



Automated Video Quality Check

QScan is a family of fully-featured, comprehensive, file-based Automated Quality Control solutions that tests media content for a vast array of faults or errors. From the entry level QScan One (with single file processing), to QScan Pro (that can test four files concurrently), right up to the enterprise level QScan Max, there is a solution for any business or workflow. Suitable for online, VOD and broadcast content, QScan has an intuitive web-based user interface that allows users to set up templates for testing in minutes.

General Features

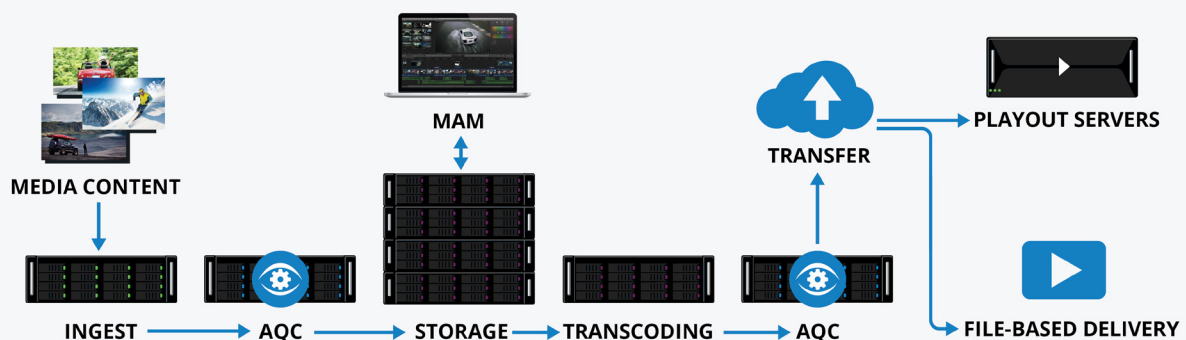
- ▶ Efficient, fast, intuitive, visual & robust web-based system
- ▶ Scalable for growing workflow environments
- ▶ Hardware / CPU efficient
- ▶ Multi-Level reporting environment
- ▶ Built in templates for ease of compliance checking
- ▶ Single pass analysis takes the guesswork out of setting test thresholds
- ▶ Simultaneous multi-user support with different permissions
- ▶ Leading edge multi-format and multi-parameter analysis
- ▶ Pre-roll/post-roll and TC-in/TC-out event configuration
- ▶ Cloud-ready web based software
- ▶ API available

Main Advantages

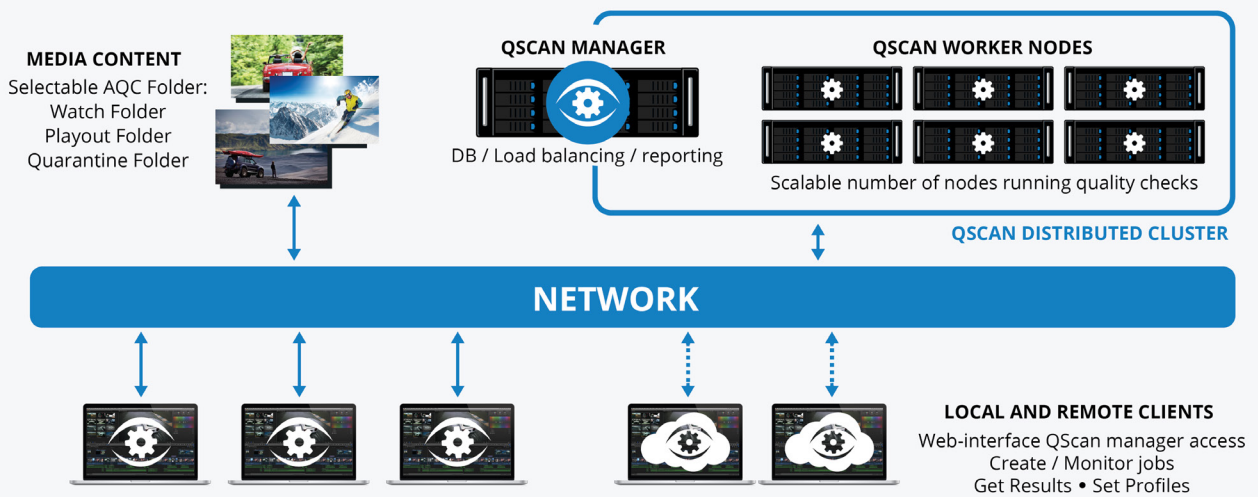
- ▶ Efficient iterative analysis: analyze once, change your threshold multiple times
- ▶ Parallel analysis of multiple simultaneous sources
- ▶ Supports unique parameters, i.e. digital dropouts, dead pixel detection
- ▶ Clustering and modular architecture, easy load balancing
- ▶ Allows analysis of YouTube videos directly from URL
- ▶ Straight-forward API for seamless integration in third party applications
- ▶ Graphic timeline chart of measured parameters with one click access to frame view

