



# Leia Inc. and AWS Partner Insys VT Accelerate Launch of LeiaFlix Using Cloud DRM and AWS

In collaboration with



## Executive Summary

Three-dimensional experience company Leia Inc. (Leia) developed LeiaFlix, a video-streaming application that converts 2D content into 3D on tablets equipped with its Lightfield display technology. To stream movies on LeiaFlix, the company needed a highly effective digital rights management (DRM) solution in place to protect third-party, proprietary content from piracy. Leia engaged AWS Partner Insys Video Technologies (Insys VT), and it adopted Insys VT's Cloud DRM solution with customized features. To scale its application to demand, Insys VT and Leia collaborated to build a backend that runs on AWS Elemental MediaConvert, AWS Lambda, Amazon S3, and other AWS services. In November 2021, Leia launched LeiaFlix in the United States.

## Preparing to Launch LeiaFlix

In 2021, nanotechnology company [Leia](#) created LeiaFlix, a video-on-demand (VOD) streaming application that runs on 3D Lightfield display tablets and gives users the ability to watch 3D content without special eyewear. While developing this new offering, Leia wanted to provide users a catalog of movies from popular film studios, which meant that the company needed to have a DRM solution in place that would encrypt its content to maintain a proper security level, legal access to digital content, and industrial compliance standards.

After finishing a prototype of LeiaFlix, the company wanted to launch this new application quickly, and it set a 3-month deadline to implement a DRM solution on its application. To accelerate its time to market, Leia engaged AWS Partner [Insys VT](#), and the two companies collaborated to implement Insys VT's [Cloud DRM](#) solution and to build a secure environment for video streaming on Amazon Web Services (AWS). As a result, Leia deployed a flexible DRM solution that has helped it meet each film studio's security requirements and deepened its monitoring capabilities in under 2 months. Having surpassed its original deadline, Leia has launched beta testing for LeiaFlix across the United States.

## Leia Inc.

### About the Customer

Customer: Leia Inc.  
Industry: Media & Entertainment  
Country: United States  
Website: [leiainc.com/](http://leiainc.com/)

Leia is a 3D-experience company secured by proprietary nanotechnology and artificial intelligence, working to democratize access to the Metaverse through its 3D Lightfield displays.

# Leia Inc. and AWS Partner Insys VT Accelerate Launch of LeiaFlix Using Cloud DRM and AWS

## Searching for a Robust DRM Solution

Founded in 2014, Leia is a 3D Lightfield display and software applications company that uses proprietary nanotechnology and artificial intelligence to convert 2D content experiences into 3D. Its current product line includes handheld tablets and full-size monitors equipped with its proprietary Lightfield display technology, which it uses to create immersive digital experiences.

To further this goal, the company created Lume Pad, a handheld tablet that comes equipped with a VOD application called LeiaFlix. However, to stream movies from different film studios, the company had to develop a DRM solution that would protect this content from piracy. “We needed robust DRM protection to release our product and use Hollywood studio content,” says Gabriel Wilensky, director of product management at Leia. “We were looking for a solution that would support specialized session constraints and near-real-time checking features.”

**“Using Insys VT’s Cloud DRM and AWS services, we’ve been able to fully comply with each Hollywood studio’s standards.”**

Denis Otchenashko  
software architect, Leia Inc.

Leia explored several DRM solutions, including Insys VT’s Cloud DRM solution that is now available in [AWS Marketplace](#), which helps companies find, test, buy, and deploy software that runs on AWS. Insys VT offers over 15 years of experience in video technology, and its staff has earned over 20 AWS Certifications. Leia chose to work alongside Insys VT because its team was willing to expand the features that Insys VT offered through its Content Access Protection (CAP) software-as-a-service solution, which gives Leia full control over its content. “We use a unique solution called the CAP service,” says Dawid Górniak, product manager at Insys VT. “It limits not only the number of active sessions for one user account but also for a single asset.”

