Cloud-based MC and Playout Approach;
It's Time To Prepare

Within two years, the same number of revenue channels running on-prem will run in the cloud.

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Cloud-based MC and Playout Approach

hange is nothing new to master control and playout workflow. Driven by advances in technology and the quest for ever-greater efficiency, how linear television channels are scheduled, content played out, and quality ensured has steadily transformed from the days of heavy iron, robotic video cart machines, and rather closed automation software to off-the-shelf computers, channel-in-a-box, video servers, and more open software standards aimed at tighter integration with aligned workflows.

Workflow efficiency has taken center stage as industry consolidation has seen the rise of hub-and-spoke MC and playout creating the need for a smaller number of operators to monitor and control ever more channels—both primary in multiple markets as well as the wide variety of Diginets.

More recently, these workflows have begun evolving to address not only traditional linear and newly launched NextGen TV channels but also online Free Ad-Supported Television (FAST) channels and other over-the-top (OTT) revenue centers.

Right on time, the industry has a new tool capable of delivering greater workflow efficiencies. That tool is the cloud, where artificial intelligence (AI) and machine learning (ML) tools have the potential to simplify and automate workflows and help to usher in the next wave in operational process evolution.

While a nascent technology for master control and playout at the moment, the direction is clear: the cloud will emerge as a trusted platform for playout of less demanding channels—those not laden with live content—within the next 24 months. In the near future, even primary broadcast channels with a

large amount of live programming will regularly playout from the cloud.

The good news for broadcasters is they have a couple of years to begin rethinking their traffic, master control, and playout workflows to ensure the cloud-based solutions under development today track their operational needs when it is time to transition.

TO THE CLOUD

The transition of playout workflows to the cloud will likely be done in stages. Within two years, the cloud will make its presence felt for playout in several limited applications. Those include channels requiring a low degree of interaction with the playlist. In other words, the cloud will first be used for channels with limited live content, such as channels programmed with a lot of syndicated shows and only peppered with news.

Another strong candidate for the initial use of cloud-based playout is a temporary channel, which broadcasters increasingly are identifying as a sought-after NextGen TV application. For instance, temporary channels might serve as a safety valve to maintain the presence of syndicated shows while a broadcaster elects to go wall-to-wall with live coverage of an emergency or disaster on the main channel.

During this phase of the transition, cloud and on-prem playout infrastructure will likely exist in parallel as broadcasters seek to minimize capital spending on new infrastructure while at the same time pursuing newly available revenue sources arising from the growing number of distribution opportunities.

The interim phase in the transition to cloud-based playout

workflows will likely give way about three years later when traffic, master control, and playout for a broadcaster's main revenue-generating channels along with all the related workflows, including ingest, content prep, and QC will be cloud-based. This means channels with heavy live news schedules, not simply low-interaction channels, will play out of the cloud.

Helping to drive this full-on adoption of the cloud will be the fact that master control and playout tools in the cloud will have caught up with broadcast workflow requirements. Impediments today to mass adoption, such as latency, will be overcome as new deployment strategies unfold.

Several factors will contribute to cloud adoption beyond the pursuit of greater efficiency, even in the face of climbing channel count. One of the biggest will be a desire to take advantage of AI and ML tools available in the cloud that will automate workflows to a greater extent. These tools also offer the chance to enable closer interaction with traffic systems to achieve the vision for BXF.

With AI and ML, revenue-affecting decision-making will be done by and consistent with a larger business system rather than ad hoc by an MC operator choosing how to replace missing commercials. With AI and ML, these decisions about substitutions will not be made on the fly; rather, subsystems will be developed that can predict the best, most profitable solution.

AI and ML-powered cloud-based playout tools will also assist broadcasters as they begin to take full advantage of the ad and content personalization and interactive aspects of NextGen TV and OTT channels.

In turn, these new playout capabilities will enable geofenced ad delivery, creating the opportunity for broadcasters to segment their audiences in a manner previously unavailable. This will allow them to deliver hyper-localized ads priced below the full-market rate and potentially bring new advertisers into the broadcast fold.

Cloud-based playout also will harmonize the ongoing transition in ad sales from a spot-based legacy to impression-based advertising and provide a natural pathway to digital ad server-enhanced workflows.

