

IBM and StorePerform modernize the links in retail chain management



Highlights

- StorePerform[™] Workbench[™] software provides retailers with a closed-loop store execution management system designed to help maximize sales opportunities and increase productivity across the retail chain
- The standards-based flexibility of the IBM® TotalStorage® DS4000 Family combined with StorePerform software can help retailers manage resources more cost-effectively
- Performance tests of
 StorePerform Workbench on an
 IBM platform show exceptional
 performance and scalability
- StorePerform has qualified as TotalStorage Proven[™] with the IBM TotalStorage DS4000
- A standard set of application programming interfaces and integration with IBM WebSphere® Application Server helps enable retailers to leverage existing IT assets

Retail enterprises operate in a highly competitive, rapidly changing business environment. Distinctive brand propositions can help retailers stand out in a crowded field of competitors, but they are only a first step in providing innovation and an experience that matters to customers. Retailers are working to differentiate the in-store experience in ways other than lowering prices, realizing that the impeccable execution of instore, consumer-centric initiatives can help drive retail success.

However, successful task execution cannot be achieved without real-time reporting and feedback, along with workload management tools.

Compliance with regulations and policies must be supported and documented throughout the chain, and vendor marketing dollars must be managed as efficiently as possible. Retailers need effective communication tools to help them transform retail strategy into

store execution. These tools can help ensure that best practices are shared among all stores, that labor requirements are scheduled appropriately and that all tasks are monitored from assignment through to completion.

Still, many retailers rely on historical sales data to evaluate the success of promotional campaigns and depend on a jumble of IT services and infrastructures-phone calls, faxes and e-mailfor customer, office and in-store communications. Many organizations have expanded IT capacity over the years simply by continuing to add hardware, which has created highly complex IT infrastructures with expensive overhead. The challenges associated with this kind of ad hoc expansion are amplified in the face of mergers and business acquisitions—a common thread in the retail industry. Flexible, standards-based platforms combined with sophisticated store execution management (SEM) software can help retailers transition from complex, resource-intensive, localized or isolated infrastructures to integrated, streamlined IT architectures that can share information and manage resources more cost-effectively.

StorePerform eliminates the gap between retail strategy and store execution

StorePerform Technologies provides SEM software with Web-based functionality designed to help streamline the in-store management and execution of operational tasks, from outsourcing facilities maintenance to launching corporate initiatives to ensuring coupon releases match product supply.

The StorePerform Workbench is a role-specific, Web-based application designed to enable retailers to design, execute and monitor processes and programs throughout stores. Each module in the workbench is designed to help increase operational efficiencies across the board—from headquarters to store level. The Business Process Designer module allows corporate executives to develop tasks and activities based on a template that can be used across all stores. Workload Optimizer acts as a gatekeeper, to help ensure that stores have the workload capacity to handle tasks, and scheduling or reprioritizing activities accordingly. Task Manager is designed to distribute

the relevant information and Feedback Manager is designed to close the loop on completed tasks, providing real-time status and performance reports on demand. By allowing retailers to successfully execute retail strategy, StorePerform can help improve the customer experience and drive down operational costs.

StorePerform adds flexibility and performance

StorePerform Workbench software can be configured to address the unique business requirements of each retailer. This helps avoid having to wait for expensive custom code development, lower the total cost of ownership (TCO) and minimize the impact of new software releases.

StorePerform Workbench is also designed to offer exceptional performance and scalability. In performance benchmarking and testing¹ on IBM @server® pSeries® servers running the IBM AIX 5L™ operating system, IBM DB2 Universal Database™ (UDB) and WebSphere® 5.1 software, the StorePerform Workbench scaled up to 240,000 distinct users and 58,860 concurrent users supporting

15 million tasks at 1,500 stores. This level of performance can help enable retailers to personalize communications across multiple locations and effectively monitor thousands of simultaneous processes by thousands of users across those locations.

IBM TotalStorage systems help maximize reliability and performance

Many of the StorePerform Workbench customers have chosen to run the application on an IBM storage platform because of its proven track record for reliability and performance. Designed to help retail businesses simplify their IT infrastructures, support business continuity and improve information life-cycle management, the IBM TotalStorage DS4000 Family can help customers achieve high efficiency, enhanced data protection and high return on investment. These systems help retailers achieve low TCO for their storage infrastructures by providing scalable and flexible platforms to support advanced data applications.

Flexible storage scales easily and cost-effectively

To keep up with rapidly changing business demands and seasonal workloads, retailers need a flexible storage environment that can scale quickly and

cost-effectively. TotalStorage DS4000 Family systems can help retail enterprises to respond with agility to customer demand and market opportunities. Virtualization tools with easy-to-use interfaces and remote management capabilities also can help improve ease of use and management efficiency.

The IBM TotalStorage Resiliency Family of technologies can help protect high-availability and disaster recovery functionality with a range of redundant components and a comprehensive suite of resiliency features that help support high availability and data protection.

StorePerform on pSeries servers helps optimize high performance

pSeries servers with the POWER4+™ processors and AIX 5L—the advanced, open, scalable UNIX® operating system from IBM—deliver outstanding performance, scalability, reliability and security. pSeries servers provide the power required to run robust SEM applications and the interoperability required to share information across the entire store chain. Built on innovative mainframe technology from IBM, pSeries

servers running AIX 5L provide a powerful, flexible base for the StorePerform Workbench applications and solutions while helping to lower costs and improve operational efficiency.

pSeries systems feature exceptional processing power, memory and I/O capabilities, so they can scale dynamically to handle the rapid growth and ever-changing needs of a retail environment. Using the dynamic logical partitioning (LPAR) capabilities in AIX 5L, retailers can create virtual servers within a server and dynamically add and remove processors, real memory and I/O slots from active partitions—each isolated from other partitions and running its own instance of the AIX 5L operating system—without the need to reboot. In this manner, dynamic LPAR enables clients to assign system resources where they are most needed, easily adjusting to changing system priorities and growth requirements.

