

CASE STUDY

End-to-end Global Distribution at Scale from
Cloud-based Infrastructure at A+E Networks

Business Objectives

- Agility, Elasticity, & Efficiency
- Automate to remove repetitive and time-consuming tasks
- Support remote workforces
- Never miss a deadline
- Unify disparate pipelines
- Significantly shorten delivery

Benefits

On-prem editing has been eliminated, reliance on third-party service providers has ended, and delivery cycles have been shortened by 70%.

“ We finally landed on a solution that checked every box and made remote editing a cost-effective and scalable reality. AWS, SDVI, Arch and Polaris create a unique harmony of functions to bring this innovation project to life. ”

- David Klee
VP of Strategic Media Solutions

Introduction

A+E Networks' multi-year, enterprise cloud transformation project hit an important milestone with the roll-out of cloud-based remote editing and delivery workflows. What were once separate pipelines are now unified, completely rebuilt and modernized in AWS using SDVI Rally, Arch Platform Technologies, and TMT Insight's Polaris software.

A+E Networks, innovative content creators and a world renowned media company, worked closely with AWS to bring about an integration of technologies which has continued to evolve A+E's distribution business, bringing high-touch editing workflows directly into the path of bulk ordering for Broadcast and VOD delivery. A single-pane-of-glass now controls a complex network of automated and manual processes. On-prem editing has been eliminated, reliance on third-party service providers has ended, and delivery cycles have been shortened by 70%.

Strategy for success

Managing a constantly expanding content library across brands like History, Lifetime and Vice TV requires business logic incorporating speed and cost controls, along with resource layers that can adapt to solve new and different challenges. As streaming services started expanding rapidly and viewership demands increased, A+E began its journey to the cloud in 2019, partnering with AWS, and working toward the transformation of its global infrastructure and media supply chains.

Cloud transformation is not merely about ensuring business continuity; it requires a fundamental shift in mindset. Familiar workflows, platforms, and tech stacks need to be reimaged. To drive adoption, a spirit of innovation must be fostered throughout an organization.

To give their roadmap focus, A+E parsed its media distribution work into three primary process groups: In, During, and Out. These represent core functions in their supply chain like Ingest & Pre-qual, Edit & Render, and Packaging & Delivery. The first step was to digitize the entire content library for adding to its Amazon Simple Storage Service (S3). By the time the pandemic hit, the "In" and "Out" pieces of its new workflow had been built and unlike many media companies, A+E avoided missing a single delivery deadline. Inbound/outbound traffic was rerouted to the cloud and work-from home spaces were spun up with relative ease.

In 2018 Don Jarvis, SVP of Global Engineering & Technology at A+E, brought in David Klee as VP of Strategic Media Solutions to partner with him to recon- ceptualize their business functions. David oversees design and implementa- tion of A+E's future-state media supply chain: Media Elevate.

With their catalog in the cloud and their in/out transfer pieces complete, David turned his focus on the functions of the middle stage; the “During” piece, which dealt with media processing.

A+E turned to SDVI as their technology partner, whose Rally solution is an orchestration layer for the supply chain, which ensures all tools integrate seamlessly in any given workflow. Moreover, it's a marketplace, allowing the A+E team to leverage the tools they know and love whilst experimenting with new media supply chain solutions to optimize workflows. The infrastructure itself is automated, not just the tooling, enabling cloud resources to spin up and down as needed. Working with the SDVI team, the network fine-tuned their Ingest and Pre-Qual routes, leaning heavily into automation. Metadata absorption, content hierarchy map- ping, and auto-QC were established at the forefront of the ecosystem, setting the stage for more advanced functionality.

With the media supply chain infrastructure now controlled by SDVI Rally, A+E then needed workstation, storage and render workflow infrastructure orchestration. Unlike prebaked transcode functions, editing takes an undetermined amount of time and requires costly computing resources. They needed a way of spinning up and down their workstation infrastructure in the same way SDVI was managing media supply chain resources. After extensive market analysis, Arch Platform Technologies was added to round out their end-to-end delivery solution.

The Arch Platform intelligently manages workstation infrastructure by launching, tearing down, and monitor- ing a variety of instances specifically designed for A+E's edit workflows. It gives them the cost controls and burst capabilities they need to expand and contract resources based on work volume. Arch eliminates several barriers to entry for firms looking to migrate their compute-heavy media work into the cloud. For A+E, this was a missing link in their supply chain.

The team had reached a pivotal moment; the groundwork had been laid and the infrastructure was in place. What came next was a transformation that required a certain harmony between users, technology, and A+E's media ecosystem. A+E needed a path to guide operations from source to deliver- able and between their day-to-day operations and their new infrastructure. They turned to TMT Insight's Polaris operational management software, giving their teams visibility and control over the new system.

Polaris communicates directly with SDVI and Arch, allowing non-developers to launch workflows, view inventory, and move and preview files. Its workorder-centric visual narrative creates a “universal language” around the backend processes. The platforms, when combined, gave A+E a meaningful deployment path to move each updated workflow into production, one by one.

Now stakeholders from across the business – Schedulers, Producers, Account Executives, Media Engineers, Editors – can all work out of the same tool that is monitoring their technology stack. This unlocked the ability to integrate workflows that share duties between automated and user-driven processes.

A+E delivers to multiple endpoints across every media platform, their content is truly everywhere: broadcast, VOD, FAST, DTC, podcasts, vendors – you name it, they support it. To give each publisher the type of content they require, a series of mezzanine files are generated from the production master. This involves frame-accurate, high-resolution editing. To avoid egress fees, transfer time delays, and support their distrib- uted workforce, their workstations must now live where the files do - in the cloud. Working with TMT Insights, A+E's technology team set up cloud-based workstations in AWS comprised of EC2 compute, FSx cache storage, and Teradici PC-over-IP virtualization software.

Editors can now log into Polaris, navigate to the Tasks queue, and self-assign an edit job that's ready for work. This triggers SDVI to drop the source file into their personal user queue within the Rally Access Premiere Pro Panel. They launch the file from the panel and begin work. The workstation looks and feels like directly attached storage. When they finish their cuts, they simply save their work. An EDL is generated, and a new version is rendered in the cloud. The next step in the workflow is immediately triggered. Whether an automated transcode, a manual QC, or an outbound delivery step, Polaris leverages its order management logic to communicate with SDVI continually, surfacing up every stage of the process in a user-friendly graphic UI.

Conclusion

David Klee as VP of Strategic Media Solutions at A+E commented: “After years of analysis and exhaustive POCs, we finally landed on a solution that checked every box and made remote editing a cost-effective and scalable reality. The pieces fit beautifully: AWS, SDVI, Arch and Polaris working together. Collectively, these solutions create a unique harmony of functions that in and of themselves cannot be achieved. It was the cooperation of these technologies and the teams behind them that brought this innovation project to life.”