

Video Quality Monitors

Sentry ABR • VNM-SABR2 Datasheet



Monitor your entire network with rich graphs and an easy-to-use web-based interface.

Features

- Supports up to 250 Top Manifests
- Supports Apple's HTTP Live Streaming, Microsoft's Smooth Streaming and MPEG DASH Protocols with HTTP statistics
- ABR Decryption and DRM Support provides QoE and PVQ measurements for decrypted and decoded video and audio
- Proactively monitors all available ABR "media" and "network" from content acquisition (source) to the edge of the network
- Fetches manifest files and fragments from any place on the network to simulate a subscriber's request for content
- Validates all assets, bitrate profiles and manifest files based on a highly parallel HTTP fragment fetching engine
- Performs sub-stream manifest validation and fragment fetching in real time at the manifest-indicated rate
- Alerts on any mismatch in the bitrate of the sub streams; missing segments (HTTP errors); and excessive segment-fetching latency

- Reports on the availability of all input manifests (programs) over the network, and their sub streams in the familiar Sentry-product style
- Supports both 1 GbE and 10 GbE interfaces allowing Sentry ABR to be placed throughout the network for maximum ABR monitoring coverage

Benefits

- Quality of experience and perceptual video quality measurements from ingress to final delivery for multiscreen, OTT, TV Everywhere services
- Quantify and compare video quality across profiles
- Reduce operational costs
- Ensure customer satisfaction

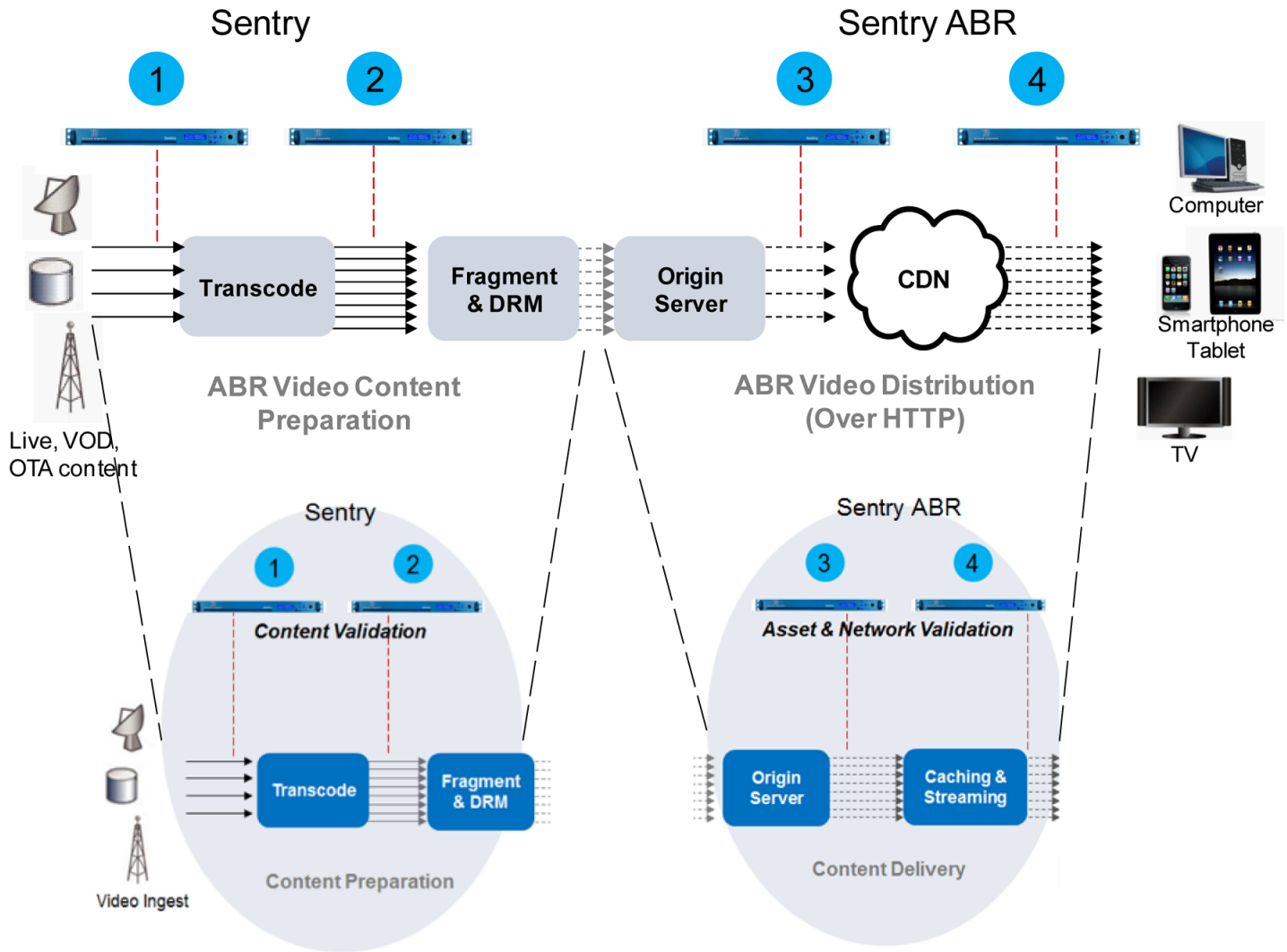
End to end video quality monitoring with Sentry ABR

