

Global Tier-1 GTT Enhances Visibility, Security, and Profit with Kentik



CATEGORY

Global telecommunications provider: wide area networking, internet, managed services, and voice services

CHALLENGE

Internally-developed network traffic system limited in ability to scale and provide visibility to extract real-time intelligence

SOLUTION

Kentik Detect for network visibility, security, and profitability analysis

RESULTS

- Highest potential new sales prospects identified
- Insight into how to service customers profitably
- Real-time DDoS attack detection and alerting
- Cross-departmental network visibility

Overview

Tier-1 network carriers are the literal backbone of the internet. They can reach the entire global routing table through the sum of their downstream customers and settlement-free peering partners and are, by definition, completely transit-free. Network capacity and reliability are market differentiators for them, and they generate revenue from tier-2 and tier-3 carriers by charging for data transit. To win in this intensely competitive market, tier-1 carriers must provide outstanding network performance and security, identify the highest potential new prospects, and service customers profitably. Interestingly, the network itself – specifically, the network traffic data – provides invaluable intelligence for both technical and business operations for tier-1 carriers. That's why tier-1 global carrier GTT turned to Kentik.

Situation

GTT is a top-five tier-1 global IP network carrier, spanning more than 300 points-of-presence. The company provides wide area networking, internet, managed services, and voice services to nine of the top-10 largest telecoms providers, over 5,000 enterprises, and customers across industries in over 100 countries.

GTT historically relied on an internally-developed system to derive intelligence from their network traffic. The system was good at tracking traffic originating from a customer's network edge, which ensured GTT's ability to provide top service to its existing customers. But there were significant limitations in the system's granularity, which impacted the ability to drill deep into the details. That hampered GTT in two key areas: prospecting in real time for new customers and protecting the customer experience from network anomalies, including distributed denial of service (DDoS) attacks.

GTT knew that achieving the needed level of granularity would require an improved NetFlow-based platform that could handle unsummarized details at huge volume. But even small networks can generate hundreds of billions of flow records per day; GTT's flow output would be far greater. The company concluded that they could not build a system of this scale in house.



"There were only a handful of options out there with useful NetFlow analysis capabilities. However, once we looked at the available solutions, most were not cost effective or were clearly insufficient in giving us a comprehensive look at network performance, traffic profitability, and security all in one platform."

- Adam Davenport, Director of Interconnection Strategy at GTT

Solution

"There were only a handful of options out there with useful NetFlow analysis capabilities," says Adam Davenport, director of interconnection strategy at GTT. "However, once we looked at the available solutions, most were not cost effective or were clearly insufficient in giving us a comprehensive look at network performance, traffic profitability, and security all in one platform."

GTT learned of Kentik's unique network traffic intelligence platform, Kentik Detect, very early in the solution's development. By the time GTT outgrew its internally-developed system, Kentik Detect had matured greatly. GTT knew it was the right solution to meet all of its requirements, including NetFlow analysis for multiple use cases, scalability, and cost-efficiency.

Since Kentik Detect is available as an easy-to-adopt SaaS, it took less than 48 hours for GTT to activate a subscription, configure flow data collection from all applicable network equipment worldwide (routers, switches, etc.), and start applying insights from Kentik analytics.

Results

Kentik Detect provides network traffic intelligence to GTT for a variety of use cases involving both technical and business operations:

SALES PROSPECTING ANALYSIS

Within 30 days of the deployment of Kentik Detect, GTT fully automated its sales prospecting analysis and reporting capabilities. Using Kentik, GTT is now able to pull insights from NetFlow and BGP data to identify when high volumes of traffic are transiting its network to or from networks that aren't yet GTT customers. Kentik Detect alerting capabilities allow this information to be distributed to sales teams who can then utilize the data to help gain new prospects for GTT services. Since Kentik makes these types of analyses so easy to pull via SQL or REST APIs, there is even a possibility of linking such Kentikdriven report data with GTT's marketing automation stack, to create deeper sales process integration.



"Simply put, with the limitations of our previous system, we were flying blind in many key areas prior to deploying Kentik."

- Bob Burris, Senior Vice President of Global Engineering and Operations at GTT

CUSTOMER TRAFFIC PROFITABILITY ANALYSIS

With Kentik's Ultimate Exit analysis, GTT can see where traffic is entering its network and where and to whom that traffic exits. That lets GTT quantify not only traffic volume but also how far the traffic traveled across its backbone. This combination of metrics is one of the "holy grails" of network traffic analysis because it provides a better understanding of the cost of any subset of traffic. With that level of granularity, GTT can truly optimize their business and, based on data rather than offers, negotiate much better contracts than ever before.

CROSS-DEPARTMENTAL NETWORK VISIBILITY

For GTT, the network traffic is a direct reflection of their core business activity, which is why network traffic intelligence is powerful for teams across the business, not just network operators. Using Kentik Detect, teams outside of GTT's core engineering group are now able to quickly and easily query traffic data, including the sales team for prospecting. In addition to prospecting by the sales team, for example, GTT recently deployed Kentik Detect in their Network Operations Center (NOC) to increase alerting and monitoring visibility. Kentik places no restrictions on the number of users, so GTT plans to continue enabling network traffic intelligence for additional teams.

DDOS ATTACK DETECTION & ALERTING

Kentik provides GTT with continuous, multi-dimensional monitoring of millions of IP addresses, with the most significant traffic adaptively baselined and measured for anomalies. GTT is now working to deploy Kentik as the front end of its DDoS detection and alerting system. The system augments IP transit and dedicated internet access services to provide automated, real-time detection and mitigation of attack traffic and return clean traffic to impacted organizations.



"If an organization is looking for a full featured NetFlow-based analytics solution without having to spend an arm and a leg on internal manpower and development time or on one of the other incredibly expensive off-the-shelf solutions, Kentik is the right choice."

- Bob Burris, Senior Vice President of Global Engineering and Operations at GTT

KEY TAKEAWAYS

With Kentik, GTT is able to turn its core asset – its network – into an even greater competitive advantage by surfacing both business and operational intelligence from the network traffic.

"GTT's overall experience with the Kentik solution has been overwhelmingly positive," says Bob Burris, senior vice president of the Global Engineering and Operations organization at GTT. "New features and improvements to existing features come at a very rapid pace. GTT has also begun making the solution available to our support escalation teams, and we currently have more than 40 active users."

"Simply put, with the limitations of our previous system, we were flying blind in many key areas prior to deploying Kentik," adds Burris. "If an organization is looking for a full featured NetFlow-based analytics solution without having to spend an arm and a leg on internal manpower and development time or on one of the other incredibly expensive off-the-shelf solutions, Kentik is the right choice."

ABOUT KENTIK

Kentik is the network traffic intelligence company. Kentik turns network traffic – billions of digital footprints – into real-time intelligence for both business and technical operations. Network operators, engineers, and security teams use Kentik to manage and optimize the performance, security, and potential of their networks and their business. To learn more about Kentik and its award-winning visibility solutions, visit www.kentik.com.