Content quality verification needn't give you headaches any more
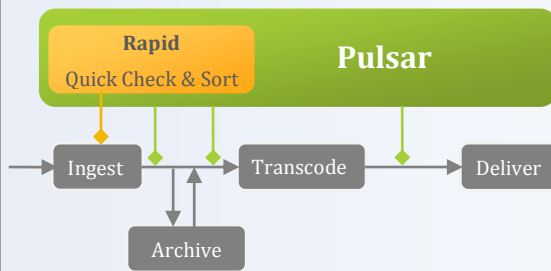
Pulsar makes it incredibly simple.

Pulsar
Automated Content Verifier

Quick verification of large content volumes

Achieve more with same resources

Automate detection of issues like blockiness and loudness

Automatically detect faulty content

Rapid
Quick Check & Sort

Pulsar

Ingest → Transcode → Deliver

Archive

Industry's fastest & most flexible Automated QC solution for rapid QC, sorting and in-depth verification

Broadcast
Post Production
Archiving
IPTV/Cable

- 4x real-time HD Analysis
- Browser based interface
- User-defined templates (General & Adaptive)
- Hot folders (General, Live, Virtual)
- Monitor, Re-prioritise, Pause, Resume and Cancel jobs
- XML/PDF reports with thumbnails
- Web-services APIs for integration
- Configurable parameter checks
- Email alerts

Industry is fast migrating to file based content workflows. Early identification of content issues, related to its structure (like profile/level, aspect ratio, bit-rate etc) or quality (like blockiness, freeze frames, loudness etc) results in fast turnaround and increased business capacity.

Pulsar helps you ensure consistent content quality and simplifies technological and operational challenges associated with file based QC. You can now perform integrated QC across content types and stages in your workflow, reducing dependency on specialized skills and using existing resources more efficiently.

BENEFITS

Fastest - Each Pulsar Professional unit can verify up to four simultaneous files and one HD file can be analyzed at unmatched speed of 4x real-time.

Configurable - Pulsar allows you to create your own templates with pre-defined rules and checks to verify the content. A template can be applied to the content depending on content type or stage in the workflow.

Ease of Use - Pulsar's intuitive interface allows fast operations, including the ability to add, re-order streams in the queue, and review results from the analysis. Reports show stream information, as well as green, yellow or red title bar for each stream. Frame shot along with time-code is available for error locations.

Versatile – With support for broadcast and streaming formats along with capability to perform Rapid QC, Sorting and in-depth QC, Pulsar is the most versatile Automated QC solution.

Flexible and Scalable - Each seat of Pulsar includes the complete analysis engine, as well as the ability to interface with other instances of Pulsar, allowing you to set-up a daisy-chain environment for as many simultaneous streams as you need.

Rich Analysis Features – Audio and video quality analysis features ensure that your content doesn't contain undesired mute, peak, drop and silence zones and that the loudness levels are not violating levels recommended as per R128 or CALM. You can also check for tricky video issues such as Blockiness and Digital Hits.
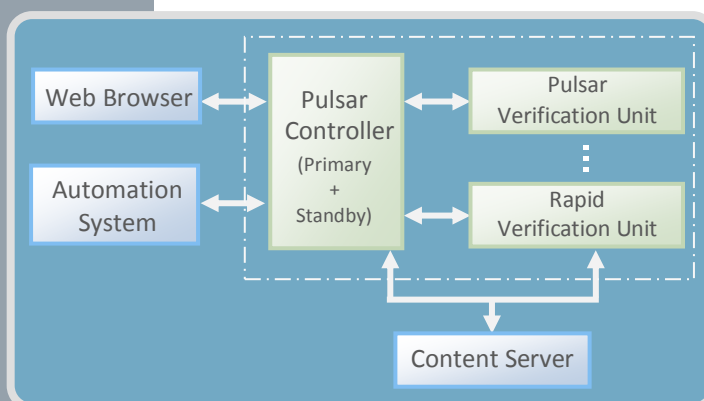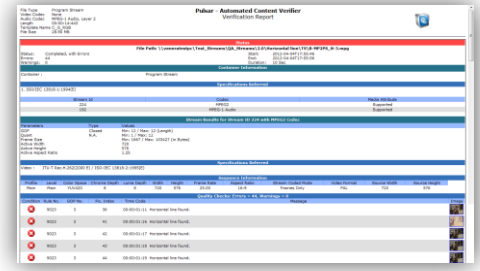
Multi-User – Ability to create multiple users in the system along with configurable privileges allow you to tailor Pulsar to your corporate policies.

Adaptive Bitrate Content Analysis – Simple, Integrated analysis & reporting for formats such as HLS and Smooth Streaming. Pulsar works directly on manifest files with user configurable adaptive streaming templates for auto template assignment.

Track Layout – Analysis of track structure with user-defined track layout. Can be used to verify the layout of content as well as exclude specific portions of the content from analysis, reducing unnecessary alarms.

