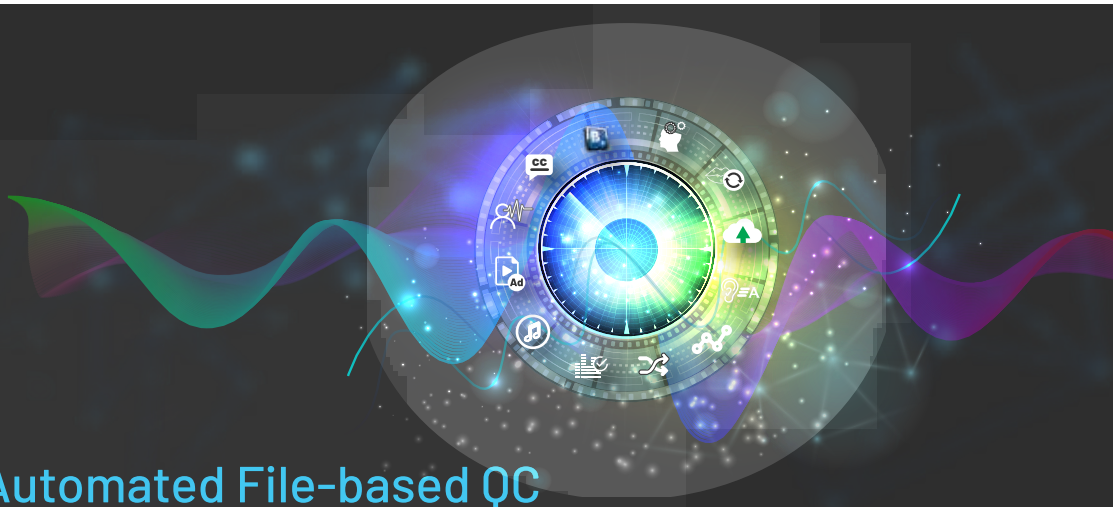
interra systems



BATON®

Enterprise-class Automated File-based QC

Interra Systems' BATON is the leading enterprise-class QC solution used globally by broadcasters, OTT, post production houses, IPTV and archiving companies working with file-based media. BATON is the trusted choice for all their file-based QC needs with its comprehensive quality checks, scalability, support for a wide range of media formats, and an intuitive web-based interface.

Why BATON

Hybrid QC Solution
BATON's unified hybrid QC platform implements organizational QC policy to support a combination of automated and manual QC checks. The result is a well integrated and efficient broadcast workflow

Video Ad Serving Template (VAST) Support
BATON is the industry's first QC solution to support VAST protocol, a universal XML specification for serving digital video ads to players, with an extensive feature set and support for comprehensive quality checks

Unmatched 4K Content Verification Speed
BATON offers comprehensive quality checks optimized for performance

Cloud QC Enabled
BATON works seamlessly with popular cloud computing infrastructure services

Highly Responsive and Fast Interface
BATON supports the latest technology that makes it a highly responsive and faster solution to perform all the QC operations. With the efficient database handling capabilities, BATON proves to be a trusted enterprise-class solution for content QC

Reliable QC with Comprehensive Quality Checks
BATON provides the most comprehensive checks covering standards compliance, regulatory checks and baseband checks in the industry, including PSE/flashiness checks

Scalability and High Availability
BATON's scalable architecture lets users expand the BATON farm as their QC needs grow. BATON's high availability ensures that the system continues in the enterprise environment even if one of the hardware components is down

Wide Integrations
BATON provides the most comprehensive integrations with media servers, transcoders, MAM, archiving and workflow solutions through its easy to use web-services based APIs

Manual QC
BATON supports Manual QC to manually perform quality checks on content

Pre-configured Multiple Delivery Formats
BATON ensures ease of deployment with pre-configured testplans for DPP, Netflix, CableLabs and a full list of delivery standards

Multi-Segement ABR Transcoding
BATON performs ABR specific checks on large volumes of VOD files, encoded at different bit rates, to ensure that the prepared content meets service provider and end-user quality expectations

Efficient Pre/Post-QC Workflow with Smart Folders
BATON provides a set of rich content aware, rules-based, pre/post-QC filters for efficient content verification workflows

Multi-lingual Reporting
BATON provides the most comprehensive and completely configurable reporting in multiple formats to suit your operational needs. Reporting languages include English, Chinese, Portuguese, Spanish and French, among others

API Driven
BATON provides extensive REST API support for integration with automation systems and custom workflows

Extensive Subtitles and Closed Caption (CC) Data Verification and Audio Language Detection

BATON supports a host of subtitle and CC formats, both embedded and stand-alone. Verification includes dropouts, standards compliance, profane word detection, and many others. BATON can also perform multi-language checks of audio tracks

