



“The BIG-IP LTM Application Delivery Controllers do their job. ... If you go with unknown brands, you are taking a chance.”

Fernando Gonzalez, CIO, Byer California

Byer California Improves Business Agility, Time-to-Market with F5, Oracle, and VMware Solutions

Byer California is a privately held garment manufacturer whose large selection of women’s and children’s clothing is marketed under private labels and its own through major retail and online stores in the United States. Time-to-market is key in the highly competitive fashion industry, so it is essential that the company’s IT architecture be adaptable for business process agility.

When Byer decided to implement a customized version of the Oracle E-Business Suite to manage its complex order processes, the IT team turned to F5 solutions to enable nimble development, testing, and deployment. With F5® BIG-IP® solutions, Byer California is ensuring the performance and agility of its business system.

Business Challenges

Working three fashion seasons ahead, Byer California produces and distributes thousands of garments—nearly 20,000 to 30,000 new SKUs—every 10 to 12 weeks. “Our business is all about how quickly we can get our garments out to the loading dock and delivered to the retail stores’ docks, so our processes have to run smoothly,” said Mandar Ghosalkar, IT Infrastructure Manager at Byer.

The company’s earlier Oracle system was designed when Byer produced all goods in the United States and could handle orders

numbering in the dozens. But the Oracle system could not easily support 50,000 line orders. “We deal in three dimensions—style, size, and color—so we need a system that can accommodate multiple dimensions,” said Fernando Gonzalez, CIO at Byer. Though Oracle does have a separate high-volume order processing system, it does not work for Byer’s style, size, color, and model configuration.

After moving 70 percent of its manufacturing offshore, Byer lost visibility across the system. “When we sent things

Overview

Industry

Manufacturing/Wholesale Clothing

Challenges

- Manage business processes
- Mitigate risk
- Provide reliability for internal users and contractors
- Scale for expected growth

Solution

- BIG-IP Local Traffic Manager
- BIG-IP Application Ready Solution for Oracle

Benefits

- Smooth integration with Oracle E-Business Suite
- Rapid deployment
- Improved business agility
- High-availability environment
- Improved flexibility for configuring active-active grid systems

offshore, the only way we found out about the status—when fabric or trims were received, how much was on the truck or boat, or arrival times—was through emails and spreadsheets mailed to us,” said Gonzalez.

Byer planned to extensively modify the Oracle E-Business Suite (EBS) to fit its processes and meet its unique business needs, including accommodating the multiple categories not easily supported by Oracle. “The secret to our success is our processes—not our brand, not our product,” explained Gonzalez. “We didn’t want to change our processes per se, so we decided to tweak the Oracle system to respect our processes.”

“When we started the Oracle implementation, we knew we were going to put in a completely custom module on top of the framework. We didn’t have any metric for this architecture, but we needed to support from 400 to 500 users,” said Ghosalkar.

The team also knew it would have a test system, a development system, and a production system. It would also end up having multiple versions of that test system and would need to provision a new server, allocate disks, and do everything very quickly without slowing down the development process.

Solution

Once the Byer IT team made the decision to customize the Oracle solution, it looked at other pieces of the puzzle that would help it succeed.

Byer has a variety of virtualized systems running on servers and workstations in production and development states. “Today we have VMware ESX hosts on HP c-Class blade servers, running Windows and RedHat Linux operating systems. These virtual servers run Oracle, Microsoft SQL Server, .NET servers, terminal servers, Blackberry Enterprise Server, business intelligence systems, business object servers, and enterprise monitoring systems,”

“BIG-IP LTM provides us with enterprise-class availability by load balancing across multiple virtual machines.”

Mandar Ghosalkar, IT Infrastructure Manager, Byer California

said Ghosalkar. Virtualized operating environments are also used at the desktop level to accommodate applications that cannot coexist.

It took Byer two and a half years to design and develop the custom solution. “We had to be flexible. At the same time, we needed to put in a design that could scale up, so we went with HP blade servers and an Intel platform,” said Ghosalkar. “One of the issues I faced was how to size the systems, because we were going from an application which was written for a different set of business requirements, and we planned to come up with a completely new custom layer.”

