

# Empowering OTT Innovation

## How nClouds Modernized OTTera's AWS Infrastructure

### Benefits Summary



Enhanced Scalability



Accelerated  
Developer Velocity



Fine-Grained  
Infrastructure Control



Improved Operational  
Efficiency



### About OTTera

OTTera is a professional white-label service provider revolutionizing how companies launch over-the-top (OTT) media services directly to viewers via the internet. In a market where building a comparable solution from scratch demands significant time and multimillion-dollar investments, OTTera offers a compelling alternative. Leveraging a decade of professional OTT experience and supporting nearly 100 million users, OTTera's comprehensive end-to-end solutions are adaptable to any form of content, enabling businesses to launch their own streaming platforms in mere weeks at a fraction of the traditional cost. Learn more at [ottera.tv](https://ottera.tv).

### Industry

Digital Media, Software,  
Video Advertising,  
Video Streaming

### Location

Los Angeles, CA

### Featured Services

Application Modernization,  
Cloud Migration Services,  
DevOps Services

### Service Page Links

- [Migration and Modernization Services](#)
- [DevOps Services](#)



## Executive Summary

To maintain its competitive edge and enhance its service offerings, OTTera collaborated with nClouds to undertake a strategic modernization of its Amazon Web Services (AWS) infrastructure. This partnership focused on addressing critical challenges related to application scalability and operational excellence, achieving greater control over custom application architectures, and significantly accelerating the delivery of innovative new features to its customers. By leveraging nClouds' expertise in application modernization and cloud migration services, OTTera successfully transformed its environment, paving the way for enhanced performance, agility, and future growth in the dynamic OTT landscape.

## The Challenge

OTTera faced the critical need to enhance its application scalability to accommodate a growing user base and increasing media demands. Simultaneously, the company aimed to improve operational excellence, gain more granular control over its diverse application architectures to optimize performance and security, and accelerate the pace at which new, innovative features could be delivered to its platform users.



### Why AWS and nClouds

Recognizing the power and flexibility of Amazon Web Services, OTTera sought a partner with deep AWS expertise to guide its modernization journey. nClouds' proven track record in application modernization and cloud migration services, coupled with its understanding of the digital media and streaming landscape, made it the ideal choice. nClouds' collaborative approach and focus on delivering tangible business outcomes aligned perfectly with OTTera's objectives for a continuous cloud evolution.



**“We value nClouds’ expertise in helping us build and modernize our IT infrastructure—from migrating workloads to automating deployments. Plus, nClouds’ services relieve our team from the ongoing management of our AWS infrastructure so our engineers are focused on creating innovative new features.”**

**— Craig McEldowney —**  
CTO & Cofounder, OTTera

## Strategy and Solution

OTTer first engaged nClouds in 2020. Together, OTTer and nClouds have focused on the ongoing cloud journey rather than a one-and-done event. nClouds' activities have evolved from building a production environment on AWS to managed DevOps services, including managing deployments and modernization initiatives designed to achieve greater operational efficiency and enable faster innovation.

nClouds collaborated closely with OTTer to implement a modern, containerized infrastructure on AWS. nClouds migrated OTTer's Elastic Beanstalk workloads (API) to AWS Fargate to improve and provide accelerated container management.

The migration also involved leveraging key AWS services such as Amazon VPC for a secure network environment; scalable storage solutions with Amazon RDS, Amazon S3, and Redis; and the deployment and management of containerized applications using Amazon ECS Clusters, which automates server management, capacity planning, and isolation of container workloads for security.

Robust monitoring was implemented with Amazon CloudWatch alarms, and content delivery was optimized through Amazon CloudFront distributions. Amazon EC2 Gnome Boxes were utilized for specific operational tasks, including deploying and building Docker images via Jenkins agents.

To further streamline and automate infrastructure management, nClouds and OTTer also integrated essential third-party tools:

- Jenkins was implemented as an open-source automation server to manage deployments to Amazon ECS for continuous integration and continuous delivery (CI/CD) pipelines, managed efficiently through Groovy scripts and the Jenkins Configuration as Code (JCasC) plugin. The JCasC plugin is an opinionated way to configure Jenkins based on human-readable declarative configuration files. The Jenkins server works as a master wherein all jobs are defined and uses Amazon EC2 agents to run jobs that deploy/build Docker images.
- HashiCorp Packer enabled the creation of consistent machine images across multiple platforms from a single configuration.
- Furthermore, HashiCorp Terraform was implemented for infrastructure as code (IaC), allowing OTTer to provision, update, and version its AWS infrastructure efficiently and reliably. Notably, nClouds provided a new production environment leveraging Terraform to support OTTer's CMS and API stack.





## Results & Benefits

The strategic modernization efforts led by nClouds delivered significant results and tangible benefits for OTTera:



### Enhanced Scalability for End Customers

OTTera's end customers now benefit from a highly scalable infrastructure capable of seamlessly supporting rapid growth in media content and user engagement. This ensures that customers can now support more media and more meetings with consistently high-quality streaming experiences, even during peak demand periods, directly enhancing the value proposition for OTTera's clients.



### Accelerated Developer Velocity

By adopting a modern, containerized infrastructure, OTTera's development teams experienced a significant acceleration in their ability to build, test, and deploy applications. This faster development lifecycle translates into quicker iteration of new features, reduced time to market for critical updates, and increased responsiveness to evolving market demands.



### Fine-Grained Infrastructure Control

The implementation of infrastructure as code (IaC) with Terraform provides OTTera with precise and granular control over its application infrastructure. This enhanced control optimizes resource allocation, improves capacity planning and scheduling, and strengthens the overall security posture of its environment.



### Improved Operational Efficiency

Automation through CI/CD pipelines managed by Jenkins and infrastructure provisioning via Terraform significantly reduced manual effort and the potential for errors. This improved operational efficiency allows OTTera's IT team to focus on strategic initiatives, innovation, and delivering greater value to the business rather than routine management tasks.



The collaboration between nClouds and OTTera showcases the transformative power of strategic cloud modernization in the competitive OTT landscape. By leveraging AWS and embracing modern DevOps practices like containerization and infrastructure as code, OTTera has achieved significant advancements in scalability, operational efficiency, and the speed of innovation. This partnership not only empowers OTTera to deliver exceptional white-label OTT services but also positions it for sustained growth and continued success in the dynamic digital media market. nClouds is proud to have been a key partner in OTTera's journey toward a future-ready and high-performing platform.

ABOUT  
**nClouds**

nClouds is a certified, award-winning provider of AWS and DevOps consulting and implementation services. We partner with our customers as extensions of their teams to build and manage modern infrastructure solutions that deliver innovation faster. We leap beyond the status quo.