



# StratoView

Monitor and visualize your entire broadcast network with a powerful data driven operational platform

Predictive analysis

Mixed signal

Data correlation

Flexible UI

# **Strato View Ecosystem**

As broadcast networks scale and with the transition to IP, OTT and cloud architectures, operators are constantly working on maintaining video network uptime to guarantee end users the best quality of experience possible.

We provide a total monitoring solution that empowers broadcasters and content providers the ability to manage QoE, QoS, visualization and analytics while reporting and maintaining Service Level Agreements (SLA's).

With todays distributed network architectures, monitoring and video signal visualization challenges are changing the way video is transmitted. Our Monitoring solutions are designed with remote operations in mind and we effectively allow you to manage your entire network across buildings, cities and countries, all with the ability to do so from any point on earth.

Our modular approach to monitoring provides the flexibility needed to work with different topologies and with various physical interfaces. Managing video networks also entails dealing with a plethora of non-video centric equipment such as routers, switches and other devices that make up a video headend or a production facility.

Our solution allows for monitoring this equipment as part of the video network and provides a complete comprehensive network overview. Thereby, making troubleshooting and maintaining network uptime a breeze with a single unified platform.

Along with monitoring, come many aspects of Video network management such as compliance recording and signal aggregation. Our ecosystem is modular with many components (probes) that can be added on demand to fulfill requirements as you scale.

Telestrider's all-encompassing unified monitoring solutions enable you to monitor Broadcast and non-video centric devices all in one place, eliminating the need for multiple monitoring systems.



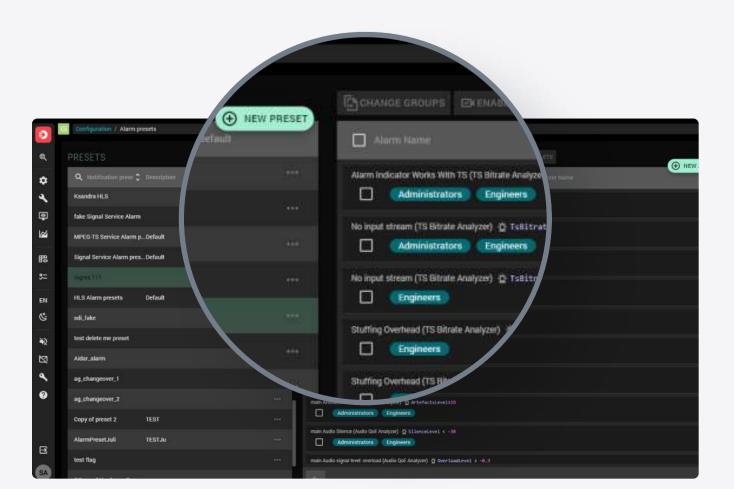




# **Key Features**

- Real-time Broadcast Monitoring and Visualization
- Control DVB, Terrestrial, Cable, DTH, IPTV and OTT networks
- Visual and instrumental monitoring and control of all components
- Distributed architecture built around remote operations
- Mosaics are available remotely via HLS, SRT, NDI or UDP
- Ability to monitor remotely any stream in full resolution
- Detailed Reporting and Analysis (SLA)
- Detailed graphing and video analysis tools

- Monitor any non-broadcast components such as routers, switches etc. (API, SNMP)
- Logical service level chain views



### **Benefits**

- 24/7 reliability
- Modularity
- Statistics
- Data Correlation
- SLA Calculation