Essence/Segment Detection – Automated detection of beginning and end of essence; or audio-visual segments based on user-defined criteria. This significantly reduces manual intervention.

High Availability – With its 'Controller Plus' module, Pulsar can be installed with redundancy so that a standby Pulsar unit can automatically take over in case of hardware failure, ensuring 24x7 operations.

PICK HIT
BroadcastEngineering
2013

Web Browser

Pulsar Controller (Primary + Standby)

Pulsar Verification Unit

Automation System

Rapid Verification Unit

Content Server

Pulsar
Automated Content Verifier

EDITIONS

	Professional	Standard
No of Parallel Files	4	1
Video Checks/Formats	All	All
Audio Checks/Formats	All	All
Container Formats	All	All
Multi-core	✔	✘
Dolby-E	✔	✔
Controller Plus	✔	✘
Rapid	✔	✘

Product feature list (left column):

- In-depth Verification, Rapid QC and Sorting
- iTunes compliance and correction
- Simple, Integrated Adaptive Streaming Content Analysis
- Quarantine or pass jobs by moving, deleting or renaming files under test
- Multi-stream analysis
- Multi-User system
- Wide conformance & quality checks
- Wide format support – Broadcast, New Media & Adaptive Streaming
- Controller Redundancy – automatic take-over in case of hardware failure
- Run as a Windows Service

Dolby Certified Engine Inside

Pulsar Rapid
Optional module that performs rule-based rapid QC and sorting of content. Rapid can be used at stages that don't require in-depth QC to significantly reduce human intervention and to boost the overall throughput of your workflow.

TECHNICAL SPECIFICATIONS

Formats

Container	MXF, GXF, LXF, MOV, MP4, 3GPP, MPEG-2 TS, MPEG-2 PS, FLV, WMV, AVI, WAV, BWF, AIFF, DPX, JP2, Smooth Streaming, HLS, Elementary
Video	H.264/AVC, MPEG-2, VC-1, D10, XDCAM, HDCAM, DV, DVCPro25, DVCPro50, DVCPro100/HD, AVC-Intra 50/100, Avid DNxHD (VC-3), Apple ProRes, JPEG-2000, RGB, YUV
Audio	LPCM, AES3, AC3, SMPTE 302M, DD+, MPEG-1/2, AAC, HE-AAC, WMA (Standard & Professional), Dolby-E

Verification Checks

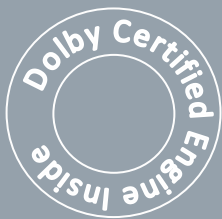|	
Verification	Codec Specifications, Readymade templates for CableLabs, DVB, iTunes, DPP
Video Parameters	Codec, Video Format, Chroma Format, Colour Matrix, Scan Mode, Duration, Frame Rate, Resolution, Display Aspect Ratio, Pixel Aspect Ratio, GOP Length, GOP Type, Field Order, Frame Sizes, Buffer Size, Bitrate (CBR/VBR), Profile/Level, Entropy Coding, Reference Pictures, MBAFF, Timecode Discontinuity
Video Quality	Black Frames, Blockiness, Brightness, Colour Bars, Colour Gamut, Combing, Dead Pixels, Digital Hits, Field Dominance, Freeze Frames, Luma/Chroma levels, Half/Full lines, Letter/Pillar Box, Active Picture Size, Black Bar, Coloured Frames
Audio	Codec, Sampling Frequency, Quantization Bits, Channels, Bitrate (CBR/VBR), Drops, Silence, Mute, Test Tones, Loudness (R128, CALM), Loudness Range, Dialnorm, Peaks (DBFS, PPM), True Peak, Clipping, Phase Mismatch, Artifact
Container	Conformance, File Size, No of streams, Incorrect extension, Container/Essence cross checks, PIDs, SCTE35, PCR Jitter, PID Bitrate, Packet Intervals, Packet Length, PID Usage, PAT/PMT checks, PASP, GAMA, CLAP, FIEL, COLR, Track Properties, Channel Configuration, MD5
Meta-data	Closed Captions (608/708), AFD, Bar, V-Chip, Teletext
Correction	Automatically detect and correct QuickTime meta-data mismatch issues

Rapid Checks

File Rules	Incorrect extension, File Size, Invalid file characters
Video	Codec, Video Format, Chroma Format, Colour Matrix, Scan Mode, Duration, Frame Rate, Resolution, Display Aspect Ratio, Pixel Aspect Ratio, Profile/Level, Bit Depth, Buffer Size, Entropy Coding, Reference Pictures, MBAFF
Audio	Codec, Sampling Frequency, Quantization Bits, Channels, Profile
Container	Format, No of Video/Audio streams, Track Duration, PASP, GAMA, CLAP, FIEL, COLR, Channel Configuration

Venera Support
We are committed to providing superior support to all our customers. We are flexible in our approach and willing to go the extra mile to ensure customer satisfaction. Our success is in our customer's delight.