



RETAIL

GARDEN RIDGE

UNICENTER AND SUN POWER RETAILER GROWTH

Highlights

Company

Garden Ridge

Industry/Market

Retail

Applications/Solutions

- CA's Unicenter TNG Enterprise management solution
- Endura retail application
- Informix XPS (Extended Parallel Server) database

Products/Services

- One Sun Enterprise™ 4000 server (6-way)
- Two Sun Enterprise™ 4500 servers (6-way and 12-way)
- Seven Sun StorEdge™ A5000 fibre channel-based storage arrays totaling 840 GB (360GB mirrored transaction and data warehouse databases)

Key Business Challenges

- Provide managed IT infrastructure to support growth from \$365 million to \$1 billion business
- Provide environment to support high availability for transaction processing and decision support
- Provide high-performance data warehouse access

Key Business Results

- Unicenter TNG delivers the comprehensive enterprise management capabilities necessary to support growing transaction and data warehousing systems
- Sun Enterprise servers and Sun StorEdge arrays provide consistent, scalable architecture with ample expansion capabilities
- Sun StorEdge arrays reduce data warehouse query performance response times significantly

“The pairing of CA Unicenter on the Sun/Solaris platform and operating environment provides an unbeatable combination for managing change-and growth.”

Mark Wozny, Director of Technology and Infrastructure, Garden Ridge

Garden Ridge is quickly becoming a household name throughout the midwest and south-east. The \$365 million, 27-store home decor specialty chain is scheduled to open five new stores in the coming year. To keep pace with this rapid rate of expansion, the company realized it needed a more sophisticated IT infrastructure. When Mark Wozny, director of technology and infrastructure, joined Garden Ridge five years ago, his mission was to establish an IT base that would support operations for a billion-dollar enterprise.

At the time, Garden Ridge relied on proprietary technology that was difficult to scale or add new functionality. The company also realized that to gain maximum advantage from its new enterprise system, it required an infrastructure that would support growing transaction loads, and the implementation of a new product sales data warehouse. The company's selection of Endura (formerly FourGen), a retailing business application, was the impetus for specifying the tools to manage that infrastructure.

Today, Garden Ridge is basing its infrastructure on Sun Enterprise servers, Informix extended parallel databases, and will manage it with CA's Unicenter TNG.

Getting the Picture

Garden Ridge home decor superstores consist of nearly a dozen merchandising categories, with each site stocking more than 80,000 items, or SKUs (stockkeeping units).

To prevail in the superstore arena, retailers require information systems that let them view the big picture on business metrics such as sales trends and expenses, while helping them pay close attention to details such as timely processing of sales totals for specific SKUs.

That translates into a need for robust transaction systems that can easily withstand seasonal peaks in volume. For instance, during Thanksgiving weekend, the busiest shopping time of the year, Garden Ridge generates about a month's worth of business in the space of 84 hours. It also dictates the need for effective analysis and decision support. As a mass retailer, huge quantities of inventory are impacted by every product decision. Garden Ridge required a data warehouse that would let them analyze patterns in demand, pricing, and profitability so it could optimize its distribution and replenishment strategies.

Four years ago, it was apparent that the company's existing proprietary applications could not support the chain's anticipated growth. Although the application was running on an IBM AIX platform, the application's proprietary data store was not scalable, and its code

base was difficult to modify. When Garden Ridge decided to migrate to FourGen, a UNIX®-based retail business system based on Informix, the company realized it had to choose the right platform and systems management infrastructure to run the new application.

Building Systems Management Discipline

Garden Ridge's existing tools were largely stand-alone. They included a job scheduling system written in UNIX Basic; a rudimentary print spooler bundled with the legacy retailing application; and modem-based file uploads from retail stores. Given the chain's growth rate, such a strategy would soon run out of gas.

"We began with a blank slate," said Wozny. "We evaluated point tools and enterprise frameworks, and looked for the UNIX server and storage environment that would deliver the best reliability and price/performance."