The whole system would be designed from scratch, and Ghosalkar discovered there weren’t many guidelines to help. He had to consider server sizing, how many spindles, how many application servers, and more. “With everything up in the air, I had to map it all out, and going with a load balanced architecture was one way to do that,” he said. “The question was how we would load balance and deploy on one server now, and maybe deploy on three or four servers in the future.”

The next step was selecting the right vendor for the Application Delivery Controllers. “I knew we were going to have a challenge because of the customization,” Ghosalkar said. “I went to Oracle’s support site, searched for load balancing, and the vendor with which Oracle had **knowledge base documents** was F5. There were other vendors with published compatible solutions, but

on Oracle’s site, F5 was the only one.” Byer chose F5 BIG-IP® Local Traffic Manager™ (LTM) Application Delivery Controllers to load balance its Microsoft .NET web servers and Oracle grid applications.

Benefits

Byer competes based upon its ability to adapt quickly to fashion trends and promptly deliver goods to market. To do this better than its competitors, Byer requires agility in its processes and its business. This is driven by Byer’s IT applications and the infrastructure through which those applications are delivered. The company’s respected reputation in the industry for delivering on its promises meant taking the risk to develop a customized solution for Oracle E-Business Suite—which required solutions such as BIG-IP LTM to develop, test, and deploy applications with agility.

By implementing the BIG-IP LTM solution, Byer processes run smoothly, and the system delivers the performance the company demands for its customers. The IT infrastructure positions Byer to manage rapid growth efficiently and cost effectively.

“We deployed BIG-IP LTM to provide a high-availability environment for our grid applications as we migrate our HP-UX application from PA-RISC architecture to HP blade servers running RedHat Linux,” said Ghosalkar. “Deploying F5 BIG-IP LTM allows us to migrate from active/standby UNIX clusters to active-active grid systems.”

The BIG-IP LTM solution is critical to Byer’s success because nearly everything is on the network. In addition to the Oracle EBS, 95 percent of the orders come in through Oracle EDI, and the design and fabric cutting systems are on the network, as are the scanning, packing, and shipping systems. The network also handles voice over IP and video conferencing. “If the network is down, then the company is down,” said Gonzalez.

“Knock on wood—other than electrical outages, we have not had a problem that has shut our network down, and not

everyone can say that," Gonzalez continued. "We're at 100 percent now and I believe it has to do with the architecture, the way it's put together, and the products we have purchased. These solutions are stable. They are trustworthy."

Ghosalkar's goal was to keep the architecture simple. "We needed an enterprise product that worked with enterprise applications—but it had to be easy to use," he said. Ghosalkar was able to get BIG-IP LTM deployed quickly using the F5 Deployment Guide, downloaded from F5.com. With the guide, no additional support was required.

When Byer embarked on the path to migrate legacy systems based on a highly available cluster of HP-UX MC/ServiceGuard to RedHat Linux-based grid applications, the challenge was to provide a similar level of availability. "BIG-IP LTM provides us with enterprise-class availability by load balancing across multiple virtual machines running across ESX servers, which are enabled with VMware high-availability DRS capabilities. VMware HA, DRS, and vMotion-enabled virtual machines coupled with BIG-IP LTM load balanced URLs provide highly available business systems to our end users," said Ghosalkar.

"I never wanted hardware or the architecture to negatively affect performance," added Gonzalez. "Mandar has never come to me with a problem with the load balancing. To me, it's a positive thing to know it's there and it's transparent to everyone. The BIG-IP LTM Application Delivery Controllers do their job."

With F5 as part of the infrastructure, Byer doesn't have to worry that its business is at risk. The company doesn't use unknown brands of products, so staying with market-leading vendors, such as F5, makes sense.

"We need to be able to hire people to help with implementations, and if you go with unknown brands, you are taking a chance," Gonzalez concluded. "When we work with a company, we want not only the product, but the partnership, too."

"As we extend our business supply chain across the globe, the demand to keep the IT systems available and agile have increased," explained Ghosalkar. "We need virtualization solutions—VMware to provide us that agility and BIG-IP LTM to provide that availability. Just the fact that we can scale our grid applications during busy retail market seasons, utilizing BIG-IP LTM load balancing features and the relative ease of cloning virtual machines on top of our x86 architecture, has paid for our investment in the F5 and VMware architecture."

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