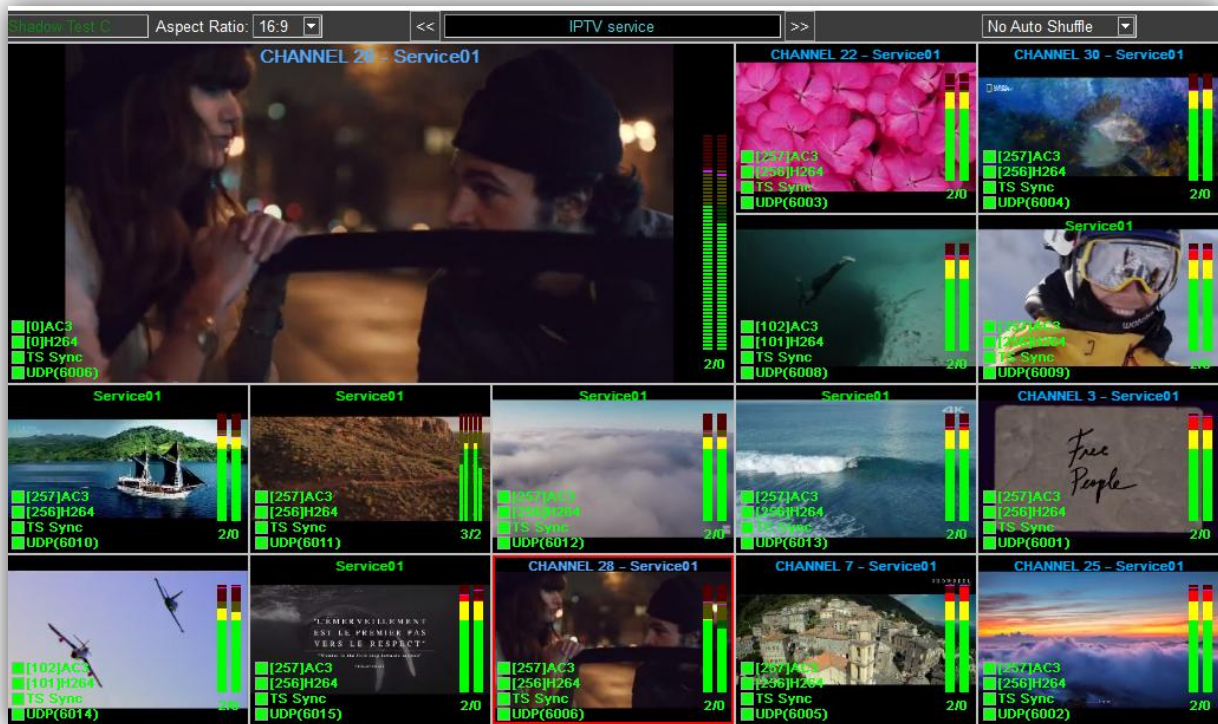**MiraVid**

Delivering responsive content monitoring and testing in real-time

TeleSight is a real-time video quality monitoring solution that delivers awareness of system information, ancillary data, and conformance results. With its multiviewer capabilities, TeleSight couples confidence monitoring with complete testing and analysis of video streams for cable, satellite, telco, IPTV, and over-the-top (OTT) services.

Our solution provides an operator with a comprehensive display of signal statistics and conditions, such as QoS, QoE, closed captions, alarms, and visible impairment, all within a single glance. It offers high performance and scalability for quality and compliance across different geographical locations or a centralized location.

