Fusebill

EXECUTIVE SUMMARY

Pulse Secure transforms data center networking with open, virtual, and automated solutions that empower organizations to maximize their investments for the New IP

Challenges
- Upgrade from NSLB's basic load balancing functionality
- Deploy web application firewall to meet PCI requirements
- Maintain an infrastructure that supports company's growth

Solution
- Pulse Secure Virtual Traffic Manager
- Pulse Secure Virtual Web Application Firewall
- Runs on common off the shell servers based on Intel's x86 architectures

Benefits
- Easy deployment into Hyper-V environment
- Global traffic management functionality supports DR and backup initiatives
- Layer-7 support ensures application performance
- Not overprovisioning saves on IT budget
- Solution's scalability keeps pace with company's growth
- Much easier PCI compliance with Pulse Secure as recognized firewall vendor
- Pulse Secure TrafficScript takes some of the load off developers

Pulse Secure vADC Saves Money and Simplifies PCI Compliance for a Growing Cloud-based Subscription Billing Business

Fusebill automates invoicing, billing, and collections for subscription-based companies. Its customers span many industry sectors including software as a service, digital media, and communications.

Challenge: traffic peaks at beginning of month; PCI compliance requires firewall

Fusebill's expertise in subscription billing comes from its founders' years of building and extending large-scale billing systems for SaaS companies. They founded Fusebill three years ago to offer that expertise as a cloud-based service to mid-sized companies and divisions of larger corporations. Today, Fusebill has more than 100 customers.

Billing activities peak at the beginning of the month, when most of Fusebill's customers want bills and invoices sent out. After that, traffic is relatively light. One of the IT challenges has been to build up enough infrastructure to handle first-of-the-month traffic without having too many assets sitting idle the rest of the time.

The company primarily uses Microsoft products for it's application infrastructure, including Microsoft Internet Information Services, SQL Server, Windows Server with Hyper-V, Office 365, OneDrive, etc. As such, Fusebill initially used Microsoft Network Load Balancing Services (NLBS) to distribute traffic. NLBS is strictly limited to load balancing, however, and eventually Fusebill began needing capabilities such as scripting and Layer-7 support. "NLBS is a very basic product. It's truly just traffic management," explains Greg Burwell, vice president of technology at Fusebill. "It's not application-aware, not a Layer 4 through 7-type solution."

Because Fusebill accepts credit card payments, the company is audited annually for Payment Card Industry

(PCI) compliance. One aspect of compliance involves having a web application firewall. Burwell was aware of firewall products that could be "bolted on" to NSLB. "But that is not a great relationship," he says. He decided to look for an integrated solution that would provide a web application firewall along with advanced traffic management functionality.

Solution: the #1 Microsoft Hyper-V

Burwell and Fusebill's IT manager, Stephen Keeler, evaluated products from Citrix and F5 as well as Pulse Secure vWAF, a full-featured virtual Layer 7 application delivery controller (ADC) from Pulse Secure Technology. In addition to comparing the products on functionality and ease of use, price was a key consideration.

The decision came down to Pulse Secure or F5, which Burwell had used previously. "F5 is a great product but very expensive and quite complex. We'd need several people to run it," he says. He decided to go with Pulse Secure vADC because it had the functionality Fusebill needed, including the integrated Pulse Secure vWAF, and was easier to use than F5. "Pulse Secure vADC is more price-friendly for smaller to mid-sized companies," Burwell adds.

Pulse Secure vADC goes beyond basic load balancing, ensuring the reliability of Fusebill's services by inspecting, transforming, prioritizing, and routing application traffic. Pulse Secure vWAF proactively detects and blocks attacks at the application layer. The solution's scalability will allow easy expansion as the company grows. It also gives

Fusebill Pulse Secure Traffic Script customization language that makes it easy to create rules defining how application traffic is managed.

Fusebill purchased two instances of Pulse Secure vADC to front all of the applications involved in the delivery of the company's subscription billing services (approximately a dozen). The deployment into the company's Hyper-V environment was easy. "I used the simple setup wizards, we were up and running in less than half a day," Keeler says.

Benefits: lower hardware costs; easier PCI compliance support for future IT direction

Overprovisioning eliminated. Pulse Secure vADC saves Fusebill money by eliminating the need to overprovision the infrastructure to handle traffic peaks at the first of the month. "Our operation here is completely virtualized," explains Burwell. "Pulse Secure vADC lets us get around some of the physical and logical separations in the environment so we use our hardware more optimally than we did previously."

Easier PCI compliance. Another benefit of the transition to Pulse Secure vADC is much easier PCI compliance, in the sense that Burwell spends less time preparing for the annual audit. "Having a web application firewall from a recognized vendor, which Pulse Secure is, lets me just I check that requirement without having to go into a lot of detail," Burwell explains.

Higher security. Fusebill has not had any security issues since Pulse Secure vADC was deployed, but the solution was in place when the Heartbleed bug hit the news.

"The second I heard about it I was on the phone or shooting email to a lot of our vendors," says Keeler. "Pulse Secure was the first to respond, about five minutes after I contacted them. They had a huge knowledge base about products affected by OpenSSL vulnerability [Pulse Secure vADC was not affected], and that gave me great peace of mind."

Faster deployment of new functionality. Pulse Secure vADC helps in the deployment of new Fusebill functionality by allowing Keeler to switch between web farms almost instantly. "We bring a new deployment online in one cluster, and if the QA team finds problems, our roll-out strategy is to bring our previous cluster back online," says Keeler. "Prior to Pulse Secure vADC, that process took several minutes. With Pulse Secure vADC it takes just a few seconds."

Easy customization. Keeler uses TrafficScript to take on some of the tasks that used to be done by developers. "We use TrafficScript daily to do things like remove headers used in internal testing so they aren't made public," he explains. "The benefit is that we don't get the development team bogged down with details that Pulse Secure vADC can handle. Also, whatever I can do with TrafficScript gets handled immediately, rather than waiting days for the developers to do it."

Global traffic management. Fusebill is currently using Pulse Secure vADC for local load balancing, but by the end of this year the solution will be extended to global traffic management. "Currently all of our IT infrastructure is on-premises but we're exploring the use of other locations for disaster recovery and backup functionality," says Burwell. "That's another reason we went with Pulse Secure vADC. Its global traffic management functionality blends nicely with that initiative."

Rare recommendation. The Pulse Secure vADC deployment has been so beneficial to Fusebill that Burwell is happy to recommend Pulse Secure to other companies, which is something he doesn't usually do. "I'm typically cautious about referring people to vendors but there are a select few that I will," he says. "I see Pulse Secure as one of those vendors."

Why Pulse Secure

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— Greg Burwell, vice president of technology, Fusebill

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Summary

When Fusebill outgrew its original load balancer, Microsoft NLBS, the IT team evaluated F5, Citrix and Pulse Secure vADC, comparing the products on functionality, ease of use, and price. Pulse Secure vADC had the functionality Fusebill needed, including the integrated Pulse Secure vWAF, at a price that was much more affordable to the small but growing company.

With Pulse Secure vADC, Fusebill uses its virtualized infrastructure more effectively, saving money by eliminating the need to overprovision to handle traffic peaks. The solution has simplified PCI compliance because Pulse Secure is a recognized application firewall vendor. Pulse Secure vADC also helps in the deployment of new functionality by allowing a switch between web farms to be made almost instantly. Finally, Pulse Secure TrafficScript lets the network team take on of the tasks that used to be done by developers.