Technical Features

- ▶ Support for most standard formats including HEVC for compressed 4K content
- ▶ User definable macros
- ▶ Audio loudness analysis including EBU R128
- ▶ Closed caption detection
- ▶ AS-11 UK DPP template including PSE testing to ITU BT-1702
- ▶ Enhanced syntax error detection
- ▶ Web based system allows local and remote use
- ▶ Access to networked content repositories
- ▶ In-depth analysis of contents with frame/waveform detailed view
- ▶ Database storage of measured parameter values
- ▶ Reporting of time codes and frame references
- ▶ UNICODE support for extended character sets
- ▶ RESTful API with simple JSON objects and informative HTTP messages
- ▶ HTML, PDF, XML and e-mail reporting with event edition/removal by the user
- ▶ Combine previously saved templates for faster creation of new analysis profiles
- ▶ Graphic timeline chart of measured parameters with one click access to frame view



QScan AQC workflow



QScan Scalability: Network

Application Scenarios

- ▶ Delivery compliance to many local and global standards
- ▶ AQC for any workflow process (ingest, transcode or delivery)
- ▶ Content provisioning and Media Servers
- ▶ Integration in encoding/transcoding tools
- ▶ Integration in video edit tools
- ▶ Playout content health-check
- ▶ Audio and video breakpoint detection
- ▶ AQC for DVD Authoring processes

QScan AQC Specifications

BASEBAND/WAVEFORM

Gamut Errors
Highest Luminance Level
Lowest Luminance Level
Brightness
Contrast
Luma Footroom Violations
Luma Headroom Violations
Chroma Headroom Violations
Highest Chroma Level

VIDEO CONTENT

DigiBeta Error
Digital Dropouts
Luminance Line Errors
Chrominance Line Errors
Picture Quality Score
Flash/Strobe Detection
PhotoSensitive Epilepsy
Dead Pixel Detection
Noise Detection

FRAME STATISTICS

Picture Coding Type
Is Keyframe
Bytes Per Frame
Stream Syntax Errors

VIDEO CONTENT

Blackness
Freeze
Blockiness
Blurriness
Interlacing Artefacts
Field Order
Temporal Complexity
Field Dominance Errors
Test Pattern Detection
Constant Color Frame Detection
Letterbox and Pillarbox Detection

AUDIO

Level
Mute
No Audio
Clipping
Sample Clipping
Loudness

FORMAT CHECKS

Container Format
FileSize
Video Codec
Duration
Resolution
Video Bitrate
Frame Rate
Video Absence
Pixel Format
Coded Aspect Ratio
Display Aspect Ratio
Audio Codec
Audio Bitrate
No. of Audio Streams
No. of Audio Channels
Sample Rate
AS-11 UK DPP Compliance Check
Support for AQC of IMF packages