CLOUD CAVEATS

Broadcasters should be aware of the fact that the development of cloud-based infrastructure is on its own path that is not necessarily parallel to Media & Entertainment Industry businesses. It is not being built for broadcasters. Thus, they must be proactive in the development of cloud-based master control and playout to ensure that the systems developed meet their needs.

The cloud will not work like the on-prem environment broadcasters are accustomed to, necessitating a rethink of their master control and playout workflows.
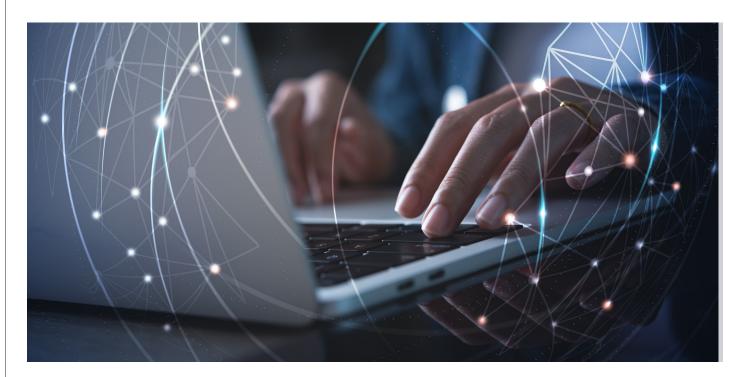
Broadcasters used to CAPEX budgeting may initially suffer sticker shock when they adopt an OPEX-based playout model in the cloud. However, the pay-as-you-go model supporting playout for temporary channels will help to temper this reaction.

WORKFLOW IS KEY

A successful transition to the cloud depends upon broadcasters beginning today to evaluate their operational processes. The initial and most important step, this evaluation enables broadcasters to create a process map clearly laying out in detail what is being done currently. With this granular view of their master control and playout processes, broadcasters can then determine which will work best on-prem and what processes are best-suited to the cloud. Their guiding principle should be seeking out how best to run their operation.

Broadcasters may also wish to work with trusted forward-looking partners to assist in this process and help them examine unfolding trends to see how they can best benefit from the opportunities the cloud presents for master control

and playout workflows. One such partner is Florical Systems. While the company's primary focus for decades has been the development of master control automation and playout solutions, it frequently partners with broadcasters as they develop their workflow plans, offering insight as a trusted consultant.

Today, Florical is at work on cloud-based master control and playout. One of its first cloud solutions will likely be a cloud-native version of its on-prem MediaMaster asset management (MAM) system that will: manage media assets in the cloud; support content management from one cloud storage to another; automatically obtain content; use AI to identify where to insert start and end markers into content; and leverage metadata.

THE FUTURE APPROACHES

The television industry is poised for another sea change in how content is prepped, scheduled, played out, QC'ed, and monitored. This time the technology that will help broadcasters perform these processes is the cloud.

One day soon, all editing and management of commercials and programs will be accessible from anywhere via a laptop logged onto virtualized instances of the on-prem tech used today for these functions.

At-home or in-office master control will become real, and in the process, unlock multiple benefits, ranging from greater workflow efficiencies to disaster recovery via a cloud equivalent of the Florical SMART Central business management solution. Rather than accessing the heart of Florical's on-prem solution via the web, however, the company's master control and playout will be running natively in the cloud—bringing the power to control playout with proven automation to anywhere an operator needs to work.

This transition to the cloud will not happen overnight, but the direction of the industry is clear. Within a couple of years, the first revenue-generating channels running from the cloud will equal the number of on-prem channels. The main revenue-generating channels will then follow.

Such a significant transformation, however, can only be successful if television broadcasters take advantage of the brief window they have today to begin planning how to leverage the cloud for master control and playout in the future. In other words, now is the time to get started.

About Florical Systems

Florical master control automation software is future-ready for cloud-based master control. Whether you are looking to implement a native cloud-based solution or use the cloud for disaster recovery, we have the solution for you. As the leading automation technology provider, we partnered with industry-leading broadcast cloud providers to bring cloud-native solutions to our customers.

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