



CASE STUDY

Oplink Enhances Network Upgrade with Corero SmartWall DDoS Protection



The Optimal Link Corp., also known as Oplink.net, is a Tier-1 premier data center that offers dedicated and virtual servers, colocation, and fiber Internet services. Established in 1999 as a local ISP in Houston, Texas, the company quickly grew to become the largest independent and highest-rated Houston-area DSL ISP. In 2010, it expanded the business by offering dedicated servers, colocation and other datacenter services.

The company focuses on small businesses that can benefit from its support, knowledge and low-latency network. Oplink.net's main products are server colocation, dedicated servers and virtual private servers. The company also offers Metro Ethernet Internet access over fiber local loops.

"We're proud to have an excellent customer satisfaction record for personal help," says Daniel Newman, president of The Optimal Link Corporation. "We're always improving our network to meet the needs of our worldwide community."

In 2019, the company upgraded its Internet bandwidth from 2x 10Gb uplinks (20 Gbps total) to a 100 Gbps CenturyLink (Level 3) uplink, with new Cisco networking equipment. In May 2020, the company deployed Corero's SmartWall to offer DDoS protection for all their customers. As a result of the increased Internet capacity and Corero DDoS protection, Oplink was able to roll out a new 10 Gbps unmetered connection offering in September 2020.



CORERO SMARTWALL AT A GLANCE

- » Surgically removes DDoS attack traffic automatically, before it reaches critical systems, ensuring optimal performance and maximum availability
- » Delivers line-rate, in-line distributed denial of service attack protection, from 1 Gbps to 100 Gbps per rack unit, in a solution that scales to terabits per second of protected throughput
- » Prevents a range of attacks, from simple volumetric floods, to sophisticated state exhaustion attacks at Layers 3 through 7
- » Delivers comprehensive visibility for analysis and forensics – before, during and after attacks



CHALLENGE

With competitors offering DDoS protection to their customers, Oplink.net began looking for vendors that could help. As the company's new 100 Gbps uplink could absorb larger attacks without having to hand off data transport to a third party, they were looking for capabilities to protect their edge from the regular attacks that were impacting their clients.

"Edge protection makes sense because it enables Oplink.net management a low latency response and doesn't rely on uncertain Internet cross-connects with unknown equipment and bandwidth," says Newman. "Our challenge was finding a DDoS protection product with on-site equipment we can manage."

The company researched several vendors and options for DDoS protection to improve experience for their customers, with proposals received from about five companies. "Some of these solutions were immature (vaporware), some were too expensive, and some were too complicated," says Newman. "We discovered Corero by talking to our business friends."

Implementation was very easy, the company reports. "The SmartWall device was shipped to us and ready to go in bypass mode – all we had to do was mount it, implement a virtual server for control, apply basic configuration commands, a few unique IP addresses, and connect the SmartWall between the Level3 uplink and our Cisco main router," says Newman. Corero support helped the company in real time with video conferences and phone calls, and even created special rules that could be set up over time to customize protection. "There was no confusion because support was very clear, the device is basically intuitive to start up, and we participated in the configuration."

When Oplink.net was limited to 20 Gbps maximum bandwidth, the company experienced several network issues resulting from DDoS attacks. Some smaller attacks were absorbed by the network, but others ended up disrupting services for several customers who shared a rack with the attacked client. Larger DDoS events, greater than 10 Gbps, were disrupting the entire Oplink network.

"Incursions were numerous, and disruptions would happen, of one sort or another, on a weekly basis," says Newman. "Mitigations required manual interventions, and from time to time we had to issue special requests to our uplink providers to null-route certain IP's. Our reputation was harmed by these attacks."



VALUE-ADDED OFFERING

Oplink.net started by rolling out 10 Gbps of DDoS protection to all of its customers, at no extra cost. They considered charging for higher bandwidth mitigation, but in researching the marketplace and considering customers' priorities, they chose to extend that free protection to the full 100 Gbps for all network clients. "We believe our 100 Gbps uplink, combined with 100 Gbps DDoS protection, will attract more and larger accounts to Oplink.net," says Newman. "We're absorbing all the extra costs and expecting revenue to increase because of the quality of service we provide."

Newman says the company does not plan to change this strategy. "We think Oplink.net is in a unique class for high bandwidth, quality support and security," he says. "Since May, we now provide comprehensive defense against criminal DDoS assaults, with Corero's SmartWall protection."



BENEFITS

Since rolling out the Corero SmartWall in May 2020, the network has been attacked 80 times, including a notable attack that measured about 30 Gbps. "The Corero device stopped them all within seconds," says Newman. "No cabinets in our suite were impacted, and no customers were knocked offline, resulting in zero customer complaints."

Newman says Corero's best feature is the quick response of the SmartWall to stop assaults. "Reporting by the multi-tenant Service Portal is forwarded to each victim to inform them of the mitigated attacks and to improve our reputation," he says. "We receive excellent support from Corero," which has not only been exceptional for setting up the equipment properly, but also to improve Oplink.net's Cisco configuration and implement some of Corero's new features, Newman adds.

The company found they could provide customized rules to help individual customers with specific protection issues. "Customers can benefit from Corero protection because of rapid attack discovery, rapid mitigation, and our ability to customize rules to apply special safeguards," Newman says. "For instance, with Corero's help we created a new rule to help one customer with a PlayStation on a virtual server/VPN who was experiencing frequent attacks that disrupted his gameplay."

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Newman says the Corero edge device design, along with Oplink.net's large bandwidth uplink, is superior to any cloud-based protection. "Not only is the attack mitigated within seconds, but we don't rely on uncertain congestion on unknown networks with equipment we can't control," he says. "We like the responsibility of directly controlling our customer's experience."

About Corero Network Security

Corero Network Security is dedicated to improving the security and availability of the Internet, through the development of innovative DDoS mitigation solutions. We are the leader in real-time, high-performance, automatic DDoS attack protection, with comprehensive attack visibility, analytics and reporting. Deployed on-premises, hybrid, and in the cloud, we protect thousands of organizations world-wide, across many verticals. The Corero SmartWall® Threat Defense System (TDS) family of solutions utilizes modern DDoS mitigation architecture to automatically, and surgically remove DDoS attack traffic, while allowing good user traffic to flow uninterrupted. For more information, visit www.corero.com.

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