



Aurora
Automated File-based Quality Control System

Release Notes

This document supports version 6.5.7

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Release notes for Aurora version 6.5.7


These release notes provide a list of the new Aurora features and important defect fixes that have been made available in software version 6.5.7

New features

Version 6.5.7 Major new features / improvements

- Added support to send mails from the Gmail SMTP server using TLS (Transport Layer Security) security protocol that encrypts email to protect its privacy.
- Added a new test (Test 4027) to detect change in Active Picture Size.
- Added a test to ensure PID to Audio/Subtitle languages mapping are correctly encoded in VOD packages. Aurora checks if the specified audio/subtitle PID is present in the PMT descriptor of TS files.

Minor new features / improvements

- Improvements done to Aspect Ratio Changes test (Test 4010) to detect changes in Aspect Ratio.
- Instant tests are marked with  to indicate that the results from this test are available instantly.

Version 6.5.6 Major new features / improvements

- HTTP requests sent to the cloud storage locations need to be signed so that the source of the request can be identified. Aurora supports both Version 2 and Version 4 Signature Versions.
- Provides option to set the severity of alerts based on number of occurrences of an alert or the duration of an alert.
- Audio Loudness Correction test (Test 6003.005) can now be applied with performance improvement markers.

- Added SOAP API method *GetJobsInProgress ()* to retrieve all jobs currently in process.
- Addressed an issue with True Peak values exceeding Sample Peak in certain cases.

Version 6.5.5 Major new features / improvements

- Improved the performance of Audio Loudness Correction feature.
- Added a new configurable option to set the location for storage of PDF reports of Jobs.
- Addressed an issue with reporting for HE-AAC tracks with SBR profile.
- Addressed an issue with Hot folders containing ISM files that have missing tracks.

Version 6.5.4 Minor new features / improvements

- Support for Intra profiles in the Video Profile/Level Metadata test (Test 3008).
- Provided an option to add multiple instances of the Average Loudness test (Test 6003.005) to allow testing of multiple Audio Specifications simultaneously.
Audio Loudness Correction if selected will be done only on the first instance.

Version 6.5.3 Major new features/improvements

- New metadata tests added to check for:
 - EBP Distance (Test 2023.001)
 - EBP mode (Test 2023.002)
 - Video Reference Frames (Test 3047)
 - Audio Profile (Test 5011)
 - AC-3 Service Type (Test 5012)
 - Audio Max bit rate (Test 5013).
 - Added a new SOAP API method *AddJobWithTemplateXML ()* to create a job using the template information provided in XML format.
 - Optimization of job processing to improve performance based on the tests selected in the template.
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- Enhancement of the Netflix Distribution Profile test for SD/HD material (in Test 7675) to support Netflix 8.1 Specifications.

- The following metadata based tests have been optimized to provide 'instant' results:
 - File Size (Test 2002)
 - Compare Stream Lengths (Test 2003)
 - Container File Contents (Test 2006)
 - Container Type (Test 2007)
 - Number of PIDs (Test 2010)
 - Container File Extension (Test 2011)
 - Container Start TimeCode (Test 2014)
 - Index Table Presence (Test 2021.001)
 - Random Index Pack Presence (Test 2021.002)
 - KAG Size (Test 2021.003)
 - Essence Wrapping Mode (Test 2021.004)
 - Container Body Partition Count (2021.007)
 - Truncated MXF File Detection (Test 2022)
 - EBP Distance (Test 2023.001)
 - EBP mode (Test 2023.002)
 - Resolution (Test 3003.001)
 - Active Picture Size (from Metadata) (Test 3003.002)
 - Aspect Ratio (Test 3004)
 - Frame Rate (Test 3005)
 - Frame Horizontal Size (3006.001)
 - Active Picture Horizontal Size (from Metadata) (Test 3006.002)
 - Frame Vertical Size (Test 3007.001)
 - Active Picture Vertical Size (from Metadata) (Test 3007.002)
 - Profile/Level (Test 3008)
 - Buffer Size (Test 3010)
 - Interlaced Mode (Test 3011)
 - Check Stream CBR/VBR (Test 3014)
 - Color Space (Test 3018)
 - Pixel Sub-Sampling (Test 3019)
 - AFD Codes (Test 3024)
 - Pixel Aspect Ratio (Test 3029)
 - Color Gamut / Primaries (Test 3038)
 - Video Stream Start Timecode (Test 3039)
 - Video Stream End Timecode (Test 3042)

