C&S Wholesale: Achieving Seamless Supply Chain Mastery With DataStax Enterprise

C&S Wholesale Grocers, Inc. (C&S) is the largest wholesale grocery supply company in the United States—serving 14,000 retailers, chain stores, and institutions—and an industry leader in supply chain innovation. C&S currently manages and operates warehouses in 15 states.

C&S Wholesale Grocers

USE CASE:
Inventory Management

INDUSTRY:
Food & Beverage

CHALLENGES:
> Need to consolidate disparate data

> Required reliable 24/7 support

> Real-time data viewable in a mobile app

> Read and consolidate data but offers the ability to write back

SOLUTION:
> DataStax Enterprise with the best distribution of Apache Cassandra™

RESULTS:
> Seamlessly integrates with other technology onsite

> Allows C&S to meet the contextual, always-on, real-time, distributed, and scalable requirements of their applications

THE CHALLENGE

C&S delivers over 140,000 food and non-food items from more than 50 locations in the United States and operates over 18 million square feet of storage space. Its customers include Stop & Shop, Giant of Carlisle, Giant of Landover, BI-LO/Winn-Dixie, Safeway, and Target.

As C&S continued to scale and grow, it realized that its warehouse data was siloed and disintegrated, and as a result, this was slowing down distribution efficiency and impeding innovation. The company needed to find a way to consolidate and respond to that data, which was stemming from numerous points along the warehouse operation—all in real time—to improve efficiencies and help pinpoint and address problem areas in its warehouse operations. The enterprise optimization and subsequent performance enhancements would create a more seamless experience for its vendors and their end customers.

To achieve this increased warehouse efficiency and productivity, C&S needed its data consolidated into a real-time mobile app, while requiring that the app not only read data but also allow users to communicate interactively and in real time. "We wanted the mobile app to enable users to collaborate in real time, adding notes as data was streaming from different endpoints into the application and writing notes back to the database to improve warehouse selection and time management," said Salil Sinha, Vice President, IT Systems, C&S Wholesale Grocers.

In addition, because its warehouses operate around the clock, C&S needed a trusted partner who could provide a reliable, always-on solution that could help them consolidate all data points that were previously disjointed and show all those moving parts on their mobile platform in real time so they can be analyzed by warehouse managers, supervisors, and vice presidents. "We needed an application that was entirely reliable and not vulnerable to unplanned outages because our warehouses are pretty much 24/7… the data integrity, reliability, availability, and speed were the main reasons we went with the DataStax solution," said Sinha.

DATASTAX

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THE SOLUTION

C&S was faced with managing and consolidating its data and needed to choose the right partner to manage its enhanced platform. The platform needed to capture millions of records in seconds and also needed to provide a real-time view of all the working parts of the manufacturing operation, from how items move through the warehouse and to which locations, to all the ways items are being selected to be placed together on the pallet.

After vetting other solution providers, including Oracle, Hadoop, and Postgres, C&S chose DataStax Enterprise for its superior ability to compile the rapidly changing and disparate data and display it quickly on the mobile app. DataStax also seamlessly integrated with other technologies at play, including WSO2 for identity management, Wildfly for the web services, and Kony for mobile applications.

DataStax Enterprise, a unified hybrid cloud database including search and analytics, allows enterprises to meet their personalized, always -on, real-time, distributed, and scalable application requirements. "We selected DataStax on its ability to stream the data to the database and the performance and availability of the database. The optimized management capabilities that DSE provides has been instrumental to our efficiency and growth," said Dinesh Perumalsamy, IT Architect, C&S Wholesale Grocers.

THE RESULTS

By leveraging DataStax's enterprise solution, C&S Wholesale has been able to get exactly what it needs: an always-on holistic view of all warehouse operations in one place that pulls together all of the existing disparate information from multiple sources, made available for multiple users in a real-time mobile view.

The new platform is already helping C&S achieve remarkable efficiency, reading thousands of transactions per second per node and writing back almost as many in the same time. Over 300 users are currently using the platform, which can process about 280,000 records in about five minutes.

What's more, over the next five years, C&S Wholesale projects its direct return on investment from implementing DataStax Enterprise will be in the multi-millions of dollars.

WHAT'S NEXT

Given the immediate results C&S Wholesale Grocers has already realized using DataStax, the next step is to expand the mobile application's use to all 45-plus of its warehouses.

Furthermore, once this is complete, C&S will tap DataStax to help beyond the warehouses: "We want to continue using DataStax for the second phase of this project where we move beyond just warehouse information, to migrating data sets from our entire supply chain to be in one place," said Kiran Killamsetty, Director of IT, C&S Wholesale Grocers. "This will enable our data lake for enterprise analytics and reporting needs."

ABOUT DATASTAX

DataStax delivers the always-on, Active Everywhere distributed hybrid cloud database built on Apache CassandraTM. The foundation for personalized, real-time applications at massive scale, DataStax Enterprise makes it easy for enterprises to exploit hybrid and multi-cloud environments via a seamless data layer that eliminates the issues that typically come with deploying applications across multiple on-premises data centers and/or multiple public clouds. Our product also gives businesses full data visibility, portability, and control, allowing them to retain strategic ownership of their most valuable asset in a hybrid/multi cloud world. We help more than 400 of the world's leading brands across industries transform their businesses through an enterprise data layer that eliminates data silos and cloud vendor lock-in while powering game-changing applications. For more information, visit DataStax.com and follow us on @DataStax.

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