- Infrastructure control
- Capture data from any devices
- Analytics





### **Highlights**

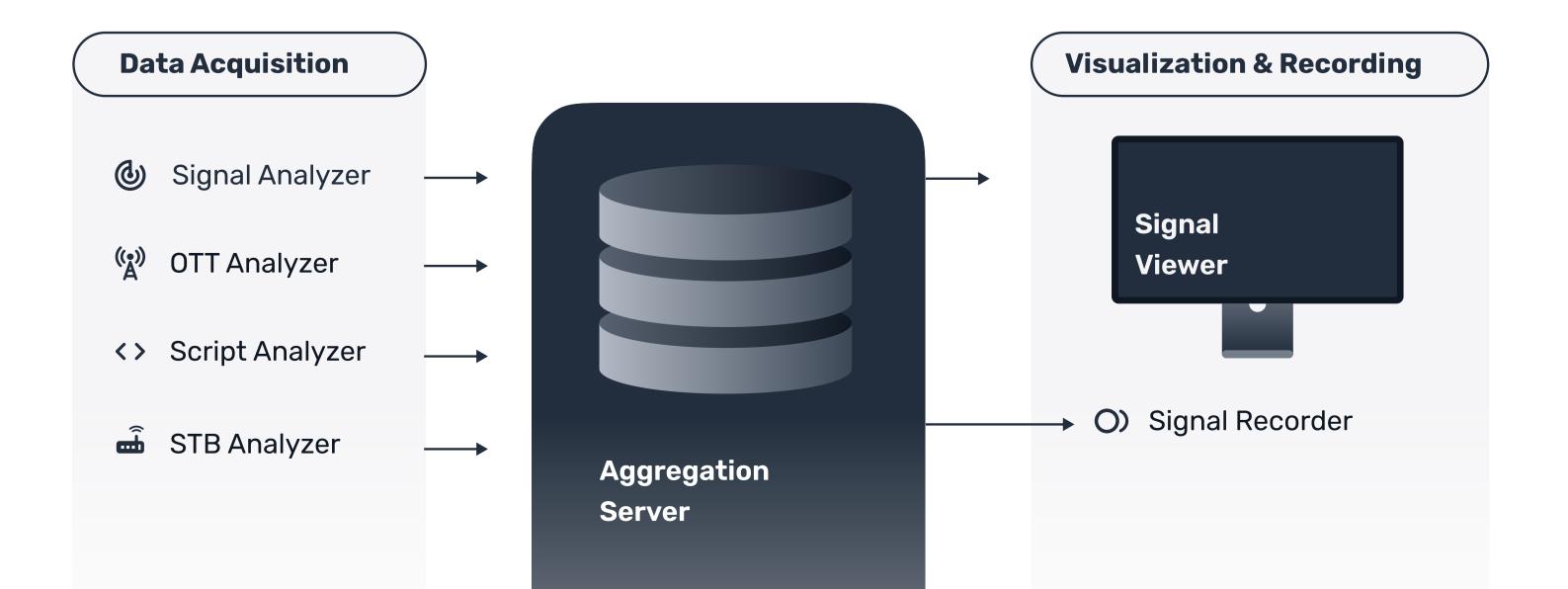
- Personalized cross-platform WEB UI
- Signal flow views to monitor objects in the form of a signal or logical channel path diagram
- Group/batch addition and configuration of monitored objects
- Data and analytics from any device in your network can be processed and used to find operational correlations
- Support for all popular modern broadcasting standards
- Highly customizable dashboards with the abilityto display information in a convenient and intuitive interface (graphs, indicators, panels)
- Generate video walls to display remote signals
- Personalized cross-platform WEB UI

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# **System Architecture**

The system architecture is comprised of three components that provide the main functionality:

- Data acquisition (input)
- Aggregation (storage and analytics)
- Visualization/Recording (data output)



# **Data acquisition**

System Component comprised of modules used for collecting service quality metrics, media signals and traffic streams:

### **Signal Analyzer**

System module used for collecting service quality metrics, media signals and traffic streams.

### **OTT** Analyzer

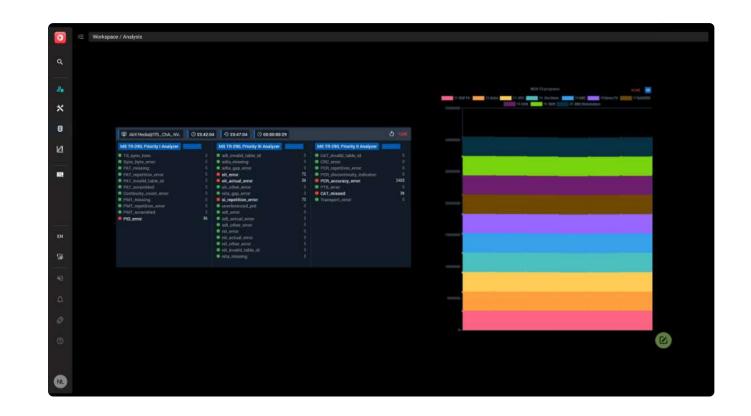
An OTT Broadcast Metrics Collection module.

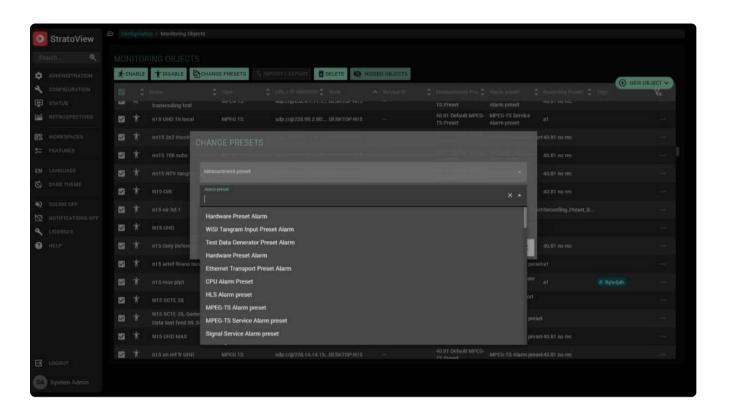
### **ScriptAnalyzer**

Module for importing and controlling external devices or systems. This module enhances the system ability to interface with 3rd party equipment for monitoring and management using user-defined scripts.

