Packaging Manufacturer Virtualizes Data Centers with UCS

American Fuji Seal powers rapid company growth and supports data-intensive processes with UCS data center capabilities.

Executive Summary

- **Customer Name:** American Fuji Seal, Inc.
- **Industry:** Packaging design and manufacturing
- **Location:** Bardstown, Kentucky; Anaheim, California; Mexico City, Mexico
- **Number of Employees:** 600

Challenge
- Support rapid business growth
- Maintain low overhead
- Meet needs of data-intensive packaging design and production environment

Solution
- Build virtualized data centers with Cisco Unified Computing System (UCS)
- Integrate with end-to-end Cisco network and EMC SAN

Results
- Improved business agility and scalability to support global expansion
- Delivered server resources in days versus weeks
- Accelerated application response times and network throughput

Challenge

American Fuji Seal, Inc. faces an enviable challenge: keeping pace with escalating customer demand and supporting plans for global expansion. The rapidly growing company provides shrink-sleeve and in-mold label print packaging to some of the world's leading consumer-packaged goods and drug companies.

To help fuel its business, hundreds of American Fuji Seal employees in three facilities need fast, reliable access to graphic design, file-sharing, business productivity, and enterprise resource planning (ERP) applications to efficiently and effectively execute their jobs. Until recently, however, the company found that its technology infrastructure needed a boost. Application response times were slow for some users, hindering productivity and user experiences. A new, more sophisticated ERP system and the ability to analyze data to streamline manufacturing practices were also required to better manage the company's increasingly sophisticated supply chain and production processes.

The company's operations are highly compute-intensive. Employees acquire data from the production floor and analyze it on SQL servers. Staff also handles huge graphics files that are often distributed to remote sites. All of these processes were putting a strain on an outdated IT infrastructure.

At the same time that demand for higher-performing, more reliable technology was on the rise, data center space was at a premium, and the company's IT staff of eight that supports three facilities needed advanced technology to keep pace with the business' growing demands. "We wanted to consolidate data center space and reduce IT overhead, all while improving our ability to support our fast-growth business," says Dale Wilcox, information technology manager, American Fuji Seal. "We began looking at ways to consolidate our 35 physical servers and adopt a new data center architecture that would streamline IT resource provisioning for better business agility."

Solution

Built for virtualization

After considering data center offerings from HP, IBM, and Cisco, American Fuji Seal partnered with Boice.net to deploy Cisco Unified Computing System™ (UCS™) C210 rack-mount servers, unique in their ability to integrate storage, network, and UCS server resources into a unified platform. The decision was clear and driven by the company's experience with Cisco as a trusted business partner, positive experiences with Cisco technical support, and the fact that Cisco® UCS delivers an enterprise-ready virtualization framework that readily supports both VMware and EMC SAN storage. Cisco also offered cohesive integration among Cisco servers, switches, and routers to create a more complete data center and network infrastructure.

"When we first started evaluating vendors, Cisco's innovative approach to the data center and new technologies caught our attention," says Wilcox. "The well-known reliability of Cisco switches and routers coupled with Cisco's premium technical support and the high-capacity and fast performance of Cisco Unified Data Center solutions sealed our decision to go with Cisco."

In the Kentucky headquarters, the company has decommissioned 35 physical servers, and now has nine Cisco UCS C210 Series Rack-Mount Servers, virtualized into 39 virtual machines and tied together using Cisco Nexus® 5010, Catalyst® 4900M, and 2960-S Switches. The Cisco UCS servers are virtualized using VMware ESXi hypervisor, integrated with a 70 TB EMC SAN, and support multiple virtualized applications, including Microsoft SharePoint, Microsoft Exchange, processing-intensive packaging design and production applications, the company's development and test environment for the new ERP system, and, soon, the production ERP system.

Well-suited for disaster recovery

In addition to the Kentucky location, the company is planning to virtualize servers in other company locations in California and Mexico, with the Mexico facility serving as a disaster recovery (DR) site. The near-term plan is to create a secondary footprint of Cisco UCS servers and a smaller EMC SAN in Mexico. Especially when it comes to the new ERP implementation, the company must be back up and running with virtually no downtime if something occurs. After implementing the DR site in Mexico, the company plans to begin virtualizing approximately 375 desktop machines across its three facilities.

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— **Dale Wilcox**
Information Technology Manager
American Fuji Seal, Inc.

Results

High performance, smaller space

Since the company implemented its Cisco Unified Data Center and updated its Cisco switching infrastructure, application response times and network access consistency have improved substantially. Performance has improved across the board, from email response to speed of running memory- and processing-intensive graphics applications by as much as an estimated 40 percent. According to Matt Deem, network administrator for American Fuji Seal, the Cisco UCS servers have exhibited perfect uptime, and can handle even the most demanding applications. The Cisco UCS Data Center also supports a large number of virtual machines due to its high-memory density and fast CPUs.

These boosts in reliability, day-to-day usage performance, and speed have been accomplished in a fraction of the data center footprint. And, by freeing up room, the company has more space in its data center to support ongoing rapid growth and global expansion. "We went from five racks with 35 total physical servers to just two racks with 39 virtual servers, all while dramatically improving overall performance," says Deem. "The ability to grow as our business grows without having to provision physical servers gives us a competitive advantage."

Streamlined IT

Working with Boice.net, the IT team can quickly obtain new servers and provision services on virtual machines across the enterprise. According to Deem, about a day is required to obtain a new physical server and a day or two to build out a virtualized environment that typically accommodates six new virtual servers. The Cisco UCS servers scale to support multiple functions, and can be managed with ease. "From an IT standpoint, I don't have to be so focused on server administration and provisioning, so I can wear more hats and have more time to help users," says Deem. "That's important when an IT staff of 8 needs to support 600 employees across multiple locations."

Supported business growth

The primary business benefit of using Cisco Unified Data Center solutions comes from the ability to stay agile and scalable, while keeping costs in check. Additionally, the company can provide resources to support new demands in days, and that means all the difference for a company in high-growth mode looking toward global expansion. "With Cisco USC at the heart of our IT strategy, we can now rapidly match high-performance IT resources to ever-more-demanding business requirements," says Wilcox.

For More Information

To find out more about Cisco Unified Data Center solutions, go to: www.cisco.com/go/dc.