Overview

Customer is a market leader in DiCom images digitization. Being global healthcare provider, the software system initially was built to be installed at customer datacenter.

Furthermore, multiple solutions are available to support customers with their DiCom imaging requirements.

With so much data available, a state of the art machine learning and artificial intelligent solutions are built to provide insight to customer.

Tool Set

- Jenkins DSL
- Terraform and Terragrunt
- Ansible and Python
- AWS
- A Cloudwatch WS
- Github
- Terratest
- Hashicorp Vault
- AWS EKS
- Grafana, Prometheus and Alerts Manager

Challenges

Distributed underlying infrastructure hosted at client location was managed centrally. This required knowledge of unique infrastructure components configured in client datacenter. Even with proper documentation, it was hard for centralized IT teams to stay proficient with all the distributed systems. Other than this, managing release and push cycle for application to the client location also needed coordination and could not be done in single window. Components which were in customer management purview often made troubleshooting incidents complex. Plus contributed to overall application performance resulting in subpar end user experience.

Our Solution

Application was transformed to support AWS cloud and was integrated with native AWS cloud components. Moving to cloud, provided common underlying infrastructure for all client’s environment. Using AWS cloud elastic nature, environment was setup to be self-healing and auto scalable from the instantiation of the project. Calance DevOps Infinite framework acted as guiding framework during Customer cloud journey. Several cloud components were natively integrated in the application which helped in passing infrastructure management responsibility to the cloud provider.

Results

Customer transitioned from reactive support model to proactive support model. Cloud environment was tightly integrated with cloud based logging and monitoring solution which provided alerting as well as self-healing processes at different business workflow stages. Moving to cloud allowed Customer to move from Platform as a Service (PaaS) model to centralized Software as a Service (SaaS) model which resulted in 29% reduction in overall IT spend. IT management team was able to focus 2X on application features development. Rolling out new feature sets in the application got 15% faster in the first year and 33% in the second year.