

CASE STUDY

DAKOTA CARRIER NETWORK SELECT CORERO DDoS PROTECTION TO STRENGTHEN

NETWORK SECURITY AND

DELIVER ROI

>the challenge

Like most broadband service providers, DCN's network has been targeted by cyber attackers. They experience frequent and sophisticated DDoS attacks designed to create service latency and downtime for network and their customers

DCN
dakotacarrier.com

Dakota Carrier Network (DCN) is a consortium of 13 independent broadband companies located in North Dakota. The consortium has a fiber footprint spanning 65,000 miles in North Dakota, which represents all the major local independent broadband service providers. It serves customers in 379 communities, adding up to over 85% of all broadband exchanges in the state. DCN provides critical network services to state and local governments along with commercial businesses, including banks and energy companies.

DCN needed a DDoS protection solution that works fast, is automated, and can provide protection at scale. DCN faced the additional challenge of managing a dual-vendor DDoS mitigation solution prior to adopting Corero, where one vendor analyzed traffic to detect DDoS traffic and the other provided hardware scrubbing. This split-vendor solution was difficult to maintain, with two vendors DCN couldn't standardize the service offering, and they were unable to provide a customer portal.

DCN required a single-sourced, multi-tenant service portal to provide their customers with a dashboard that would show network traffic and enable them to adjust their attack mitigation policies and manage reporting.

>the solution

To protect themselves against sophisticated DDoS attacks, DCN chose a multi-edge, multi-terabit detect-and-redirect Corero DDoS protection solution. The Corero solution analyzes traffic as it comes in with sample packet mirroring. Traffic that needs to be redirected is sent via BGP over to the scrubbers and then comes back as clean.

"Thanks to the Corero solution, our customers can access the DDoS portal for history and details regarding mitigation events, including source and destination IPs, source and destination TCP/UDP ports, and attack volume." Jesse Heck, Director of Operations at Dakota Carrier Network

"Strengthening the customer experience fits with DCN's overall preference to do business by finding partners, not vendors. Corero has exemplified that they fit this model well."

>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 DDoS attack protection, from 1 Gbps to 100 Gbps per rack unit, in a solution that scales to terabits per second of protected throughput.
- » Prevents several 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.

>the results

Many DDoS solutions are merely reactive: They only start working once the DDoS attack has already hit its victim. With Corero's SmartWall solution, DCN benefits from a proactive approach. Corero offers automatic protection using analytics to aggregate historical records of DDoS traffic. By detecting anomalous traffic at the network edge, attacks are prevented before they can cause any harm to the network or downstream customers.

Improving ROI with DDoS protection-as-a-service

The Corero DDoS protection solution is also being introduced as-a-service to the DCN customer base. This will extend strong cybersecurity protection throughout North Dakota's broadband networks.

"Now that we have a solid DDoS mitigation product with a single-source portal, we are introducing it to a lot of our customers that don't have DDoS protection," said Heck.

"The process of adding customers to the mitigation service was completely "seamless," with no disruption."

Jesse Heck, Director of Operations at Dakota Carrier Network

Crucially, this subscription-based DDoS-as-a-service model will help DCN meet their strategic goal of improving their ROI. By offering easy, effective DDoS protection to their customers, DCN will be able to generate revenue and improve their return on investment. To support this aim, Corero has provided sales training for DCN's staff on how to educate their customers about the value of the DDoS mitigation service.





>Corero's advantages in speed, customer support, and more

An immediate solution at DCN's fingertips

DCN needed an immediate solution to the attacks they were experiencing. Given the breadth of their service area and customer base, a technology that promised results in the distant future was not an option.

"Whereas other vendors were still talking about their roadmaps and what they would do in the future, Corero could do everything immediately, and didn't need to talk about their roadmap," said Heck. "We don't want to see a roadmap; we want to see what you can do today, because we need this right away."

Improving the DCN customer experience

Corero also helped support DCN's strategic objectives of selling DDoS as a service to their downstream customers. DCN has been able to take advantage of Corero's advanced capabilities, including a multi-tenant portal which enables them to onboard tenant customers, define and assign service levels and view attack dashboards.

Customers can also log into their own view to see DDoS attack reporting and analytics, understand any attacks they've experienced and have peace of mind that they are being protected. It's a simple way for DCN's customers to upgrade their cybersecurity on a subscription basis, while at the same time improving customer loyalty and delivering ROI.

"We're introducing DDoS protection to a lot of our internet customers that don't have it today. It's a base service that they all should have from just a good cybersecurity posture."

Jesse Heck, Director of Operations at Dakota Carrier Network

Faster time to mitigation

Corero stood out from the competition because it was the only vendor to offer sample packet mirroring functionality, which allows DCN to ingest traffic with faster time to mitigation. This enables DCN to analyze the malicious traffic in real-time and take relevant action against it.

Excellent customer support

Corero prides itself on its excellence in customer support. With a renewal rate of over 98%, they know that providing fast, helpful responses to customer issues is key. In this case, they were able to help DCN streamline their own customer support.

“Corero separated themselves from the pack early on by being responsive at every step along the way,” said Heck. “Their team answered our questions immediately, so we never had to chase them down for information as we did with some of the other vendors.”



The Corero SmartWall detects anomalies in network patterns in real-time.

> Corero Smart Wall highlights



- » Operates in real-time, 24/7.
- » Surgically and automatically removes DDoS attack traffic before it reaches critical systems, eliminating downtime, ensuring optimal performance and maximum availability.
- » Delivers line-rate, always-on DDoS attack protection, in a solution that scales to tens of terabits per second of protected throughput.
- » Prevents impact from even the most sophisticated DDoS attacks ranging from volumetric floods, to state exhaustion incidents.
- » Delivers comprehensive forensic-level analysis before, during and after attacks.
- » Ensures that legitimate traffic is not impacted by false positives.
- » Inspects every inbound packet header and payload data, surgically removing the DDoS packets without disrupting the delivery of legitimate network traffic.
- » Corero’s Smart-Rules leverage heuristic and closed-loop policy, so rules can be reconfigured and deployed on-the-fly, thereby responding rapidly to evolving, sophisticated DDoS attacks.
- » Detects and mitigates attack traffic in under a second; not minutes or tens of minutes, as with traditional DDoS protection solutions.



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