

# Phoenix East Aviation increases the scalability and availability of their ecommerce and marketing site while staying within budget!

## About PEA

Since 1972, **Phoenix East Aviation (PEA)** has trained more than 12,000 professional pilots. Their teaching experience, industry credentials, and professional reputation have been built up over more than 40 years of aviation excellence and dedication. Every year the PEA students and instructors fly a collective 30,000+ hours and are able to do so because of the great weather in Daytona Beach, FL. PEA has been able to recruit and retain these students year after year due to their helpful admissions process. Their admissions experts are able to help with everything from financial advice to even obtaining a visa.

The majority of PEA's flight school interest has come through their eCommerce site. Showing a large portion of international students who solely rely on the website during the application process. And for these types of reasons, it is imperative that the website is always responsive and online. PEA is one of the few schools that is trusted by Homeland Security and with this, their website needs to be performant on a global scale.

**What do you do when you need an eCommerce site for an education company? You call CloudHesive to help you migrate to the cloud and make sure your site performant on a global scale.**

CloudHesive is recognized as an Amazon Web Services (AWS) partner with a focus on both commercial and public sector cloud services. They have helped state, local, and higher education institutes begin the journey to the cloud while securing their environments. Now more than ever colleges and universities are concentrating on Information Technology to drive student success and address concerns about the costs, value, and outcomes of higher education. With PEA's evolving customer base, they sourced CloudHesive to ensure their eCommerce site was scalable and available for current and future students.



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*“CloudHesive and Amazon Web Services have had a huge impact on our company. Our site availability has been great and gone well past our expectations with regard to tech support.”*

**- Dale Johnson -**  
IT DIRECTOR AT PHOENIX EAST AVI

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## The Challenge

In an era of fast innovation many businesses, from enterprise level to small and medium sized business, are looking for efficient new ways to manage their web hosting needs. The hosting environment is rapidly changing, and most are now looking beyond traditional setups towards cloud hosting solutions. PEA was experiencing just this, they not only wanted, but needed to move off a traditional dedicated hosting environment that was managed via cPanel.

PEA had been experiencing problems with the stability and performance of their ecommerce and marketing website. Their current setup was not equipped to handle the traffic they had been receiving and this needed to be resolved immediately. However, switching from traditional hosting to cloud hosting required specific expertise and they reached out to Amazon Web Services for recommendations. Fortunately, AWS introduced CloudHesive, an AWS advanced consulting partner to help build PEA's new cloud solution. They needed a solution that would not only handle their current traffic but would also set them up for future growth.

## Solution

AWS offers an ecommerce cloud computing solution to small and large businesses that provides a flexible, secured, highly scalable, and low-cost solution for online sales and retailing. With AWS, PEA's new ecommerce site would be able to fluctuate as much as needed while remaining available for their global audience. It was CloudHesive's objective to create a new architecture that included fault tolerance, high availability, security controls, and could manage such a robust environment.

To get started, CloudHesive did an assessment of PEA's current environment in order to plan the migration from their current hosting facility. Once the assessment was complete, CloudHesive created the new architecture and then started to build out the infrastructure on the Amazon Web Services. During the build out, CloudHesive implemented the security control plane for the environment and then began testing all the different functionalities. When PEA approved the infrastructure, CloudHesive then migrated their entire environment to AWS all within 30 days. The new environment utilizes a multiple availability zone architecture as well as the ability to auto scale the infrastructure if needed.

### Technologies Leveraged

AWS: VPC, EC2, ALB, EBS, RDS

### Third party applications or solutions used

Trend Micro, Datadog, Sumologic

## Benefits

The benefits from this project for PEA were several. The first and foremost being the stability of the environment went from having issues each week to a highly available and fault tolerant environment. PEA's ecommerce site was now able to handle increased customer traffic as well as the customer experience was much better. The solutions we put in place allowed for caching at the edge locations to increase the end users experience.