### **STB-Analyzer**

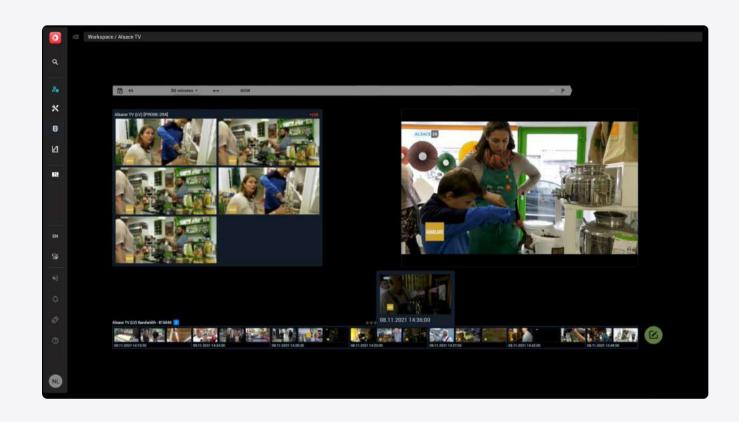
A hardware and software module that performs alternate channel switching on subscriber STB's. Monitors end user quality of experience and forwards data analytics to the central aggregation server.





### Recorder

System module for recording, archival and playback of video signals from different sources.



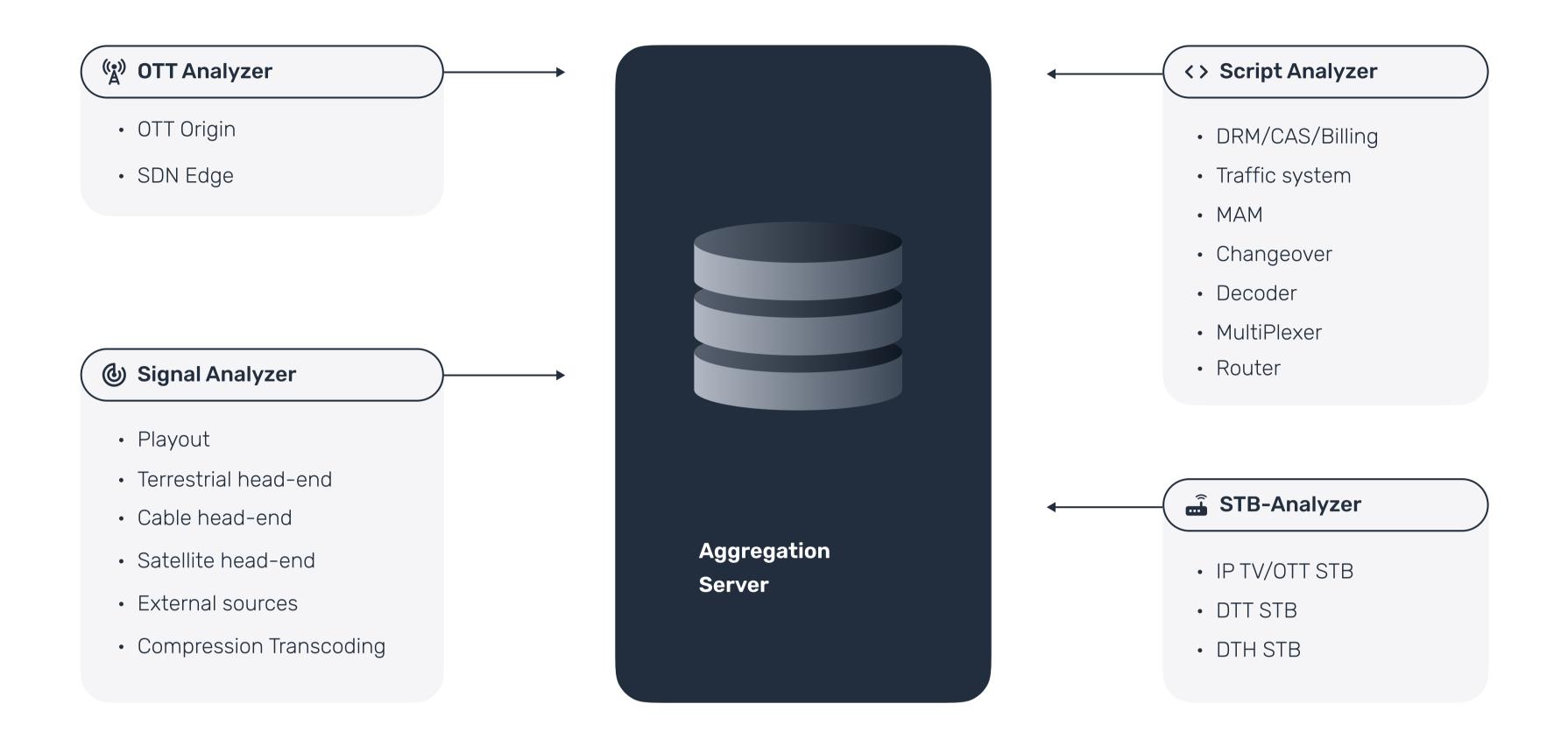
### **Visualization**

Signal Viewer, a multifunctional software component that captures and displays received signals, generating Mosaics and remote views on demand.



