iQ and Cable TV Provider

Case Study



A Large Cable TV Provider Relies on Telestream iQ Video Quality Monitoring Solutions Thru Transition to Streaming Service

Telestream iQ solutions have been instrumental in cable TV providers transition to a streaming platform by providing an ultimate level of visibility that enabled moving forward with confidence. A leading cable TV provider is operating in different markets and serves multiple geographic locations throughout the United States. The operator is currently transitioning from traditional QAM (digital cable) architecture to an all IP streaming solution using the HLS (HTTP Live Streaming) protocol. This transition involves rolling a new architecture into production with expansion to all regions they serve.

The transition to an IP streaming architecture helps to address different challenges for any cable TV operator:

- 1. Subscribers want more choice in how they consume their video services, and cable TV providers can respond by transitioning to a more efficient and flexible streaming service.
- Offering IP streaming service enables providers to compete at a new level with new market entrants that are focused on pure streaming. It also enables them to offer more attractive bundles that include cable TV and streaming services customized for subscriber preferences.
- Moving to streaming allows the service providers to enable a better video experience versus the QAM architecture–with higher video resolution for the growing number of 4K devices. Tightly managing quality can give a competitive advantage and reduce churn to other streaming platforms.
- 4. The transition to IP allows pay TV service providers to be more agile, making updates quickly when newer video technologies emerge. This also enables them to keep a faster pace with shifts to 4K and even 8K streaming services.

The Challenge

With the shift from traditional QAM architecture to a high-speed data delivery, a new type of visibility is needed to identify issues that might arise over the video operations network.



To address these challenges, cable TV providers need monitoring equipment that can identify and troubleshoot all issues that can occur in the new streaming platform.

When launching a new solution, especially one as significant as a shift to OTT streaming, the biggest challenge is integration with different vendors to ensure everything works together well. Similarly, it is critical to ensure that everyone in the organization can see the health of video delivery service in all steps of the video contribution, processing, and delivery chain. The regional field support teams need access to information so they can see what's going on in their area of focus. If a channel goes out, they need to quickly escalate to the video operations team to perform deep root cause analysis.

Being able to quickly find where a problem is in the network that's causing a poor quality of experience for customers is a key requirement for any video service provider. Much of the content still arrives from satellite receivers or some type of terrestrial feed. Being able to identify where there are issues with the packet drops over the network, and making sure the video service provider has a clean network to deliver video without any freezing or macro-blocking can be a challenge.

The Solution

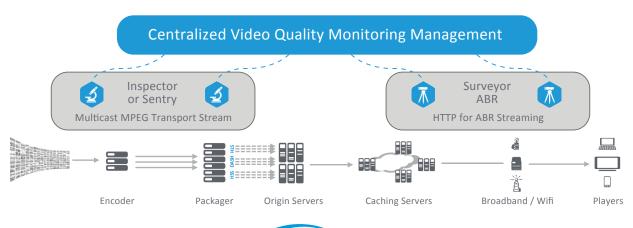
As part of the important transition to IP streaming, the large cable TV provider is utilizing Telestream iQ solutions to monitor the quality of the streaming service at multiple points along the distribution chain.

This has been particularly critical during the initial deployment to ensure each vendor was delivering the quality and capability expected. Video quality monitoring with Telestream iQ solutions allows cable TV providers to identify where in the network they are having an issue and work proactively with their vendors and internal departments to resolve them.

For this specific Cable TV provider, Telestream IQ solutions was very helpful at identifying issues with streams during the selection and trial phase of streaming architecture. The team was able to see down to the IP flow and network delivery level. This transparency helped the service provider reduce a lot of the finger pointing between vendors. With the help of the centralized video management platform from Telestream iQ, the cable TV provider could show vendors a snapshot of what's going on, the actual errors they were receiving, and that helped in resolving those types of problems.

The Results

When leveraging Telestream iQ, everyone from across the operations team has access to the centralized video monitoring system. This platform informs the team, at a glance, about the overall health of video distribution. The centralized video quality management systems address visibility across video delivery chain and enable correlation and aggregation of data from each monitoring point. The system pulls data from multiple probes and displays on a single pane of glass. It's a key focus in the video head-end monitoring wall. Video service providers can look at all the channels in one spot and see what they're doing. When a problem happens, the video operations team can just click on a channel and drill down to all the additional information to troubleshoot. Moreover, on top of the real-time monitoring, video operations team can make daily use of the availability reports generated by the centralized monitoring management system to discover if there are any underlying issues that require additional attention.





Centralized Video Quality Monitoring Management



Dispersed operations teams have some visibility



Data aggregation from different monitoring points



Single location to check for all faults and alarms



Quickly identify the source of problems

The Benefits

A major advantage of using Telestream IQ is that its centralized video quality monitoring management platform helps cable TV service providers figure out what information is useful from all monitoring points in the video delivery chain. It enables service providers to configure what types of notifications they need and at which level. All the alarm templates are customizable, which enables service providers to track the most critical events for their own specific environment.

One example of the utility of Telestream iQ solutions occurred during the cable TV provider's initial lab evaluation for their streaming platform. At some point, while the client devices were behaving normally and users could still see the channels, the Surveyor ABR streaming probe alerted with HTTP 503 errors on the output of the CDN. The CDN vendor didn't see anything in their logging. However, when the cable TV provider went to field trials and had more people utilizing the system, there were reports that users couldn't tune to various channels. The player would time out while looking for the URL or the stream.



The cable TV provider then went back to those HTTP 503 errors and dug in deeper with the CDN vendor, showing them snapshots in that area of the network. It turned out that it was actually a firewall issue related to the confirmation of the CDN vendor. When they sent a request, the request was being incorrectly redirected and the request would timeout, never getting a response. The CDN vendor was not logging that error on their system, so they never saw it. Thanks to Telestream iQ solutions, the problem was finally diagnosed correctly and resolved.

According to this large cable TV provider, Telestream iQ Solutions have been instrumental in their transition to a streaming platform. It's given them a level of visibility that enabled them to move forward with confidence.

For More Information:

Please visit the Telestream IQ website at: https://www.telestream.net/iq/overview.htm

To learn more about Telestream IQ Centralized Video Quality Monitoring Management visit here: https://www.telestream.net/ig/ARGUS.htm



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