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INMOTION HOSTING DELIVERS A BETTER WEB HOSTING EXPERIENCE WITH THE CORERO SMARTWALL® THREAT DEFENSE SYSTEM

SUMMARY

INDUSTRY
Web hosting services provider

CHALLENGE
Successfully defend against DDoS attacks that lead to unplanned server outages

SOLUTION
Corero SmartWall® Threat Defense System (TDS) with SecureWatch® Analytics

RESULTS
- Corero mitigated the largest volumetric attack InMotion Hosting had ever seen with no ill effects on customers
- No longer need to do black holing, which keeps customers online
- Greater visibility into other threats and malicious traffic coming into the network

KEY BENEFITS
- Attacks are defended against without impact to customers
- The analytics identify other potential threats and malicious traffic
- The Corero solution can be scaled up as business needs dictate the extra capacity
- Availability and performance of the network has improved significantly

InMotion Hosting owns and operates two world-class data centers—one on the west coast and one on the east coast of the U.S. Both data centers have a somewhat unique design. The Los Angeles data center, for instance, has two edge routers at the top of the network with multiple telecommunications providers for redundancy. Then the company has installed a secondary core switching layer. InMotion Hosting leverages multiple 10Gbps switches at that layer through various scripts and APIs to change the routing within the network itself on demand.

CHALLENGE

The east coast data center configuration is similar, although slightly more simplified based on the smaller footprint of the data center in comparison to Los Angeles. The network architects say this configuration gives them more control over how to route the traffic.

Like other web hosting companies, InMotion Hosting had its share of denial of service attacks. One of the techniques used to combat the attacks was to "black hole" the targeted server. InMotion Hosting would contact its upstream provider and ask to have all traffic going to the affected server temporarily dropped. This essentially completed the mission of the DDoS attack in that the targeted server – and all customers connected to it – got knocked out of commission for several hours, at least until a DNS update could take place and reroute customers' traffic. This was a huge pain point, not only for customers whose service was interrupted, but also for InMotion Hosting's support staff who had to explain the situation to unhappy customers.

InMotion Hosting recognized black holing to be an ineffective way to fight the inevitable DDoS attacks. Intentionally taking companies' services offline is a poor way to treat customers, and it damages InMotion Hosting's reputation of providing good service. This became the justification for purchasing a dedicated DDoS defense solution.

The company began looking at various commercial solutions designed for Internet service providers. InMotion Hosting tested solutions from five vendors; a Corero SmartWall® Threat Defense Systems (TDS) was among them. InMotion Hosting's network configuration – with the two layers of router and switches – created a unique scenario when testing the DDoS defense solutions.

THE SOLUTION

InMotion Hosting evaluated the solutions from the five vendors by conducting stress tests, experimenting with the user interfaces, and just generally kicking the tires. The SmartWall TDS stood out for several reasons. First of all, some of the solutions InMotion Hosting evaluated couldn't be installed in a way that was compatible with the service provider's network configuration. The SmartWall TDS is flexible enough to be installed after the second layer of core switches, and this is critical for InMotion Hosting.

The service provider has written a series of APIs and uses them to determine if traffic will get routed through the DDoS solution or not. When traffic gets to a certain threshold, InMotion Hosting's APIs automatically route traffic to the secondary 10Gbps switch to avoid saturating the first switch. For the most part, however, the original 10Gbps switch and the SmartWall TDS are able to mitigate attack traffic and keep the network healthy. Admittedly, InMotion Hosting's configuration is a bit unique but the company believes it gives them more control over traffic routing.

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>   IT Manager

Another reason why the Corero SmartWall TDS was chosen over the other products is that the Corero device has the ability to scale over time. Other vendors' solutions come with a particular capacity and that's it. Corero allows InMotion Hosting to start with a certain capacity and grow it by adding additional 10Gbps appliances as needed. Erik Soroka, IT Manager at InMotion Hosting said, "We really like the idea with Corero that we could just slide in another appliance and get another 10Gbps of protection. This is something that was very attractive for us."

The network administrators at InMotion Hosting also prefer Corero's user interface because it is simpler than the other products' UI. What's more, the SmartWall TDS has good reporting and analytics. When large events occur, Corero's support team is also very quick to monitor the attack and provide status updates and detailed graphs to InMotion Hosting's network administrators.