# **Aggregation and analytics**

Configure your system, interfaces as well as aggregate data collection from all other modules in your network. Central database repository for data collection and analytics.



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# **Monitoring of TV broadcast signals**

# INPUT FORMATS/PROTOCOLS

SD/HD/UHD-SDI

CVBS/HDMI

ST 2110

ST 2022-6/7

NDI

SRT

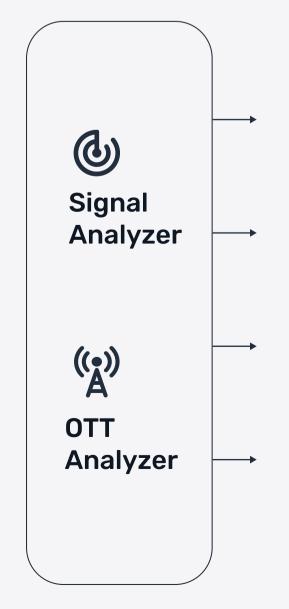
RTSP/RTMP

MPEG-TS

T2-MI

HLS

MPEG-DASH



### MEASUREMENTS (MORE THAN 100 METRICS)

### QoS

- ETR 101290
- RFC 4445

## Metadata

- Teletext
- Subtitles
- CC, OP-42/47, CEA-608/708
- SCTE 104/35
- EPG

### QoE

- Artifacts
- Frozen/Black Screen
- MOS
- EBU R 128

### **OTT** metrics

- Master Playlist Analysis
- Media Playlist Analysis
- Media Segment Analysis
- Catch-UP
- VOD



### **Specifications**

#### **Supported interfaces**

- SD-SDI (SMPTE-259M, 10 bit, 270 Mbit/s)
- HD-SDI (SMPTE-292M, 10 bit, 1,5 Gbit/s)
- 3G-SDI (SMPTE-424M, 10 bit, 3 Gbit/s)
- UHD Quad-link 3G-SDI (SMPTE ST-425, 4 x 3 Gbit/s)
- 12G UHD-SDI (SMPTE ST-2082, 12 Gbit/s)
- HDMI
- Analog (NTSC, PAL, SECAM)
- IP/Ethernet (ETSI TS 102 034)
- Composite (NTSC, PAL, SECAM)
- AES/EBU (24 bit/ 192 kHz) channels
- DVB-S/S2 (ETSIEN 300 421, EN302-307, EN301-210)
- DVB-ASI (ETSI EN 50083-9)
- DVB-T/T2 (ETSI EN 300 744, 302 755)
- DVB-C/C2 (ETSI EN 300 429 Annex A/B/C)

#### **Media containers**

- MPEG-2 TS (ISO/IEC 13818-1), MPTS or SPTS
- DVB T2-MI Streams (ETSI TR 101 290-1, A14-1)

### Third party equipment support

- Switches
- Backup units
- Splitters
- Logo inserters
- Encoders/Decoders
- Multiplexors
- Routers
- Traffic systems
- MAM
- Broadcasting servers
- Billing systems
- CAS/DRM systems
- EPG servers

### **Network and OTT broadcasting protocols**

- FLASH (1889, 2326, 3550)
- RTMP streams (Real Time Messaging Protocol) H.264 -AAC and MP3 streams
- RTSP (RFC 1889, 2326, 3550)
- NDI (NewTec)
- SDI over IP (SMPTE 2022-6/7)
- MPEG-DASH
- MMS & MMSH Microsoft Media Server Protocol and MMS over HTTP
- HLS (HTTP Live Streaming Monitoring)
- SRT (Haivision)
- SMPTE 2110

### **Scripting and API's Supported**

- REST
- JSON-RPC
- Requests over Telnet and SSH
- SNMP

### Video codecs

- MPEG-1 (ISO/IEC 11172-1)
- MPEG-4.2 (ISO/IEC 14496-2)
- HEVC (H.265) до 4K
- MPEG-2 (ISO/IEC 13818-1)
- MPEG-4.10 (H.264, ISO/IEC14496-10)
- JPEG 2000

### **Audio codecs**

- MPEG-1 Layer II (ISO 11172-3)
- AAC/ADTS/ADIF (ISO/IEC 13818-7, ISO 14496-3)
- AC-3/E-AC-3, ATSC A/52
- SMPTE 302M





