AutoCheck

Automated High Volume Media Tester

Delivering powerful and responsive analysis for optimum video

Organizations in broadcast and digital media industries deal with volumes of media content, in different formats, and with a variety of different standards. Managing and ensuring content integrity and quality is a challenge that broadcasters, cable network operators, IPTV, and digital media providers face on a daily basis. Furthermore, the pressure to increase operational efficiencies force organization to find ways to streamline processes within the digital media development process.

Many of these digital media companies struggle to manage their file-based content and workflows. Quality of Experience is the most important factor in retaining your valuable customers. So how should companies ensure that their compressed content is error-free after going through the whole production workflow?

Automated File-Based Quality Assurance

AutoCheck is an automated file-based content validation and quality assurance system that is designed to give companies the greatest flexibility in their file based quality assurance strategies. With high speed testing, large amount of media can be checked for misuse of encoding parameters, encoder errors, missing data streams, conformance errors, and data corruption during production.

With a web-based interface, AutoCheck easily integrates into media processing Workflows and provides flexibility for remote test monitoring and configuration.

Summary

AutoCheck is a highly optimized media approval processor that is designed to give companies the greatest flexibility in their file based quality assurance strategies.

AutoCheck Applications

- IPTV, VOD
- Content Houses and Digital Media Providers
- Video Archives
- Encoding Farms
- Post Production House

For Organizations

- Catch problems before they reach customers
- Catch problems early in the workflow before time and resources are wasted on further processing
- Comprehensive bitstream testing at transport, video and audio level will ensure error-free output.
- Fully automated and optimized for high volume file throughput.
- Flexible profile setup to meet different test requirements.
- Easy integration into workflow with watch folders and scheduler.

AutoCheck Product Highlights

- Extremely fast conformance testing against large volumes of data
- Faster than real-time deep bitstream testing from transport level to the lowest encoding syntax coefficient level
- Intuitive web based user interface with detailed html reports on testing results.
- Schedule testing times to meet workflow requirements.
- Automatically check for the existence of Closed Caption, V-Chip and CGMS-A information.
- Check that media matches expected configuration including video compression type, resolution, bitrate and more.
- Highly customizable testing profiles and options

Recommended System Requirements (for one AutoCheck license)

- 500Mhz Pentium 3 (Recommend 2.0GHz Pentium 4 or higher)
- Windows 2000, Windows XP, Vista
- Processor speed: 3 GHz
- Memory: 4 GB RAM
- Ports: USB and Ethernet
- Hard drive: 50 GB

For Technical Users

- Intuitive web-based interface allows remote test monitoring and configuration
- Automate processes to minimize operator intervention
- HTML reporting, including detailed test results and detailed logs
- Integrate with MiraVid's MSight Media Analysis to provide a complete solution to find and analyze any problem and take quick action

AutoCheck Specification

File formats	TS, PS, SS, VOB, E-VOB, MP4, AVI, 3GPP, MOV, GXF, ASF / WMV, VES, AES,YUV
Video compression	H.264/AVC, MPEG-2, MPEG-4 Part 2, SMPTE VC-1
Audio compression	MPEG-1 / 2, AAC, HE-AAC, AC-3, SMPTE-302M, LPCM
System tests	TR-101-290, ISO-TS, ISO-PS, T-STD, P-STD
Video tests	Video conformance, VBV, HRD, black, freeze, grey
Audio tests	Silence, clipping, exceeding maximum level (user defined)
Video Parameter Checks	Profile, level, video width, video height, min bitrate, max bitrate, framerate
Audio Parameter Checks	MPA (Sampling rate, min bitrate, max bitrate, layer, channel mode) AAC (sampling rate, channel configuration) PCM (sampling rate)

VOD CEP 2.0 compliance test	MPEG-2 TS streams that contains MPEG-2 video (MPEG Audio is optional for HD profile). This test performs the following tests according to CableLabs VOD Content Encoding Profiles 2.0 Specification:
	▪ Video Encoding Specification
	▪ Closed Captioning/V-Chip Specification (Note: This test is the same as the CC and XDS Existence Test)
	▪ Audio Encoding Specification
	▪ MPEG-2 Systems Constraints
	  ○ Video PES Constraints
	  ○ Transport Stream Constraints
	  ○ Transport Bitrate constraints
	  ○ PSI Constraints
	  ○ PID Value Constraints
	▪ Standard Definition (SD) Encoding Constraints
	▪ High Definition (HD) Encoding Constraints

Closed Caption and XDS	NTSC caption data (Closed Caption and/or XDS data) carried over the following user data formats: ▪ ATSC-A53/EIA-708 ▪ SCTE-20 ▪ Dish Network ▪ Omneon This test checks the existence of the following contents: ▪ EIA/CEA-608 CC ▪ EIA/CEA-708 CC ▪ XDS VChip/Content Advisory ▪ XDS CGMS-A