Internet of Things (IoT)
Connected Sports and Health

Challenge In mid-2014, a U.S.-based Fortune 100 multinational corporation that designs and markets footwear, apparel, equipment and accessories needed a global, highly available and scalable NoSQL database to transform its health and sports Internet service business into a big data platform. It also needed to move to the cloud.

Solution It became clear that DataStax Cassandra was the right database choice and AWS the right cloud solution. DataStax brought in Cloudwick to help build, operate and manage its global Internet of Things (IoT) sports and health network platform powered by DataStax DSE. The big data project took six months and Cloudwick trained the internal team to seamlessly take over management and monitoring.

Benefit Cloudwick rapidly built out the first production cluster and optimized the data model read and write performance SLA to exceed business requirements.

Cassandra in the Cloud

An American multinational Fortune 100 corporation that designs and sells footwear, apparel, equipment and accessories with more than 40,000 employees worldwide was looking to move from Oracle to NoSQL as well as move to a public cloud solution for its new sports and health Internet of Things (IoT) platform. Once the company decided on Cassandra and specifically DataStax DSE as its database and Amazon Web Services (AWS) as its platform of choice, DataStax called on Cloudwick for its professional services expertise to build, operate and manage the big data project.

Cloudwick, the leading Big Data-as-a-Service provider to the Global 1000, migrated Oracle to DataStax Cassandra on AWS to support Internet application scalability, 100% availability and performance for time and sensor-based processing for the company's IoT sports and health network platform. AWS provides more reliability, agility and failover, as well as elasticity and flexibility for cost savings.

Expertise and Experience

Because the company needed to migrate 1TB of big data over the wire to AWS, while ensuring existing clusters and the network were not impacted during data transfer, Cloudwick performed the migration through AWS Direct Connect. This established private connectivity, increased throughput, and a more reliable connection for the migration.

Since internal staff didn't have the specific expertise to handle the entire big data migration, DataStax and Cloudwick worked closely with the company to build, operate and manage the clusters and then handed over the management and monitoring once the clusters were performance tuned, secure and up and running. The next phase is a global deployment.

AWS Services Used:

- **EC2** for scalability, flexibility, reliability and cost-effectiveness, ensuring the company has enough room for data but not so much that they are overpaying.
- **CloudWatch** to monitor AWS resource utilization, application performance, and operational health to keep the company's applications running smoothly.
- **S3** to store and retrieve data.
- **EMR** for quickly and cost-effectively processing vast amounts of data.
- **Amazon Relational Database Service (RDS)** to establish, operate, and scale the relational database in the cloud.

"It's been a highly collaborative partnership from day one with everyone from Cloudwick and DataStax very focused on the company's success. The customer feels really good."
~ DataStax

Cloudwick
Big Data Success