



Bruce Devlin

Streaming

The term “streaming” has become so common to us that it now covers a variety of different business areas, technologies, and end-user experiences. I remember the legendary Roderick Snell explaining to me that no new media format has really killed off the incumbent formats. Radio did not kill off newsprint or magazines. Cinema did not kill off radio. TV did not kill off the cinema. Streaming is different. Streaming is a technology used to deliver event cinema. Streaming is used to deliver live TV. Streaming is used to deliver over-the-top (OTT) services.

If streaming is done correctly, then the user of the streaming service, either consumer or professional, neither knows nor cares that streaming was used to enable the audiovisual experience.

What I find fascinating is the range of underlying technologies that are used to enable streaming. SMPTE, alone, defines several different streaming mechanisms depending on whether you are streaming components or interleaved media. Other standards organizations are defining protocols and compression wrappers to allow very low latency streaming such as common media application format (CMAF). The promise of a low latency 5G, high-reserved


capacity network coupled with CMAF is promising to change the way live production will take place worldwide.

In the U.S., the new Advanced Television Systems Committee (ATSC) 3.0 standard is IP-native and this will signal the beginning of the end of the Transport Stream, which has powered consumer distribution for the past 30 years. It seems that all services will be streamed in the not-too-distant future....But will they be?

Certainly, those who are at the leading edge of technology adoption see it that way, but there are still billions of dollars of traditional production and distribution equipment around the world that are still very serviceable and need to, somehow, be connected at both input and output to the streaming revolution that is changing our consumption habits. I am writing this piece while at the Hollywood Professional Association (HPA) Tech Retreat and this morning’s breakfast conversation revolved around the issue that existing operators are

grappling with, which is: “How do I get there from here?” It seems that one of the emerging answers is the incremental introduction of cloud workflows. Streaming to and from the cloud can be an enabler to reach new audiences that are hard to reach with the traditional fixed infrastructure of serial digital interface (SDI) plants. Some awe inspiring presentations of doing this in practice show that this vision of the future is already here.

Streaming is just one of the many disrupting technologies that are changing the business of professional media in 2020. It might not kill off the previous technologies, but it will radically change the way they are consumed. SMPTE’s standards on streaming include ST 2022 and ST 2110. SMPTE is also looking at security and microservices to help control these streaming transports and help the industry build interoperable systems at scale.

If this topic interests you and you want to get involved in guiding the future of professional streaming, then please get in touch. 

UPCOMING SMPTE TECHNOLOGY COMMITTEE MEETINGS

1–4 June 2020

Virtual Meeting

16–19 September 2020

European Broadcasting Union, Geneva, Switzerland

7–10 December 2020

Disney, Burbank, CA

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