Sentry® ABR is part of Tektronix' end-to-end video quality and service assurance solution for monitoring OTT (Over The Top), TV Everywhere and multiscreen services. Sentry ABR provides a comprehensive and scalable monitoring solution for post-fragmented adaptive bit rate (ABR) streams and supports both 1 GbE and 10 GbE interfaces for maximum ABR monitoring coverage throughout the network.

Sentry ABR supports up to 250 top manifests which translates into a much higher monitoring capacity as each manifest can support up to 15 representations of each program. Sentry ABR proactively monitors all available ABR "media" and "network" from content acquisition (ingress) to final delivery. Sentry ABR offers ABR decryption and DRM support, which enables Quality of Experience (QoE) and Perceptual Video Quality (PVQ) measurements for decrypted and decoded video and audio content.

Manifest files and fragments can be fetched from any place on the network (e.g., origin servers or CDN caching servers) to simulate a subscriber's request for content. Sentry ABR validates all assets, bitrate profiles, and manifest files based on a highly parallel HTTP fragment fetching engine. In addition, it supports all of the existing alert functionality and reporting capabilities offered in Sentry (including the alert dashboard, program availability and 90-day historical reporting and trending analysis). This enables proactive and comprehensive QoS and QoE monitoring of all video assets for ABR streaming. ABR issues are identified quickly and often resolved before customers are impacted.

Multi-Screen Multi-Point Video Monitoring



Post transcode monitoring with Sentry

- Availability of all services, profiles/bitrates
- QoE Scoring
- Verify Audio Quality
- Perceptual Video Quality, check for over-compression artifacts
- IDR/EBP presence, cadence and alignment
- Compliance for Audio Loudness and Closed Captions

ABR content delivery with Sentry ABR

- HLS, DASH and MS-SS support
- ABR decryption and DRM support
- HTTP errors
- Manifest file verification
- Service and Profile availability
- Fragment size and bitrate
- Fragment load time and latency time
- Historical graphing/trending of KPI's

Characteristics

All specifications apply to all models unless noted otherwise.

General

Browser Support	Firefox, Safari, Google Chrome and Internet Explorer
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MPEG/IP Input Port	1000BASE-T Ethernet interface 10GBASE-(LR or SR) interface
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Management port	1000BASE-T Ethernet interface
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Supported protocols

Video	MPEG-2, H.264, H.265, VC-1
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Audio	Dolby AC-3 (5.1 Surround), E-AC-3 MPEG-1 Layer II (Mono, Stereo) AAC, HE-AAC, and HE-AAC v2 Audio Loudness and CALM Act compliance (ITU BS. 1770)
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Network	HTTP over TCP/IP SNMP trap and MIB support
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Physical

Dimensions

Height	44 mm (1.73 in)
Width	437 mm (17.2 in)
Depth	600 mm (29.5 in)

Weight (net)	12.4 kg (27 lb.)
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Power supply	100-240 V AC, 50-60 Hz
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Environmental

Temperature

Operating	+10°C to +35°C, 30°C per hour maximum gradient Temperature of the intake air at the front and sides of the instrument
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Non-operating	-20°C to +60°C, 30°C per hour maximum gradient
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Power	4.0-1.7 A maximum, 100 - 240 V, 50/60 Hz The maximum power consumption for any board combination measured is 175 W at 120 V by safety test
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Tektronix is registered to ISO 9001 and ISO 14001 by SRI Quality System Registrar.

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