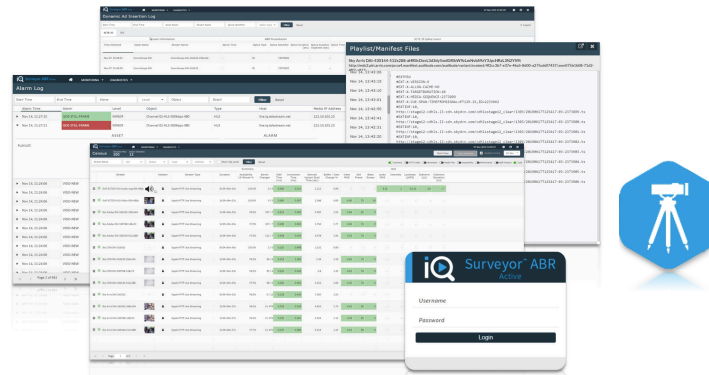


Surveyor ABR Active Compact

Product Sheet



Surveyor™ ABR Active Compact

Portable Real-Time Monitoring of OTT Streaming Video for Access and Edge Networks

Market Challenge

Consumers have an increasing number of options to view video content. If your customers experience slow video startup, mid-program buffering, or missing content, you are sending them an invitation to try a competitive offering. The result is churn. Even worse, you may not even know why the churn is occurring.

Verifying the quality and availability of Over-the-Top (OTT) streaming video is a complex challenge. Each video asset is published in a variety of bitrates (“asset variants”) to support Adaptive Bitrate (ABR) streaming. Beyond that, there are multiple streaming formats to support the different devices that customers expect to use to play your video streams. All of this complexity increases the risk of a poor viewing experience.

The IQ Solution

Surveyor ABR Active Compact (ABRc) is a video quality monitoring solution that uses “synthetic client” technology to verify that your video content – live or VoD – is available and plays as expected, in every bitrate and format. It effectively acts as your most critical viewer, measuring video flows and keeping you informed about your service’s quality and performance. Simply point Surveyor ABRc at the assets you want to monitor, and it continuously “plays” or cycles through the video to measure key performance indicators (KPIs). Surveyor ABRc Active Compact is an integral component to IneoQuest’s ABR monitoring solution. Its small footprint and monitoring capacity is ideal for monitoring the access network and video assets that need attention by identifying issues before your customers are impacted.

Active monitoring is a great complement to client-based solutions that are designed for monitoring your viewers’ actual experience and behaviors. On their own, client-based solutions offer a limited view of content availability or quality because they are reactive by nature. They only collect and report data on the specific bitrates that viewers are actually playing. Surveyor ABRc is a “proactive” solution. Using Surveyor ABRc to monitor performance of all bitrates, at different locations in the video delivery chain, you can identify quality weaknesses and diagnose their sources, potentially before your viewers are affected.

Key Benefits

- Accessibility verification, ensuring the content is accessible at each location across the distribution and access network.
- Proactive visibility into the performance of video streams at any point from the origin server to the edge and the access network.
- Reduce Mean Time to Resolve (MTTR) with the ability to differentiate between geographic, network, or content impairments
- Ensure a high quality viewing experience measuring content availability measuring availability for each bitrate variant of a video asset and identifying issues before customer impact
- Protects advertising revenue by monitoring the dynamic ad-insertion workflow, ensuring ad opportunities are present and without error.
- Rich control and analytics API to facilitate full integration in to the monitoring ecosystem

Features

- Active QoS & QoE monitoring for ABR video streaming supporting the following packaging formats:
 - Hypertext Transfer Protocol (HTTP) Dynamic Streaming (HDS)
 - HTTP Live Streaming (HLS)
 - Microsoft Smooth Stream (MSS)
 - Dynamic Adaptive Streaming over HTTP (DASH), also known as MPEG-DASH
- Using Synthetic Client technology acting like a client to request any asset variant for monitoring
- 24/7 or scanning monitoring of live and on-demand content with asset-based multi-level drilldown into per segment statistics for rapid fault isolation and reducing mean time to diagnose (MTTD)
- Asset service validation (manual or scheduled) ensuring asset availability for your entire on-demand library
- Stream performance “at a glance” with Availability and the patented VeriStream QoS metric
- Real-time streaming error notification with customized threshold configuration and configurable. Availability parameters puts emphasis where you want it
- Media Decryption monitoring QoE of DRM encrypted streams - supports Verimatrix (Multi-DRM and ViewRight), Synamedia DRM System, PlayReady, EZDRM and Irdeto encryption
- Schedule-based Monitoring to optimize active monitoring using realistic constraints based on server load, bandwidth utilization and Content Delivery Network (CDN) costs
- Dynamic Ad Insertion support with SCTE-35 monitoring, detection, decode and alarming, and Ad thumbnail images for visual validation
- Text track monitoring ensures captioning content availability and conformance
- Monitoring profiles support stream prioritization and differentiation groupings
- Full packet capture buffer based on customized trigger events for in-depth post-event analysis
- Playlist error detection through dynamic parsing and conformance monitoring
- Monitoring and alarming of HTTP errors (HTTP 4xx, 5xx)
- Media File error detection
- Playlist and Manifest file inspection
- Enhanced Traceroute for network analysis to measure for potential choke points in the distribution path

- Keyless QoS measurement of encrypted streams
 - Advanced Encryption Standard AES-128 support for HLS
- An Application Programming Interface (API) provides the ability to control the probe, schedule monitoring, and access the Surveyor ABR Active metrics and additional information
- Uses Lightweight Directory Access Protocol (LDAP) for user authentication

Applications And Uses

For Video Service Providers, Content Owners, and Online Video

- Platforms (OVPs):
- Verify that all of your assets are available from your origin servers, and that the servers are meeting performance expectations.
- Continuously scan up to 10K assets in your VoD library for availability and QoS.
- Establish and monitor Service Level Agreement (SLA) benchmarks for your Content Delivery Network (CDN).

For Online Video Platforms (OVPs), Network and CDN providers:

- Differentiate your service with real-time performance monitoring for your customers' video assets.
- Provide third-party validated video asset performance metrics.
- Quickly direct Surveyor to troubled video assets to help determine if a problem's root cause is in the CDN or elsewhere.
- Identify how specific assets perform in your network (e.g., 4K assets) to identify and help you eradicate trouble spots.

Technical Specifications

- Browser-based user console with multi-user access
- Licensable for up to 100 concurrent sessions of HTTP based streaming video
- Media Ports for Monitoring: two Copper RJ45 10/100/1000 Base-T Ethernet ports or two SFP+ 10/100/1000/10000 Base-T Ethernet ports
- Management Port: one Copper RJ45 10/100/1000 Base-T Ethernet port
- Remote configuration storage
- Micro-USB port for Out-of-Band management