Multiviewer and Analyzer Combined

TeleSight combines complete analyzer capabilities with a fully customizable multiviewer of your video streams. This combined offering enables you to visually inspect all your monitored streams with the assurance that the highest video quality is delivered.
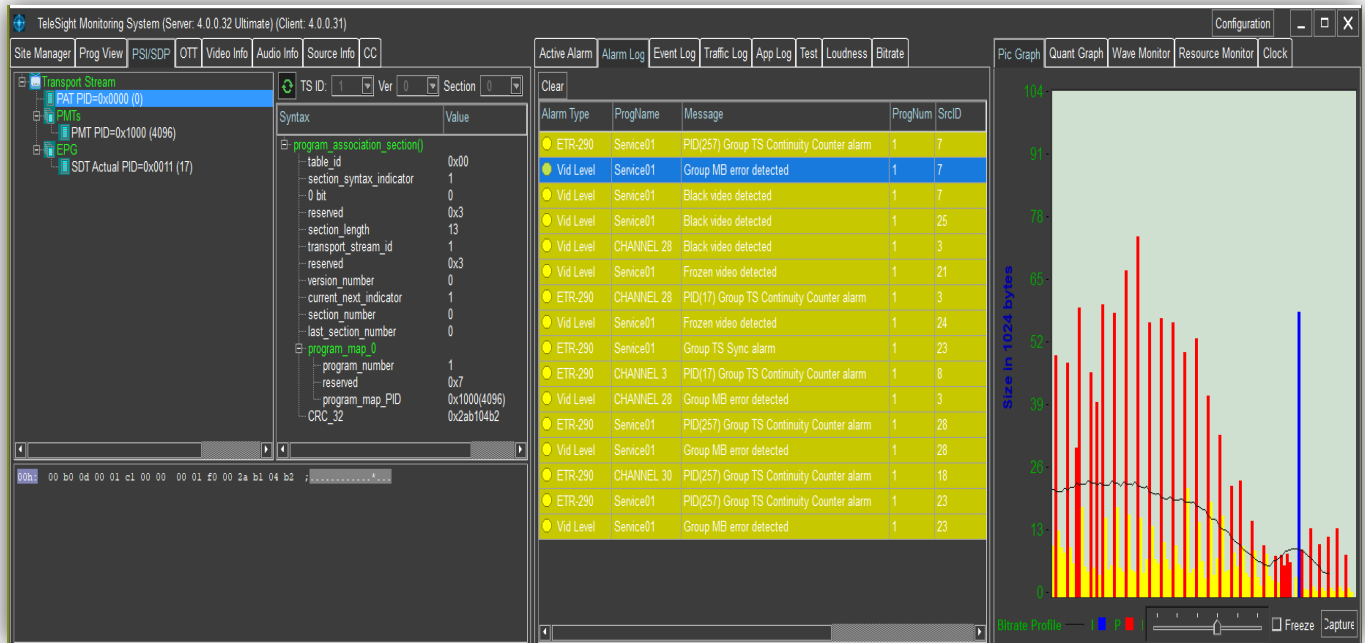

View real-time playback of all input streams simultaneously

www.miravid.com   Contact MiraVid Sales - sales@miravid.com

Responsive Content Monitoring

When monitoring a high volume of streams, it is not practical to display everything on a video wall. TeleSight performs continuous 24x7 QoS and QoE tests and analysis, with alarm and error notifications. TeleSight's multiviewer display can be configured to cycle through a group of streams for added confidence monitoring. When an alarm is detected, the operator can select the stream, and the multiviewer displays the stream on the mosaic. This enables quick and efficient troubleshooting of errors.
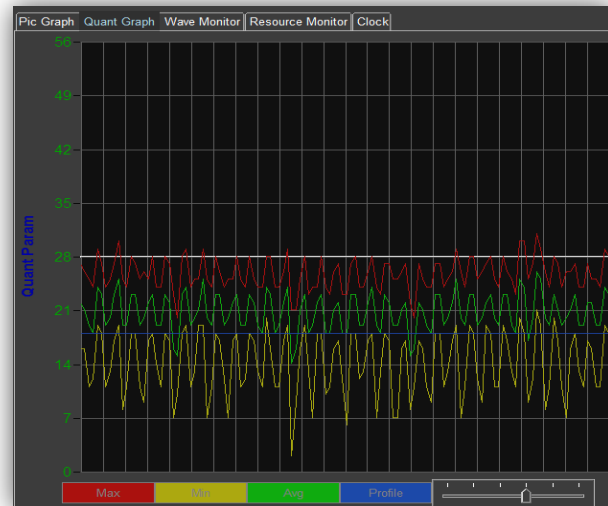

Monitoring System Dashboard

In-Depth Testing and Analysis

TeleSight allows operators to monitor and analyze their video services with confidence. It offers real-time decode, display, and stream analysis, including TR-101-290, video black and freeze, video codec conformance, and audio level tests. Its multiviewer display is highly configurable with on-screen alarms and notifications.

