

Entertainment Company Deploys Application Delivery Solution for Speedy and Secure Transactions for Music Lovers

SpiralFrog deploys Cisco ACE modules to ensure the highest level of performance, load balancing and network security

EXECUTIVE SUMMARY
<p>SpiralFrog, Inc.</p> <ul style="list-style-type: none"> • Industry: Entertainment Technology • Location: New York, NY
<p>BUSINESS CHALLENGE</p> <ul style="list-style-type: none"> • Consolidate load balancing, switching and security features into an all-in-one device • Needed a solution that scaled for future growth and traffic
<p>NETWORK SOLUTION</p> <ul style="list-style-type: none"> • Consolidate network infrastructure for advanced load balancing and superior application performance
<p>BUSINESS RESULTS</p> <ul style="list-style-type: none"> • Streamlined IT management through a single device with a single vendor • Maximum availability, performance and security for host of data center applications • The ability to utilize virtualization and extend mileage from new and existing IT equipment • Flexible licensing to add features and scale without the need to buy additional devices

Business Challenge

SpiralFrog is a Web-based, advertising-supported music experience, combining music discovery with free downloadable audio and music video files licensed from major and independent record labels. SpiralFrog is the market-driven solution to illicit pirate file-sharing sites in a secure environment with an easy to use Web interface that allows music lovers to discover songs, music videos and artist information. The company’s site is available to users in the United States and Canada.

SpiralFrog has two data centers including one in Ashburn, Virginia and a second developmental data center in Seattle. Since the company was founded in 2006, SpiralFrog has grown in popularity evidenced by the increasing traffic on the company’s website. The company has a 10Gbps line that connects into their Ashburn data center, and according to Brad Kirkpatrick, Manager of Data Center Operations for

SpiralFrog, the goal for he and his team is to be able to fill the 10Gbps line with user traffic.

“In our business, 90 percent of our traffic is downloads coming out of our data center and the other 10 percent is Web traffic,” says Kirkpatrick. “Our requirement from day one was to be able to fill that 10 gigabit pipe, which meant we need to be able to load balance up to 10 gigabits of traffic.”

Consolidation became a focal point for Kirkpatrick as he and his team looked at a variety of vendor solutions for routing, switching, load balancing and firewalls.

“As we considered the products we were evaluating, it became clear that we might have to decide on a multi-vendor solution,” says Kirkpatrick. “The more we thought about using products from several different vendors and getting them all to work together and saw how complicated and harder to manage it was becoming, we began to consider an all-in-one type of solution from a single vendor.”

“Having high performance and quality load balancing is critical to our success. Ours is an eCommerce company and our Website is instrumental to generating revenue and is key to our business. The multi-functionality of Cisco ACE gives us high performance, maximum availability, and security for our host of data center applications.”

—Brad Kirkpatrick, Manager of Data Center Operations, SpiralFrog

Network Solution

The team agreed that a solution that would provide them with multi-functionality in single device was the direction in which SpiralFrog should go and selected Cisco® Application Control Engine (ACE) module for the Cisco Catalyst 6509-E Switch.

“We have one ACE module in our Catalyst 6509 chassis,” says Kirkpatrick. “Because of the nature of our business, we absolutely need a secure, high performance load balancer and fast switching capabilities. With Cisco ACE, we’ve got routing, switching, load balancing, firewall and so much more functionality all in one box from one vendor.”

Kirkpatrick says he and his team looked at a competing vendor for load balancing, but found that the more they added rules for incoming traffic the more the device’s performance dropped.

“We initially evaluated a 10gig solution for load balancing from another vendor that seemed pretty good at first glance, but as we looked more closely, we found issues with it when it came to adding rules for traffic,” says Kirkpatrick. “The more rules we added to compensate for the incoming traffic the performance for the device quickly declined from the 10 gigabit. That experience did not happen with the ACE and that was one of the deciding factors for going with the ACE module.”

According to Kirkpatrick, load balancing is vital for SpiralFrog.

“We are utilizing three virtual ACE implementations, one of which sits in front of our Microsoft Internet Information Services 6.0 web servers,” says Kirkpatrick. “We also have a virtual ACE sitting in front of our SQL Server 2005 servers and one in front of our Isilon storage system. We load balance to the 12 node clustered storage system and also load balance between our SQL servers on the back end. These SQL servers contain all of our metadata for the audio and video content shown on our Website in addition to registered user information.”

The security features of the Cisco ACE have been crucial for Kirkpatrick and his team who are using the module to provide the last point of defense for SpiralFrog’s servers.

“Our Web servers are completely locked down and we only allow Port 80 HTTP traffic through that context,” says Kirkpatrick. “We also only allow the Microsoft SQL Server protocol to access through the ACE context and the same for our storage.”

Business Results

As a result of implementing Cisco ACE, Kirkpatrick says the high performance has been the number one benefit.

“Having high performance and quality load balancing is critical to our success,” says Kirkpatrick. “Ours is an eCommerce company and our Website is instrumental to generating revenue and is key to our business. The multi-functionality of Cisco ACE gives us high performance, maximum availability, and security for our host of data center applications.”

The ability to utilize virtualization features is an added benefit from implementing Cisco ACE, according to Kirkpatrick.

“The combination of Cisco’s licensing model and the fact that we now have the ability to utilize virtualization has been a winning proposition for us,” says Kirkpatrick. “With 16Gbps we actually have six Gbps free and can utilize that remaining six within virtual contexts. We saw that as a cost savings benefit in being able to secure our backend systems and also load balance to our backend systems all within the same module and with the same licensing. That was pretty attractive to us.”

Kirkpatrick cites training and support via a Cisco Learning Solutions Partner (CLSP), Firefly Communications, was also instrumental in their implementation of Cisco ACE.

“Firefly helped us with the initial install and came out to help us get the configuration set up,” says Kirkpatrick. “Once the configuration was up and running, we took over and immediately were able to begin testing. It was such a huge benefit for us to get a full level of support with our deployment from someone who had done this with the ACE modules countless times and could train us as well.”

As Kirkpatrick and the team look into future IT purchases, he believes that as the traffic on the SpiralFrog Website increases, he will likely purchase another Cisco ACE.

“As our Website grows in popularity and transactions increase, we will definitely want to ensure our website performance is not at all compromised,” says Kirkpatrick. “If we begin to exceed our current license, we will definitely consider purchasing another Cisco ACE module to offload the new traffic.”

PRODUCT LIST

Cisco Application Networking Services:

- Cisco® ACE module
- Cisco Catalyst 6509-E Switch

For More Information

Find out more about Cisco ACE module for the Cisco Catalyst 6500 Series, please visit

<http://www.cisco.com/go/ace>.



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