

Terror Films Automates Media Distribution Pipeline



Executive Summary

Terror Films is a distributor of high-concept indie horror movies that makes content available to audiences all over the world. Terror Films' movies are currently available in more than 60 countries on 20+ streaming channels, including Tubi, Prime Video, Apple TV, and YouTube. The company also distributes movies for limited theatrical release, television, and ancillary markets.

Across all distribution, production, and post-production work, there's a lot that Terror Films has done manually in the past to execute its media pipeline. Facing strong growth prospects and a rise in at-home streaming due to the COVID-19 pandemic, Terror Films knew it had to come up with a faster way to make its catalog available for audiences.

The company decided it was time to take advantage of cloud-enabled automation on the Amazon Web Services (AWS) cloud. ClearScale stepped in and helped Terror Films develop a minimum viable product (MVP) to validate Terror Films' idea and prove the value of moving forward with more automation down the road.

"Our media pipeline had many manual steps, and we had a vision for a fully automated pipeline. We just needed help to bring this vision to reality. ClearScale developed a transcoding pipeline on AWS for us that not only resolved our pain points but enables future growth as other areas of our overall process are automated and bolted onto this architecture."

Brad Geiszler, Technical Operations, Terror Films

The Challenge

Terror Films' legacy media pipeline relied heavily on manual operations. Employees had to download files to a local computer, run transcoding jobs, and upload results by hand before they could be pushed out across various distribution channels. Adding complexity to this process was the fact that Terror Films' had limited transfer bandwidth and finite compute capacity.

In addition, the company had trouble with a specific type of media format - QuickTime 8-track audio, that caused problems downstream. Whenever QuickTime 8-track formatting was detected, someone on the TerrorFilms team had to update that media file to a standard audio output format.

Automating manual workflows and fixing formatting issues were crucial for Terror Films, as the company was gearing up to scale its operations. Terror Films wanted to offer more films on more platforms, which wouldn't be possible without reliable automation and more compute capacity.

The distributor had a solution in mind that involved leveraging AWS and developing an automated pipeline. However, Terror Films didn't want to invest in a full-scale solution until it proved the overarching concept made sense with a smaller MVP. Rather than automate the entire business flow, Terror Films wanted to focus on automating one element of the legacy pipeline.

The company asked ClearScale, an AWS Premier Consulting Partner with extensive automation experience, to lead the charge on designing this pipeline. ClearScale was tasked specifically with automating how Terror Films transcoded media files, a critical workflow within a much larger chain of activity.

The ClearScale Solution

ClearScale approached Terror Films' project with the intent of implementing a number of reliable, widely used cloud services and managed solutions that would:

1. Prove immediately valuable to Terror Films
2. Streamline a critical workflow
3. Increase productivity for Terror Films' employees through automation

First, ClearScale set up [Amazon S3](#), an object storage service that has the ability to store any volume of data for advanced use cases on the cloud. Amazon S3 is highly scalable and secure, giving Terror Films the cloud infrastructure it needed to maintain a massive library of media files. ClearScale configured S3 to be step one in a longer, automated workflow.

As soon as new media files are added to an S3 bucket, a trigger fires that sets off a second trigger from AWS Lambda. AWS Lambda is a serverless, event-driven compute service that frees up engineers from having to worry about maintaining their own IT infrastructure. ClearScale configured AWS Lambda to automatically trigger an [AWS Elemental MediaConvert](#) process.

AWS Elemental MediaConvert is a transcoding solution that prepares video files for on-demand distribution. So, when a file (i.e., a movie) gets uploaded to Amazon S3, a primary trigger sets off a Lambda trigger, which then causes Elemental MediaConvert to automatically process the film. After processing, the video file gets uploaded to a destination S3 bucket and a status notification gets sent to an Amazon Simple Notification Service (SNS) topic. Amazon SNS is a fully managed messaging service that has sophisticated application-to-person and application-to-application capabilities.

In this case, ClearScale used SNS to notify a Terror Films' operator via email about a successful upload. That person can then kick off the remainder of the media pipeline workflow manually. Here is where ClearScale's initial scope of automation work ended.

To keep Terror Films apprised on its new automation pipeline progress, ClearScale implemented [Amazon CloudWatch](#), a monitoring service that helps engineers keep track of applications, performance, and resource usage, plus [AWS CloudTrail](#), a monitoring service that records all AWS infrastructure activity. Together, these solutions gave TerrorFilms the insight and confidence needed to trust that its automated solution was better than what the team was doing manually before.

The Benefits

Though what ClearScale did was seemingly simple on the surface, Terror Films' new automated cloud pipeline dramatically improved the scalability and efficiency of its media operations. The distributor can now expand its library and accelerate delivery to match consumer demand. Terror Films also has the foundation it needs to automate downstream workflows in the future.

At a time when at-home streaming services are only growing more popular, Terror Films made the smart decision to invest in its cloud capabilities now and set itself up for long-term success. Furthermore, Terror Films has a partner in ClearScale that can step in at any time to take the company's cloud architecture to the next level.