

Baton – Advantages

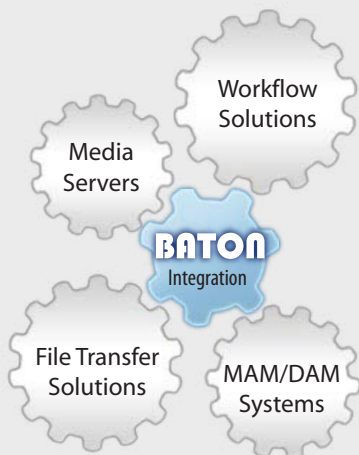
- Most Comprehensive Quality Checks
- Efficient Verification
- Enterprise-Wide Scalability

File-based digital media maximizes the potential for content monetization and operational efficiencies.

- **Content monetization potential** increases with a growing list of target consumer platforms across big screen, IPTV, Mobile TV for Prime-time, VoD, Travel and Re-runs
- **Operational efficiency improves** when correct content is assured, guaranteed despite multiple transformations across various stages of content lifecycle

In both scenarios, the content needs to be repeatedly verified for Quality Control (QC). Content QC includes verification for compliance to target platform specifications, media standards, government regulations, and perceptual quality.

Baton – Integration



Baton – Maximizes Monetization and Improves Efficiencies across Content Lifecycle

Baton – Users

- Broadcasters
- Post production Houses
- IPTV
- Satellite Companies
- Archiving Facilities

Interra’s Baton is an Industry Leading File-Based QC or Automated Content Verification Software solution. Baton has been widely adopted by global media companies all over the world. Major Broadcasters, Post production houses, IPTV, Satellite and Archiving companies use Baton for QC every day, for the following advantages:

- **Most Comprehensive Quality Checks** – Full range of checks for compliance to formats, media regulations, and content quality
- **Efficient Verification** – Easy to set up with extensive support for Test Plan management, debug, and reports. Designed to leverage compute power and optimize verification runs.
- **Enterprise-Wide Scalability** – Large, high-volume content verification across multi-markets, multi-stages on multi-platforms. Integration ready, with clustering and high availability.



With Dolby certified AC-3, DD Plus, Dolby-E analysis

Baton - Salient Features

High Level Features

- Web based, Enterprise class solution
- Efficient verification leveraging available compute power
- High availability and clustering for 24x7 reliable QC
- Efficient Partial and Growing file verification
- Intuitive environment to speed up usage, scheduling of tasks, Test Plan setup, and fast debugging with media player
- Audio Loudness Correction - for regulatory compliance
- Web Services API to integrate with Media Servers, Transcoders, MAM, and Archiving solutions

Verification and Reporting Features

- Compliance to media standards and regulatory requirements
- Quick Test Plan setup and change management
- Extraction and verification of parameters and metadata in the content
- Reports in HTML, XML, PDF, Excel
- Incremental reports of tasks in progress
- Quick content profiling without verification
- Integrated Media Player for enhanced debugging

Task Scheduling and Monitoring Features

- Easy integration with content servers
- Watch folder for quick automation
- Priority-based scheduling of tasks
- Task scheduling strategies to handle verification load
- Utilities to manage disk usage

Automation of Post Verification Actions

- Email, TCP, UDP alerts
- Moving of files to playout or quarantine

Baton Quality Checks – Sampler

- Container Checks**
- Content layout
 - CableLabs VoD compliance
 - Play time
 - File size
 - Packet size
 - Teletext
 - Ancillary data
 - Number of audio/video streams
 - ARIB specifications
 - Digital Cinema compliance
 - TR101 290
 - AS02 compliance

- Video Checks**
- Frame rate
 - Bit rate
 - Frame size
 - Aspect ratio
 - Duration
 - Resolution
 - Video format
 - Picture scan
 - Color format
 - Close caption
 - Blockiness
 - Cadence
 - Freeze frames
 - Black frames
 - Black bars
 - Color gamut
 - Flashy video
 - Luma/Chroma levels
 - Brightness
 - Contrast
 - Pixelation
 - Blurriness
 - White point
 - Drop frame
 - Combing errors
 - Block error
 - Stripe error
 - Upconversion
 - Field order
 - Video dropout
 - Image search

- Audio Checks**
- Silence
 - Clipping
 - Mute
 - Test tones
 - Phase detection
 - Wow & Flutter
 - Audio distortion
 - Jitter
 - Transient noise
 - High Frequency noise
 - Background noise
 - Loudness compliance (ITU, EBU, CALM Act)

Baton Formats Support – Sampler

- Workflows** SD, HD, Mixed workflows
- Media Containers** MXF, GXF, LXf, DVB/ATSC/MPEG-2 Transport, ASF, AVI, MPEG-2 Program/DVD VOB, 3GPP, 3GPP2, MP4, AVCFF, MOV, QuickTime, QuickTime Reference Movies, DPX, HLS
- Video Codecs** MPEG-2, IMX30/50, XDCAM, D10, D11, DV(25/50/100), MJPEG2000, DNxHD (VC-3), Uncompressed RGB (in QuickTime), H.264, MPEG-4, VC-1, Apple ProRES, PhotoJPEG, MPEG-A, MPEG-B, Uncompressed YUV, Cineform Video
- Audio Codecs** AC-3, Dolby Digital Plus, Dolby-E, MPEG-Audio, MPEG 2.5, MP3, BWF, AAC, AAC Plus, AES3, LPCM, ADPCM, AIFF, WAV, WMA (Standard & Professional), DV Audio

Baton – Enhanced Debugging

