



THE COMPUTERWORLD HONORS PROGRAM

CASE STUDY

LOCATION:
*Flowery Branch, Georgia,
United States*

YEAR:
2006

STATUS:
Laureate

CATEGORY:
Manufacturing

NOMINATING COMPANY:
EMC

ORGANIZATION:

DS Waters of America LP

PROJECT NAME:

DS Waters Propels Performance and Management of Crisis

Summary

DS Waters maximizes the performance of its mission-critical Oracle E-business Suite applications while managing its rapid data growth and dramatically improving its accounting and customer service productivity by using EMC® DatabaseXtender™ software to automate policy-based database archiving and achieve more efficient access to information.

Introductory Overview

DS Waters is a leading producer and distributor of bottled water products in the home and office category with annual revenues of about \$800 million. With 2,200 routes across the country, serving 80,000 customers a day, DS Waters processes close to 100,000 invoices every day. Its accounts receivable data is growing at a rate of more than two million invoices a month, or approximately 30 gigabytes every 30 days.

To create a usable and efficient production environment, DS Waters faced challenges on two fronts: 1) merging multiple legacy systems to provide its customer service and accounting employees with seamless access to financial and customer information and 2) stemming the exponential growth of its database that was impacting performance and productivity and jeopardizing the company's ability to service its customers.

DS Waters turned to EMC Corporation for guidance in assessing and defining its business and database processes needs and then devising a strategy for information lifecycle management (ILM) that would align storage resources with its diverse data requirements. As a result of this collaboration, DS Waters concluded that active accounts receivable data should remain on the high-performance EMC Symmetrix® SAN (storage area network) for 13 months and general ledger data should remain on the same high-performance SAN for 27 months. After the designated time period, both types of information would then be archived for retrieval on the EMC CLARiON® SAN, creating a tiered storage infrastructure for a lower total cost of ownership of the company's applications environment.

By deploying EMC DatabaseXtender software, DS Waters streamlined its production databases—relocating inactive data to a more cost-effective tiered storage environment. DatabaseXtend-



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er performs the data relocation while maintaining all existing data relationships as if the data is still stored within a single production environment. Following data relocation, users continue to use native applications to transparently monitor, analyze, and use data stored in both the production and historical databases.

Currently, DS Waters archives one-month's worth of accounts receivable data (30 gigabytes) every month to maintain a static and efficient volume of approximately 550 gigabytes within its 1.6 terabyte production database. It archives one-quarter's worth of general ledger data (6 gigabytes) every quarter to maintain a static and efficient volume of approximately 150 gigabytes within the production database.

Benefits

At this point in time, DS Waters has relocated over 25 percent of its accounts receivable data onto EMC CLARiiON networked storage. By lowering data volumes in its production database, it is finding that online access and reports run much more efficiently. Database backup procedures take 10 percent less time to complete. Now the overall backup time is 12 hours for each of the nine development and test databases. And it takes 10 percent less time and 175 gigabytes less space to clone a copy of each of the nine development and testing databases.

By enhancing access to information, EMC DatabaseXtender enables DS Waters' customer service department to respond more efficiently to the more than five million phone calls it receives each year. Overall, the feedback from employees has been very positive because staff is able to complete routine tasks like accounts receivable reconciliation and collections with greater speed and efficiency.

Offloading historical data from high-performance EMC Symmetrix to more cost-effective EMC CLARiiON storage systems has enabled DS Waters to cut the total cost of ownership for the storage of its historical databases by a factor of eight. With time, as the production database grows and DS Waters continues to move data to less expensive storage, the savings will accrue even faster. At this time, DS Waters has moved sufficient data out of production to scale down each of the development and test databases to gain space for one full test database (1.6 terabytes).

Nikhil Sawant, DS Waters' Director of Implementation Services, said, "Previously, to address our rapid data growth, we would have had to develop our own custom application or purchase more hardware. EMC DatabaseXtender provides users with transparent access to database information regardless of where it is stored. It also helps us alleviate the pressure tremendous data growth would otherwise place on our ability to service our customers in the timely manner which they've come to expect from us."

The Importance of Technology

EMC DatabaseXtender software efficiently expedites the archiving and purging of data from the DS Waters production system and then provides a transparent link between the historical and production information. Without this tool, users would need to log into the production and historical databases separately to get the requisite information to produce reports or respond to customer inquiries. The information that they viewed would be in different formats and if they wanted to collate data across the two databases, the IT development team within DS Waters



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would have had to create ad hoc capabilities for them to do so. With IT development resources at a premium, staff would have to wait for programmers to schedule their requests into the queue, which could take up to four weeks from requests to completion and implementation. DatabaseXtender technology automatically handles this task seamlessly.

Originality

The DS Waters production environment is one of the first large-scale operations to deploy this transparent technology. It required a team effort among in-house IT staff and EMC consultants to achieve a seamless environment across multiple databases. The project represents a solid technical achievement wherein users have no need to know whether the data they are seeking resides in the current production database or is archived elsewhere in an historical database. It is a testament to DatabaseXtender technology that users experience no difference between data retrieved from either storage location. They are able to simply log on to the production system with the confidence that both the current and aged information they need is instantly retrievable whenever they need it.

Success

DS Waters has been able to stem rampant and unmanageable growth in its production database by archiving accounts receivable and general ledger data at regularly scheduled intervals without compromising customer service. More than 1,600 employees use the Oracle eBusiness application suite to perform their jobs on a daily basis. Because the archiving occurs in the background and remains transparent to users, there has been no need for additional training for users to reap the full benefits of accessing both the production and historical database environments.

Difficulty

As with any large-scale operation, testing concepts and reaching consensus on project specifications can be a challenge. Initially, DS Waters used EMC CLARiiON storage technology to test the archiving concepts. Although CLARiiON provided strong functionality, the company realized that testing this critical application required an even higher level of performance and chose to use EMC Symmetrix storage as its test environment for this project.

Before the final solution could be deployed, the management team needed to agree on an archive retention policy. It required extensive research to pinpoint the source of the company's most rampant data growth down to specific application modules and then build a business case for offloading that data according to a specific timetable. Eventually consensus was reached to archive accounts receivable data older than 13 months and general ledger data older than 27 months.

A third challenge centered on allocating resources to test the production/historical database environment concept. Key internal resources were already committed to other projects. But the business case built for this project demonstrated the immediacy of the need for a usable and efficient production environment and the significant cost savings and operating efficiencies that would result from deploying EMC information lifecycle management and database optimization technology.