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Today's Content Distribution Challenges Go Far Beyond Transcoding and Exporting Files

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The media & entertainment supply chain is under increased pressure as the number of devices and locations from which consumers access content continue to rise. According to a recent Cisco whitepaper (go2sm.com/ciscovni), one million minutes (17,000 hours) of video content will cross global IP networks every second by 2021. While new distribution agreements enhance the revenue of content owners and originators, there hasn't been a corresponding allocation of resources to fulfill these agreements. Transcoding and packaging of media is a substantial part of the media & entertainment supply chain process, particularly when prepping for a new outlet. However, it is far from the only issue. In any on-prem workflow, graphics are added/removed/altered, dialog is replaced, legislative advisories are added/removed/replaced, promos are inserted, and much more. Platform requirements further complicate the issue with adaptive bitrate (ABR) variants being optimized for different devices and closed captioning, dynamic ad insertion, sidecar content, and loudness standards to be adhered to. Working with international distributors creates still another set of demands focused mainly on localization of programs and movies. In many cases, these additions and alterations are performed by an automated "bag and tag" edit function running largely autonomously. (We certainly don't want people doing such repetitive, mundane work.)
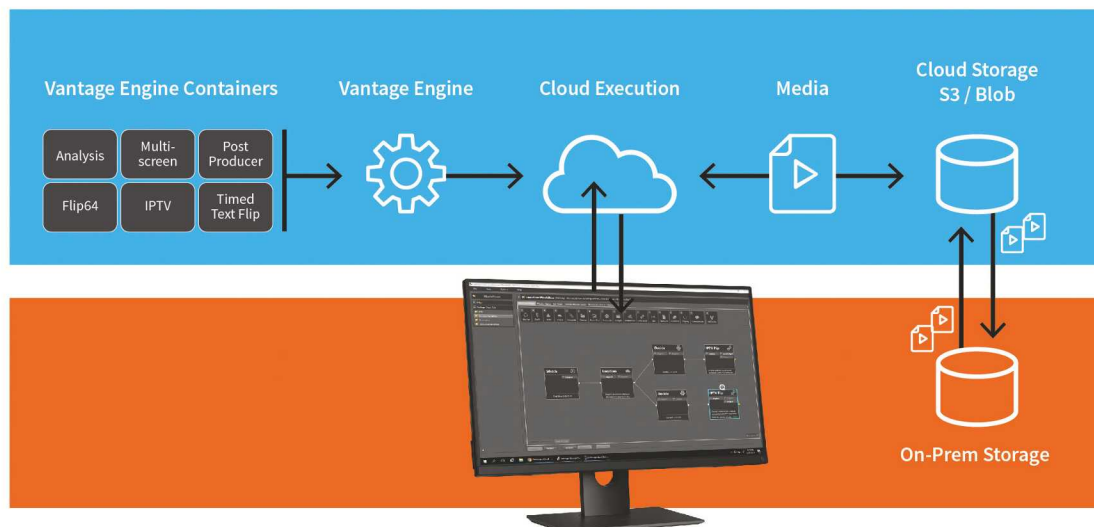
KEEP SILOS ON THE FARM

Many organizations have set up distinct workflows for each distribution destination as the need has arisen. Frequently, these workflows will be comprised of different technologies and service providers that were available at the time to get the job done. This is not surprising, as each of the workflows comes with unique demands that content originators may not be equipped internally to provide. With these custom tools in place and independently deployed for each use case, organizations become challenged when moving to new, centralized workflows that can scale as required. These resultant siloed workflows are inefficient, difficult to maintain, and costly in terms of resources (machine and human).

IS THE CLOUD THE ANSWER? YES AND NO

The need to scale up media processing resources has never been greater as distribution contracts get signed, back catalogs are refreshed, and programs find new avenues to viewers. For a growing number of companies, though not all, the logical solution is to move the media supply chain up into "the cloud" and make use of the well-understood advantages that such architectures promise. The scalability of cloud processing, along with the idea of consumption pricing for the infrastructure and processing make this an easy decision in the minds of many CFOs, as moving more expenses to an op-ex budget can be very attractive.