- Video level testing (black and frozen video)
- Audio level testing (silence, max, and clipping)
- TR-101-290 testing (priority 1, 2, 3)
- Loudness monitoring (CALM compliance)
- Video conformance testing (syntax testing at video codec level for MPEG-2, H.264)
- Bitrate max/min threshold alarms
- Caption presence detection alarms

With TeleSight, you have the power to configure all QoS and QoE tests at the global, source, and program level. This flexibility allows you to tailor your monitoring to your specific video services and monitoring points, giving you the highest degree of control and adaptability.

TeleSight provides additional stream analysis, including a GOP structure picture graph, quantization graph, and bitrate profiles, to help you quickly identify and troubleshoot issues.
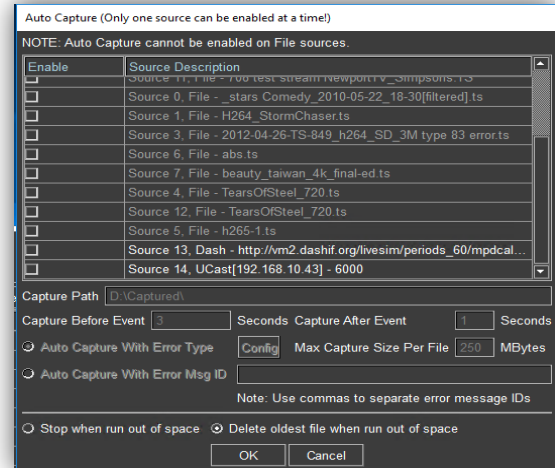

An important method to measure video quality of a stream is to analyze the compressed stream at the video layer. TeleSight's advanced video conformance tests analyze the video stream at the syntax and macroblock level to determine whether the stream complies with the video codec standard. Detailed video conformance error messages provide insight into the quality of the video. TeleSight triggers video conformance and macroblock error alarms to notify the operator of video errors that can result in pixelation, blockiness, and video corruption. In cases where an operator needs to monitor and test large volumes of channels, video conformance testing becomes a good way to detect errors quickly and efficiently.

The depth of testing and speed at which errors are detected allows organizations to address problems early and minimize the cost of errors and customer complaints. Both real-time multi-viewing capabilities and full-range video stream analysis and testing allow network operators to command their control room.

