Video Quality Monitors

Sentry ABR • VNM-SABR Datasheet

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

Features & Benefits

- Supports up to 250 Top Manifests

- Supports Apple's HTTP Live Streaming and MPEG DASH Protocols with HTTP statistics

- 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

- Top level manifest file validation is used to automatically discover the sub-stream manifest URLs

- 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
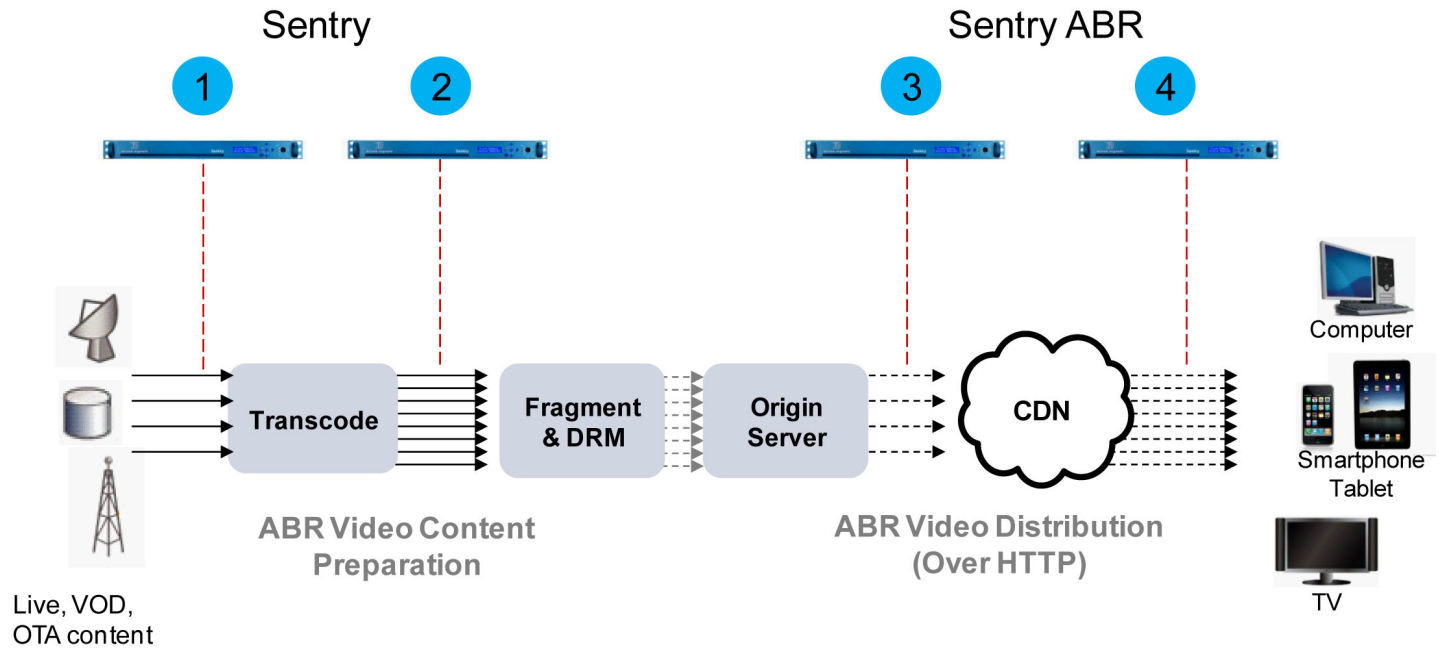
Applications

- Adaptive Bitrate video testing and monitoring at origin servers, CDN (caching servers), and last mile (streaming servers)

- Quality assurance monitoring for multiscreen video delivery from Pay TV providers

- Full 60-day historical reporting and real time alerting ideal for testing, proactive monitoring, and troubleshooting

- Flexible configuration and throttling capability provides flexibility from initial network testing to live 24x7 monitoring of large scale multiscreen service roll outs

Sentry® ABR is part of Tektronix' source-to-edge 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 12 representations of each program. Sentry ABR supports Apple's HTTP Live Streaming protocol with HTTP statistics and proactively monitors all available ABR "media" and "network" from content acquisition (source) to the edge of the network.

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 60-day historical reporting and trending analysis). This enables proactive and comprehensive quality assurance monitoring of all video assets for ABR streaming giving users the ability to identify issues quickly and resolve them before their customers are impacted.

Tektronix®

Multi-Screen Multi-Point Video Monitoring

Sentry

Sentry ABR

ABR Video Content Preparation

ABR Video Distribution (Over HTTP)

Transcode

Fragment & DRM

Origin Server

CDN

Computer

Smartphone Tablet

TV

Live, VOD, OTA content

For OTT, TV Everywhere and Multiscreen video service monitoring, customers typically use the Sentry Video Quality Monitor at the ABR video content preparation stage (pre- and post-transcode) for in-depth QoE (Quality of Experience) monitoring and analysis. Sentry ABR is used at the ABR Video Distribution stage for QoS (Quality of Service) monitoring of all ABR files and fragments.

Characteristics

Characteristic	Description
Browser Support	Firefox, Safari, and Internet Explorer
MPEG/IP Input Port	1000BASE-T Ethernet interface for VNM-SGE and VNM-SASI
	10GBASE-(LR or SR) interface for VNM-SXG
Management Port	1000BASE-T Ethernet interface

Supported Protocols

Characteristic	Description
Video	MPEG-2, H.264, VC-1
Audio	Dolby AC-3 (5.1 Surround) MPEG-1 Layer II (Mono, Stereo) AAC, HE-AAC, and HE-AAC v2
SPTS or MPTS, multicast (IGMP v3) and unicast	
SNMP trap and MIB support	

Physical

Dimension	mm	in.
Height	50.8	2
Width	432	17
Depth	381	15

Weight	kg	lb.
Net	9.2	20.2
100-240 V AC, 50-60 Hz power supply		

Environmental

Characteristic	Description
Max Storage Temperature	70 °C
Max Operating Temperature	35 °C
Max Humidity	85%

Ordering Information

VNM-SABR
Sentry ABR Video Quality Monitor.

Options

Option	Description
Opt. 50S	Throughput of 50 Mb/s
Opt. 100S	Throughput of 100 Mb/s
Opt. 300S	Throughput of 300 Mb/s
Opt. 500S	Throughput of 500 Mb/s
Opt. 1G	Throughput of 1 Gb/s
Opt. XG-LR	Adds 10 GbE interface and Long Range SFP
Opt. XG-SR	Adds 10 GbE interface and Short Range SFP

Service Options

Option	Description
VNM-SUP	One-year service support
VNM-SUP-REN	Renewal of one-year product support

Power Plug Options

Option	Description
A0	North America power
A1	Universal EURO power
A2	United Kingdom power
A3	Australia power
A4	240 V, North America power
A5	Switzerland power
A6	Japan power
A10	China power
A11	India power
A12	Brazil power
A99	No power cord or AC adapter

CE

Tektronix is registered to ISO 9001 and ISO 14001 by SRI Quality System Registrar.

Datasheet

For Further Information.   Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit **www.tektronix.com**

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