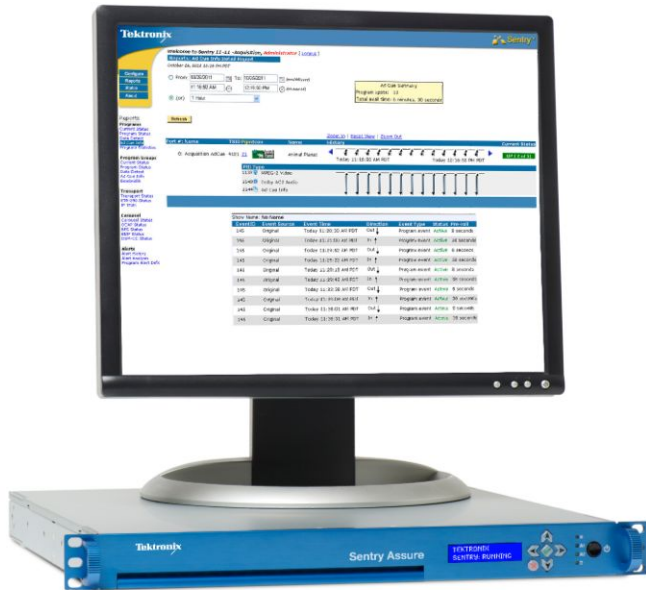


Video Quality Monitors

Sentry Assure Datasheet



Sentry Assure offers Sentry Verify functionality with Digital Program Insertion (DPI) monitoring and Audio Loudness Monitoring (ALM) options included and serves as a last line of defense before modulation and encryption.

Key features

- Digital Program Insertion (DPI) validation
- CALM compliance monitoring
- Regulatory compliance monitoring
- Detection of MPEG and IP issues
- Historical reporting and graphing
- Live thumbnails and Thumbnail Wall
- Error seconds and program availability reporting
- Stream to View
- Program group bandwidth graphing
- Triggered alert stream capture
- Real-time detection and alerting

Applications

- Post-splice monitoring
- QoS monitoring

- Audio loudness monitoring
- Digital Program Insertion (DPI) monitoring
- EBIF monitoring
- Program statistics and availability reporting

Video quality monitoring with Sentry Assure

Sentry Assure is cost effective and future proofed for large-scale post-splice monitoring deployments. It has been optimized to help cable television operators and other providers of multichannel video services comply with the Commercial Advertising Loudness Mitigation (CALM) Act, which requires that ads be no louder than the programs they accompany.

Sentry Assure is designed specifically for identifying loud commercials in the multichannel environment. It combines the ability to simultaneously monitor hundreds of channels in real-time with loudness detection capabilities and post-splice ad insertion monitoring, which makes Sentry Assure an ideal solution for cable operators' CALM Act needs. Additionally, Sentry Assure's reporting tools enable operators to diagnose and repair issues related to local ad insertion, which mitigates revenue loss from ads failing to air properly.

Sentry Assure also helps operators comply with government regulations for closed captioning with its support for the SCTE-608, SCTE-708, and SCTE-20 specifications. Sentry Assure monitors CGMS data, closed caption data, teletext, subtitles, scrambled data, and discontinuities.

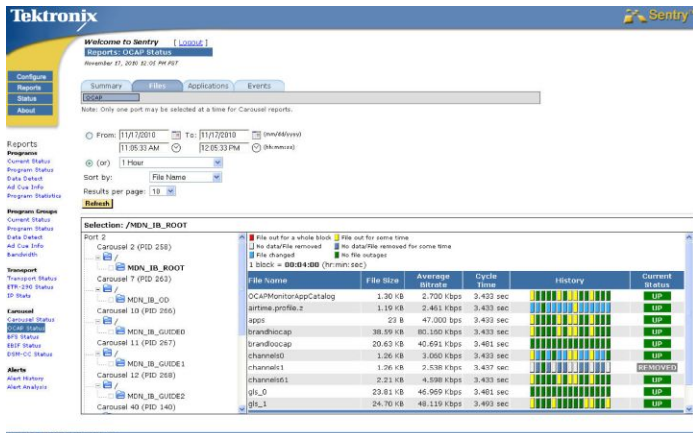
Software options

Carousels tru2way™ / OCAP/MHP / DSM-CC

The OCAP Monitor is a tool for monitoring tru2way™/OCAP carousels. Digital set-top boxes receive continuous delivery of applications and data from the headend or uplink center. These data and applications are critical for normal set-top box function and service delivery.

With the advent of tru2way™ (OCAP) and other carousels, multichannel service providers are introducing a vast array of complex, interactive services to their subscriber base. Monitoring the carousel activity is essential to ensuring the quality and consistency of experience for subscribers.

