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G-Core Labs Keeps Media & Entertainment Networks Fast & Secure with Help from Kentik

G·CORE LABS

CATEGORY

- Cloud and edge solutions provider

CHALLENGE

- Legacy monitoring tool required purchasing costly licenses to support growing network and team

SOLUTION

- Powerful network and security insights from Kentik

RESULTS

- Comprehensive traffic analysis for cost savings and network optimization
- DDoS attack detection, investigation, and mitigation
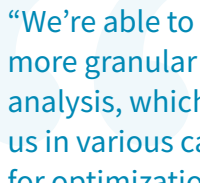- Cost control with annual subscription model

Overview

G-Core Labs is the world's leading provider of powerful cloud and edge solutions for the media and entertainment industry. Headquartered in Luxembourg, the company offers CDN, streaming, hosting, security, and cloud services. With the company's network expansion across multiple continents and the need for real-time visibility to maintain its superior services for customers and end-customers (gamers, readers, viewers), G-Core Labs enlisted help from Kentik's powerful network analytics platform.

Situation

As a global edge and cloud solutions provider, G-Core Labs has scaled its company tremendously since its 2011 inception. From entertainment industry customers like Wargaming, Nordeus, and RedFox Games, to modern enterprises like Beeline, Michelin, Tinkoff Bank, and Avast, organizations choose G-Core Labs for its always-on networking and cloud services. The company's infrastructure has even been awarded by the Guinness Book of Records for the most simultaneous online players on a single MOG server (190,541 users).

As G-Core Labs' network grew to include 100 nodes on five continents, the company's network operations team grew with it. However, G-Core Labs' legacy network monitoring tool required that more costly licenses be purchased.

"Before Kentik, we were using a solution, which was working well, but it was quite expensive with limited performance," said Oleg Yudin, head of the Global Network Department at G-Core Labs. "Basically, it was slowing everything down, because we knew we needed more licenses, but knew we would not get the budget approval to move forward."

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>
> *— Oleg Yudin, head of the Global Network Department at G-Core Labs*

"We were running in a configuration where only our most important locations were using our NetFlow solution and, only in case of emergency, a license was moved to a different device or location to enable us to do traffic analysis there," added Yudin. "Quite simply, we were running half blind in our network, most of our traffic was not analyzed, and many locations were unprotected from DDoS attacks, which is an issue some of our biggest media and entertainment industry customers face on a daily, if not hourly, basis."

"At the time, we were trying to get better discounts with our current vendor, but we were also looking for alternative solutions from a new perspective," noted Yudin. "It proved difficult because there weren't many vendors out there, and those that we did find did not offer the full feature-set, for example, DDoS mitigation or something else was always missing."

Solution

At APRICOT 2017, an annual summit for network operators in the Asia Pacific region, members of the G-Core Labs team met Kentik Co-founder and CEO Avi Freedman. After learning about all of the features and the flexibility, the intuitive GUI, and the easy, comprehensive network and security insights generated from Kentik, G-Core Labs was impressed.

"From the technical perspective, the flexibility and the almost endless options to combine metrics in various diagrams, especially Sankey, was considered to be much more helpful for monitoring, capacity and budget planning than the previous vendor offered with the rather static reports," said Yudin. "Since we mainly use the solution for DDoS detection and traffic diversion to our DDoS mitigation partner, it was important that there was the approval from the responsible team, which came without any objections."

Results

With Kentik, G-Core Labs observes the following benefits:

Comprehensive Traffic Analysis for Cost Savings & Network Optimization

"We're able to do much more granular traffic analysis, which helps us in various cases, for optimization and troubleshooting," said Yudin. "We are able to do very precise commitment verification now, and we see overcommit or underutilization, including spotting a way-too-high commitment with one of our transit ISPs, which was reduced now with significant cost savings."

Traffic analysis is also done with predefined dashboards from Kentik. G-Core Labs uses these to check commitments and do capacity planning. Routing optimization is additionally done with the help of Kentik's GUI and Sankey diagrams. This helps G-Core Labs to see traffic flows, compare those with performance monitoring data, and re-route traffic to better uplinks.

Recently G-Core Labs also started using Kentik's Custom Dimensions to label network traffic with the names of customers, products, locations, and platforms. That allows them to get much more insight about which business entities contribute the most to network loads, in addition to allocating the associated traffic costs to different products and platforms.

G-Core Labs also uses Kentik's kProbe agent to instrument standalone CDN servers, which are deployed on third-party ISP networks, where NetFlow isn't available because G-Core Labs doesn't control the network equipment. Kentik's kProbe produces a rich stream of flow data from the raw packets seen on the servers' interfaces, providing detailed visibility into parts of G-Core Labs' extended infrastructure where there was none before.

DDoS Defense

Kentik is a core aspect of G-Core Labs' DDoS defense strategy, including for detection, investigation, and mitigation. Kentik's policy engine quickly detects customer- or infrastructure-impacting attacks and triggers traffic diversion into the scrubbing centers of G-Core Labs' DDoS mitigation partners.

> "The annual subscription model is a big advantage compared to our previous vendor's perpetual licenses with huge up-front costs."

> "Kentik offers outstanding features and flexibility to create any kind of reports for fast, actionable insights."

> "It's a tool that everyone in our company benefits from. If you're thinking about Kentik, I'd say: 'Just try it, it's easy.'"

Cost Control

"The annual subscription model is a big advantage compared to our previous vendor's perpetual licenses with huge up-front costs," said Yudin. "Buying additional licenses is much easier with Kentik."

G-Core Labs is also testing Kentik's powerful APIs and evaluating where insights from Kentik's platform can be imported into other systems, such as Salesforce, to identify new customers and support with budget reporting and billing, or to an SDN performance routing controller to route application traffic more effectively.

Key Takeaways

G-Core Labs leverages Kentik's powerful network analytics for all of its existing locations and continues to extend Kentik's coverage as their network grows to new locations and edge devices.

"Kentik offers outstanding features and flexibility to create any kind of reports for fast, actionable insights. It's a tool that everyone in our company benefits from," advised Yudin. "If you're thinking about Kentik, I'd say: 'Just try it, it's easy.'"