RELIABLE MESSAGING SOLUTIONS FOR RETAIL

BROCHURE

HOW OPEN SOURCE SOFTWARE CREATES OPPORTUNITIES

"We were seeing a lot of momentum in the retail industry toward leveraging open source in general.

JEFF ARCURI
SENIOR MANAGER,
IT FOR GAP INC. DIRECT

"We look forward to expanding our relationship with Red Hat, especially in the cloud space, as we trust Red Hat solutions will provide extreme value.

ATSUSHI YAZAWA
CORPORATE OFFICER,
INFORMATION TECHNOLOGY
DEPARTMENT, CASIO

OVERVIEW

Companies in the retail industry create, share, and consume large quantities of information across the entire organization—from price lists to inventory to receipts. Decisions about what to buy, how to sell, and when to deliver are made by examining this information, and operational efficiency is directly related to the accuracy and timeliness of this data.

But because of limited budgets and IT resources, most retail companies rely on batch delivery of information from outlets resulting in delays, errors, and incomplete reports. Traditional integration or messaging solutions are not an option: the cost is too great for an industry that typically operates with very tight margins, and the overhead of adopting such a large technology solution is too onerous for outlet locations. Open source solutions are changing all that.

Gaining access to real-time data is creating new opportunities for retail companies. For example, with immediate access to information at outlets retail companies can:

- Unify web site services with in-store buying. If headquarters has accurate, up-to-date information on inventory and receipts from all outlets worldwide, the web site can offer more on-line buying options and buying program rewards.
- Effectively enter smaller markets. With reduced IT costs, companies can now afford to open smaller stores and expand into low-volume territories while still protecting their margins.
- Better manage inventory. With immediate access to activity at the outlets, companies can better manage supplies, pricing, and offerings. They can also engage in dynamic advertising that maximizes return on marketing spend.

Open source software presents an entirely different cost model and more flexibility in deployment options that suit the needs of retail perfectly. Open source solutions are **cost effective**, are highly **flexible**, and ensure **no vendor lock-in** while providing highly reliable delivery of information making it possible — and practical — to eliminate batch delivery forever.

Red Hat messaging and integration products have a long track record of providing the foundation for scalable and robust applications and are currently in use at three of the top five retail organizations in the world.

WHAT IS OPEN SOURCE?

Open source software is developed by a community of diverse developers rather than a single vendor. The code is open, so developers can adapt and reuse it. The result is technology that is less expensive, free from vendor lock-in, and transparent.

UNDERSTANDING OPEN SOURCE

Open source integration software is very tempting—its low cost and inherent transparency address two of the biggest challenges for IT professionals in retail: the high cost of infrastructure software and the limitations a closed stack imposes on the enterprise. Open source technology is also proven, and is widely adopted by the enterprise.

Red Hat was founded on the belief that open source creates better software. Everyone collaborates. The best technology wins. Not just within one company, but for anyone around the world. As a result, the open source model builds higher-quality, more secure, more easily integrated software. And it does it at a vastly accelerated pace, and often at a lower cost.

WHY OPEN SOURCE?

Corporate IT departments in many industries— including retail — are rapidly adopting open source technology. The primary drivers for this shift include:

- **Cost savings** — Users do not pay a license fee to pilot or deploy open source software, eliminating the large upfront cost typically associated with infrastructure development and significantly reducing the total cost of the project.
- **Flexibility** — Open source projects make the source code available so users can read and, if they chose to, modify the source. This allows enterprises to better understand the code and debug applications.
- **No vendor lock-in** — Open source software is developed by a diverse community community. Users of the project are not locked in to a vendor's platform and are not forced to buy proprietary modules or adopt prerequisite technology.

RETAIL: OPEN SOURCE IN ACTION

Consider a large retail company. At the company's headquarters, a centralized application tracks and analyzes information and outlets worldwide--ranging from just a handful to tens of thousands of locations. In order to run the business efficiently, headquarters and the outlets must share the latest pricing information, inventory statistics, and receipt ledgers (see Fig. 1).

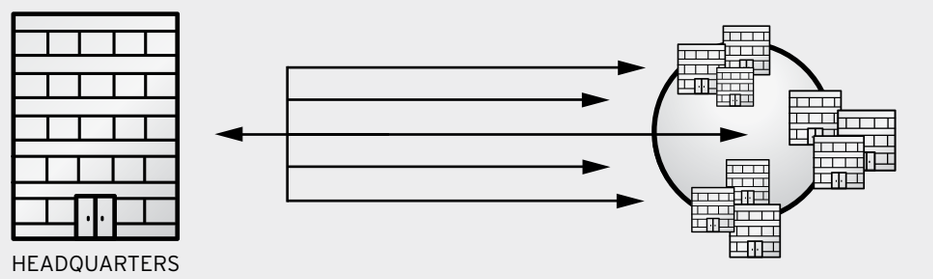

Figure 1: Retail companies share information around the globe.

