Network Optimization with Genuine Impact

Optimizing Sharktech network for measurable performance improvements and increased control over bandwidth utilization

NOCTION
NETWORK INTELLIGENCE

CUSTOMER OVERVIEW

Sharktech is a private company founded in 2003 that designs, develops, and supports advanced DDoS protection and web technologies. Founded by DDoS protection pioneer Tim Timrawi to promote, protect and serve a secure cyberspace, the company is headquartered in Las Vegas, Nevada and has more than 25 employees with data center facilities in Los Angeles, Denver, Chicago, and Amsterdam.

Customer Name:
Sharktech

Industry:
DDoS mitigation and protection, Web Hosting, Managed Services.

Location:
Las Vegas, Nevada, USA

Business Challenges:

- Overall network performance boost

- Reduction of Latency and Packet Loss

- Keeping the commit levels for each provider at a pre-configured level

- Automation of tedious BGP configuration processes

BUSINESS CHALLENGES

Manual BGP configuration has always been a challenging task for Sharktech, even when its network was significantly smaller. In some instances, engineers were observing traffic going over uplinks that had less optimal routing than the others. Correcting these situations was always a tedious job, requiring Sharktech employees to exchange ticket responses with the company's' clients to gather traceroutes and determine the best routing. Engineers would then need to reroute manually. With limited visibility into the network, such BGP optimization manipulations were becoming more and more time consuming and error prone, especially as the network continued to expand. According to Tim Timrawi, CEO at Sharktech, it was taking far too long and involving too many staff hours to optimize the company's multi-homed network infrastructure manually.

As the company evolved, becoming one of the North America's fastest growing DDoS mitigation and server hosting providers, network optimization came to be a top priority for Sharktech. Moreover, the ability to seamlessly manage bandwidth usage, reducing the overages by maintaining the commit levels with transit providers was also on the agenda. The implementation of a BGP optimization product was needed in order to accommodate growing levels of traffic and ensure that a quality user experience is being provided to all clients.

SOLUTION

Sharktech chose Noction IRP to optimize its network performance and traffic delivery. In the words of Tim Timrawi, Sharktech, CEO: *"After a thorough review of the obtained results during the trial period, features and functionality of the product, it quickly became apparent that the platform was the right choice for us."*

The platform implementation allowed Sharktech to utilize each of the company's providers as cost-efficiently as possible while still maintaining the utmost network performance at all times. *"Immediately after adding Noction we noticed major changes regarding which carriers traffic would use. This information helped us decide which carriers to add more of and which ones to drop."* mentioned Tim Timrawi.

"IRP exceeded our expectations. The product's ability to automatically reroute traffic through the best performing provider, to minimize latency and packet loss as well as to being fully transparent on the performed improvements really impressed us." stated Tim Timrawi.

RESULTS

Noction IRP delivered upon promises. Since the deployment of the platform within the company's network, IRP brought the following results to Sharktech WAN:

- Noticeable reduction in packet loss has been observed. IRP lowered Packet Loss by an average of **76%** for the analyzed prefixes.

- Sharktech average network latency to long distance, trans-Pacific destinations for the analyzed prefixes has been lessened by nearly **32%**, from **298 milliseconds** to **203 milliseconds**.

- Network engineers started spending less time and energy on manual BGP configuration tasks, instead dedicating more time to strategic initiatives.

- With IRP's Commit Control feature in place, Sharktech was able to avoid overages by intelligently leveraging traffic across available providers.

With IRP being deployed in all four Sharktech POPs: Amsterdam, Chicago, Denver, and Los Angeles, the company is now seeing a tremendous improvement of overall network performance as well as a dramatic increase in bandwidth utilization by clients.

"Noction IRP has improved connectivity on our network through reduced latency and is particularly noticeable in our Los Angeles location with our trans-Pacific carriers." mentioned Tim Timrawi.

76% IMPROVEMENT
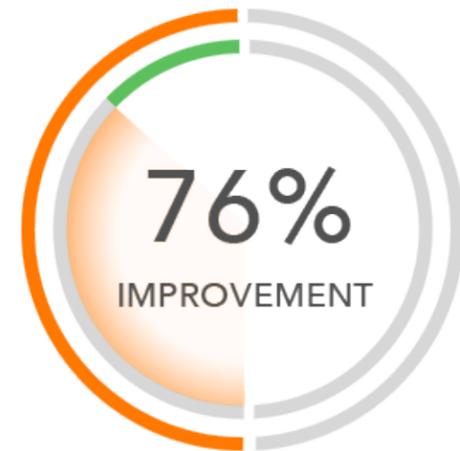
■ Initial Packet Loss - **50%**
■ Post-Optimization value -**12%**

32% IMPROVEMENT
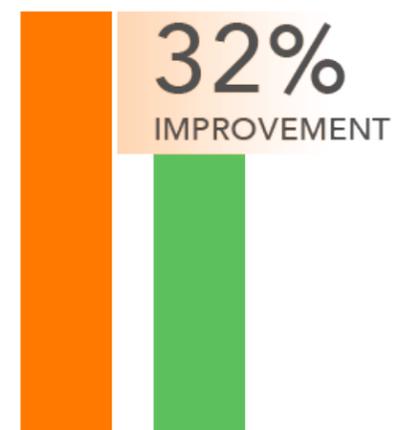
■ Initial Latency - **298 ms**
■ Post-Optimization value - **203 ms**