Overview

Summit Communications Ltd. (SComm) is a leading provider of data communications services in Bangladesh. To monitor and analyze complex network traffic patterns and deliver on the promise of always-on, reliable service for its customers, SComm uses the Kentik Network Observability Cloud.

Situation

SComm serves mobile phone operators, internet service providers and call centers. Its services are in high demand in Bangladesh, as the nation is one of the fastest-growing economies in the world, with fast-rising use of advanced communications. Specifically, in this country of 166 million people, there are more than 170 million mobile phone accounts, and over 110 million internet users.

SComm offers a variety of services, including a nationwide telecommunications transmission network (NTTN), long-haul transmission lines with its nationwide, extensive optical fiber cable network, one of the country's largest International Internet Gateway (IIG) offerings, and IPLC and IP transit, among other services. SComm also has extensive point-of-presence (PoP) coverage throughout the country.

Many of SComm's services involve interconnection with carriers outside Bangladesh. For example, the IP transit service includes peering and caching arrangements with major content delivery networks (CDNs), such as Google, Facebook, Amazon, Netflix and Akamai, resulting in more favorable pricing and quality of service for SComm customers.

“Our goal is to provide our customers with reliable, cost-effective, and flexible options for the bandwidth and connectivity they need,” says Md. Shahidullah Kaisar, Senior Manager of Gateway Operations for SComm at its headquarters in Dhaka. “To meet these objectives, we must closely monitor our many
network connections across all dimensions — performance, availability, security and cost.”

Solution

SComm’s gateway operations team had employed several approaches over the years in an attempt to satisfy its need for network observability. Kaisar points to several necessary requirements in a network observability solution, including: capacity planning; cost control and allocation; peering negotiations; DDoS detection; and network usage by individual customer, geography, carrier, application, and type of service.

“We were experiencing rapid growth in all dimensions — the number of customers, the volume of network traffic, and the variety of services used. We reached a point where we were not getting the detailed information and insights we needed to have a clear picture of our network operations,” Kaisar recalls.

The team initially explored NetFlow analysis tools to capture data on the volume of network traffic as well as sources and destinations. Later, they explored the option of application, country, and AS-based traffic analysis. These approaches, however, had their limitations.

“We were having trouble categorizing network connectivity in different geographies,” Kaisar says. “This is important to us, as we need detailed information to make effective peering arrangements, as well as ensure that we deliver a high quality of service to customers in all parts of the country.”

Then the SComm team heard about Kentik. “We learned that many of the leading CDNs and Tier-1 carriers were using Kentik,” Kaisar says. “So we wanted to try it out in our network.” After initial evaluation, the SComm team selected the Kentik Network Observability Cloud as its primary network observability solution.

Kaisar says Kentik satisfies three primary needs: detailed reporting on network traffic, both real-time and historic; support for network engineering and capacity planning; and DDoS detection.
Results

The Kentik platform is integral to the SComm team’s network monitoring needs. “The highly detailed information we get from Kentik supports our most important functions,” Kaisar says. “The reports we receive help us make many critical decisions.”

Specifically, SComm is using Kentik for:
- Traffic engineering (both prefix- and AS-based)
- Network planning: capacity planning, performance optimization and network expansion
- DDoS detection: accurately identifying attack traffic and sources
- Analysis of growth in network traffic volumes (e.g., by application, CDN or geography)
- Traffic pattern analysis (by country, ASN or prefix)

Upholding SLAs with help from Kentik

“We are dedicated to delivering highly reliable services, either through formal service-level agreements (SLAs) or our pledge to meet a carrier-grade service availability,” Kaisar says. “Kentik is a very valuable element in meeting those commitments.”

Capacity planning from Kentik

With the dramatic growth SComm is experiencing, capacity planning is vital, and Kentik is essential to this effort as well. “We use Kentik as part of a continuous effort to maintain our ability to deliver the best quality service to our customers. Kentik delivers the foundation of any good planning effort: complete, accurate information on exactly what’s happening on all our networks and external connections.”

Easy-to-understand reporting from Kentik

Kaisar says the reports from Kentik are highly detailed yet presented in a way that network managers can quickly and easily view the metrics most important to them, as well as note any warnings of potential problems.
Key takeaways

Kaisar notes the widespread impact Kentik has on SComm: “For any organization that faces challenges in monitoring their network operations and ensuring quality of service, Kentik will provide them with valuable information and insights.”

Reflecting on his experience with the Kentik Network Observability Cloud, Kaisar has concluded that “rapidly growing organizations should use Kentik to optimize their entire network.”

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 ridiculously 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.