Traditional messaging solutions include several licences and resources from IT to help manage across different outlets. In contrast, open source solutions don't require licensing fees, have smaller footprints, and can potentially make reliable messaging a possibility for virtually all retail organizations.

Consider the options. The main application at headquarters is complex, and the development team would likely need a considerable amount of software, hardware, and services to build the application at the hub no matter what solution is used. Compare what it would take to do the project with closed source software versus open source software:

BUILDING THE APPLICATION AT HEADQUARTERS

Closed source software	Open source software
• **Software costs** – Can be high and involve license fees • **Hardware costs** – Can be high • **Flexibility** – Limited	• **Software cost** – Significantly reduced; subscription fees • **Hardware costs** – Less due to smaller footprint • **Flexibility** – Open
Summary: Closed source vendors create robust and comprehensive solutions that can cost more than open source solutions.	**Summary:** Open source solutions are also robust and comprehensive, but have a small footprint and lower overall cost. The solution also allows the team more flexibility in configuration, tools, and support.

Retail companies can often save money with a subscription model versus buying software outright. But the real savings happen when you consider the applications at the outlets:

BUILDING THE APPLICATION AT EACH OUTLET

Closed source software	Open source software
• **Software costs** – Proprietary software must be purchased separately for each store location • **Hardware costs** – Large machines are still required at each location to support the suite • **Flexibility** – Limited	• **Software cost** – A single purchase covers current and future outlets • **Hardware costs** – Low hardware costs due to small software footprint • **Flexibility** – Easily integrates with existing technologies and hardware.
Summary: Solutions from closed source vendors can be prohibitively expensive for many retail applications.	**Summary:** Once the application is built, deploying it in multiple locations costs very little, resulting in game-changing savings when there are a large number of outlets. **Bonus:** The flexibility that open source provides makes it easier to deploy on mobile devices, custom machines, and inexpensive platforms.

In the retail industry, where margins are everything, being able to deploy a reliable messaging system for a fraction of the cost of traditional, proprietary solutions, gives you instant access to business information. Before mature, open source solutions were available, any company that could promise batch delivery (and the accompanying latency) would do it. Now that barriers to entry are drastically reduced, retail companies are building applications that were never before possible.

These customers have successfully deployed Red Hat software:

- **Sabre Holdings (Travelocity)** – The company has been connecting travel consumers with travel suppliers for years. It uses Red Hat software in its partner gateway. Sabre Holdings needed a solution that could be deployed at thousands of suppliers at a minimum cost. Today, it handles more than 1.4 million transactions a day and has not experienced a single unscheduled outage.
- **Specsavers** – The largest optical retailer in the United Kingdom needed to share information in real time among its 1400+ cash register stores and its headquarters in Guernsey, UK. The company chose Red Hat because, according to John Lister, CIO of Specsavers, it "needed a partner who understood both the demands of the dynamic business environment we operate in and our approach to high-quality open software solutions."
- **Large global retail chain** – One of the largest retail chains in the world relies on immediate access to information to run their business. It deployed with a closed source solution, but the high cost limited them to only deploying in mega-stores in high-traffic areas. A Red Hat solution allowed the company to move into new markets with smaller stores.

For more information in these and other Red Hat customers, please visit **redhat.com/solutions/industry/retail.**

WHO IS RED HAT JBOSS?

Red Hat® JBoss® Middleware expanded its offering with the acquisition of FuseSource in 2012. The products gained in this acquisition include lightweight and flexible integration and messaging technology perfect for building distributed applications, and perfect for the retail industry.

KEY BENEFITS OF OPEN SOURCE FROM RED HAT

Retail IT organizations have stringent requirements for infrastructure software, and Red Hat addresses these needs by testing and packaging open source community projects into enterprise-class, production-ready open source products. Red Hat takes the community's best open source projects and creations distribution with the following advantages:

- **Technology integration** – Projects are evaluated and integrated, and available as a product with simplified installation.
- **Stable releases with incremental patching** – Red Hat takes a snapshot of the code, puts it through a standard release process, and makes it available on www.redhat.com.
- **Qualities of Service (QoS)** – All Red Hat open source products are tested and verified, and have high standards for robustness, performance, availability, and security.
- **Flexible licensing** – Red Hat products are released under either the Apache or the LGPL license that allows for embedding and redistribution.
- **24x7, worldwide support and services**– Red Hat provides a complete array of professional services including enterprise-class support, comprehensive training, and consulting.

