

FPT Telecom uses network observability from Kentik to deliver an amazing customer experience



CATEGORY

- Telecommunications

CHALLENGE

- Periodic network congestion threatened to degrade quality of service to customers
- Lack of visibility into network connections hampered diagnosis and resolution of network problems

SOLUTION

- The Kentik Network Observability Cloud provides a comprehensive, real-time view of performance throughout all networks

RESULTS

- Time to identify and diagnose network issues is sharply reduced
- Insights on traffic flows help eliminate congestion during peak usage times to ensure a quality customer experience
- Detailed statistics contribute to advantageous peering contracts
- Trend analysis leads to cost-effective capacity planning

Overview

The goal of FPT Telecom is to deliver an “amazing customer experience” to more than 3 million business and residential customers in Vietnam. To help ensure that it meets that goal, FPT uses the Kentik Network Observability Cloud to avoid network congestion, facilitate capacity planning and improve operational efficiency.

Situation

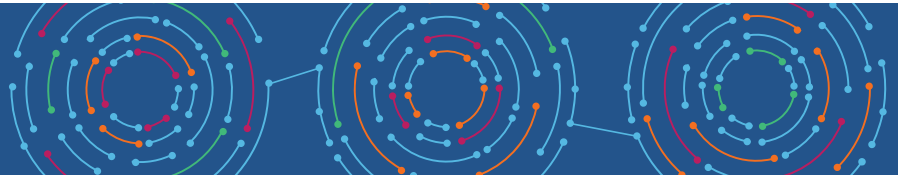
Over the past two decades, Vietnam has consistently been one of the fastest-growing economies in the world. As part of its growth, the country’s demand for telecommunications and entertainment services has risen sharply. One of the leading companies satisfying this growing demand is FPT Telecom.

Founded in 1997, FPT Telecom serves more than 3 million business and residential customers throughout the nation and has nearly 10,000 employees. It provides a wide range of services: fixed and mobile voice, broadband internet access, subscriber-based television and streaming entertainment, smart-home capabilities, cloud computing, and other digital services.

The rapid growth in subscribers, combined with an ongoing introduction of new services and network capabilities, puts added pressure on FPT to maintain a robust and highly reliable network infrastructure. Monitoring all facets of that complex infrastructure is an ongoing challenge.

Dat Nguyen Thanh, network manager of FPT Telecom, recalls two of the most formidable challenges in recent years. “The first was occasional congestion on some of our international trunk lines during times of high usage. This resulted in latencies higher than we wanted, and we knew it could also impact our customers and their digital experiences.”

The second major challenge, Nguyen adds, was negotiating peering contracts and other arrangements with carriers. These contracts are critical from both



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a financial and operational standpoint. Well-crafted peering arrangements can improve profitability as well as ensure fast, reliable connections for customers. A critical factor in negotiating peering arrangements is an accurate accounting of the volume, characteristics, and sources/destinations of data and voice traffic.

“Sometimes we would have to make peering and transit agreements solely with our own estimates of traffic volumes,” Nguyen says. “We didn’t have the hard data that we really needed to support the decisions.”

The FPT team knew they needed detailed and actionable information about network traffic sources, destinations and characteristics of traffic between its customers and its public and private clouds and carriers.

FPT had been using network monitoring tools it developed in-house. But, Nguyen notes, “Our previous tools only gave us a high-level picture and lacked the detail that we needed to quickly diagnose a problem or plan for future network expansion.”

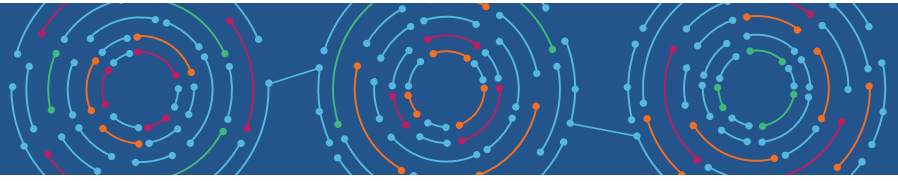
The FPT team was also spending an unacceptable amount of time monitoring network activity, troubleshooting anomalies and resolving network problems. And despite all the time and effort, there still was no guarantee that desired standards for service availability and quality were being met.

Solution

Network observability is the answer to FPT Telecom’s challenges.