## Building a Content Ingestion Pipeline on AWS

In September 2021, both companies collaborated to implement Insys VT’s Cloud DRM solution, which they deployed in November 2021. Throughout the project, Insys VT provided support to Leia, from securing movies to encoding content on the users’ side. Using Insys VT’s Cloud DRM, Leia can run its VOD application across virtually any type of operating system while monitoring users’ activity. At the same time, Insys VT helped Leia architect an environment on AWS that helped it stream its content at scale. “We had to build everything from the ground up,” says Denis Otchenashko, software architect at Leia. “If it wasn’t for the assistance from Insys VT, we might not have met our aggressive deadline.” In only 2 months, Leia and Insys VT finished implementing Cloud DRM and building a scalable content ingestion pipeline on AWS.

On the backend of its content ingestion pipeline, Leia and Insys VT use [AWS Lambda](#), which gives companies the ability to run code without thinking about servers or clusters. “AWS Lambda scales the infrastructure immediately,” says Górniak. “We don’t need to set up new servers to handle viewing peaks.” For additional scalability, Leia relies on [Amazon Elastic Compute Cloud](#) (Amazon EC2), which provides secure and resizable compute capacity for

## Benefits

- Accelerated launch of LeiaFlix
- Complied with several Hollywood studios’ security standards
- Built a scalable content ingestion pipeline
- Enhanced its monitoring capabilities
- Freed up resources to focus on customizing its offerings



# Leia Inc. and AWS Partner Insys VT Accelerate Launch of LeiaFlix Using Cloud DRM and AWS

virtually any workload. Combining these two services, Insys DRM Cloud can rapidly scale its content pipeline to handle up to 1,000 licenses per second.

For streaming content, Leia and Insys VT implemented several AWS Media services, including [AWS Elemental MediaConvert](#), which helps it process video files and clips to prepare on-demand content for distribution or archiving. Using this solution, Leia can broadcast high-resolution videos to LeiaFlix devices. “Using AWS Elemental MediaConvert, we have adaptive streaming capabilities,” says Wilensky. “Our content is dynamically converted into the optimal format for virtually any device.” For its content delivery network, Leia uses [Amazon CloudFront](#), which securely delivers content with low latency and high transfer speeds.

Leia securely stores LeiaFlix metadata using [Amazon DynamoDB](#), a fast, flexible NoSQL database service for single-digit millisecond performance at virtually any scale. Insys VT and Leia set up this solution to register all its sessions, helping the company track how its customers are using the application. The company also uses [Amazon Simple Storage Service](#) (Amazon S3), an object storage built to retrieve any amount of data from anywhere. Leia uses this service as a reliable and highly scalable distributed movie storage.

To bolster its security and compliance, Leia adopted [Amazon CloudWatch](#), which provides observability of companies’ AWS resources and applications on AWS and on premises. With these solutions in place, Leia can meet the security requirements of multiple Hollywood studios. “Each studio has different security and privacy requirements that we have to agree to,” says Otchenashko. “Using Insys VT’s Cloud DRM and AWS services, we’ve been able to fully comply with each Hollywood studio’s standards.”

**“AWS Lambda scales the infrastructure immediately. We don’t need to set up new servers to handle viewing peaks.”**

Dawid Górniak  
product manager, Insys VT

## Developing the Next Generation

Since deploying Cloud DRM on AWS, Leia has started beta testing for LeiaFlix across the United States. It’s also working on improving its hardware so that it can release the next generation of Lume Pad devices, which will include additional features. “Our experience with AWS and Insys VT went smoothly,” says Otchenashko. “We found solutions that perfectly fit our needs.”

## About the Partner

AWS Advanced Tier Services Partner Insys VT has over 15 years of experience working with video technology and provides over-the-top solutions and services to its customers. The company’s Cloud DRM solution is available in the AWS Marketplace, and it participates in the AWS Solution Provider Program.