Stream Recording

TeleSight provides stream recording capabilities to capture and record a video stream upon error. There are two capture modes:
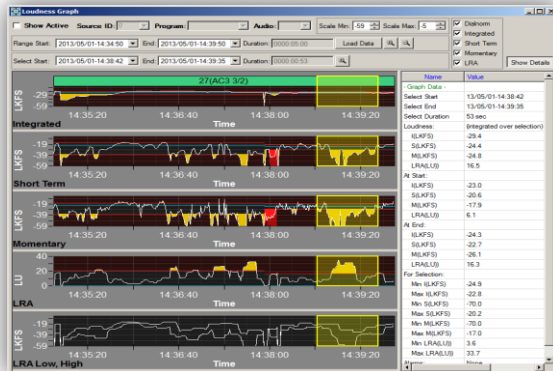
- Automatic stream recording enables the automatic capture of stream data before and following an error condition (in system, video or audio layers). Source data captured will be saved from 3 seconds before the error happens and 1 to 60 seconds after the error.
- Manual stream recording gives operators the ability to manually record a stream at any time.
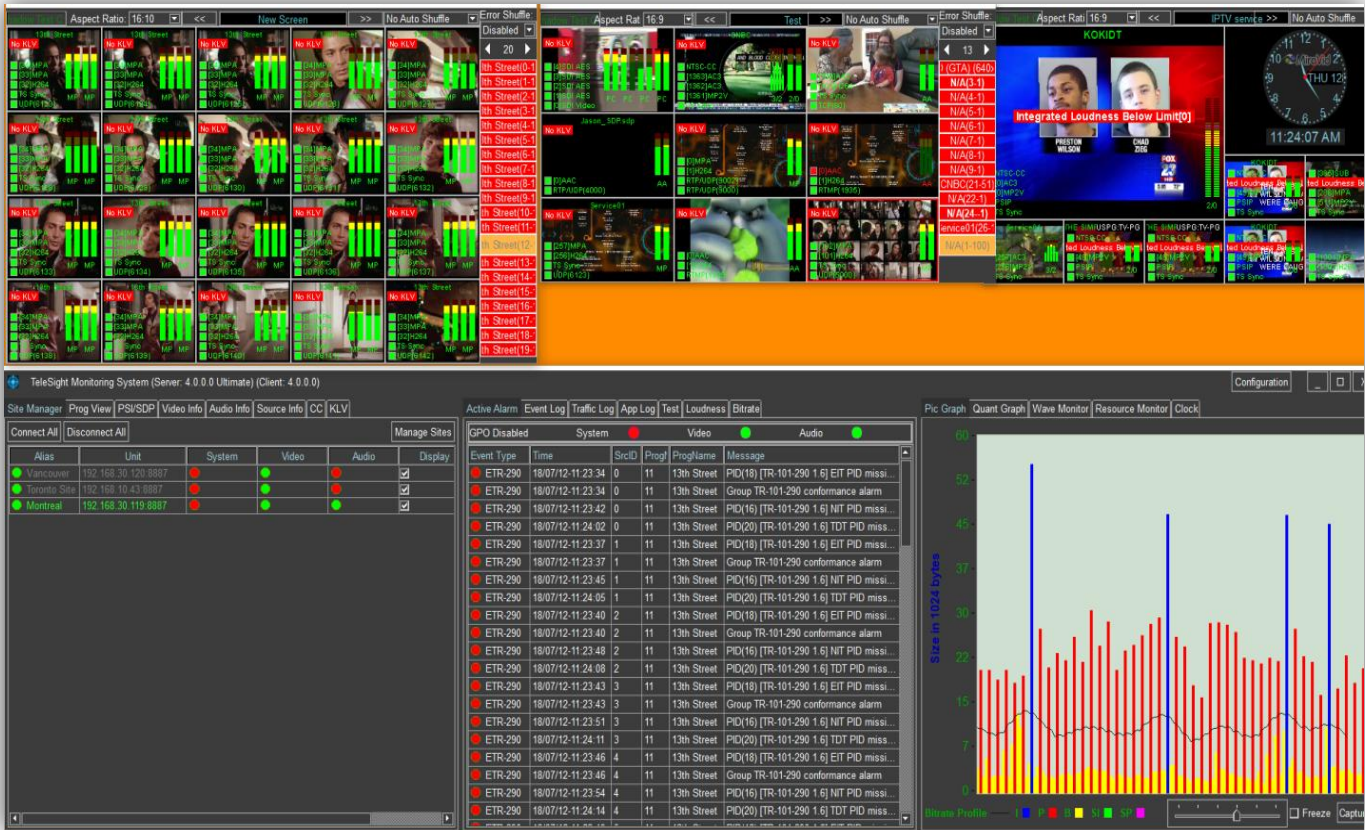
Audio Loudness

TeleSight's audio loudness monitoring, alarming, and logging features enable compliance with the Commercial Advertisement Loudness Mitigation Act (CALM Act) Regulations. Accordingly, specific audio loudness measurement requirements were implemented from ATSC A/85, ITU BS.1770, and EBU R128 standards. Alternatively, operators can customize loudness settings and thresholds.

Audio Loudness measurements include the Integrated, Short-term, and Momentary Loudness, Dialnorm, and Loudness Range.

Remote Monitoring and Site Management

TeleSight Site Manager allows you to monitor and control multiple TeleSight systems within a centralized facility or across geographical locations. The operator can see the overall health of your streams at each remote site in a single view. The Site Manager dashboard displays status indicators, highlighting problems at each site. The video multiviewer is displayed for each site along with signal status, on-screen alarms, and audio meters.

