

Notal Vision Case Study



Groundbreaking Medical Technology Company Reaches Out to AllCloud for Kubernetes Modernization

About Notal Vision

Notal Vision is a pioneering company bringing novel AI-based data analytics to remote diagnostics for eye disease. The company is currently in clinical trials for its latest product, home-based Optical Coherence Tomography (OCT), expected to reach commercialization stage within the next two years. Home OCT uses AI-based data analytics, enabling remote diagnostics and monitoring of eye disease, and personalized assessment and treatment of millions of individual patients. As Notal Vision continues to develop its product pipeline to revolutionize home-based diagnostics and eye health, it needed a scalable infrastructure that allowed them to run the device's algorithm in the most cost effective way.

Summary

Notal Vision began its cloud journey with AllCloud several years ago, when the decision was made to move from on-premise servers to an AWS cloud infrastructure. Notal Vision reached out to AllCloud to modernize its AWS system and move to Kubernetes containerization. Today, Notal Vision mostly manages their cloud environment independently and in-house. As an AllCloud Engage customer, the company benefits from exclusive access to expert assistance in special development projects, 24/7 security monitoring and management, and ongoing FinOps.

Challenge

Notal Vision migrated its on-premise servers to a cloud-based infrastructure in the past with the help of AllCloud. This move enabled the company with an advanced, efficient and appropriate infrastructure for commercialization, ongoing operations and growth.

In 2022, Notal Vision prepared to launch a highly sophisticated technology for remote detection of retinal disease. The device, in its developmental stages, captured detailed images that had over 100 micro-images sliced into nanometers to measure the fluid of each eye. These images played a crucial role in enabling in-home accurate diagnosis for each eye. The technology required to support this device was far more refined and advanced than Notal Vision's previous products, and therefore needed larger databases, better computing power and significant storage space.

Until a proper infrastructure was set up to support this device's efficacy, the company was not ready for mass production or begin the rollout of the highly advanced solution. Notal Vision then approached AllCloud to modernize the existing AWS environment and move to Amazon Kubernetes containerization.

Solution

AllCloud migrated Notal Vision's AWS infrastructure to a containerized K8 system using Amazon MAP with migration funding from AWS, thereby making it more cost efficient .

The migration was implemented seamlessly and the system is now in the QA phase, being monitored and tested to prepare for the launch to market of Notal Vision's new device.

Notal Vision is now an Engage Professional client of AllCloud. The day-to-day management of the AWS environment is handled in-house by Notal Vision's team of developers in partnership with AllCloud experts for guidance about architecting new solutions and issues that are outside of their internal scope of capabilities.

AllCloud also provides Notal Vision with 24/7 security monitoring aligned with AWS best practices. The AllCloud team also created a security playbook, covering all the possible scenarios, with mitigation and escalation procedures in place. AllCloud handles alerts as they arise, providing Notal Vision with a report at the end of the month, offering full transparency into the security state of the cloud environment,

In addition, Notal Vision also receives continuous FinOps support from AllCloud via the Amazon reseller program, helping to reduce their cloud costs and boost the ROI of their AWS investment.

Results

- Over the past year, AllCloud has helped Notal Vision lay the brand's foundation for future growth by building a robust, containerized AWS system that can support all their new products through the stages of FDA approval, commercialization and market penetration.
- Today, the security of Notal Vision's cloud environment is enabled with enhanced monitoring, efficient escalation response, and access to an expert team to implement AWS security best practices, via the AllCloud Engage program.
- By investing in a cloud modernization process, Notal Vision has saved 20% on their cloud costs via the AllCloud FinOps service. This ensures that the company has the best possible infrastructure for scalability, at a cost that is continually optimized.
- AllCloud once again has enabled Notal Vision to innovate and advance by building, implementing and monitoring a Kubernetes infrastructure that not only supports their current needs, but can also grow with the company's product pipeline and facilitate continued advancement in the AI-driven diagnostics and telemedical industry.

"We began our journey with AllCloud many years ago, and we came back when we needed to take the next big leap as innovators in our field. Now as then, AllCloud's services are of the highest quality and efficiency, based on the very latest AWS best practices, and available to us as we need them via the Engage program. We look forward to continuing our innovation path as the leader in remote, accurate diagnostic technologies for eye disease, with the support and expertise of AllCloud to guide us." – David Rachutin, VP Cloud Software Development and IT Systems, Notal Vision