Searching for OTT quality

OTT delivery has given traditional broadcasters a fabulous new revenue stream. Quality of service issues are more important than ever says **Penny Westlake**, Interra's sales director, Europe

When OTT offerings became mainstream in 2016, some called it the end of the television industry. That's not entirely true. In fact, OTT services are driving new revenue sources for traditional content providers.

Live sport channels in particular emerged as a huge growth opportunity for broadcasters and operators looking to make a splash in the OTT environment.

While the NFL witnessed a double-digit decline in TV audiences, with *Monday Night Football* down 24 percent from this time a year ago, according to an executive at Fox Sports, online streaming numbers hit a record high during the Summer Olympic Games. NBC's apps recorded 2.7 billion minutes, nearly twice the amount for all previous Games and had 100 million unique users, a 29 percent increase over 2012.

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Beyond an increase in OTT sports channels, we're seeing a rapid transition to a direct-to-consumer world. A recent survey by Pew Research Center found that as many as 24 percent of American adults do not have cable or satellite TV. Increasingly, cord-cutters are accessing OTT services through Netflix, Amazon, and Hulu. Moreover, streaming companies like Netflix are partnering with cable companies like Comcast, making streaming content more accessible and convenient.

RAMPING UP QUALITY CONTROL

It's clear that viewers are shifting toward watching content when and where they want it, and on any device. With the surge in online video viewing, traditional broadcast and pay-TV operators need to ramp up their quality control (QC) and monitoring operations. Here's why: Consumers today have higher internet bandwidth than ever before and they expect the same high-quality, consistent viewing experience on secondary devices as they get with broadcast TV. If the quality is low, viewers will find an alternative means of watching content. Yet, ensuring delivery of error-free and high quality content is a challenging proposition. Content providers require a reliable set of QC and monitoring tools to stay competitive in the OTT environment.

ENSURING OTT QUALITY

In an OTT workflow, content is stored on origin servers, CDNs, as well as edge/cache servers. Depending on the location of the end user, bandwidth availability, and other factors, video is sent from one of these servers to the end user. Quality issues can arise at any of these delivery points, and content providers will need visibility into the entire workflow to ensure optimum quality of service (QoS) and quality of experience (QoE).

An efficient QC solution will help content providers address these critical OTT delivery requirements through centralised management, checks of QoS and QoE, and real-time error alerts for problem detection and troubleshooting. Content providers should choose a QC solution that supports SD, HD, and cloud-based workflows, as well as 4K and HDR. As consumer demand for 4K HDR video

grows, 4K and HDR quality checks will be critical to assuring superior quality of adaptive bitrate (ABR) content.

> **Operators need to ramp up their quality control (QC) and monitoring operations**

In particular, content providers will want a QC solution that performs file integrity and compliance checks to ensure that the file or content being delivered is not corrupt and has been encoded per industry standards. If these requirements are not met, downstream tools may not be able to play out the assets accurately. In the OTT environment, this is especially important because there are a variety of devices with different form factors and players from a multitude of vendors. Content providers must make sure that the files play well on all devices.

SOFTWARE FLEXIBILITY

From a monitoring standpoint, in 2017, content providers will adopt software-based test and measurement solutions for OTT service delivery. Checking the quality of OTT services is very complex, and it's constantly changing. Software-based solutions offer flexibility and better ease of expansion. This is particularly true in cases where multiple different types of services are being output from the same media center. Some manufacturers offer hardware-based T&M solutions to reduce the number of potential variables that are involved; however, as the distribution of many services requires constant flexibility, and new services need to go online very fast, software-based solutions are the way of the future. ■