BATON Release Notes

Windows Enterprise

April 2023

This is **BATON Enterprise** version **8.4** for installation on **Windows 64-bit** platform.

The details of features added in **BATON Enterprise** version **8.4** are listed, in the following sections.

Procedure for installing BATON is available in *BatonInstallationManagerGuide.pdf.*

- BATON help is available as an online help. After BATON installation, click the help icon available on BATON's home page.
- The BATON API help is available as *BatonAPIHelp.pdf*.

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Table of Contents

FORMATS SUPPORT **3**

NEW FORMATS 3
ENHANCEMENTS 3
NEW CHECKS 3
Elementary Audio Video Essence *3*

TEST PLANS **4**

ENHANCEMENTS 4
Algorithm Improvements *4*
Video Quality 4
Container Checks *4*
MPEG2 Transport Features 4
TEST PLAN VERIFICATION OPTIONS 5

BATON SETTINGS **5**

AUDIO SETTINGS 5

APIS **5**

ENHANCEMENTS 5
REST/XML-RPC *5*

CONFORMANCE CHECKS **6**

NEW CHECKS 6
ENHANCEMENTS 6

OTHER IMPROVEMENTS **7**

AC4 AUDIO 7
BATON DIAGNOSTICS 7
IMF PACKAGE SETTINGS 7
BATON INSTALLATION MANAGER GUIDE 7
PRODUCT UPDATES 8

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Formats Support

New Formats

Support added for:

- REDCODE Audio

  This is a licensed feature. There is a separate license available, named **BatonREDCODEAudio**, to analyze REDCODE Audio format files.

- VENICE/CineAltaV bitstream types for SonyRAW video format

To know more, refer Online Help> Introduction to BATON> Formats Supported

Enhancements

- New structure of **ARRIRAW** file supported in multi-core mode
- Enhancements done for **DPX** formats:
  - Decoding of 12-Bit files is added
  - Decoding of 10-Bit files is upgraded to handle log colorspace
- Support extended to decode 16-Bit TIFF format files

To know more, refer Online Help> Introduction to BATON> Formats Supported

Test Plans

New Checks

Elementary Audio Video Essence

- Detect and report **Bed Count** in Dolby Atmos audio file
  Audio beds are channels, similar to the channels in 2.0, 5.1, 7.1, etc. configurations. **Bed count** refers to the total number of beds in each Dolby Atmos frame.

To know more, refer Online Help> Understanding BATON > Understanding Checks in BATON > Elementary Audio Video Essence Checks > AC3 Audio Features > Detecting Bed Count

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Test Plans

Enhancements

Algorithm Improvements

Video Quality

- Algorithm for the following **Video Quality** checks improved:
    - QR Code
    - Ghosting Artifact
    - Defective Pixel
    - Black Bars
    - Video Dropout
        - Frame/Field Corruption
        - Concealment Artifacts (High Sensitivity)
        - Block Distortion
        - Checkerboard Pattern

Container Checks

MPEG2 Transport Features

- Enhancements done in **DVB** Subtitle check:
    - New sub-checks added to report subtitle dropout errors, as mentioned below:
        - **Dropout Lead-in**: Detects any subtitle dropout issue that occurs at the start, from the first frame of the subtitle file. This also includes the situations where the subtitle and video have no overlap.
        - **Dropout Lead-out**: Detects any subtitle dropout issue that occurs at the end, from the last frame of the subtitle file
    - Existing sub-check **Dropout persists** is renamed to **Dropout During the file**

To know more, refer Online Help> Understanding BATON > Understanding Checks In BATON > Container File Formats > MPEG2 Transport Features > Detecting DVB Subtitle

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Test Plans

Test Plan Verification Options

- Support enhanced for optimized multicore analysis when reading files directly from cloud locations.
  For this, a new setting **Use Multicore Optimization** is added in the Test Plan Settings.

To know more, refer Online Help> Setting up BATON > Setting Test Plan Verification Options > Setting Verification Options > MP4 Settings > Multicore Optimization

BATON Settings

Audio Settings

- Support extended to check number of channels for all audio checks. Currently, audio checks can be set only for the content having 2, 6 or 8 audio channels.

To know more, refer Online Help> Setting up BATON > Setting up Test Plans > Editing Existing Test Plans > Editing Sections > Mapping Sections

APIs

Enhancements

REST/XML-RPC

- Support added to mark and unmark errors in a specified media file using the `reviewAction` method

To know more, refer BatonXMLRPCAPI Guide

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Conformance Checks

New Checks

- **Conformance check: 3030** added in MPEG-2 Transport container section to report an error DVB SUBTITLE PTS ERROR if the PTS value of the first PES packet of a DVB subtitle stream in an MPEG2-Transport stream is greater than the total file duration. The error contains the PTS value of the first PES packet, stream Id and file duration.

  Note: This conformance check is disabled while performing **Spot Checking** and **Partial Verification**

- **Conformance check: 8149** added in Dolby Atmos section to report an error if the output channel configuration is not supported for Dolby Atmos format files.

- **Conformance check: 7532** added in the BWF Audio section to report an error if the decoded data size of a file is not equal to the encoded data size for BWF audio format files.

Enhancements

- **Conformance check: 10501** enhanced to report irregular frame rates only once.
  With this, the message displayed while reporting the error is updated to "*Multiple entries detected in the time to sample table(stts). This will lead to an irregular frame rate. Average frame rate was found to be %.2f.*"

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Other Improvements

AC4 Audio

- Spot-checking feature is now available for analysis of AC4 files

BATON Diagnostics

- The default value of cleanup policy is now 7 days

IMF Package Settings

- Improvements done to handle BATON efficiency if multiple Version Package files (VF) of the same Original Version Package file (OV) exist in an IMF package.
  Now, if a VF file is scheduled whose OV file is already analyzed by BATON with the same Test Plan, instead of repeatedly QCing all the tracks in VF file, BATON uses the pre-stored information of OV files. And finally, BATON merges the report for OV tracks with the new VF report.

To know more, refer Online Help > Understanding BATON > Understanding Checks In BATON > Verifying DCP/IMF Formats

BATON Installation Manager Guide

- Steps added to:
  - Migrate the BatonCache server manually
  - Troubleshoot if rollback happens due to BatonCache failure

To know more, refer BatonInstallationManagerGuide.pdf

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Other Improvements

Product Updates

- BATON now backs up the cache data while taking full or incremental backups of the database.
  The cache backup files are compressed into a zip file and are stored in the same backup location as the database backup.

  To know more, refer Online Help> Setting up BATON > Setting up BATON Environment > Managing Access To BATON Services > Configuring Database Settings > Backing up the Database

- Improvements done in the Video Format check to detect combination of height and width of video format for the file having NTSC file format

- Test e-mails are now sent from all the VMs present in a cluster setup.
  Earlier, this support was available only for the VM where the user was logged in.

- **MainConcept Codec SDK** upgraded to **version 13.3** for enhanced decoding of AVC, MPEG4 and HEVC media files

- **Download speed improved** for file size greater than 16MB.
  This is done for downloading files locally from S3 location during QC and not valid for any file operations in Smart Folders

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