

Camiant Intros 'Fair Use' Bandwidth System

Policy control specialist Camiant Inc. has unveiled a "Fair Use Management" (FUM) extension that could indicate how Comcast Corp. (Nasdaq: CMCSA, CMCSK) and other cable operators might enlist byte "quotas" and other bandwidth management policies.

The FUM bandwidth management control application is an addition to the Camiant Multimedia Policy Engine (MPE), a network element of PacketCable Multimedia (PCMM), a CableLabs specification/architecture designed to inject quality of service (QoS) into a wide range of IP-based applications.

According to Camiant vice president of business development Randy Fuller, the FUM extension offers cable operators a way to introduce "application-agnostic" bandwidth management, with an eye toward bandwidth "quotas."

The idea: Operators insert monthly consumption caps or quotas into the cable modem service agreements that are completely transparent to the customer. If customers exceed their bandwidth quota, the operator then has the right to enforce policies, but must be explicit about what those policies are. Enforcement can be as simple as a warning, an upcharge for additional consumption, or, in the extreme case, booting the customer from the system. Using PCMM, operators can enforce such policies temporarily or without requiring a cable modem reboot, according to Fuller.

Another option MSOs might consider: Enlist quotas only during times of congestion, and eliminate them when the networks are relatively unclogged.

"If there's an issue with the network, you look at the whole pipe and control the whole pipe, rather than looking inside" at the applications being used, Fuller explains.

That approach could gain favor with MSOs in the wake of recent, high-profile controversy involving network management and the broader "network neutrality" debate. (See *Net Neutrality Gets Its Hearing*.) Comcast has come under tremendous pressure, including a Federal Communications Commission (FCC) probe, about the way it throttles or delays peer-to-peer (P2P) applications. In the wake of that, the nation's largest MSO has initiated plans to migrate to a "protocol-agnostic" platform, the details of which have not been disclosed. (See *Comcast Caves In to P2P Pressure*.) Comcast and Pando Networks Inc. are also seeking help from other ISPs and P2P companies to develop what they are calling a "P2P Bill of Rights and Responsibilities." (See *Comcast, Pando Crafting 'P2P Bill of Rights'*.)

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Camiant's fair use app aims to manage bandwidth quotas via several steps. The first is to collect and count the bytes. The second is to analyze that data and determine which customers have exceeded their respective quotas over a given length of time. The third phase alerts the policy server as to who the heavy users are. Among the final steps, the system can apply policies that determine which customers should be controlled, and enforce the operator's policies.

"This is a new application that's been developed as a tool for MSOs to help [incorporate] bandwidth control in a way that is consistent with the FCC guidelines on what acceptable network management is," Fuller says.

While readily admitting that cable MSOs are exploring all manner of bandwidth management systems, he says Camiant's FUM app is in trials "with several MSOs" and the vendor is in discussion with several others. Fuller would not disclose Camiant's list of MSO customers, but he says more than half of North American cable operators have

deployed PCMM using Camiant's policy server. Among them, Cox Communications Inc. has announced it is using Camiant and PCMM to power a Docsis "Speed Preview" application. (See *Cox Deploys Camiant*.)

"MSOs are experimenting with various bandwidth management techniques... including several that could be implemented with this [Fair Use Management] application," Fuller says.

What's happening now

Of course, the use of consumption caps isn't entirely new. Rogers Communications Inc. (NYSE: RG - message board; Toronto: RCI) of Canada, for example, has introduced its bandwidth usage policy to customers, and is expected to begin enforcing it later this year. Its high-end "Extreme Plus" 18 Mbit/s tier, for example, caps consumption at 95 gigabytes per month. Rogers will charge those customers \$1.25 for every gigabyte consumed above that threshold. Its mid-range "Express" 7 Mbit/s service caps consumption at 60 gigabytes per month, and charges \$2 for each additional gigabyte. Rogers reportedly is using an electronic bulletin system from PerfTech to alert customers when they are nearing the cap.

Other MSOs seem to be ready to move away from the all-you-can-eat model. Time Warner Cable Inc. (NYSE: TWC - message board) has been noodling a more metered approach. (See *TWC to Test Broadband Toll Booth*.) Late last year at the CableNext show in Santa Clara, Calif., Charter Communications Inc. (Nasdaq: CHTR - message board) chief technology officer Marwan Fawaz offered this prediction: "Eventually, we will go to a usage-based solution."