ITV Uses Telestream Cloud Services to Prepare for BritBox UK on Amazon Prime Video Channels.

Migration to Cloud enables ten-fold increase in media processing capabilities at UK's premier independent commercial broadcaster.

> "Within 12 weeks, we were exceeding our previous content preparation capabilities. It was a roller coaster ride with us learning on our feet. We went from POC to full production in one of the quickest turnarounds that I have ever experienced working at ITV."
>
> **– James French, Content Processing Team Lead at ITV**

The Customer:

ITV entertains millions of people and shapes British culture. It is a leading media and entertainment company, with the largest commercial television network in the UK and a global production and distribution business, with over 55 labels.

ITV reaches over 40 million viewers every week with programmes on its family of channels, as well as the ITV Hub, which is available on 28 platforms and on over 90% of connected televisions sold in the UK.

ITV Studios produced 8,400 hours of original programming last year. Its global footprint spans 13 countries including the UK, US, Australia, France, Germany, The Nordics, Italy, and the Netherlands. Its global distribution business sells a catalogue of 45,000+ hours to more than 300 broadcasters and platforms.

ITV as part of its 'More than TV strategy', has created a scaled Direct to Consumer business in the UK, including recently surpassing 500,000 subscribers to its ad-free catch-up service, Hub+. In November 2019 ITV launched BritBox UK, a streaming service with the BBC bringing the very best in past, present and future British programming and award-winning content from the BBC, ITV, Channel 4, and Channel 5 to viewers all in one place.

telestream

As the media landscape continues to change rapidly, ITV is focused on building upon its unique combination of creativity and commercial strength, transforming digitally to create a more diversified and structurally sound business.

The first big challenge – Business Interruption:

For several reasons, ITV decided to move a significant amount of its content preparation operations into the Cloud. The project sees ITV migrating many of its current on-premise media processing operations into the Cloud while establishing new cloud-based media processing operations for preparation of BritBox UK VoD content on Amazon Prime Video Channels.

Commencing pre-pandemic, ITV started bringing in-house a range of content processing operations that had previously been provided by a third-party service. At very short notice, ITV was unable to use the supplier. With only a few weeks notice , ITV had to design and build a new solution for the preparation of content.

The creative team in ITV's Leeds facility was expanded to accommodate any craft edits, while the team was faced with the need to rapidly scale up content encoding and packaging workloads. Cloud based services were the only practical solution for ITV, and after evaluation of several alternatives, ITV selected the Telestream Cloud solution and worked with Telestream's team to onboard a cloud-based workflow for their own content.

"We only had sight of the workflows required from the client side, so we had limited knowledge of what we could build," explained James French, Content Processing Team Lead at ITV. "Very quickly, we had to get up to speed, since we needed to minimize business disruption and we must not have screens turning black."

"Already, we were well embedded with Telestream using its on-premise solutions," French explains. "So, it was a natural progression to investigate what Telestream Cloud Services offered us."

With Telestream's help, ITV created a POC (Proof of Concept) system, which replicated its existing Vantage workflows on Telestream Cloud services and proved highly successful. Phase 1 was fully operational within six weeks , allowing ITV to process 50 percent of its normal throughput.

"Within 12 weeks, we were exceeding our previous content preparation capabilities. It was a roller coaster ride with us learning on our feet," explained James French. "We went from POC to full production in one of the quickest turnarounds that I have ever experienced working at ITV.

"A lot of this was thanks to the Telestream team and their ability to visualize what we wanted to do. Now, we are in Phase 3 of re-factoring the Vantage workflows, streamlining them and making them productionized. It's going really well."

The second big challenge – ramping up for BritBox UK.

ITV is expanding its use of Telestream Cloud Services for content processing as their VoD requirements grow in support of the B2C digital strategy. A recent increase in workload included encoding over 7000 hours of content for the launch of BritBox UK on Amazon Prime Channels. With a very short time available to process this content, the Telestream Cloud Service's ability to run massive parallel processing has been invaluable, with up to 300 concurrent sessions being initiated to allow encoding of over 200 long-form media assets per hour.

"Because of the success of Telestream Cloud at ITV, we looked at its suitability for this application," explains James French. Selecting Telestream as its technology partner on this project has allowed ITV to deploy existing pre-approved Vantage workflows for new platform deliveries in remarkably short times and with little or no risk.

"The transcode profile that we chose to use for BritBox – MXF op1A – is a profile that we already use with another partner," stated French. "We were able to lift and shift this profile into Telestream Cloud with just minor modifications by the Telestream engineers."

ITV has found that one significant benefit of this new architecture is increased throughput. On-prem, ITV uses a self-built prioritization microservice that enables up to 200 jobs to be scheduled each midnight, covering seven broadcast partners. ITV is limited to 200 jobs each day since it is constrained by the number of on-prem Vantage nodes.
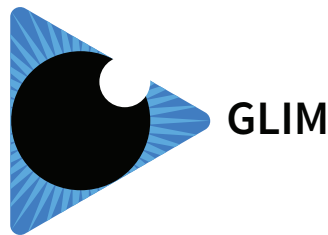
"With Telestream Cloud, we have tested up to 300 concurrent jobs each hour, which is a game-changing uplift in media processing capacity," states James French. "We're just about to kick off the 7000 hours transcode project and we're confident that we will complete it in significantly shorter time, compared to using our on-prem Vantage system.

telestream

"This is a massive change for us. Once we have completed the BritBox UK launch, we can scale back our production system, safe in the knowledge that we can call a production capacity burst whenever we need it in the future," French explains. "This makes it so much easier to on-board new partners onto the BritBox UK platform because the media processing capacity and throughput is there at the flick of a switch."

Challenge three – learning new production techniques in a remote environment.

Cloud implies remote working, even if we were not living in a global pandemic, so how has this impacted on ITV? "With Telestream Cloud, we don't need remote access into on-prem servers to check status levels," comments James French. "Now, we go direct to the Telestream Cloud console and all the management information we need is presented there."

"Telestream's GLIM is another game-changer," he states. "Being able to check and QC content that's on AWS S3 storage and in data centers without needing to download files is great. Previously, if we had problems with a piece of content, I would need to log on to the ITV server, go into our storage and then wait three hours to download a 30GB MXF Op1A file to check if there is any corruption. Now with GLIM, I can connect to the console and view the content, together with all associated media information and get back to the customer within minutes.

"If we have partners contacting us about problems with a piece of content, we can respond immediately, which is so important to me and my team. In this new remote world, GLIM has been a fantastic addition to our production toolkit."

GLIM was developed to solve well known remote work challenges – to be a superior experience to the 'remote desktop/virtual desktop' play back experience, and to prevent remote employees wasting hours every day downloading mezzanine grade media files.

To Learn More

To get more information about products and services mentioned, see:

- http://www.telestream.net/telestream-cloud/overview.htm

- https://www.telestream.net/glim/overview.htm