation in MPEG DASH is now supported.
TXMF-8220	Support provided for segmented MP4 subtitles in MPEG DASH output.
TXMF-8218	Added support for Roles and Accessibility parameter insertion into MPEG DASH manifest files.
Resolved Issues	
TXMF-8295	Dolby vision 8.1 support with backward compatibility for HDR10. This is supported in CMAF, Mpeg-Dash and HLS manifest files.
TXMF-8268	Addressed an issue with the use of pre-roll setting with the binary scte35 dash files
TXMF-8262	Fixed Issue, where the FrameFormer price per minute was not indicted in the UI when a Multiscreen action is put in Cloud port Mode.

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 of B-frame referencing.

- 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.

- **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.