Helping Our Customers Solve a Problem:

Playing the broadband market

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THE U.S. ARMY launches a special "Recon" version of America's Army, a 10 level, realistic, military role-playing and simulation game being used as a "wired" recruitment tool, after a barrage of publicity. On July 4 gamers and the curious hit sites such as GoArmy.com, Yahoo Game, PCGamer.com, and ugo.com to download the 250Mb action adventure.

Just a few hours later, Christian Stumm's cell phone rang. Stumm, CTO of San Francisco-based video promoter and game publisher Gigex, was now officially on alert -- broadband alert. Gigex server traffic was reaching record levels.

What triggered the call to Stumm's cell was an off-the-charts demand for America's Army downloads. Gigex was handling the "Recon" launch through its servers and had the game available on sites of more than 50 affiliates. "We have had over 800,000 units downloaded [by September]," Stumm says. "We knew it would be a big title. We didn't know it would be a super big title."

High-profile titles, such as America's Game, bring high download demands. And that leaves Stumm with a problem that many CTOs see: managing broadband costs in face of unpredicted traffic spikes. On an average day some 70,000 visitors download games, demos, and trailers through Gigex servers. With gamer word-of-mouth and client publicity exponentially increasing clicks, Stumm is left trying to quantify his company's estimated broadband usage with unquantifiable elements.

"The whole trick in my business -- on the technology side -- is to manage the costs and to manage the spikes and bursts," Stumm says. Ultimately, the gaming publisher's CTO, like enterprise CTOs, wants to avoid hitting the dreaded 95 percent usage and be assessed higher rates and penalties outlined in the company's monthly broadband contract.

Within the usual month-to-month corporate broadband contract are expected usage provisions, which, if violated, can result in dramatic fee increase. "If you go beyond the month's contractual amount for more than 5 percent of the month, you'll pay a higher rate for the entire month," Stumm says. In Gigex's experiences, particularly popular downloads brought traffic spikes that would push the monthly rate to a higher fee category, increasing a month's costs by as much as 400 percent.

"To get a good deal, companies have to make long-term commitments. They can either buy for the spike, which is too expensive," says Nemo Semret, CTO of Burlington, Mass.-based StreamingHand, a real-time broadband marketplace. "Or they'll buy for what they know they'll use and have to pay 'burst pricing.' "

Broadband overdraft protection

Stumm wanted, in effect, broadband overdraft protection. And he found it with StreamingHand's broadband market, dubbed Mercado. StreamingHand "buys broadband in bulk, chops it up, and resells it. We buy wholesale ... and restack our customers' requests," says Semret, who developed the dynamic market concept while at Columbia University working on a Ph.D. thesis on applying game theory to pricing models.

As the traffic from America's Game downloads were approaching critical mass, Stumm logged onto StreamingHand's real-time market site from his home computer and checked out the prices for five-minute blocks of broadband. Although the five-minute prices were higher than comparable blocks in his monthly contract, he put in an open market-order and rerouted traffic bursts to two Gigex servers colocated with StreamingHand. A few days later demand died down, another automated signal was pushed out to his cell, and Stumm closed his market order.

Buying broadband from StreamingHand was, in a minute-by-minute comparison, more expensive than the Gigex's monthly contract rate -- in normal usage and when traffic remains under the 5 percent peak. But, when buying the more expensive blocks in smaller chunks, Stumm says he saves significantly.

"We've paid an awful lot of money for broadband. The good news is that Gigex is successful. The bad news was that until recently costs went through the roof. I searched for four years for this solution," Stumm says.