CUSTOMER SUCCESS STORY

Dexcom®

SCALING UP DEVOPS WITH JFROG HIGH AVAILABILITY AND NETAPP

COMPANY

Dexcom, Inc. empowers people to take control of diabetes through innovative continuous glucose monitoring systems. Dexcom has emerged as a leader of diabetes care technology. By listening to the needs of users, caregivers, and providers, Dexcom simplifies and improves diabetes management around the world.

CHALLENGES

After building to support rapid growth, Dexcom's software development teams were distributed across locations and using different methods for storing and deploying binary artifacts.This made collaboration difficult, maintaining private container registries in several single node instances of Artifactory as well as Google Container Registry.

The Dexcom platform team sought to consolidate and standardize on Google Cloud Platform with cloud native solutions. This shared operating environment would host a single, universal binary repository manager for all developers that the Dexcom team wished to manage themselves. To support intensive, 24/7 use by global teams, Dexcom required a highly available artifact management solution that could synchronize across multiple regions, and be maintained with minimal downtime.

INDUSTRY

Healthcare, medical equipment and devices

PROBLEM

- Multiple package types used
- Globally distributed development
- No central artifact management
- Require Google Cloud Platform
- Uptime disruptions for maintenance

RESULTS

- Universal package type support
- Central, high availability artifact management hosted on GCP
- Integrated with preferred storage type (NetApp CVS)
- Universal SCA vulnerability scanning
- Replication for multiple regions
- Redundancy for disaster recovery protection
- Zero downtime

SOLUTION

JFrog Artifactory using HA capabilities
JFrog Xray
Google Cloud Platform
NetApp Cloud Volume Services

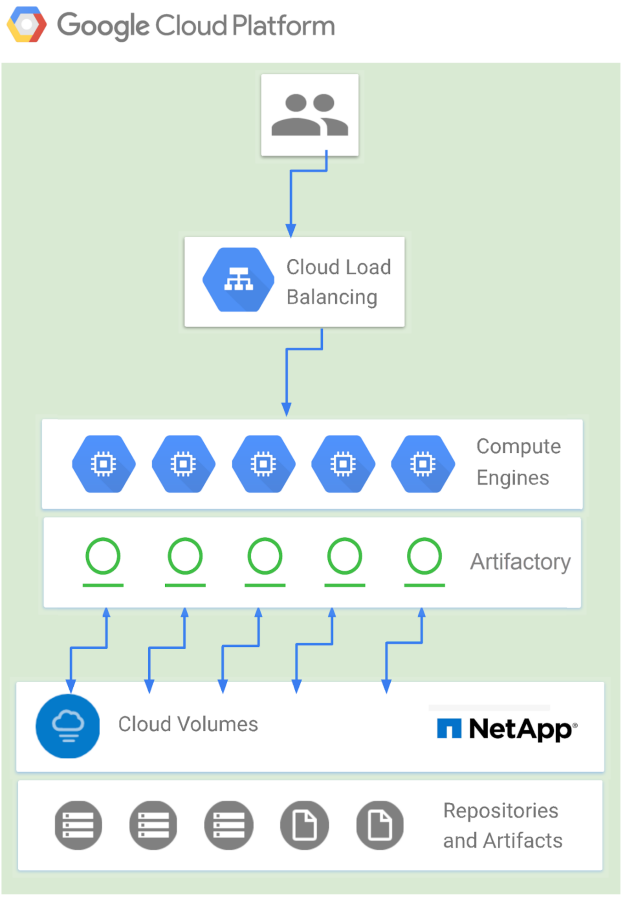
RESULTS

The Dexcom platform team installed a self-hosted Artifactory with high availability (HA), using multiple VMs in a GCP managed instance group joined by a load balancer. With redundant HA nodes, the Dexcom platform team can perform maintenance transparently to end users, with zero downtime.

For storage, Dexcom chose to use NetApp Cloud Volume Service, whose NFS they had determined was the best fit for their capacity and performance needs. With assistance from the NetApp Google Cloud team, Dexcom enabled the NFS service shared across Artifactory's managed instance group in 20 minutes.

Dexcom added JFrog Xray to scan artifact repositories for vulnerabilities in open source components, greatly improving software security.

The transition of the Artifactory HA service to production servers was so smooth, Dexcom's development community didn't realize the change happened. An additional setup of cross-region replication between sites was accomplished within a 30 minute enablement meeting, and helps provide disaster recovery protection.



"Recently, Dexcom experienced an issue with a node running JFrog, we took the node down for maintenance while the secondary node was up and running. The end users continued to run with zero downtime or impact to performance."

-Joel Ferrer, Senior DevOps Engineer at Dexcom