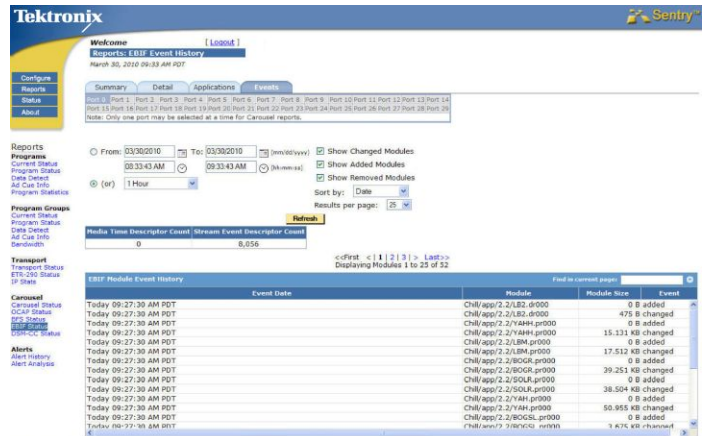
Sentry Assure supplies detailed reports of carousel performance and activity based on their real-time behavior and data output. Service providers are able to identify the root cause of errors and make necessary changes to eliminate issues and guarantee rapid application deployment. The reports show detailed source and file structures and carousel changes in real time while observing streaming metrics such as cycle time, bandwidth utilization, and stream packet continuity. Real-time alerting notifies users of critical situations, enabling them to resolve issues such as outages, cycle-time fluctuations, and unauthorized changes.



Monitoring tru2way™/OCAP Carousels

EBIF monitoring

Interactive applications and associated advertising allow you to deliver enhanced capabilities to your subscribers and monetize advanced digital services in a broad range of digital set-top boxes. eTV content consisting of the applications and metadata is, however, prone to errors during transport, rate-shaping, and muxing. Old video-over-IP metrics such as MDI and Continuity Counter (CC) errors are incapable of detecting any content errors, especially with eTV.



Monitoring EBIF/eTV

The EBIF/eTV monitoring solution breaks down and reports on eTV application data and critical signaling information, so service providers can be assured they are delivering the best possible quality of experience for their subscribers. In addition, a 60-day application-level historical report (available by service and by location) provides critical trending information about eTV delivery. Tailored alerting and dashboards provide proactive eTV monitoring and fast troubleshooting.

SA-BFS monitoring

Sentry is designed to identify and monitor data carousels within the transport, which enables it to keep detailed information about the real-time and historical status of the Scientific-Atlanta Broadcast Files System (BFS). Similar to the way other application carousels (tru2way, DSM-CC, etc) are monitored, Sentry is able to provide critical information about the status of BFS carousels. Multichannel service providers can set alerts to be notified of bit rate errors, file changes, file cycle times, and if files are missing.

Summary
Detail

AdCue | PremMux1 | OCAP | A | BFS | PremQueue | Post Qcm | Impaired | Port 7 | Port 8 | Port 9 | Port 10 | Port 11 | Port 12 | Port 13 | Port 14 | Port 15 | Port 16 | Port 17 | Port 18 | Port 19 | Port 20 | Port 21 | Port 22 | Port 23 | Port 24 | Port 25 | Port 26 | Port 27 | Port 28 | Port 29

Note: Only one port may be selected at a time for Carousel reports.

From: 04/06/2010 02:03:02 PM To: 04/06/2010 03:03:02 PM

Sort by: Current Status

Report On: Active Sources Only

Results per page: 10

File out for whole block

No data/File removed

File changed

1 block = 00:04:00 (hr:min:sec)

File out for some time

No data/File removed for some time

No outages

Active BFS Summary

Carousel bitrate: 28.049 Mbps
Total IB sources: 18

Carousel file size: 30.63 MB
Total files: 91

<<First < 1 | 2 | > Last>>
 Displaying Sources 1 to 10 of 18

Expand All
Collapse All

Src ID	PID	Block Size	Src. Bitrate	Avg Cycle Time	Src. Size	History	Current Status
2	28	3000 B	2.328 Mbps	1.362 min	21.40 MB		UP
6	33	4000 B	525.378 Kbps	25.000 ms	1.66 KB		UP
10	17	4000 B	527.469 Kbps	25.000 ms	1.66 KB		UP
12	21	4000 B	526.160 Kbps	25.000 ms	1.66 KB		UP
14	22	4000 B	526.169 Kbps	25.000 ms	1.66 KB		UP
16	25	4000 B	527.629 Kbps	25.000 ms	1.66 KB		UP
18	30	4000 B	526.637 Kbps	25.000 ms	1.66 KB		UP
20	19	4000 B	526.589 Kbps	25.000 ms	1.66 KB		UP
2001	35	4000 B	2.224 Mbps	14.357 sec	3.92 MB		UP
2003	26	4000 B	2.232 Mbps	290.000 ms	79.14 KB		UP

<<First < 1 | 2 | > Last>>
 Displaying Sources 1 to 10 of 18

Monitoring Scientific-Atlanta Broadcast Files System

Characteristics

Platform characteristics

Browser support	Firefox, Safari, and Internet Explorer
MPEG/IP input port	1000BASE-T Ethernet interface
Management port	1000BASE-T Ethernet interface

Supported protocols

HD/SD programs, SPTS or MPTS, multicast (IGMP v3) and unicast MPEG-PSI, DVB-SI, ATSC-PSIP table support, SNMP trap and MIB support

Video	MPEG-2, H.264, H.265 (HEVC), VC-1
Audio	Dolby AC-3 (5.1 Surround) MPEG-1 Layer II (Mono, Stereo) AAC, HE-AAC, and HE-AAC v2
Carousel	tru2way™, BFS MHP / DSM-CC
Program insertion	SCTE-35 (local ads)

Physical characteristics

Dimensions	
Height	50.8 mm (2 in.)
Width	432 mm (17 in.)
Depth	381 mm (15 in.)
Weight (net)	9.2 kg (20.2 lb.)
Power supply	100-240 V AC, 50-60 Hz

Environmental characteristics

Max storage temperature	70 °C
Max operating temperature	35 °C
Max humidity	85%



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

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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.tek.com.

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