- Frame Rate & Format (Test 3044)
- Video Bit Depth (Test 3045)
- Entropy Coding (Test 3046)
- Video Reference Frames (Test 3047)
- Pixel Aspect Ratio Compare to Frame Aspect Ratio (Test 4016)
- Audio Duration (Test 5001)
- Audio # of Channels (Test 5002)
- Audio Language ID (Test 5003)
- AC-3 Dialogue Normalization (dialnorm) (Test 5004)
- Audio Bit Depth (Test 5009)
- Audio Sample Rate (Test 5010)
- Audio Profile (Test 5011)
- AC-3 Service Type (Test 5012)
- Audio Maximum Bit Rate (Test 5013)

■ The following metadata based tests have been optimized to provide 'quick' results:

- PID Type (Test 2005)
- Container Timecode Discontinuity (Test 2008)
- Rude Word Detection (in Caption Text) (Test 2009)
- Container Bit Rate (Test 2013)
- Container Header Values (Test 2018)
- Container Footer Values (Test 2019)
- Caption/Subtitle Dropout Detection (Test 2020)
- Body Partition Duration (Test 2021.005)
- Container Body Values (Test 2021.006)
- Check for Open GOP (Test 3013)
- AFD Value Change Detection (Test 3025)
- CGMS-A Value (Test 3026)
- TV/MPAA Rating (Test 3027)
- GOP Size in Bytes (Test 3035)
- Stream Timecode Discontinuity (Test 3036)
- Scan Order (Test 3037)
- GOP Alignment (Test 304)
- CableLabs ABR (Test 7325)
- IMF Profile using Photon (Test 7679 in Netflix Distribution Profile Test 7675)

Version 6.5.1 Major new features / improvements

- Provided an option to plot Histograms for each of the RGB values in the Job report.
- Added support for Windows Server 2016.
- Refreshed True Peak Test (Test 6003.009) for Audio tracks.
- Enhancement of the Color Bar Test (Test 4012) for Video tracks to support duration based thresholds.
- Addition of new test for DolbyE Frame Rate Coherency (Test 1834) as part of the DolbyE Audio Codec Syntax tests.
- Added an option to set the encoding type of the report.xml file. The encoding type can be changed using the following line in the Tektronix.Aurora.MasterController.Services.exe.Config file:
<add key ="ReportXMLEncodingType" value="utf-16"/>
The possible values for "ReportXMLEncodingType" are "Unicode", "UTF-8" and "UTF-16". Default value is "Unicode".
- Support for "Prores in IMF" files.

Minor new features

- Improvements in Aurora when using Aurora's Dark themes.

Version 6.5 Major new features

- Adds support for Supplemental IMF Packages.
- Adds support for validating Netflix IMF Profile using Photon, under Netflix Distribution Profile Test 7675.
- Adds support for selecting IMF Composition Playlist and ABR playlist (m3u8) in watch folder. This can be achieved through regular expression based "Include" and "Exclude" filter options when creating HotFolders.
- Improves the luma histogram in the job report.
- Adds updates to Netflix Compliance checks as per latest 8.1 specification.

Minor new features

- Improves the Audio Silence Test (6002) to detect silence in audio channels.
- Improves the performance in the Audio Loudness Correction feature.
- Improves the spot check feature.
- Modifies the *GetJobsInQueue ()* SOAP API method to return the complete list of Jobs in Queue.

Version 6.4.2 Major new features

- Adds new tests as part of the Codecs Syntax checks to check the Dolby E Guard Band start position against the Dolby E Specification.
- Improves the pre-roll and post-roll feature.
- Improves the analysis of Prores files

Version 6.4.1 Major new features

- Adds support for Hot-folders on Amazon Simple Storage Services(S3).
- Adds support for Hyper Text Transfer Protocol Secure (HTTPS) access of files on Amazon's S3 storage.

- Addresses an issue with audio channel reordering after Audio Loudness Correction for large audio tracks.
- Adds an option to set the priority of the job added through Aurora API. The priority can be changed using the following line in the Tektronix.Aurora.MasterController.Services.exe.Config file:
`<add key="AuroraAPIJobPriority" value="9" />`

Minor new features

Improves the detection of MPEG-audio tracks.

Known issues

- TekMOS test is not available for video resolutions higher than HD (1080p).
- Audio Loudness Correction is not supported for the Dolby E audio format.
- Audio Loudness Correction test (Test 6003.005) when combined with performance improvement markers SOM/EOM and Pre-roll/Post-roll, ignores the markers and applies correction for the entire track.
- The following are not supported when using Amazon Simple Storage Services (S3):
 - Audio Loudness Correction
 - Supplemental IMF Packages
 - Move to S3 location based on Job result