



**QUALES QC: Comprehensive video quality check system for small, medium or large environments**



## Automated Video Quality Check

QUALES is a fully featured, comprehensive Video Quality Check system with the best cost-effective value proposition intended for small, medium, and large environments. Suitable for online and broadcast content; provides a straight-forward web-based and visual health check system for media, ensuring content readiness in all phases of your workflow. Available Standalone and Cloud Service.

### General Features

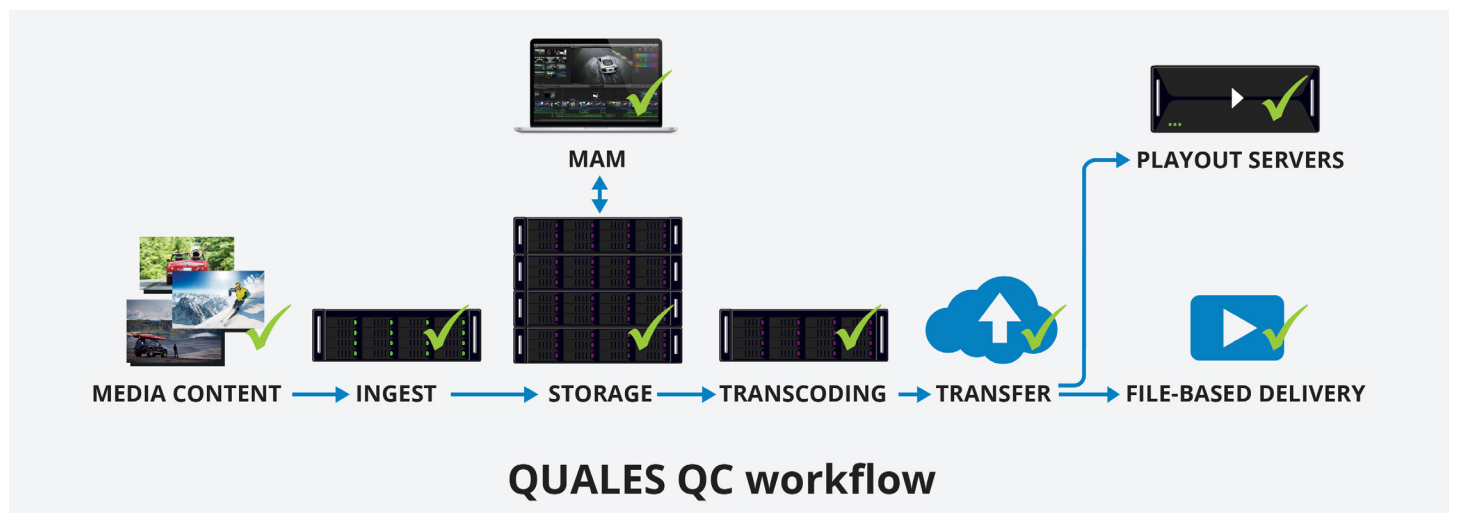
- ▶ Efficient, fast, intuitive, visual and robust web-based system
- ▶ Scalable for growing workflow environments
- ▶ Hardware / CPU efficient
- ▶ Multi-Level reporting environment
- ▶ Analysis from live sources
- ▶ Simultaneous multi-user support
- ▶ Leading edge multi-format and multi-parameter analysis now with DPX support
- ▶ Pre-roll/post-roll and TC-in/TC-out event configuration
- ▶ API available

### Main Advantages

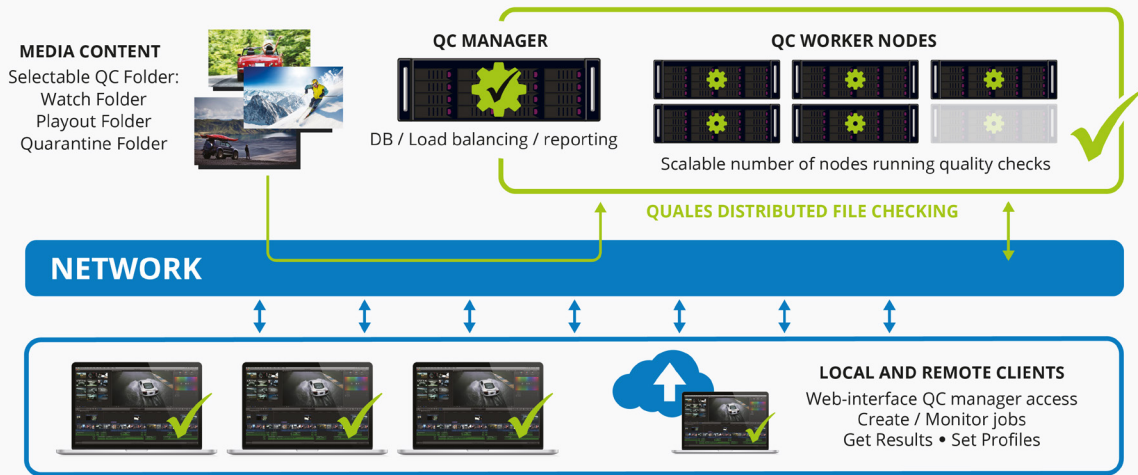
- ▶ Fast, accurate and simple to configure
- ▶ Efficient iterative analysis: analyze once, change your threshold multiple times
- ▶ Parallel analysis of multiple simultaneous sources
- ▶ Supports unique parameters, ie.: digital dropouts, dead pixel detection
- ▶ Allows analysis of YouTube videos directly from URL
- ▶ Straight-forward API for seamless integration in third party applications
- ▶ Clustering and modular architecture, easy load balancing
- ▶ Cloud-ready web based software

### Technical Features

- ▶ Support for most standard formats including HEVC for compressed 4K content
- ▶ Audio loudness analysis including EBU R128
- ▶ Closed caption detection
- ▶ PhotoSensitive Epilepsy compliant to OFCOM recommendations
- ▶ 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



**QUALES QC workflow**



### Quales Scalability: Network

### Application Scenarios

- ▶ QC in all stages of Broadcast workflow
- ▶ Content provisioning and Media Servers
- ▶ Integration in encoding/transcoding tools
- ▶ Integration in video edit tools
- ▶ Playout content health-check
- ▶ Audio and video breakpoint detection
- ▶ QC for ingest processes
- ▶ QC for DVD Authoring processes

## Quales QC 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

#### 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
Field Order
Loudness

#### FORMAT CHECKS

Container format
File size
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

#### FRAME STATISTICS

Picture Coding Type
Is Keyframe
Bytes per frame
Stream Syntax Errors