RED HAT INTEGRATION AND MESSAGING PRODUCTS

A typical application in the retail industry relies on Red Hat JBoss A-MQ to reliably and inexpensively deliver messages across all outlets, but for additional projects Red Hat offers Red Hat JBoss Fuse and a comprehensive list of additional Red Hat JBoss Middleware products. Products include:

- **Red Hat JBoss A-MQ** – A high-performance message broker that reliably delivers messages between diverse and disparate systems. It is an ideal tool real-time data exchange with outlets and devices.
- **Red Hat JBoss Fuse** – A highly-configurable ESB that combines message delivery with routing and translation. It is the platform of choice for distribution centers where a small IT footprint makes integration practical.
- **Red Hat JBoss SOA Platform** – A centralized platform for building integrated application with business rules, orchestration, and a service registry. It is the proven solution for integration within the data center when centralized services are critical.

RED HAT SERVICES AND SUPPORT

Red Hat supports customers with a comprehensive suite of enterprise-class services and support.

- **Getting started resources** – Red Hat offers tutorials and recorded demos to efficiently boost a project team's productivity. The current curriculum includes courses ranging from how to get started to advanced integration topics.
- **Virtual training** – Red Hat offers online training courses. The course includes lectures and hands-on, code-level exercises. Throughout the course the instructor, a teaching assistant, and a member of the services organization are available to answer questions.
- **On-site training** – Red Hat offers in-person training at the location of the development team's choice. Courses can be customized to meet individual needs and optionally include training lab equipment. Courses include an intensive set of lectures, hands-on exercises and detailed reference notes.
- **Enterprise subscriptions** – Red Hat has built significant expertise in distributed, large-scale, mission-critical systems and combines the benefits of open source with the assurance of an enterprise-level technical team. A subscription includes 24x7 support and a collaborative relationship with your technology vendor.
- **Consulting** – Red Hat consulting packages are designed to make teams productive and self-sufficient as quickly as possible. Red Hat guides organizations through the entire life cycle of a project from initial requirements gathering, through architecture and design, to implementation and deployment.

CONCLUSION

Red Hat products bring a constant stream of innovation to retail IT departments. By packaging the technology in an IT-friendly manner and backing it with world-class tools, services, and support, large corporations know they have a recognized technical team standing behind the products.

Red Hat products are unique in their flexibility. For example, some architects need comprehensive integration capabilities. Others need a lightweight, easy to manage broker – and sometimes need both. Red Hat products can be deployed and easily managed in any configuration so architects effectively have a different broker for every endpoint, and can deploy a network of brokers across their infrastructure.

With the cost-effective and flexible integration platforms from Red Hat, businesses can finally have integration everywhere. Visit **www.redhat.com**, and:

- **Read more about Red Hat and retail** – Access more information about the value of using Red Hat products for retail applications, links to resources, and case studies.
  redhat.com/solutions/industry/retail
- **Download Red Hat products** – Install them, run a demo, develop a proof-of-concept project. Eliminate risk by trying the software before you buy.
  redhat.com/jbossamq/download
- **Learn how to make the most of Red Hat JBoss Middleware products** – View a webinar, tune in for a Getting Started tutorial, watch a demo, and more.
  jboss.org/developer

ABOUT RED HAT

Red Hat is the world's leading provider of open source solutions, using a community-powered approach to provide reliable and high-performing cloud, virtualization, storage, Linux, and middleware technologies. Red Hat also offers award-winning support, training, and consulting services. Red Hat is an S&P company with more than 70 offices spanning the globe, empowering its customers' businesses.

NORTH AMERICA
1-888-REDHAT1

EUROPE, MIDDLE EAST AND AFRICA
00800 7334 2835
europe@redhat.com

ASIA PACIFIC
+65 6490 4200
apac@redhat.com

LATIN AMERICA
+54 11 4329 7300
latammktg@redhat.com

facebook.com/redhatinc
@redhatnews
linkedin.com/company/red-hat

Copyright © 2013 Red Hat, Inc. Red Hat, Red Hat Enterprise Linux, the Shadowman logo, and JBoss are trademarks of Red Hat, Inc., registered in the U.S. and other countries. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

redhat.com
#10620267_v3_0313