TeleSight Features

Multi-viewer (display)	
Real-time multi-viewer	View video sources in real-time allows for better response time and management of video streams. Full-motion video decoding delivers optimal confidence monitoring.
Customizable display	Configure the video layout, size, and placement using a user-friendly.
Flexible monitoring	Detect problems quickly and efficiently by visually monitoring the stream, signal presence, video stream measurements, audio bars, and on-screen alarms.
Program Cycling (Round Robin)	Manage multiple source lists by offering a convenient way to cycle through multiple screens of programs. The operator can set and activate auto-play cycling of source lists based on a time interval.
Continuous monitoring 24x7	Monitor and test hundreds of streams simultaneously, visually displaying a group of channels in a round-robin fashion.
Multiple Mosaics	Display multiple video mosaics simultaneously on a single TeleSight system.
Monitoring (test & analyze)	
In-depth testing and analysis	The system, video, and audio quality tests help identify the problem and provide additional measurements to help monitor the overall health of the broadcast, including PSI table analysis, GOP structure picture graph, quantization graph, and bitrate graph.
Audio Loudness	Monitors and logs the loudness measurements that support regulatory compliance standards, including Commercial Advertisement Loudness Mitigation Act (CALM Act).
Alarm Notification	Display all active alarms for quick troubleshooting. Log alarms and errors to a local log file, SNMP, Syslog, and Email/SMS alerts. TeleSight alarms can be integrated with an alarm device (buzzer, light).
Remote Monitoring	Allows multiple users simultaneous remote access to real-time monitoring of video and audio streams. The mosaic display and monitoring system dashboard can be displayed and managed remotely.
Site Management	Centrally manage and monitor multiple TeleSight systems from remote or local sites in a single interface. The Site Manager dashboard displays health status indicators of each site for quick and efficient troubleshooting.
Comprehensive Reporting	
SNMP and Syslog notifications and reports	Provides a more granular level of reporting and logging to better uncover the source of the problem for better video quality optimization. Integration with Dataminer and other third-party network management systems.

MiraVid

TeleSight Specifications

MPEG-2, H.264/AVC, H.265/HECV, MPEG-4 Part 2, VC-1, AVS Video

RTSP, RTP/RTCP, SDP, RTMP, HLS, MPEG-DASH

Max Audio ES per Program

MPA, SMPTE-302M Audio

AAC, HE-AAC (v1, v2) , Dolby AC-3, E-AC-3 (DDP)

SNMP v1/v2c/v3, SMIv2

Closed Caption and XDS

DVB Teletext, VPS and WSS traffic status

SCTE-35 CUE traffic status

Data Traffic Monitoring and Logging

PCR Analysis (accuracy, interval check)

PID Grid (overview of all PIDs)

Remote Client (Remote Real-Time Mosaic)

GPO Support (for alarm notification)

Dual/multiple mosaic monitoring

Test Features:

Video Level Monitor: Freeze, Black

Audio Level Monitor: Silence, Clipping, and Max

IP Layer

- Dropped packet detection for RTP layer

- RTP header length error

TR-101-290 (transport stream layer): Priority 1, 2, 3

Video Conformance (Syntax) Testing: MPEG-2, AVC/H.264

- In-depth video analysis at the block level

- Detect pixelation, blockiness, and video corruption

Loudness Monitoring

- Audio Loudness measures include the Integrated, Short-term, and Momentary Loudness, Dialnorm, and Loudness Range

Input:

Source	Resolutions
ASI	HD, SD, 3G
HD/SD SDI	4K HEVC
IP	
DVB-S/S2	**Audio**
DVB-T/T2	**Codec**
(T2-MI)	MPA
	AAC
Video Codec	HE-AAC
H.265/HEVC	SMPTE-
H.264/AVC	302M
MPEG-2	Dolby AC-3
MPEG-4 Part 2	Dolby +
VC-1	
4:2:2 10-bit	

Formats
NTSC
PAL

Output:

Video	Audio
DVI	1/8"
HDMI	(3.5mm)
VGA	mini jack
	HDMI

Expansion Options:
- 4-port ASI/SDI input
- 4-port ASI/HD-SDI input
- 12-port ASI/HD-SDI input
- 4-port GigE
- 2-port DVB-S/S2 input
- 2-port DVB-T/T2/QAM/QPSK input

Contact us for more information

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