

Merial tackles global WAN acceleration

Merial wanted to be able to perform consistent backups between its data centers, for disaster recovery purposes. The company turned to WAN optimization gear from Silver Peak Systems

By Ann Bednarz, Network World , 07/11/2009

Pet care is big business, and one of the dominant players in the industry is Merial. When the animal healthcare company decided to centralize its key business applications, the project spawned a handful of related IT projects, including a WAN optimization deployment designed to speed data center backups and boost application delivery worldwide.

A joint venture between Merck & Co. and sanofi-aventis, Merial employs more than 5,000 employees and operates in more than 150 countries worldwide. Some of its consumer pet supply brands include Heartgard and Frontline. The company's global headquarters is in Atlanta, and its second-largest hub is in France.

A few years ago, Merial executives made the decision to consolidate the company's ERP systems and move toward a single instance for global ERP. In addition, the company decided to run its centralized ERP system out of a third-party hosting facility. As Merial moved forward with efforts to streamline its data center resources, the issue of application performance became a key consideration given Merial's increasingly distributed user population

"We're consolidating down to two ERP systems -- Oracle and Microsoft Dynamics -- and we're centralizing them globally. There will be no more local installations or regional installations. It's all going to be globally hosted with a third-party provider," explains Derek Johnson, director of global networks at Merial. "So now we have a distributed user base, which is going to require LAN-like performance across a wide-area network for all their applications."

Naturally, there were new challenges to tackle. "The challenges were excessive latency, real time bandwidth management, and traditional non-optimized application development," Johnson says.

In 2007 and 2008, Merial made some improvements to begin to address performance. For example, the company upgraded bandwidth in some of its locations, initiated service improvements with its WAN provider, and implemented quality of service (QoS) technology on its WAN links.

"But you can't just continue to upgrade bandwidth. At some point you're going to have to say enough is enough," Johnson explains. So early in 2008, Merial looked to optimize its network technology.

“Some of our goals were to detect, identify and prevent infrastructure vulnerabilities that can impact business application performance; and to be able to manage the process to communicate, track and escalate performance issues by having a device that’s inline, so we could see specific packets going through and identify specific applications by port.”

“When you don’t have that kind of visibility, you don’t know what an application is doing, or how much it’s doing, for instance. You can’t look at the details of those packets,” Johnson says.

Merial also wanted to implement real-time bandwidth management, caching, compression and protocol optimization technologies. In addition, a key motivation was maximizing Merial’s relationships with its external providers, Johnson says.

“In our environment, we outsource a number of day-to-day things. For example, our wide-area network is outsourced to a third party. Our internal LANs are not managed day to day by Merial full-time equivalents. They are managed by third parties.”

Part of Merial’s optimization project includes standardizing LAN management. Beginning this spring, the company is moving away from using independent, regional LAN service providers and toward a standard, global LAN provider.

“We maintain the thought leadership, design and architecture” of Merial’s networks, and the third-party provider handles network operations, Johnson says. Bidirectional feedback helps keep things running smoothly: The operational side provides feedback about ways to improve the day-to-day issues, and “our team here, the infrastructure engineers, make changes and modifications so that it’s better, operationally, for them to manage,” Johnson says.

Most recently, Johnson’s team focused on improving application performance over the WAN. After doing tests with WAN optimization gear from Blue Coat Systems, Riverbed and Silver Peak Systems, Merial decided to go with Silver Peak.

How WAN optimization is helping Merial

After an ERP consolidation project drove Merial to consider WAN optimization technology, the animal healthcare company selected gear from Silver Peak Systems.

A key driver was ensuring acceptable application performance for end users located in remote sites. For example, Silver Peak’s NX appliances can speed the responsiveness of an Oracle application that’s located in the U.S. at a global hosting facility and being used by Merial end users in Germany. In addition, Merial wanted to be able to perform consistent backups between its primary data centers, for disaster recovery purposes.

Late in 2008, Merial deployed Silver Peak’s appliances in North America (where its global hosting sites are located), followed by France. Deployments are underway in Australia and New Zealand as well.

Using Silver Peak's gear saved Merial from having to upgrade the link between its primary data centers in the U.S., used for data replication. The WAN acceleration gear also lets Merial avoid upgrading links to some of its other corporate sites.

At Merial's site in France, for instance, the company pays roughly \$1,700 per month for 512k circuit. "If we would have had to increase that circuit, it would have cost about \$65,000 over a three-year period, to upgrade that bandwidth," estimates Derek Johnson, director of global networks at Merial. "Instead, for the purchase of the actual Silver Peak gear for that site, and the subsequent maintenance for a three-year period, it was a total cost of \$20,000."

Looking ahead, another five to 15 more sites are being considered for rollouts as Merial looks to centralize local infrastructure, such as e-mail, file and print servers, Johnson says.

When considering consolidating branch office services, "the issue becomes how to maintain LAN-like performance, now that you don't have a local [Microsoft] Exchange server, or local file and print servers, because you're going across the wide-area network," Johnson says. "Silver Peak gives us that capability, to be able to maximize authentication across the network, and maximize file and print sharing, without having a local server. That system initiative may require additional installations."

In terms of advice for other companies that might be considering a similar technology investment, Johnson stresses the need to carefully detail project expectations. "Have a plan, have goals, show before and after shots. Make sure that you educate senior-level management, because this won't be a small expense."

A telling sign that things are going well so far for Merial is that users haven't complained about performance as Merial has centralized its application instances in the U.S. hosting facilities. "They don't know that a server is 1,600 or 2,000 miles away from them," Johnson says. "They're getting the same response time as if it were right around the corner from them."

"The project has been an overall success financially and operationally," he concludes.

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