WebSphere and StorePerform streamline browser access

StorePerform Workbench runs with the WebSphere middleware software to provide an integrated browser experience for end users. WebSphere Application Server is a tightly integrated development tool and application server

for companies developing dynamic Web sites. WebSphere supports the full J2EE 1.4 programming model and extensions, including servlets, JavaServer Pages™, Enterprise JavaBeans™ and Web services, delivering a service-oriented architecture across all configurations. This enables retailers to increase their return on investment and lower their TCO by reusing existing IT assets using standards-based messaging and the latest Web services standards.

DB2 enhances SEM performance

With support for the latest Web services protocols and open Internet standards, DB2 UDB easily integrates with the StorePerform Workbench application. DB2 UDB is a multimedia, Web-enabled relational database management system delivering high levels of reliability, availability and performance. To manage growing data volumes, DB2 features shared-nothing partitioning to support no-limits scalability—from hand-held devices to high-performance enterprise cluster systems based on massively parallel processing configurations. This capability makes

DB2 one of the most scalable and storage-efficient databases on the market. And DB2 runs on the most popular platforms, including the Linux®, UNIX® and Microsoft® Windows® operating systems, providing flexibility and the ability to preserve existing IT investments.

StorePerform and IBM improve SEM, from planning to feedback

Running StorePerform Workbench on IBM TotalStorage systems can help retailers effectively improve the customer in-store experience.

The StorePerform Workbench includes a standard set of appliance programming interfaces that help allow customers to leverage existing software infrastructures. By integrating components such as organizational hierarchy, distribution lists and workload budgets, StorePerform helps streamline real-time reporting, feedback and workload management.

As retailers transform themselves into on demand businesses, an increasingly competitive marketplace will continue to push them to improve operational efficiencies across the enterprise and adopt technology standards to streamline SEM. To accomplish these goals,
companies in the retail industry must
optimize their IT infrastructures for
flexibility and resiliency by using costeffective, standards-based platforms.
IBM storage and server systems running StorePerform Workbench can play
a key role in supporting these initiatives
with a platform that is designed to integrate operating systems, middleware,
databases, security and storage into
one infrastructure that can be deployed
quickly and is easy to manage.

IBM TotalStorage Proven program simplifies IT decision-making

StorePerform software has been qualified through the TotalStorage Proven program to interoperate with the IBM TotalStorage DS4300. The IBM TotalStorage Proven program is designed to help clients identify storage solutions that have been pre-qualified for interoperability with IBM TotalStorage products. IBM helps take the guesswork out of putting a total solution together to help simplify your purchase decision, freeing you to focus on running your business.

For more overall information about StorePerform, visit: www.storeperform.com

For more information on IBM TotalStorage Proven, please see:

ibm.com/servers/storage/proven/
index.html

For more information

Contact your IBM representative, or visit:

The IBM PartnerWorld® global solutions directory: www.developer.ibm.com/gsdod/homepage.do

IBM @server systems:

ibm.com/servers/

IBM TotalStorage systems: **ibm.com**/servers/storage

IBM WebSphere:

ibm.com/software/websphere

IBM DB2 UDB:

ibm.com/software/data/

THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT. IBM shall have no responsibility to update this information. IBM products are warranted according to the terms and conditions of the agreements (e.g., IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided. IBM is not responsible for the performance or

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products in connection with this publication and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

interoperability of any non-IBM products

discussed herein.

The provision of the information contained herein is not intended to, and does not, grant any right or license under any IBM patents or copyrights. Inquiries regarding patent or copyright licenses should be made, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive Armonk, NY 10504-1785 U.S.A

StorePerform Workbench 3.0 AIX Performance Benchmark Test conducted by StorePerform at the IBM Innovation Center for Business Partners, San Mateo, California, April 2005.



© Copyright IBM Corporation 2005

IBM Systems and Technology Group Integrated Marketing Communications Route 100

Somers, NY 10589

Produced in the United States August 2005 All Rights Reserved

IBM, the IBM logo, @server, AIX 5L, BladeCenter, DB2, POWER4+, pSeries, TotalStorage, WebSphere and xSeries are trademarks or registered trademarks of IBM Corporation in the United States, other countries, or both.

A full list of U.S. trademarks owned by IBM may be found at **ibm.com**/legal/copytrade.shtml.

StorePerform and Workbench are trademarks of StorePerform Technologies Inc. in the United States, other countries, or both.

Linux is a trademark of Linus Torvalds in the United States, other countries or both.

Microsoft and Windows are registered trademarks of Microsoft Corporation.

Java and all Java-related trademarks are trademarks of Sun Microsystems, Inc., in the United States, other countries or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other company, product and service names may be trademarks or service marks of others.

No part of this document may be reproduced or transmitted in any form without written permission from IBM Corporation.

Product data has been reviewed for accuracy as of the date of initial publication. Product data is subject to change without notice. This information could include technical inaccuracies or typographical errors. IBM may make improvements and/or changes in the product(s) and/or programs(s) at any time without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

References in this document to IBM products, programs, or services does not imply that IBM intends to make such products, programs or services available in all countries in which IBM operates or does business. Any reference to an IBM Program Product in this document is not intended to state or imply that only that program product may be used. Any functionally equivalent program, that does not infringe IBM's intellectually property rights, may be used instead. It is the user's responsibility to evaluate and verify the operation of any on-IBM product, program or service.