Early in the evaluation stage, Garden Ridge saw the advantages of going with single-vendor solutions. "We chose Unicenter TNG because their individual solutions met our needs and were all tied together in a coherent framework," said Wozny. He added, "By going this route, we didn't have to worry about integrating disparate products into a framework ourselves."

However, Garden Ridge learned that Unicenter was more than just an infrastructure management tool. They found Unicenter to be a catalyst for building the methodology and discipline necessary to manage growth. After relying on consultants from both CA and implementation partners G&Z and ICI to get basic file transfer, security and server workload management activated within a 90-day period, Garden Ridge made a commitment to internalize the knowledge gained from expertise provided by CA and its partners. "We needed to get our people proactive with consultants so we could continue to benefit long after they left," said Wozny. It committed five IT staff members to work alongside the CA/ICI team.

The next phase of the project involved implementing additional Unicenter capabilities, covering event management, help desk, job scheduling, backup, software distribution, and asset management. They also installed Unicenter's print spooling and document viewing modules on NT-based LANservers.

Building the Infrastructure

Garden Ridge decided to rely on a single source for its server and storage needs. Although the company already had experience with IBM UNIX platforms, it decided to carefully evaluate all options for its next-generation system.

Wozny was pleasantly surprised when they compared Sun's line of enterprise servers and storage arrays. "Sun proved to be far more than a workstation company," he said. "They offered very aggressive price/performance, and we were impressed with the robustness of the Solaris™ operating environment."

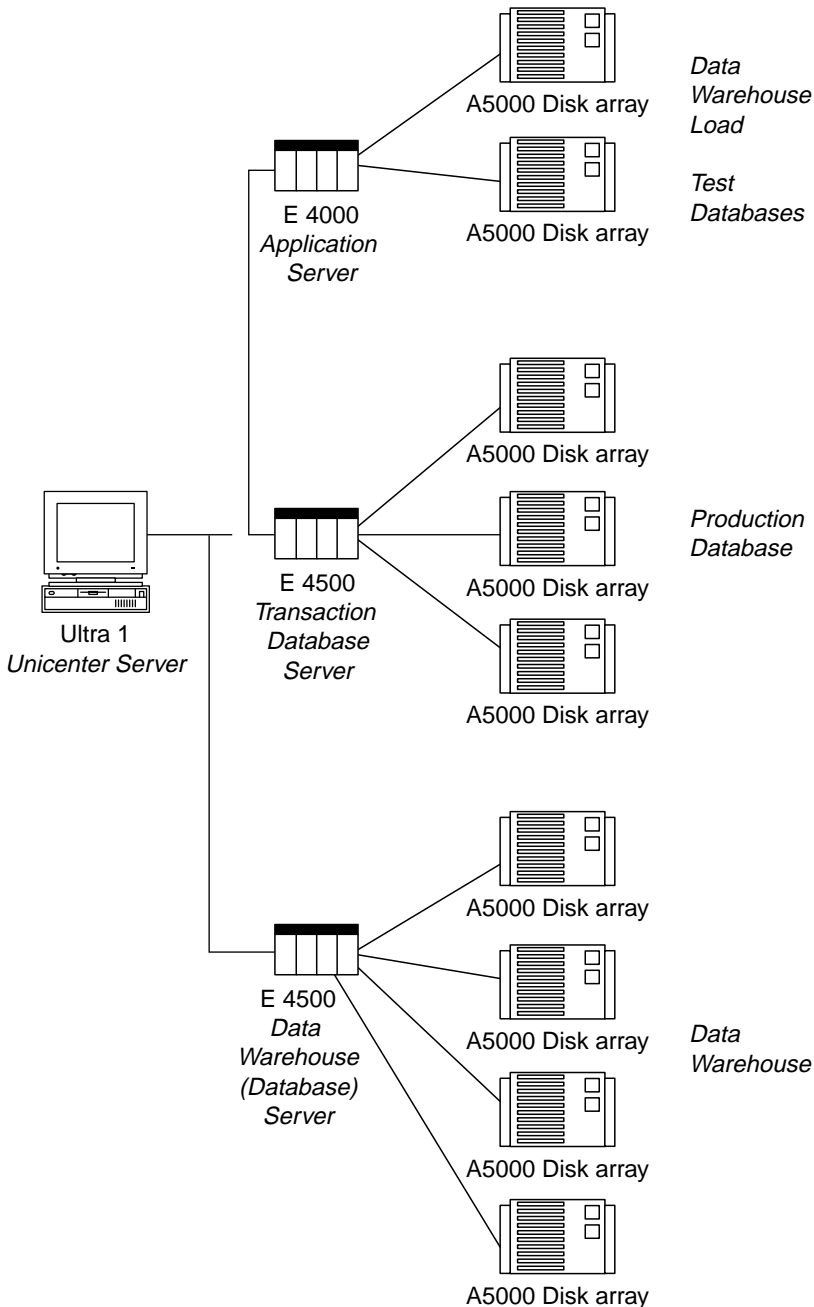
Three years ago, Garden Ridge initially placed orders for a Sun SPARCcenter™ 2000E and Ultra™4000. Today that environment has grown to five Sun servers, and includes a six-way Sun Enterprise 4500 server for running the business transactions database. Additionally, Garden Ridge has vastly expanded its data warehouse, growing its onto a Sun Enterprise 4500, 10-way server running Informix Extended Parallel Server (XPS). The Ultra 4000 is now used as an application server to handle the Endura transaction application user sessions.

