



Introduction

Quasar® is an AI-powered, cloud-native automated A/V QC platform designed for high-volume media workflows. With dynamic scaling, it processes hundreds of files simultaneously, eliminating queues and speeding up delivery. It supports advanced QC checks including Dolby Vision, HDR, and IMF/DCP validation. Built with robust content security, Quasar is available as a managed SaaS or private VPC deployment, offering flexible, scalable, and cost-efficient QC operations.

Key Benefits



Formats

Container	MXF, GXF, LXF, MOV, MP4, 3GPP, MPEG-2 TS, MPEG-2 PS, FLV, WMV, AVI, WAV, BWF, AIFF, Smooth Streaming, HLS, MPEG-DASH, IMF, DCP, Elementary
Video	H.265, H.264 (incl. AVC-Intra 50/100 and SONY XAVC), MPEG-2 (incl. D10, XDCAM, HDCAM, IMX-30/50), VC-1, DV (incl. DVCPro25, DVCPro50, DVCPro100/HD), Avid DNxHD (VC-3), Apple ProRes, JPEG 2000, Canopus HQ/HQX
Audio	LPCM, AES3, SMPTE 302M, MPEG-1/2, AAC, HE-AAC, WMA (Standard & Professional), Audio stems, Dolby Atmos (ADM BWF, IMF IAB, DCP IAB)
HDR	Dolby Vision, HDR-10, HDR-10+, HLG

Verification Checks

General	Compliance, Factory templates - Netflix, DPP, ARD-ZDF, Loudness (R128, CALM, OP-59, ARIB), iTunes & CableLabs
Track Layout	Video Property: Black Frames, Color Bars, Freeze Frames, Slate Audio Property: Mute, Test Tone, Silence
IMF/DCP	CPL based analysis, Package validation, CPL cross checks, CPL checks, PKL cross checks, OPL checks, Assetmap check, IMSC checks, Sidecar checks
ABR	Playlist cross checks. Segment cross checks, Profile cross checks, Encrypted Packages
Video Bitstream	Codec, Video Format, Color space, Chroma Format, Color Matrix, Scan Mode, Duration, Frame Rate, Resolution, Display/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, Timecode frame drop, 2020 Color Space
Video Baseband	Black Frames, Blockiness, Brightness, Cadence, Chroma Hits, Chroma Line, Clipping, Colored Frames, Color Bars, Color Gamut, Combing, Credit Roll, Camera Dead Pixels, Dead Pixels, Digital Hits, Field Dominance, Flash Frames, Freeze Frames, Luma/Chroma levels, Cadence, Half/Full lines, Bar Artefacts, Letter/Pillar Box, Active Region, Photosensitive epilepsy (Harding),Low Video level, Low Black level, FBI Warning Card, URL detection, Postal Stamp, Slate Detection, QR code, Burnt-in Text, logo overlapping, Title Safe area, Grey Scale, Statistics, Freeze Frame with audio mute, Black Frames with audio mute, Chroma Saturation, Slate Metadata Reporting
Reference Based Analysis	Time Alignment, Ref-Q, SSIM, PSNR
HDR Parameters	HDR Formats, Reporting of HDR10, HDR10+, and Dolby Vision metadata Static Metadata: Verify (display Color primaries, mastering display luminance, content light level) Dynamic Metadata: Compliance, Validate HDR10+ metadata (MaxSCL, Average Max RGB, Distribution values, Tone-mapping information, Targeted system display maximum luminance), Validate Dolby Vision metadata (Metadata version, shot must not contain <0,0,0> in level 1 metadata, Detect duplicate dynamic metadata, Crosscheck canvas aspect ratio, Crosscheck Video track information, Crosscheck (Calculated/metadata) Image aspect ratio
Audio Bitstream	Codec, Sampling Frequency, Quantization Bits, Channels, Bitrate (CBR/VBR), Endianness Check, Duration
Audio Baseband	Drops, Silence, Mute, Test Tones, Loudness (R128, CALM, AGCOM, ARIB, Speech Gated), Loudness Range, Dialnorm, Sample Peak (DBFS, PPM), True Peak, Dual Mono, Clipping, EAS tone, Phase Mismatch, Language ID, LFE Validation, Mosquito Tone, Quasi Peak, Dolby Atmos rendering Validation, Speech Presence, Audio Level, Profanity, White Noise
Container	Conformance, Format, File Size, File Name Validation, No of streams, Incorrect extension MXF: Version, Operational pattern, Timecode presence/track count/mode/start value/source, Index table presence/location/ completeness/ correctness, Origin parameters, KLV alignment grid/fill elements, Partitions validity/Status/Completeness/Instance count/Index table presence/ Essence presence/Max length, Essence wrapping/external check/referencing/partition strategy, Audio track numbers/element size/channel count/ configurations, Descriptive metadata presence/scheme, Run-in sequence, Random index pack, Segmentation track, File package count, Index edit rate, Index duration, Audio/Video sample rate, Audio/Video stream type, Audio/Video edit rate, Video line map, System item presence, Block Align, Channel status mode, Fixed channel status data, Stored F2 offset, Display F2 offset, Sampled X/Y offset, Display X/Y offset, Identical GOP indicator, Edit unit byte count, Slice count, Dark metadata, Timecode frame drop, Audio locked/unlocked status, Audio ref level, Index start position, Single index location, Single essence location, Forward index direction, Image start/end offset, Colour siting, Padding bits, Black ref level, White ref level, Colour range, Constant B picture flag, Single sequence, Low delay, AS-02 Support Transport Streams: SCTE35, Program count, PCR Jitter, Packet Length, PID Usage, PIDs, PID Bitrate, Packet Intervals, PAT checks, PMT checks, Stream checks, PES checks, Language Metadata Verification QuickTime: Checks and correction for PASP, FIEL, GAMA, CLAP, COLR. Channel Configuration, Track properties, Movie properties, Language Metadata Verification, Check disabled tracks, Check multiple codec entries, Check Timecode properties
Cross checks	Video-Container: Width, Height, Frame rate, Aspect ratio, Bitrate, Profile/Level, Scan mode, Field order, Chroma format, GOP type, GOP length, B-pictures, Low delay, Duration, Component depth Audio-Container: Sampling frequency, Bit depth, Channels, Bitrate, Duration Audio-Video: Duration in meta-data, Actual duration Quality: Voice over validation w.r.t on screen text(Telephone number), Audio sync (Primary audio vs dub), Lip Sync
Meta-data	Closed Captions (608/708) presence/conformance/format/location, AFD, Bar, V-Chip, Teletext, ARIB Caption presence
Correction	Loudness correction