Loudness Detection and Correction

BATON detects loudness issues in compliance with standards including CALM, EBU and others, and provides options for loudness correction

Rich Set of Multi-severity Checks

BATON's unique multi-severity checks provide the ability to grade errors and configure actions based on the severity of the problem

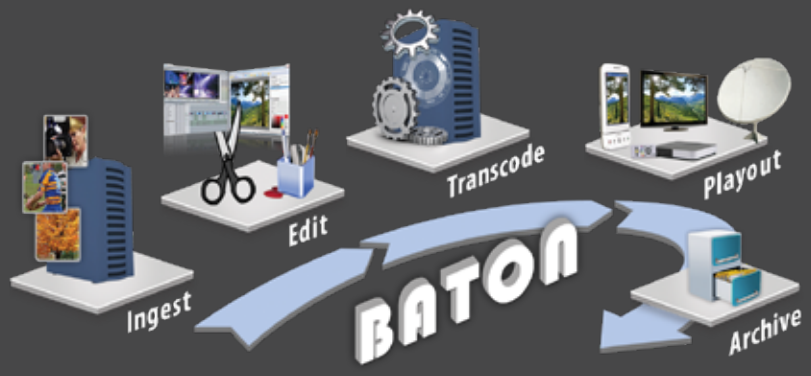
Auto-scaling

BATON offers auto-scaling functionality, both in the cloud and on-premise to scale up/down dynamically to meet growing QC requirements

ICS – BATON

Available as an on-demand content verification service over the cloud

Improves Efficiencies Across Content Lifecycle



BATON Key Features

- A comprehensive ML/AI enabled QC solution, available for Windows
- Hybrid QC platform with a combination of automated & manual QC checks on content
- Supports SD, HD, UHD, 4K Mixed workflows
- Intuitive, simplified and a very user-friendly Web-based user interface
- Extensive time code related checks including start TC /discontinuity / GOP / LTC, VITC and more
- Leading-edge cloud capability to ensure speed and stability
- Built-in Test Plans for various Standards and Workflows such as DPP, iTunes, Netflix, Cable Labs, ARD_ZDF, Ingest, Playout and more
- First QC system to support VAST formatted ads
- Supports S3, Spectrum, Avid Interplay, Google Cloud Servers, HTTP Server and Dropbox
- Efficient integration with media servers, transcoders, MAM archiving and workflow solutions through its easy to use web-services based APIs
- Support for Hybrid deployment
- Supports audio language detection for 25 languages
- Scalable architecture for expansion of the BATON set up as QC needs grow
- Available as a subscription-based service for automated QC of file-based content
- Rich reporting features:
  - Multi-language reports in HTML, XML, PDF and Excel
  - Reports based on analytics, timeline, content structure and thumbnails
  - Incremental reports of tasks in progress
  - Compact reports to analyze verification summary
  - Options to comment, tag, rate and compare reports
  - Configurable e-mail, HTTP alerts including SNMP
- Supports user management & access control
- Comprehensive solution for task scheduling & monitoring
- Support for SOAP, XML-RPC, and REST APIs
- Equipped with BATON diagnostic tool, which gives bird's eye view of BATON's performance
- Integration with Relay – Interra Systems' Workflow Management Tool, to customize workflows

BATON Checks Support

Container Checks
Content layout, Slates, Closed Caption, Duration, File size, Audio/Video duration mismatch, Compare System to elementary metadata, Timecode checks, Teletext, Packet size, Ancillary data, Number of audio/video streams, Synchronization

Compliance Checks
DPP compliance, Digital Cinema compliance, IMF compliance, CableLabs VOD compliance, ARD_ZDF_HDF compliance, AS02 / AS03 / AS10 / AS11 compliance, TR101 290, ARIB specifications, DPI compliance

Video Checks
HDR Quality checks incl. SMPTE 2084 EOTF, lightness level (MaxFALL and MaxCLL), ST 2086, and ITU-R BT. 2020 compliance etc., Frame rate, Bit rate, Frame size, Aspect ratio, Duration, Resolution, Video format, Picture scanning type, AFD, GOP, Color format, Quantization parameter, Blockiness, Blurriness, Moiré pattern, Mosquito noise, Pixelation, Ringing artifact, Telecine/ cadence analysis, Combing errors, Field dominance, Field order, Duplicate frames, Freeze frames, Motion jerk, Ofcom- compliant Flash/PSE (Flashy Video), PSE (Flashiness detection in HDR content), Action safe area, Black bars, Black frames, Blank frames, Color bars, Color banding, Credits, Ghosting artifact, Image presence, Shot transition, Color gamut, Upconversion, Luma/Chroma levels (IRE/millivolts/pixel values), Video noise, Chroma change, Defective pixels, Halfline blanking, Video dropout, Brightness, Contrast, White point, 3D experience, Image tilting, Burnt-in text detection, VBI Lines detection, Flicker, Logo detection, Offline media, Pattern noise, Black and white frames, Sawtooth artifact, Digital ghosting artifact, Scratch artifact, De-interlaced jerk, Flicker, Frame jump, Compression score, Aliasing, Pulldown judder, Solarization, Half flash, Pulsing noise, Composite signal level, Progressive segmented frame(PsF), Frame jump, Content complexity, Missing subtitle, Age rating, Lead-in/Lead-out credits, QR code