After investigating several options, FPT chose the Kentik Network Observability Cloud as the best solution on the market. Kentik collects data from all parts of all networks — from the data center to the edge, cloud and internet. All forms of telemetry are fed into a dashboard that delivers real-time observability of every network connection. This includes the characteristics of all traffic flowing through them, plus the ability to analyze historical data for trends assessment and future planning.

“Kentik offers the complete network observability solution service providers need,” Nguyen says. “We have actionable, end-to-end visibility on all of our network connections, plus real-time alerts that help us quickly diagnose



potential network problems, making it possible to avoid service interruptions altogether.”

Results

FPT Telecom applies the Kentik Network Observability Cloud to several use cases:

Managing network performance

With Kentik, the FPT team can see the status of all network connections, receiving proactive alerts of any anomalies that could indicate an issue needing attention — before customers are impacted.

“With Kentik, we know exactly which traffic flows cause congestion on which lines. Thanks to the insights provided by Kentik, we have been able to proactively adjust network configuration and routing patterns that have eliminated congestion issues during peak usage. That’s been a big plus,” Nguyen reports.

Using APIs from Kentik, the FPT team has built a tool that automatically reroutes traffic when congestion patterns begin to appear. According to Nguyen, this “has significantly improved the quality of service to customers.”

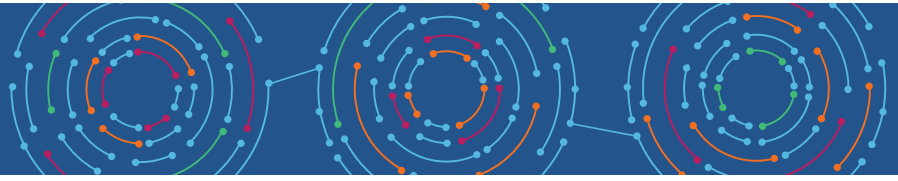
Troubleshooting

When a network problem occurs, time-to-resolution is critical. Kentik delivers comprehensive, highly granular data that network managers use to quickly identify the precise location of an issue and then drill down to learn the details. “With Kentik, we not only learn about issues right away, but also have the details necessary to quickly resolve them,” Nguyen says. “That makes a big contribution to ensuring a quality customer experience.”

Capacity planning and customer analysis

FPT is experiencing rapid subscriber growth and regularly adds or enhances its service offerings — such as smart-home products, gaming, videoconferencing and cloud computing. With network observability from Kentik, FPT’s developers, product managers and network staff collaborate around a shared pool of facts to analyze subscriber habits and traffic trends, and manage relationships with partners such as content delivery networks.

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Improving peering and interconnection

“Kentik provides a level of detail about our network — like traffic flows, connectivity mix, paths and other key elements — that we never had before,” Nguyen notes. “Now, we can make arrangements with carriers that improve performance and control costs at the same time.”

Enhancing security

Kentik adds valuable detail to tools and procedures that guard against DDoS attacks and other external security threats. Kentik’s proactive, AI-powered alerts highlight anomalous behavior or unusual traffic patterns that can be a harbinger of a security threat. And Kentik data — both real-time and historic — provides valuable assistance in pinpointing the source(s) and path(s) of attackers.

Key Takeaways

Nguyen uses a medical metaphor to explain his satisfaction with Kentik: “It’s like a patient who has an illness, and the doctor needs an X-ray to determine the exact cause. Kentik gives us the deep insights into network performance that allow us to make an accurate diagnosis.”

With Kentik, the time it takes FPT to identify and diagnose network issues is sharply reduced, slashing the time needed to resolve issues, or even preventing problems from occurring in the first place. This helps FPT deliver on its promise of an amazing customer experience by greatly limiting the chances of service degradation.

ABOUT KENTIK | Kentik is the network observability company. Our platform is a must-have for the network front line, whether digital business, corporate IT, or service provider. Network and cloud professionals turn to the Kentik Network Observability Cloud to plan, run, and fix any network, relying on our infinite granularity, AI-driven insights, and insanely fast search. Kentik makes sense of network, cloud, host, and container flow, internet routing, performance tests, and network metrics. We show network pros what they need to know about their network performance, health, and security to make their business-critical services shine. Networks power the world’s most valuable companies, and those companies trust Kentik. Market leaders like IBM, Box, and Zoom rely on Kentik for network observability. Visit us at kentik.com and follow us at [@kentikinc](https://twitter.com/kentikinc).

Revised 20211111