The company supplemented the Sun Enterprise servers initially with two ultra-fast, Sun StorEdge A5000 storage arrays using the Veritas tool to automate volume management. According to Wozny, the fibre channel-based Sun StorEdge arrays improved throughput significantly for the data warehouse with fully duplexed 200Mbps dual fibre channels. Wozny recalls the difference, before and after installing the Sun StorEdge arrays. "We used to have data warehouse queries that timed out after two hours. By moving to the sun storage arrays, the maximum is now at 15 minutes," said Wozny, adding that 85% of all queries are now completed in less than five minutes. Their use of this storage technology has grown to seven arrays, four for the data warehouse and three for the transaction system.

Platform for Growth

Today, Garden Ridge has built the infrastructure and discipline that will support its growth toward a billion-dollar enterprise. It has chosen a scalable platform that has delivered low cost of ownership. Furthermore, Garden Ridge has suppliers who are committed to helping the company develop robust management policies and processes to accompany the enterprise infrastructure software tools and hardware.

Enterprise Server Configuration



“CA brought in the right experts to get us into production quickly,” said Wozny. “The good news is that Unicenter TNG really runs the operations automatically, and yet, there is a lot of capability in Unicenter TNG that we haven’t yet exploited. Upgrading to the latest Unicenter TNG environment will provide new capabilities such as predictive management through Unicenter TNG Neugent technology.”

With Sun, Garden Ridge acquired the room it needed to accommodate the company’s planned retail growth. “Sun gave us a very low-cost, highly scalable platform. By sticking with a single vendor for server and storage, we don’t have to duplicate staff functions or learn multiple operating systems,” Wozny said.

As the chain adds more stores, Garden Ridge expects to add a top-of-the-line Sun Enterprise Server 10000 (E10000) for its data warehouse. With the E10000, the company will be able to add data warehousing capabilities, such as tracking historical trends, customer buying habits, and performing profit and loss analyses. “It’s fortunate that Sun has really pushed its server technology to achieve such scalability,” said Wozny, who added, “With the enterprise architecture, we’ll be able to reallocate processors on-the-fly to accommodate our data warehousing and transaction loads. It’s that flexible.”

“The bottom line,” said Wozny, “is that the pairing of CA Unicenter on the Sun/Solaris platform and operating environment provides an unbeatable combination for managing change-and growth. It will help the company deal with managing change in our highly complex IT environment.”

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