

Progress® SonicMQ® provides fast, reliable, scalable communications between thousands of retail stores, multiple distribution centers, and corporate offices for key Epicor cross-channel retailing solutions.



CASE STUDY

CHALLENGE

To implement real-time cross-channel selling, returns, and personalized marketing in distributed retail chains with low bandwidth connections.

SOLUTION

Standards-based enterprise communications backbone that integrates diverse, distributed infrastructure

WHY PROGRESS

SonicMQ enables fast, reliable, and scalable delivery of inventory, purchase, and customer information in large-scale distributed deployments.

BENEFITS

- > High-performance—for real-time information visibility and customer service
- > Guaranteed message delivery—ensuring the accuracy of inventory and customer information
- > Standards-based connectivity—built to integrate heterogeneous computing environments
- > Easy, cost-effective deployment—lightweight client installed in store locations with centralized management

DELIVERING THE GOODS: REAL-TIME CROSS-CHANNEL RETAILING

For cross-channel retailers competition is fierce. Customers are demanding: if you don't readily have an item they are looking for, they may be disloyal and find it somewhere else. Too little inventory and out-of-stock items lead to lost sales. But what if customers could buy an item on the e-commerce site or at a store where it is out of stock and pick it up at a convenient location? What if customers could return an item anywhere in the chain, even without a receipt, and receive the right refund without the retailer overpaying for items purchased on sale? And what if sales staff could personalize marketing and selling at the point-of-sale (POS) based on the individual customer's purchase history?

The result would be higher sales, lower costs, and greater customer satisfaction. In fact this is the vision of real-time cross-channel retailing, and it is possible today with Epicor solutions. Epicor provides integrated, full-featured, scalable, and global solutions for retailers that optimize the customer experience and improve the bottom line. These solutions are designed for interoperability and for maximum ease of integration and ROI.

However, to ensure the fast, reliable communication of accurate information necessary for effective cross-channel retailing, Epicor made its own timely purchase. It chose Progress® SonicMQ® as the standards-based enterprise messaging backbone first for its Epicor Enterprise Selling product and then for its Returns Management and Retail CRM applications.

STANDARDS-BASED CONNECTIVITY, WIDELY SCALABLE DEPLOYMENT

SonicMQ provides store-to-headquarters connections underpinning these systems through its reliable Java Messaging Service (JMS) implementation for exchanging business data and events throughout a distributed enterprise. Designed to be standards-based and open, SonicMQ simplifies integration with retailers' varied existing applications—including diverse point-of-sale (POS) and CRM applications.

"We chose SonicMQ after a thorough review of several vendors in the messaging space because it's the purest JMS implementation that's out there, and the lightest weight that has allowed us to scale where we need to scale," says Brian Blauvelt, Vice President, Development, for Epicor.

With SonicMQ, retailers can install a lightweight client at each location with a centralized server for managing the entire distributed system, enabling the system to easily scale.



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— Michael Hughes
Director, Sales Support
Epicor

Michael Hughes, Director, Sales Support, Epicor, explains: “Our largest customers have 3,000 to 4,000 locations. With SonicMQ, it’s relatively easy to do large-scale deployments—across hundreds or thousands of retail outlets.”

But connecting multiple stores with heterogeneous computing resources is only part of the story.

HIGH-PERFORMANCE, GUARANTEED MESSAGE DELIVERY

For Epicor retail applications, the chief challenge is the throughput of the store-to-headquarters network connection. Retailers often use 56Kb frame relay networks to connect stores to headquarters. While these connections are economical, they present a communications bottleneck as well as a potentially unreliable connection that can seriously interfere with store operations, especially at the point-of-sale. Network performance limitations are especially acute at peak load times, such as the busy holiday or back-to-school seasons.

Epicor solutions need to quickly process queries, answers, orders, and status messages from the stores, in order to streamline store operations and better serve customers. “Performance is key. Compared to other solutions, SonicMQ was the most streamlined and efficient in its transport. We have found that SonicMQ exceeds the performance of competitors, especially considering the variations in infrastructure,” says Michael Hughes. “Also, it scales with high throughput.”

Epicor also chose SonicMQ for its ability to guarantee message delivery—even when the network suffers intermittent failure. “We rely on SonicMQ for the transportation of the point-of-sale transaction and the guaranteed delivery of it,” says Michael Hughes.

