



Infrastructure Modernized for Business Critical Application

CLIENT PROFILE

Medical Device Manufacturer



BUSINESS CHALLENGE

A large Medical Device Manufacturer had a business-critical PHI-based application that served hundreds of thousands of end users (patients and doctors) across the globe. The multi-tiered application was hosted in local and regional on-premise data centers. The client wanted to move the application into a public cloud so they had the ability to scale new environments on demand, expand offerings to new geographic locations, and better manage the infrastructure to ensure user needs were met.



OUR SOLUTIONS

Keyva assembled senior-level team of Kubernetes engineers to support the client during the different phases of project delivery. The Keyva team designed and implemented a Well-Architected Framework to serve as a foundation for the application. This approach removed the infrastructure hurdles which come with moving an application to a microservices-based architecture and provided a standardized process for rapid software releases.

Our DevOps experts leveraged Azure DevOps and GitHub actions to build out CI/CD pipelines. They used Terraform for Infrastructure-as-Code and Ansible as the automation engine to deploy scalable infrastructure services in AWS. The Keyva team also wrote custom Golang and Python scripts, Terraform modules and providers, Kubernetes operators, and Ansible modules to enable support for client requirements related to their Kubernetes infrastructure. The team leveraged a variety of technologies, including Open Source CNCF tools like Flux, Kyverno, Airflow, Helm, and Packer, to manage security policies and deployment lifecycles.



THE OUTCOMES

The modernized cloud-based application, which the Keyva team helped migrate with zero service downtime, provided scalability while reducing operational costs. The new agile and flexible cloud infrastructure provides the ability to pursue new markets and increase code release cycles, which was previously challenging. The client can also now onboard additional applications into AWS due to the standardized automation framework.