Audio Checks
Kantar BVS watermark, Audio language detection, Audio level (Min, max, avg), Dialnorm, Level mismatch, Loudness compliance (ITU, EBU, CALM Act, OP59, ARIB) (BS.1770-1, -2,-3), PPM meter, Silence, Crackle, Background noise, Colored noise, High frequency noise, Jitter noise, Line Pattern noise, Transient noise, Overmodulation noise, Echo, Wow & Flutter, Audio Impulsive noise, Nielsen & Cinavia watermark, Click and pop, Clipping, Audio dropout, EAS tones, Misplaced channels, Phase detection, Stereo pair detection,Test tones, DPLM, Bitdepth upconversion detection, Repetitive pattern detection, Spectral aliasing detection, Audio impulse noise, Teletrax watermark, Basic alignment of speech with captions detection, Reverb, Beep, Multi reel audio click noise, Low pass filter

Data Checks
Subtitle analysis and language detection, Burnt-in text detection and analysis, Closed Captions, DPI messages. Display duration, Character count, Spell check, IMSC1 profile validation, Character code table, Subtitle position, Caption/Subtitle aignment, Dropout, Display duration, 608/708 Specific checks, XDS checks

Note:
Some of the checks and codecs listed above are not part of the base package and need to be purchased separately

BATON Formats/Codecs Support

Container Checks
MXF (All OP, OP-Atom), MP4, 3GPP, AAF, QuickTime (incl. reference files), MPEG-2 Transport (ATSC, DVB), MPEG-2 Program/DVD VOB, GXF, LXF, ASF, AVI, Matroska, VAST, Encrypted DCP, WebM, P2 Package, Dolby Vision Metadata

ABR Formats
Apple HLS, MPEG DASH, Microsoft Smooth Streaming (ISM)

Video Codecs
HEVC/H.265, H.264 (incl. AVC-Intra 100/50, Sony XAVC), MPEG-2 (incl. IMX30/50, XDCAM, D10), DV (25/50/100), VC-1, MJPEG2000, MPEG-4, MPEG-4 SStP, MVC, Frame sequential H.264, DNxHD (VC-3), Apple ProRES, Cineform, PhotoJPEG, MPEG-A, MJPEG-B, RGB, Uncompressed YUV, Canopus HQ and HQX, J2C, DPX, Avid Meridien, Apple Intermediate codec, Compressed JFIF, RED, DNxHR, SonyRAW (F55, F65, VENICE, CineAltaV), ARRIRAW, AVS, M101, EXR, Sony X-OCN profiles

Audio Codecs
Dolby AC-3, Dolby Digital Plus, Dolby-E, MPEG Audio, Dolby Atmos, MPEG 2.5, MP3, BWF, AAC, AAC Plus, AES3, LPCM, ADPCM, AIFF, WAV, WMA (Standard & Professional), DV Audio, DTS Audio, Vorbis, Dolby AC4 Audio, Dolby Atmos encapsulated as ADM BWF, Dolby Atmos Master Format (DAMF), REDCODE Audio, IAB IMF

DRM Support
Widevine, FairPlay, PlayReady

Image Formats
JPEG, GIF, TIFF, Targa, Kodak Cineon, PSD, PNG, DNG, JPF, ARRIRAW

Text Formats
CEA-608, CEA-708, Line 21, Timed Text / DFXP, SCC, STL, SMI, SRT, WebVTT, SMPTE 2052, SSA/ASS, IMSC1 Subtitles, iTunes Subtitle, CineCanvas, IMSC1, DCDM Subtitle format, EBU-TT, ARIB subtitles



24x7 Post Sales Support
BATON's renowned technical support is available anytime to ensure users are always up and running.

Interra Systems, Inc.
1601 S. De Anza Boulevard, Suite 212, Cupertino, CA 95014
Toll Free no.: (1-877) BATONis (1-877-228-6647)
Phone: +1 408 579 2000 | Email: baton_info@interrasystems.com
www.interrasystems.com

© Interra Systems, Inc. All rights reserved.