

The possibility of errors has increased as the video delivery chain becomes more complex. Subscribers are more demanding than ever, expecting consistent, high-quality video services. To meet these expectations, operators must have a good understanding of what is going on within their video delivery.

**Analyzers are powerful tools that allow operators to gain real-time insights into all aspects of their video service, from the headend to the delivery network.**

### What Analyzers do

- Provide critical insights into the encoding and integrity of streams.
- Deployed throughout the video head-end and delivery network.
- Support all types of delivery, including adaptive bitrate streaming, telco TV, & cable.
- Combine with Agama Client Device Monitoring for full end-to-end observability.
- Test-points deployed throughout the video head-end and delivery network.

### How Analyzers are deployed

- Part of Agama's full end to end offering with the Enterprise Platform as central umbrella system.
- Fully software-based probes to be deployed on standard server hardware, VMs or containers.
- Scalable to support hundreds or thousands of concurrently monitored streams.
- Available with perpetual or term license and with flexible options for allocating analysis capacity.

### Content Delivery Networks

- Assure readiness to deliver playlists and segments.
- Verify playlist syntax and correctness of MP4/CMAF/TS segments.
- Track response times, bitrates and overall quality.
- Benchmark and compare CDNs and/or edge caches.

### Benefits for service providers

- Visualize technical quality to proactively prevent incidents and reduce time to fix.
- Understand how all detected errors affect the viewer's experience in real-time.
- Track KPIs to objectively evaluate changes and drive continuous improvement.
- Log and capture incidents with triggered recording for advanced root cause analysis.

### Head-end and playout

- Detect problems at ingest and errors introduced during transcoding & packaging.
- Codec-level analysis to detect macroblocking and other encoding errors.
- Audio and video analysis to detect black screen, freeze frame and silence at the source.
- Validate accuracy and adherence to expectations on bitrates, formats and other properties.

### Multicast and HFC networks

- Detect packet loss, jitter, reordering, timing issues and more.
- Full real-time TR290 analysis on all streams.
- Monitor on both sides of IP to RF conversion in HFC networks.
- Track DEPI sessions, muxes and individual services.
- Support for high-density analysis in RF networks with support for multiple multi-tuner input cards.

### Features



In-depth analysis for all types of video.



Alerts and live thumbnail mosaics with penalty box functionality for situational awareness.



Best visualizations with custom dashboards, interactive timelines, and logs.



Centralized, delivery chain aware end-to-end overviews in the Agama Enterprise Platform.

### Technologies supported:

**MPEG-DASH • HLS • Smooth Streaming • Common Encryption • SCTE 35 ad insertion signaling  
TS multicast • DVB-C/T/S • DEPI/R-PHY • SDI over IP**