Market Challenge
Consumers demand the same viewing experience with Internet and mobile video as they do with traditional broadcast TV. Without visibility into the adaptive bitrate (ABR) streaming video network, providers cannot ensure video quality and service availability. When it comes to ABR streaming video, monitoring is even more challenging because of built-in quality variability and reliance on third-party networks to deliver your valuable content.

The iQ Solution
Surveyor ABR Passive (S-ABR Passive) offers insights into the complex solutions and various networks used to deliver adaptive bitrate video. By monitoring at multiple demarcation points in the network, S-ABR Passive collects context-specific metrics, calculates performance based on multiple dimensions, and when necessary, raises alarms to alert you of critical events for further investigation.

S-ABR Passive provides publishing validation in the head end and monitors post-origin for 24x7 coverage of streaming assets. Unlike solutions that rely on streaming the content for measurement, S-ABR Passive monitors without drawing on critical resources required to serve client devices. When these complementary methods of active and passive monitoring are combined, service providers and network operators can effectively scale the monitoring solution for content accessibility and network-performance measurements.

With the insights from S-ABR Passive, you can quickly identify performance of streaming services, drilling down from visual trending data to network-level measurements for root cause analysis. Customized alarm thresholds and allocation to assets provide enormous flexibility to cater the solution to your needs.

Use S-ABR Passive monitoring to be alerted whenever your content is not available, or delivery performance runs the risk of degrading the viewer experience and your brand.

Features and Benefits
• Measure video quality “on-the-fly”, before your content is delivered through the network
• Minimize customer service calls and “truck rolls”
• Continuously evaluate the health and performance of your encoding/transcoding resources
• Reduce cost and risk of regulatory compliance

Key Features
• Availability measured for each bitrate variant of published video assets
• Success rate calculated for each intra-Content Delivery Network (CDN) element and asset for simple identification of performance impairment
• Asset-based multilevel drilldown for rapid trouble diagnosis
• Real-time streaming error notification with customized threshold configuration puts the error detection emphasis where you want it
• Monitoring profiles support stream prioritization and differentiation groupings
• Full packet capture buffer for deep-dive offline analysis
• Alias templates ease the process of translating URLs to readable names for quick service identification
**Applications and Uses**

**For Video Service Providers and Online Video Platforms (OVPs):**
- Ensure that all assets are packaged and ready for distribution to in-house or third-party CDN
- Gain visibility to encoder and packager impairments that can result in stream outage, buffering, or looping video

**For OVPs and Network and CDN providers:**
- Monitor all client requests to your network for continuous analysis of system performance
- Quickly identify unavailable content without synthetic testing clients
- Establish and monitor Service Level Agreement benchmarks for your CDN
- Prepare for and design services appropriately based on observed performance and network load
- Compare performance of architecture or network changes

**Specifications**

- Support for HTTP Live Streaming (HLS), MPEG-DASH (DASH), Microsoft Smooth Stream (MSS), RTMP and Adobe HTTP Dynamic Streaming (HDS) packaging formats
- Measurement and error detection for accessibility, ABR protocol, and streaming performance
- Origin, load balancer, and cache error detection based on segment transfer times, latency, and bandwidth
- Browser-based user console with multiuser access and profiles
- Publishing monitoring up to 10Gbps
- Intra-CDN monitoring up to 15Gbps
- End Client up to 15Gbps and 5,000 concurrent user sessions