

The top half of the slide features a vibrant night market scene with numerous colorful stalls and umbrellas in shades of red, blue, yellow, and green. The stalls are illuminated with warm lights, and people can be seen walking through the market. A large, white, stylized 'K' shape is overlaid on the right side of the image. In the top left corner, the word 'NOKIA' is written in a white, sans-serif font.

NOKIA

Tier 1 cable MSO uses Nokia Deepfield to improve their OTT video delivery, establishes top 10 lists for different categories of OTT content

Use case

Consumers continue to embrace a growing range of cloud-based applications and services, including personal cloud storage, social media, online banking, subscription-based music and video streaming services, and online gaming. The cloud era has truly arrived, and content no longer has geographic or national boundaries. This creates headaches for service providers that need to deliver content to their customers.

Challenge

In highly mature markets, increasing numbers of consumers are subscribing to multiple video streaming services. Many are using these services as a replacement for linear TV programming.

Internet service providers (ISPs) have traditionally offered best-effort, no-service-guarantees broadband internet access to their subscribers. Cable/multiple systems operators (MSOs) who have been delivering video services for a long time are now facing high expectations from their subscribers that over-the-top (OTT) services—particularly video services—also have to be delivered with the same high quality of service. Some OTT providers are adding pressure by publicly ranking ISPs based on their ability to deliver the network speed and performance required to ensure a superior user experience.

As the pressure mounts, more ISPs are looking for new ways to ensure the smooth delivery of top video content to their subscribers. They are searching for tools that will help them monitor trends, spot the inflection points at which OTT content becomes a hot commodity for their subscribers, and make network adjustments to increase the quality of their service relative to the competition.

Solution

A Tier 1 cable MSO in Europe chose Nokia Deepfield Cloud Intelligence, Deepfield Service Intelligence and Deepfield Subscriber Intelligence to improve OTT video delivery

and gain more complete visibility of network, content and application flows and related trends for all types of OTT video services.

Using the Deepfield solution, the MSO established a continuous improvement program that relies on regular mapping and examination of how OTT video services traverse its network and get delivered to subscribers.

The Deepfield solution collects an extensive range of information from the MSO's network without using network probes or appliances. This information covers many dimensions of data, including IP flow information, BGP, SNMP and DNS. It also collects data sets from the MSO's end systems and subscriber management systems (CMTS, AAA).

The solution enhances this information with Deepfield Cloud Genome®, which provides continuously updated data about billions of IPv4 and IPv6 internet addresses, content delivery network (CDN) domains and related IP flows. It categorizes all this information by traffic type to create a 'supply map' for all internet-based content and applications.

By using Deepfield to combine and correlate these data sets, the MSO can examine and map all OTT content flows from application and content domain CDNs, across peering and transit, and all the way to end users. The MSO can also see how these flows correlate with its broadband service plans. The result is accurate and valuable information about how OTT services are consumed.

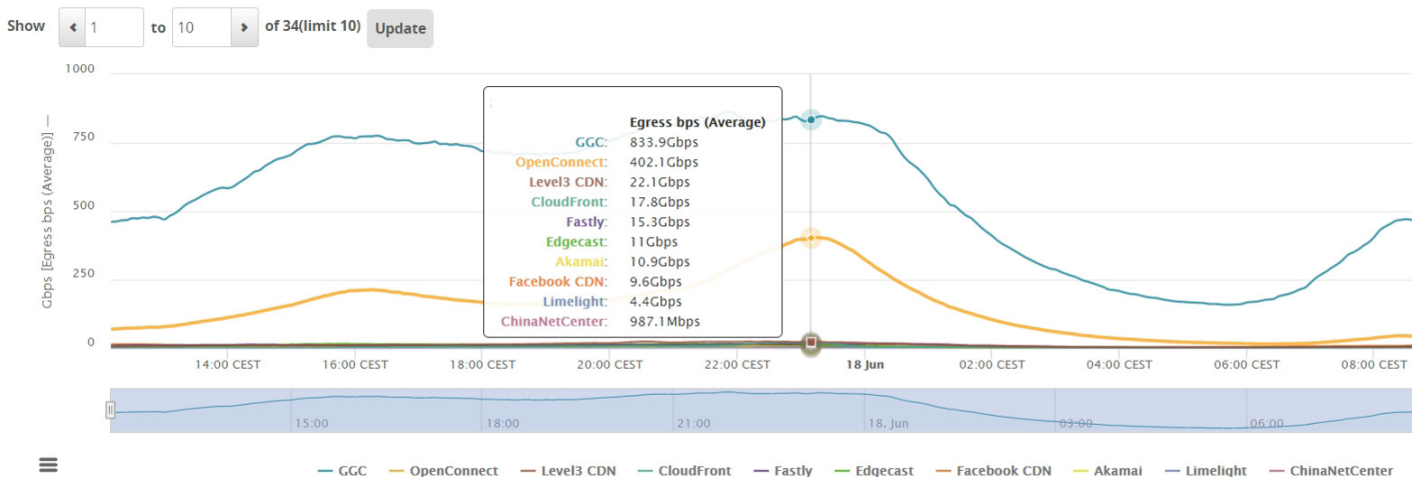
Benefits

Empowered by Deepfield's usability and unique insight into OTT traffic flows, the MSO has built the solution into the workflows of its teams. This has enabled the MSO to establish a process of continuous monitoring and benchmarking for different OTT services.

The MSO now maintains and monitors 'top 10' lists for several OTT service categories, including music and video. These lists enable the MSO to continuously maintain and improve the performance of these services. They also allow the MSO to better understand the relative and absolute popularity of these services

within its customer base and make timely network infrastructure decisions to maintain and improve the overall quality of experience for these services.

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About Nokia

At Nokia, we create technology that helps the world act together.

As a B2B technology innovation leader, we are pioneering networks that sense, think and act by leveraging our work across mobile, fixed and cloud networks. In addition, we create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs.

Service providers, enterprises and partners worldwide trust Nokia to deliver secure, reliable and sustainable networks today – and work with us to create the digital services and applications of the future.

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