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Dwayne Sye
Vice President of Technology, Cvent



Cvent Upgrades Application Delivery Infrastructure to Accommodate Growth and Improve Services

Industry

Technology

Challenges

- Improve network scalability
- Improve application delivery networking infrastructure

Solutions

- BIG-IP Local Traffic Manager 3400
- BIG-IP Global Traffic Manager

Benefits

- Ease of deployment, management
- Better application performance
- Future-ready infrastructure
- Faster time-to-market

Overview

Cvent (www.cvent.com) is the largest event planning software company in the United States, used by marketing professionals to plan more than 100,000 events per year. With up to 60 percent annual growth in website traffic in recent years, the company outgrew its F5 sBIG-IP version 4.x devices and replaced them with BIG-IP[®] Local Traffic Manager[™] (LTM) 3400 devices with SSL Acceleration[™], and BIG-IP Global Traffic Manager[™] (GTM) Application Delivery Networking devices. Now, the company is better positioned for future growth and has improved the performance of its application infrastructure.

Challenges

Using a software-as-a-service model, Cvent provides hosted, on-demand event management and registration, web surveys, and e-marketing tools to corporations, associations, nonprofits, educational institutions, and other organizations. The company has helped a range of customers manage more than 100,000 marketing campaigns, events, and web surveys each year.

In the past few years, Cvent has experienced a 40 to 60 percent growth in traffic to the hosted web-based applications its customers use to plan and manage events and marketing activities. This rapid growth began to tax the BIG-IP devices that Cvent had

implemented in 2000. Dwayne Sye, Vice President of Technology at Cvent says, “The legacy controllers served us well for nearly seven years. But, with our tremendous growth, they suffered from over-utilization. It was clear that these aging devices wouldn’t be able to support projected growth.”

Cvent also wanted to implement an application delivery infrastructure that would help enhance the performance and availability of the company’s services. “We needed a solution that would provide geographic site redundancy and load balancing in order to deliver a higher level of service to our customers,” says Sye.

Solutions

After a thorough evaluation of more than 12 other products, Cvent chose the F5 BIG-IP[®] devices. It was “a generation or more ahead of other vendors,” says Sye. Cvent focused its evaluation on five primary factors—functionality, performance, reliability, ease-of-management, and total cost of ownership. “F5 was the clear winner in all categories.”

In the first half of 2007, Cvent initiated a major network infrastructure overhaul, during which it replaced the old F5 devices with new BIG-IP appliances. An engineer from F5 helped Sye’s team configure the new hardware to work with Cvent’s network design. After the team completed



compatibility testing, F5 walked Cvent through the planned deployment process.

In June, the team deployed three BIG-IP LTM 3400 devices, and two BIG-IP GTM appliances. The BIG-IP GTMs—one located at each data center—optimize and route Cvent traffic to the appropriate data center, based on traffic type and volume. The BIG-IP LTM 3400 devices sit in front of the company's 12 web and application servers, intelligently managing and delivering web and e-mail traffic. These devices also provide secure sockets layer (SSL) acceleration to improve the performance of the application servers. BIG-IP SSL acceleration offloads CPU-intensive SSL encryption and decryption from Cvent servers, migrating it to the BIG-IP device, which is designed to handle SSL transactions more efficiently.

Cvent also uses F5 iRules™ technology—customizable commands that control over application traffic—to aid in the collection of customer web statistics using a hosted, third-party model. Cvent's former method, which required tagging each web page with a script was problematic in corporate environments. "Customers often blocked access to our hosted statistics vendor, resulting in some fraction of usage not being logged, and, in some instances, the security restrictions interfered with site functionality." To remedy this problem, Cvent implemented an iRule to redirect traffic directly to the statistics vendor host.

Benefits

Since implementing the BIG-IP devices, Cvent has improved the scalability of its network and positioned itself for future growth. It

has also improved application performance, sped time-to-market for services, and has experienced a smooth, deployment.

Ease of Management

Compatibility testing prior to deployment and thorough implementation guidance from F5, "ensured that the migration was smooth and trouble-free," says Sye. "The F5 engineer convinced me we could do the job ourselves, and we did. This is a testament not only to F5's products, but also the commitment and dedication of their service organization."

The BIG-IP devices used by Cvent run TMOS™ platform, version 9.4. Usability enhancements, including a highly intuitive graphical user interface (GUI) and rich remote management capabilities, simplify management for the team. "The BIG-IP interface is well-designed and easy to use, letting us take full advantage of the flexibility and power of the TMOS platform," says Sye.

BIG-IP LTM and GTM devices also help Cvent improve routine operations, such as change control and code escalation. "These benefits are typically not visible to our customers, but the ease with which we can manage our application infrastructure contributes to an overall lower total cost of ownership."

Better Application Performance

BIG-IP GTM has helped Cvent improve the delivery of their web services. This year, we took a significant step forward by deploying BIG-IP GTM for geographic site redundancy and intelligent traffic management. This device plays a major role in providing an even higher level of service because it gives us the

ability to direct customers to the appropriate data center based on network availability," says Sye.

Additionally, Cvent's use of iRule technology for collecting web statistics results in "more accurate web traffic statistics for us, and better application compatibility for our customers. The iRule also saves us the hassle and cost of deploying and managing a complex, installed web application statistics collection and reporting infrastructure."

Faster Time-to-Market

Cvent now relies on BIG-IP devices for more than load balancing and SSL acceleration capabilities. "We're taking advantage of BIG-IP and the TMOS platform to resolve more and more of our infrastructure load, scale, and security issues," says Sye. "In our November product release, we introduced new services that rely on BIG-IP for high-availability and scalability. By shifting this burden from the application itself to the Application Delivery Networking devices, we are able to get to market faster with new features and upgrades, offer more functionality, and do it all without sacrificing our rigorous availability standards. The BIG-IP devices, along with our database platform, are arguably one of the two most important components of our application infrastructure."

Future-Ready Infrastructure

"The most important benefit of deploying the BIG-IP LTM 3400s is the gain in network scalability," says Sye. "The new devices can handle our predicted network traffic growth several years into the future. And should traffic levels surpass these predictions, we'll be able to swap in a higher-end BIG-IP controller relatively easily, without downtime or overhauling our entire network infrastructure."

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