For expanded coverage of this month's topic "Changing Distribution," you can find the following paper in the Digital Edition. Visit the SMPTE digital library at http://journal.smpte.org to access the issue and to read this additional paper.
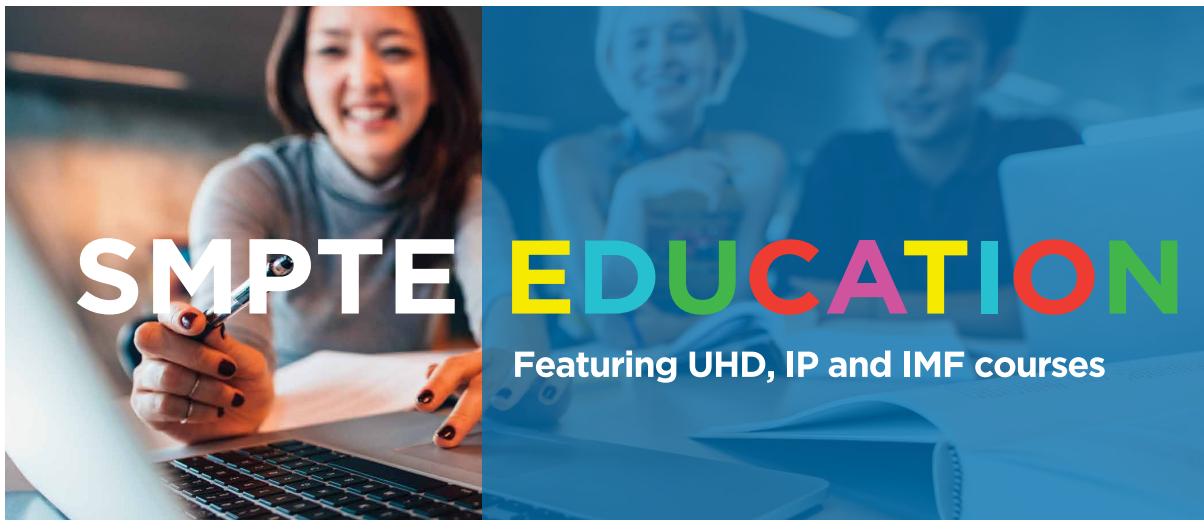
Improving Live Performance in HTTP Adaptive Streaming Systems

By Kevin Streeter

While Hypertext Transfer Protocol (HTTP) adaptive streaming (HAS) technology has been very successful, it also generally introduces a significant amount of live delay as experienced by the end viewer. Multiple elements in the video preparation and delivery chain contribute to live delay, and many of these elements are unique to HAS systems versus traditional streaming systems such as Realtime Streaming Protocol and Realtime Messaging Protocol. This paper describes how improvements in the structure of the media, the delivery workflow, and the media player can be combined to produce a system that compares well with broadcast. This paper concludes with a preview of advances in delivery technology (such as HTTP2) that will improve the experience even more in the near future.