



Title: e-learning platform on AWS for thousands of students with AWS

The company

This case study presents the process of migrating a web application for icanonlinetutors.com - an EdTech company to Amazon Web Services (AWS). The organization, an online educational platform, sought to enhance scalability, improve performance, and ensure high availability for its growing user base. By leveraging AWS services, the company successfully scaled its web application, resulting in improved reliability, cost-efficiency, and streamlined management.

Solution

Development of a video on demand (VOD) workflow using an encoder in the cloud to convert video content stored in Amazon S3 into new formats for storage, reuse and delivery using AWS Elemental MediaConvert.

AWS Elemental MediaConvert job to convert an HLS input into HLS, MP4 and Thumbnail outputs. File based adaptive bitrate and delivery producing video output for different purposes. Created an automated "watchfolder" workflow. Video files added to an S3 bucket automatically trigger a MediaConvert job to run on the uploaded files.

Products

AWS Elemental MediaConvert , Lambda, API gateway, DynamoDB, Amazon S3, AWS Step functions, AWS Certificate Manager, AWS secret manager, cloudfront.

Business Challenge

Content quality and ensuring that video plays in all mobile and web devices was also a key consideration in building icanonlinetutors platform. For icanonlinetutors to differentiate itself from other online and mobile online-education platforms, we wanted to ensure professional quality, low-latency video experiences for customers.

Working Together

CloudPlexo was the preferred AWS consulting partner to implement the project.

Why Amazon Web Services



AWS was the preferred choice as the world-leading cloud platform for flexibility, elasticity, scale and cost. CloudPlexo worked with icanonlinetutors to deliver the e-learning platform. CloudPlexo utilized a range of cloud services for example; AWS DynamoDB, AWS Elemental MediaConvert, Lambda, API gateway, Amazon S3, AWS Step functions, AWS Certificate Manager, AWS secret manager, cloudfront.

Outcomes

The solution delivered to icanonlinetutors provides a complete video workflow, including content ingest into [Amazon Simple Storage Service \(Amazon S3\)](#), transcoding using [AWS Elemental MediaConvert](#), and delivery using [Amazon CloudFront](#). With this cloud-based workflow, icanonlinetutors has been able to focus on delivering compelling e-learning, without having to worry about the complexity of building and operating a separate video processing infrastructure to support online education. The quality of the content and interactive component was outstanding.