

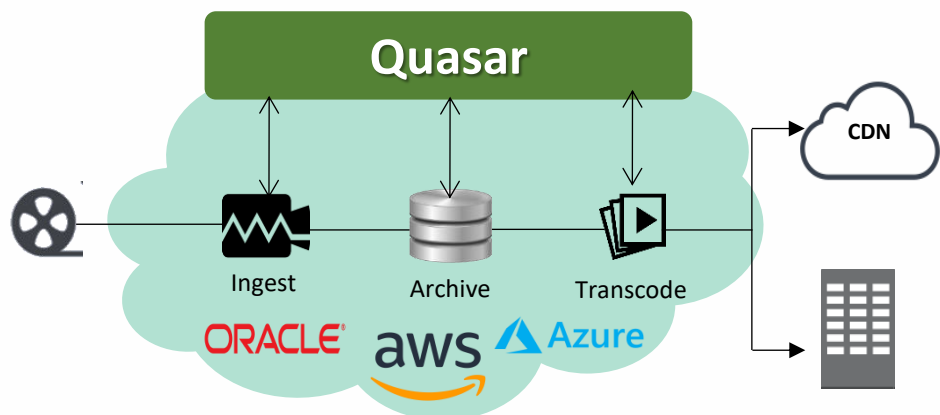
# Quasar

## Native Cloud file-based QC solution

Quasar is industry's first native cloud based QC solution available as 'SaaS' or installed in 'Virtual Private Cloud'. It is a perfect fit for workflows using content ingest, transcode and delivery on the cloud.

SaaS	Private
QC without infrastructure worries	QC within your own environment
<ul style="list-style-type: none"><li>- Hosted Service on multiple clouds</li><li>- Use with REST API.</li><li>- Dynamically scalable.</li><li>- Automatic regional resourcing</li><li>- Flexible monthly plans</li></ul>	<ul style="list-style-type: none"><li>- Resource tagging for secure usage</li><li>- Use with REST API.</li><li>- Dynamically scalable.</li><li>- Automatic regional resourcing</li><li>- Flexible monthly plans</li></ul>

Designed to meet the requirements of OTT and Content Providers, Quasar comes with flexible, usage based monthly plans.



Quasar combines the power of Pulsar QC with worldwide reach and compelling economics of Cloud infrastructure. With "Quasar SaaS" option you can focus on delivering pristine content to your customers while we manage the infrastructure for you. "Quasar Private" is optimized to run under your own Virtual Private Cloud infrastructure.

With its easy scalability, Quasar eliminates long content queues and waiting period for any content volume. This flexibility and instant access, allows you to start scalable QC operations for all your cloud based assets without worrying about any infrastructure hassles.

# Quasar Advantages

<b>Multi Support</b>	<b>Cloud</b>	Optimized to process content present on AWS, Azure and Oracle DIVA
<b>Storage Browsing</b>		Ability to browse content on your native cloud storage
<b>REST API</b>		Easy integration with REST API
<b>Dynamic Scalability</b>		Adjust QC capability to perfectly match your content volume with dynamic scalability
<b>Low latency</b>		Automatically select the processing instance in the same region as the content
<b>Fast Provisioning</b>		No installation or hardware provisioning required, start using QC within minutes
<b>Popular Templates</b>		Factory templates for Netflix, ARD-ZDF, iTunes, and DPP
<b>Deployment Flexibility</b>		Based on your business requirements, choose between our ‘SaaS’ or ‘Private’ options.
<b>Payment Flexibility</b>		Volume based pay-per-use plans that align with your business

## Formats

<b>Container</b>	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
<b>Video</b>	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), Apple ProRes, JPEG-2000
<b>Audio</b>	LPCM, AES3, SMPTE 302M, MPEG-1/2, AAC, HE-AAC, WMA (Standard & Professional)

## Verification Checks

<b>General</b>	Codec Compliance, Ready made templates for Netflix, DPP, ARD-ZDF, XDCAM, Loudness (R128, CALM, OP-59, ARIB), iTunes and CableLabs
<b>IMF/DCP</b>	Package validation, CPL cross checks, PKL cross checks
<b>Video Parameters</b>	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, Timecode frame drop, 2020 Color Support
<b>Video Quality</b>	Active Picture Size, Black Bar, Black Frames, Blockiness, Brightness, Cadence, Chroma Hits, Chroma Line, Clipping, Coloured Frames, Colour Bars, Colour Gamut, Combing, Camera Dead Pixels, Dead Pixels, Digital Hits, Field Dominance, Flash Frames, Freeze Frames, Luma/Chroma levels, Cadence, Half/Full lines, Letter/Pillar Box, Photosensitive epilepsy (Harding), Nielsen watermark
<b>Audio</b>	Codec, Sampling Frequency, Quantization Bits, Channels, Bitrate (CBR/VBR), Drops, Silence, Mute, Test Tones, Loudness (R128, CALM), Loudness Range, Dialnorm, Sample Peak (DBFS, PPM), True Peak, Dual Mono, Clipping, Phase Mismatch
<b>Container</b>	Conformance, Format, File Size, MD5, 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, Color siting, Padding bits, Black ref level, White ref level, Color 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 QuickTime: Checks for PASP, FIEL, GAMA, CLAP, COLR. Channel Configuration, Track properties, Movie properties
<b>Cross checks</b>	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
<b>Meta-data</b>	Closed Captions (608/708) presence/conformance/format/location, AFD, Bar, V-Chip, Teletext