The installation and configuration was extremely easy. InMotion Hosting scheduled it during their maintenance window and got the TDS up and running quickly. They ran the device in detect mode for the first few weeks just to become familiar with it and to customize all the rules and white lists for their own networks. Overall the integration and implementation was seamless.

THE RESULTS

Just days after installing the SmartWall TDS in the Los Angeles data center, InMotion Hosting was hit with one of the largest volumetric attacks they had ever seen. This provided a good real-world test for the Corero solution, and the shared server that was targeted by the attack remained online to service customers throughout the duration of the attack. Company executives were able to see that their investment in the anti-DDoS technology paid off.
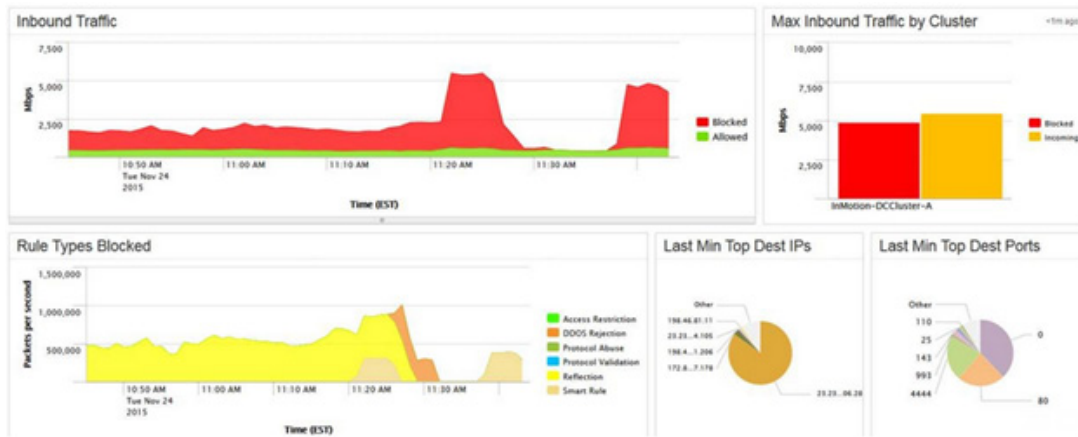
This solution has been helpful in other ways that weren't expected. For example, InMotion Hosting uses SecureWatch® Analytics to learn of other potential threats and malicious traffic coming into the network. Moreover, the reports from Corero and the counters on the actual rules help to identify trends and mitigate potential threats before they become a problem. InMotion Hosting considers these capabilities to be "a bonus."

InMotion Hosting uses the SmartWall TDS to protect all of its customers, included as part of their hosting services. Erik says the company is very pleased with the Corero SmartWall TDS. "Overall the availability and performance of our networks has improved significantly, which ultimately means a better web hosting experience and the ability for us to thrill our customers, which is a core value of our business."

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REAL-WORLD EXAMPLE OF THE DATA COLLECTED FROM A REFLECTION ATTACK AGAINST ONE OF INMOTION HOSTING'S SERVERS - NOVEMBER 2015

The red color indicates traffic that was actually blocked by the Corero SmartWall® Threat Defense System (TDS) that would have otherwise traversed deep into InMotion Hosting's network. From a volumetric standpoint, the traffic peaked at just under 6Gbps and 1 million PPS. While their unique and sophisticated network design would not have allowed for complete saturation, the performance and quality of services provided on the target server itself would have most likely been degraded without the help of the SmartWall TDS.

ABOUT INMOTION HOSTING

InMotion Hosting is one of the world's leading website hosting companies, providing shared hosting, virtual private servers (VPS), reseller hosting and dedicated servers, for businesses of all sizes as well as individuals. InMotion Hosting has always been committed to the principles upon which it was founded: offering customers top-quality hosting products at the best prices backed up by personalized service. The company's goal is "to thrill every customer with the expertise, professionalism, availability and honest desire to see them succeed." For more information visit www.inmotionhosting.com

ABOUT CORERO NETWORK SECURITY

Corero Network Security is the leader in real-time, high-performance DDoS defense solutions. Service providers, hosting providers and online enterprises rely on Corero's award winning technology to eliminate the DDoS threat to their environment through automatic attack detection and mitigation, coupled with complete network visibility, analytics and reporting. This next-generation technology provides a First Line of Defense® against DDoS attacks in the most complex environments while enabling a more cost effective economic model than previously available. For more information, visit www.corero.com

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