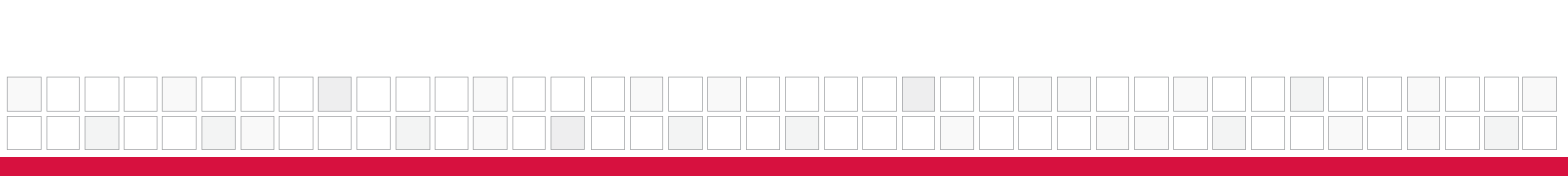
In SonicMQ’s unique Continuous Availability Architecture™ brokers are clustered in pairs. If a primary broker fails, CAA provides rapid communication failover to the “hot” broker with zero downtime for recovery—and without requiring specialized, expensive third-party hardware or software. This configuration also can serve as a backup and data recovery mechanism.

VISIBILITY INTO THE RIGHT INFORMATION AT THE RIGHT TIME

SonicMQ’s speed and reliability are critical to some of the unique functions and benefits provided by Epicor|CRS EnterpriseSelling, ReturnsManagement, and RetailCRM applications.

Enterprise Selling

Enterprise Selling unifies retail inventories, sales channels, and the corporate office. If an item is out of stock in one location, the application’s inventory locator can search chain-wide inventory. If it is available, the order management functionality, with SonicMQ as the communications backbone, manages the order wherever it can be fulfilled for the customer. The customer can then choose the most convenient delivery option. The application enables retailers to generate incremental sales without overloading every location with inventory.



“SonicMQ ensures that the data gets to the corporate office in a timely manner,” says Michael Hughes. “It controls all of the movement. Without having the guaranteed delivery of SonicMQ, we wouldn’t be able to ensure the integrity of the inventory count.”

Diane Cerulli, Product Marketing Director, Epicor, adds: “When you’re actually taking money for a product, you have to make sure that the order is at its fulfillment location or that the product is shipped to the customer. The real-time, guaranteed messaging of SonicMQ is very important so that the fulfillment store gets timely notification that the customer is coming there to pick it up.”

Returns Management

Returns Management enables customers to return an item at any chain location, even without a receipt. It captures the price of an item at the POS, including any sale or promotional pricing and taxes. This information is stored in a central returns database and is available chain-wide via SonicMQ in real time to the sales associate taking the return. It also helps the retailer to decrease fraudulent returns and avoid refunding too much money for an item purchased on sale, reducing losses.

Diane Cerulli explains, “If a customer buys something in one store and wants to be able to go to another store within the same day or just a few hours and return it, Returns Management, with the help of SonicMQ, enables the retailer to have the purchase information available for the sales associate to access and return the accurate amount.”

Retail CRM

Epicor Retail CRM provides a consolidated view of the customer across channels and integrated tools for customer analysis, segmentation, campaign management, and loyalty program management. A key differentiator is the real-time connection, provided by SonicMQ, between the customer database and the POS. This makes possible real-time personalized marketing when customers or loyalty program members are at any POS in the chain—via fast access to their individual promotions or histories. For example, based on this information, POS can offer coupons or discounts on relevant items at the cash register for greater sales and provide up-to-the-minute loyalty points status.

Michael Hughes adds: “If I sign up for a program at store A and then go on the Web or to another store later that day, it’s important for the store to recognize me and know I have already joined the program. The same is true for loyalty point calculations. We need to make sure there’s no delay from the day that I sign up and my points start getting added. With SonicMQ, it can all happen in the same day—affecting rewards.”

BETTER CUSTOMER SERVICE

All of these applications—aided by SonicMQ—help retailers provide better customer service as well as benefits such as added sales and lower costs. Fast service is always important, but especially so when customers are five deep at the register.

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— Michael Hughes

Brian Blauvelt, VP Development, Epicor, sums up the contribution of SonicMQ to this important benefit: "Many queries have to happen in just a couple of seconds: for example, when an associate swipes a receipt for a return look up, queries stock, or performs a customer look-up by swiping a loyalty card. We need to have that response hit the application and bring back the message in one or two seconds. Sonic can do this in large-scale deployments."

PROGRESS SONICMQ: MEETING THE CHALLENGES OF RELIABLE, HIGH-PERFORMANCE MESSAGING



The Progress SonicMQ enterprise messaging solution is part of the Progress® SOA Portfolio, an interoperable portfolio of best-in-class service infrastructure products used to build, deploy, and manage a service-oriented architecture. From first project to global deployment, the Progress SOA Portfolio provides robust, yet agile SOA infrastructure designed for challenging, real-world environments. Visit http://www.progress.com/solutions/services_infrastructure/index.ssp for more information.

ABOUT PROGRESS SOFTWARE

Progress Software Corporation (NASDAQ: PRGS) provides application infrastructure software for the development, deployment, integration and management of business applications. Our goal is to maximize the benefits of information technology while minimizing its complexity and total cost of ownership. Progress can be reached at +1-781-280-4000.

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