



NuoDB Future-Proofs DropShip eCommerce Platform

“NuoDB is absolutely critical to our business. We can scale up and grow the company in a much more effective way, especially when we are watching our bottom line.”

Blaine Nielsen,
President
DropShip Commerce

Overview

The DropShip Commerce software manages a staggering amount of data in real-time as the drop shipping platform for thousands of e-commerce trading partners. Fueled by the exponential growth in e-commerce, DropShip Commerce handles millions of transactions between retailers and suppliers around the world to keep products flowing to customers. “Our database is critical to our partners’ ability to manage their businesses,” states Blaine Nielsen, president of DropShip Commerce.

As the company added more and more trading partners, DropShip Commerce realized that the cost to maintain the database was becoming prohibitive. The company looked for a relational database that could easily handle the peaks and valleys of transaction volumes and found NuoDB. “NuoDB enables us to add capacity seamlessly when we need it, and just as seamlessly scale back when demand shifts,” explains Scott Lemon, CTO. “That’s extremely critical to managing costs.”

NuoDB is also dramatically improving DropShip Commerce’s time to market. “The cost to develop software is very small in comparison to the cost to own it,” explains Lemon. “NuoDB helps future proof our solution so that we can bring on a lot of customers with confidence that our code will stand up.”

About DropShip Commerce

DropShip Commerce offers the most complete cloud-based platform for retailers, brands, 3PLs and distributors to monitor, manage and grow their drop shipping operations. At the heart of DropShip Commerce’s platform is the ability for customers to create integrations to all sizes of trading partner and backend systems, whether it is via EDI, XML, web services or standard flat file exchanges. Once integrated to trading partners and internal systems, customers leverage a powerful ability to acquire or syndicate catalog data, gain access to real time inventory, and coordinate on order processes. With the understanding that the line between retailers and suppliers are merging, DropShip Commerce is the first platform to enable a company to operate drop shipping operations as both a retailer and a supplier through one interface.



www.dropship.com



Case Study

NuoDB Future-Proofs DropShip eCommerce Platform

“NuoDB promised amazing scale - and it’s delivering. Other databases don’t provide everything we need, and would have required us to adapt our platform to their capabilities. We would have been trying to engineer a square peg into a round hole. NuoDB is a perfect fit.”

Scott Lemon,
CTO
DropShip Commerce

The Challenge

The nature of e-commerce means workloads come and go episodically to handle frequent changes in products and vendors and peak shopping seasons. The DropShip platform would strain under the load each time thousands of trading partners updated their virtual product catalogs, inventory, and pricing information. Some retailers updated daily, some quarterly, some updated first thing in the morning, others the first day of each month. Sharp increases in order processing, across all trading partners, during holiday retail periods, also escalated loads on the system.

The DropShip platform needed to scale out quickly to manage the escalating exchange of information between retailers, and their suppliers and customers. “We need to be able to handle workloads when they spike, but we also have to be cost-efficient when we don’t need the capacity,” explains Lemon. “As we grew to over 10,000 partners, it became apparent the cost to maintain our in-house developed code was becoming prohibitive.”

“We could scale with MySQL, but it was expensive,” continues Lemon. “With MySQL there are traditional big iron solutions for scale that involve replicating your database, or implementing master slave or memcache solutions. But, the cost to maintaining that cache, and the cost to getting it correct is significant.”

For a time, DropShip moved to MongoDB. “Mongo helped us with that cache, but we lost the ability to have highly performing queries for relational information. We began to do some things that didn’t work very well with a NoSQL solution like Mongo.”

Capacity On-Demand

A critical requirement for DropShip Commerce as they extended their platform was a relational database designed for the cloud. Only NuoDB met that need. “NuoDB promised amazing scale - and it’s delivering,” explains Lemon. “Other databases don’t provide everything we need, and would have required us to adapt our platform to their capabilities. We would have been trying to engineer a square peg into a round hole. NuoDB is a perfect fit.”

“NuoDB runs in a multi-host configuration very cleanly, with integrated, distributed memory caching,” adds Lemon. “NuoDB provides the breadth of features DropShip Commerce requires, integrated into a single product from a single vendor, so we don’t have to integrate components from multiple sources.” Lemon points to the NuoDB Storage Manager, which integrates support for multiple storage mediums and capabilities. The ability to distribute geographically with NuoDB also eliminates a large investment in infrastructure. Plus, NuoDB enables DropShip’s engineers to use standard SQL tools. “Our engineers simply write SQL as they have in the past without having to think about the issues of scale and caching.”



Case Study

NuoDB Future-Proofs DropShip eCommerce Platform

“Our engineers simply write SQL as they have in the past without having to think about the issues of scale and caching.”

Scott Lemon,
Vice President of Technology
DropShip Commerce

“A major factor in the cost of owning code is how hard it is to change and how well it performs as your business scales,” continues Lemon. “NuoDB makes it extremely easy to change code as business requirements change. As for the scaling, our ability to bring up NuoDB Transaction Engines with their cache and our code on the fly and dynamically scale out and in is a critical feature for us. With NuoDB we can ramp up when we need to, bringing new transaction engines and memory cache into play with very little effort.”

“Our software easily handles the load during peak periods. When transactions slow down, we shut down the systems we don’t need; NuoDB scales in and we can handle a smaller number of instances very affordably and well. NuoDB gives us the best of all worlds. We don’t have to worry about the details of caching that can lead to bugs and consume engineering time, and we still get highly performing relational queries.”

In the future, NuoDB will enable DropShip Commerce to extend its platform across multiple regions. Lemon continues, “We are looking forward to leveraging the power of NuoDB across geographies. Traditionally, the replication of data is not an easy problem to solve, but NuoDB makes it very simple.”

“NuoDB is absolutely critical to our business,” concludes Nielsen. “We can scale up and grow the company in a much more effective way, especially when we are watching our bottom line.”

About NuoDB

Everyday businesses face challenges with application deployments, maintaining business continuity and providing outstanding application performance. NuoDB leads the industry with a distributed database management system to solve these problems.

NuoDB provides scale-out performance, continuous availability and geo-distributed data management. It's a single, logical database easily deployed in multiple locations simultaneously. This unique capability is unavailable in any other SQL product.

Launched in 2010 by industry-renowned database architect Jim Starkey and accomplished software CEO Barry Morris, the company is based in Cambridge, MA.

Used by thousands of developers worldwide, NuoDB's customers include automotive after-market giant AutoZone, NorthPoint Solutions, Fathom Voice, Platform28 and other innovative organizations. NuoDB was one of only nineteen vendors cited on the Gartner Magic Quadrant for Operational DBMS.

www.nuodb.com

**215 First Street
Cambridge, MA 02142
+1 (617) 500-0001
www.nuodb.com**

Version 1 – 1/21/2014

© 2014 NuoDB, Inc., all rights reserved.

The following are trademarks of NuoDB, Inc.: NuoDB, The Elastically Scalable Database, NewSQL Without Compromise, Nuo, and NuoConnect.

