



EXPERT OPINION:

Use network policy control to maximise the value of mobile networks

Broadband internet consumers are spending more time on the go using internet applications for activities such as streaming video and online gaming, which require a high quality network. According to Sandvine's Fall 2010 Global Internet Phenomena Report, real-time entertainment is unquestionably the dominant force on the internet, generating up to 43% of internet traffic. Social networking is also a substantial driver of mobile traffic, representing up to 12% of mobile data, a relative bandwidth share increase of more than 30% year-over-year in North America, and more than 80% over eight months in Latin America. At the same time, internet penetration is high in mature markets, so service providers cannot depend entirely on new subscribers as a source of revenue growth. This environment creates new challenges and opportunities for internet service providers.

The good news is that mobile operators can implement innovative revenue-generating application-based and device-based services as a complement to data access quotas and speed.

Network Policy Control is a fundamental technology and technique which enables service providers to manage traffic demand in a manner that meets subscribers' quality of experience expectations, and is simultaneously cost-effective and revenue-generating. Here, Dave Caputo outlines how service providers can create value-added data services that target customers' needs, maximising the value of their network infrastructure investment.



Dave Caputo, president, CEO and co-founder, Sandvine: In the new and possible ideal, service providers can have relevant, up-to-date information available on-demand

The first step towards effective network management and profitable network utilisation is to understand fully what is occurring on the network. A successful internet business strategy requires sufficient data to make informed decisions about service plans, management policies, capital investments and premium services.

Device awareness is critically relevant for mobile operators since state-of-the-art mobile devices are key drivers of broadband usage. For example, an Apple iPad, Samsung Galaxy and Blackberry PlayBook user is much more likely to view YouTube videos or TV shows, since tablets have high-resolution and larger graphical interfaces. These users therefore tend to consume disproportionately high bandwidth, which exacerbates load during peak periods. Fairshare traffic management allocates network resources fairly across the subscriber base. ISPs need to be able to identify user-trends in both application and device adoption, to avoid congestion pitfalls, as well as to spot opportunities that may yield more profitability.

Aggregate and correlate data
Service providers have long since had access to detailed information from billing and operations systems, but only recently is that information being combined with application-level awareness of per-subscriber internet usage. In the new and

possible ideal, service providers can have relevant, up-to-date information available on-demand that tracks key metrics and trends and proactively draws attention to problems and anomalies. A network business intelligence solution provides just that.

Implement targeted marketing campaigns

By segmenting the subscriber base, by application and device usage, marketing can design opt-in programs for differentiated service tiers. For example, a service plan can be tailored to business power-users who frequently tether their mobile device to a laptop and require increased bandwidth and quota. A service offering for video enthusiasts can provide higher quality of service and lower latencies, enabled by network policy control, video optimisation and caching.

Network policy control is a key component of mobile infrastructure. It serves to enhance the quality of experience for subscribers, while extending mobile operators' capabilities to meet traffic demands within the constraints of their network capacity, thus improving the cost-effectiveness of their network. By better understanding consumer needs and, subsequently, spotting opportunities for service creation and optimisation, new revenue streams can be generated. 