

Catalog Retailer Boosts Oracle Performance, Lowers Risk with FlashServer™ HA

POTPOURRI G R O U P I N C

Key Highlights

Industry

Catalog Retail

The Challenge

Improve online and phone-sales transaction performance and meet needs for post-acquisition workload growth, while reducing operational risk and complexity.

The Solution

Boost performance and ensure high availability by replacing two clustered-database servers with a single, purpose-built FlashServer HA system and solid-state disk (SSD) storage.

Benefits

- Enable business reporting and analytics without impacting transaction performance—even during the busy holiday season
- Ensure IT capacity to handle additional sales from recent acquisition
- Eliminate errors and down time caused by clustered database instability
- Remove risk from software upgrades

Customer Profile

Potpourri Group, Inc. (PGI) is one of the leading multi-brand direct marketers in the United States. The company offers a broad array of products including home décor, casual apparel, gifts and accessories through catalogs and the Internet. PGI's portfolio of thirteen catalog brands caters to a large and fast-growing American demographic: middle to upper-middle income women aged 40-65.

The Challenge**Improve Transaction Performance**

Orders placed for products in any of PGI's catalogs, online and over the phone, are all handled by the company's main data center located in its Billerica, Massachusetts headquarters. Based on JDA Direct Commerce, the firm's order management system runs on top of an Oracle 10g database.

PGI's order-management system is the very heart of the firm's business. Business reporting, sales forecasting, supply-chain management, and marketing initiatives all use software that accesses the same database that's supporting customer sales transactions. Needless to say, the company's IT staff must ensure nothing interferes with those transactions—especially during the extremely busy winter holiday season.

"There were monthly processes that we would get from either marketing or merchandising that we would defer during 'season,' because they were just so overhead intensive that it would impact our ability to take orders at the speed we needed," said Randall Davis, PGI's Vice President of Information technology. "So from late November through middle of December we would defer them, waiting until January to catch back up on those processes."

Performance was such a concern that Davis' staff had to "spend a lot of time monitoring and babysitting that system making sure that processes that sent orders to the warehouse were completing in a reasonable time."

Reduce Risk and Complexity

For 5 years, PGI had been using Oracle's Real Application Cluster (RAC) software with the goal of ensuring continuous order-management up time. Especially during "season."

But RAC brought significant operational complexity—and with it, significant operational problems. "Any time we wanted to do any kind of an upgrade, it would never work right the first time," said Davis. "We'd go down, we'd have to get Oracle involved, then 12-18 hours later we'd figure out what was wrong. Then we'd go back in and get it resolved. Meanwhile, we'd suffered 2 days of downtime. It got to the point where we just didn't want to touch it."

The Solution

Introducing FlashServer HA

PGI had been a Winchester Systems customer for two years when Davis and his staff met with his Winchester sales rep for an annual review of PGI's infrastructure plans and Winchester Systems strategy and roadmap. During that meeting, Winchester Systems described a new approach to handling his Oracle database.

FlashServer HA takes an entirely different approach to providing high availability to critical server workloads. Using hardware, FlashServer HA effectively "mirrors" processing between two servers—ensuring every CPU instruction, memory change or I/O access is reflected across both.

The concept is similar to RAID-1 mirroring of disk data, where every change is reflected across the drive pair in real time. If one server fails, the other takes over processing without interruption. Application workloads continue running without any perceptible change in performance—and *transactions complete normally.*

"He started describing this High Availability server," recalled Davis, "and I'm thinking this could be that big solution I didn't even know existed. I liked what I heard, but I didn't know if I could believe it."

So PGI requested a test unit. "We loaded it up, went through a couple Oracle patch installs, and it was like doing them on a standard server. The simplicity of doing things that needed doing was there," continued Davis. "Then we started yanking things: power cords, trays, and disk drives... and it would just keep running. We had users on it, we had jobs running on it, and nothing failed."

Davis' Winchester Systems rep had also told him the company was introducing a next generation solid-state disk (SSD), and that PGI could run most, or perhaps even all, of its Oracle database on SSD. During its testing, PGI performed an analysis of its database table I/O usage, and moved the top 20 tables onto SSDs, keeping the rest on a Fibre Channel-connected FlashDisk® array.

The results were compelling. Batch jobs were completing in one-tenth the time. The IT staff kept starting more and more jobs, and the system kept handling whatever they threw at it.

Potpourri Group purchased three FlashServer HA systems. One replaced the firm's two-node Oracle RAC cluster. The others handle FedEx and printing. All three were critical—and deployed just in time—for the holiday season.

Business Benefits

"This year we never had to defer anything!" said Davis. "We just kept running our normal business the way we run it any other time of the year. Now internal users run 6 or 8 batch jobs at a time. They can fire off as many reports as they want, and they're finished sooner, so they have access to

the data sooner. We know the end-user customer experience is faster, but we haven't yet been able to put a percentage to it. But FlashServer HA really has helped in that regard as well."

"FlashServer HA really has taken a lot of worry off of my back," continued Davis. "Before, I had to sit and monitor the system, and shuffle processes or priorities around. This year I didn't have to do any of that."

PGI's FlashServer HA has also given Davis' IT infrastructure enough headroom to eventually handle a significant increase in sales transactions as it integrates the order-management processing of its recent acquisition.

Concludes Randall Davis, "The advantage is simplicity. From a hardware and software cost perspective, it was roughly even with a RAC cluster. But maintaining and managing a cluster long term is much more complex and prone to problems."

Faster. Simpler. Safer. That's why Davis calls FlashServer HA "kind of the Holy Grail. It's redundancy without the complexity."

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-Randall Davis, VP
Information Technology,
Potpourri Group, Inc.**