Telestream Cloud

Vantage Engine Containers — Analysis, Multi-screen, Post Producer, Flip64, IPTV, Timed Text Flip — Vantage Engine — Cloud Execution — Media — Cloud Storage S3 / Blob

Vantage Installation

On-Prem Storage

However, when considering moving myriad processes into the cloud, companies are quick to recognize the necessity of replicating in the cloud all of the tools that they rely on locally. This includes the workflow automation engine that ties all of these processes together into an efficient, cohesive whole. Transcoding alone simply does not suffice. For example, more and more outlets require IMF packages as the mechanism of delivery. These are not simply transcoded copies of the original master (which may have been made many years ago), but program segments that require significant processing in order to create the multiple components that make up an IMF deliverable. Depending on the number and variety of silos that have sprung up to manage and prep content, moving everything lock, stock, and barrel into the cloud could be a tall order.

USING THE CLOUD WITHOUT GETTING RAINED ON

When it comes to processing media for distribution, the first rule of the "Cloud Club" is not that nobody talks about it, because everybody is talking about it incessantly. Instead, the first rule is to "follow the media." If your media is in the cloud or going to be in the cloud, then by all means you should process it there. If it is "on the ground," then it's going to be very expensive to push it to the cloud for some processing, only to have to pay handsomely to bring it back down. One of my colleagues refers to this as the "Hotel California scenario," as businesses can check in their data for free but can't ever leave without paying extortionate egress charges. The lesson here is that there are many instances where on-premise workflows will still rule when it comes to efficiency, particularly when it comes to specialized, high-resolution, high-bandwidth content workflows.

Moving to the cloud doesn't have to be an all-or-nothing proposition, and it's important to be wary of any opinion to the contrary. There are a number of scenarios where cloud-based processing—and particularly processing hosted by a public cloud provider—is not preferable or even feasible. There are data ownership provisos in many source agreements that prevent material from being housed on a public cloud platform. There are also some scenarios in which an on-prem platform can actually be more cost-effective than a cloud approach—mainly those where the "run rate" business is well known, and there is less need for "bursts" of processing.

SECRETS TO SUCCESS

For many media organizations, the solution is to go for a hybrid approach that covers the run-rate business, or a significant portion of it, with on-prem processing but with the capability to process in the cloud where it makes the most sense (follow the media). Or whenever the company has a burst of work which cannot be fulfilled with on-prem processing within a given time frame. The secret here, though, is to ensure that both on-prem and cloud-based workflows can offer all of the same capabilities with no exceptions and hopefully with the same interface. Once again, it's so much more than transcoding. All of the processing steps and options need to be available in both scenarios for this approach to be successful.

Telestream released Vantage Cloud Port earlier this year to enable Vantage users* to select encoding actions within their workflows that would normally consume on-premises resources and to export those actions to the cloud. Vantage continues to control and orchestrate those actions, but it is now consuming public cloud resources via Telestream Cloud running in a public cloud platform of choice. Customers pay for these actions on a per-content-minute basis. It is a hybrid model that enables a customer-managed on-prem installation to be augmented from an infrastructure perspective and a licensing perspective by Telestream.

Vantage Cloud Port provides a very cost-effective entry point into Vantage, enabling enterprises that could not previously afford Vantage to make use of its rich media processing feature set. The system is differentiated from other systems in its access to all the workflow automation capabilities that are intrinsic to Vantage. These new cloud-enabled media processing actions enable Vantage to utilize the benefits of a public cloud and provides consumption-based pricing in a streamlined and straightforward fashion.

Vantage Cloud Port is a fully featured media processing platform with most of the characteristic Vantage transcoding functionality including Telestream's specialty formats and packaging.

Learn how to collapse distribution silos so you can scale, optimize, manage content via centralized resources, and perhaps make your job more productive. Listen to the on-demand webinar titled "Are Your Video Distribution Workflows Siloed?" at https://pages.telestream.net/dist_sm

Telestream has thousands of Vantage users

ABOUT TELESTREAM

Telestream provides world-class live and on-demand digital video tools, workflow solutions and quality monitoring capabilities that allow consumers and businesses to transform video on the desktop and across the enterprise. Many of the world's most demanding media and entertainment companies, and service providers, as well as a growing number of users in a broad range of business environments, rely on Telestream products to streamline operations, reach broader audiences, generate more revenue from and ensure the quality of their media. Telestream products span the entire digital media lifecycle, including video capture and ingest; live and on-demand encoding and transcoding; captioning; playback and inspection, delivery, and live streaming; automation and orchestration. With its iQ product line, Telestream enables the monitoring and management of quality service and experience over any network.

Telestream's corporate headquarters are located in Nevada City, California and Westwood, Massachusetts. The company is privately held. For company and product information, visit **www.telestream.net.**