

Dispute threatens to snarl Internet Service providers' row may spur push for global regulation

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By Hiawatha Bray, Globe Staff | October 7, 2005

Internet connections could be disrupted for millions of people in Europe and North America as the result of a pricing spat between the world's two major service providers, raising concerns about who governs the global communications network and how it should be regulated.

On Wednesday, the Internet service provider [Level 3 Communications Inc.](#) of Broomfield, Colo., broke its connections with a major competitor, [Cogent Communications Group Inc.](#) of Washington, D.C., effectively throwing up roadblocks for some e-mail communication and access to websites. Level 3, which provides Internet services to major companies like [Cox Communications](#) and America Online, essentially stopped allowing its customers to connect with those of Cogent, which has 9,500 customers around the world. Cogent provides Internet services to a number of local universities, including Harvard, Boston College, and the Massachusetts Institute of Technology.

Although the scale of the disruption is unclear, the incident may offer more fodder for those who believe the Internet should be regulated by an international agency, such as the United Nations. Scientists in the United States invented the Internet, and the computers that oversee the network are still controlled by the US Department of Commerce, which favors a hands-off approach. But governments worldwide have launched a campaign to put the Internet under international control. American officials have resisted the idea, saying that UN oversight would introduce undue government interference and the threat of data censorship by authoritarian states like China.

Cogent and Level 3 are two companies near the top of the Internet's food chain. Each runs its own Internet "backbone" -- a network of high-capacity fiber-optic cables that carry vast amounts of Internet traffic. Backbones are the equivalent of wholesale Internet access providers. Companies that provide Internet services to homes and small businesses buy bulk access from various backbone companies, then resell it to their customers. Major businesses, universities, and other organizations buy bulk access for use by employees and students.

The Internet's various backbones share traffic with one another in a relationship known as "peering." Companies that peer with one another agree to handle each other's data free of charge. Peering is an essential feature of the Internet, enabling users to communicate with each other, no matter which company provides their Internet service.

But there's no law requiring Internet companies to offer peering. Companies do it because it is in their interest to connect with as many Internet users as possible. And because peering relationships are voluntary, Internet companies can decide to end the arrangement.

Level 3 spokeswoman Jennifer Daumler said that her company broke off the peering deal with Cogent

because the amount of traffic between the two networks was too low to justify the cost of peering. "Level 3 did an analysis of its peering relationship with Cogent and determined that it was unbalanced," Daumler said. Instead, Level 3 offered Cogent a different kind of interconnection arrangement, in which Cogent would pay Level 3 to handle its Internet traffic.

But Cogent chief executive Dave Schaeffer scoffed at the claim that his company's backbone carries too little traffic. "We actually operate the world's largest IP network," Schaeffer said. "We today are the second-largest carrier of Internet traffic in the world, behind MCI."

According to Schaeffer, Level 3 is trying to force Cogent to raise its prices. Schaeffer claimed that Cogent's prices for bulk Internet capacity are much lower than those of Level 3, causing its customer base to grow at a rate of 250 percent a year.

"Level 3 basically said they can't sell at our price point," said Schaeffer. "They wanted Cogent to stop what they effectively consider a price war." Schaeffer said that Level 3 pulled the plug on peering when Cogent refused.

Both Cogent and Level 3 are losing money. Cogent posted a \$31 million loss in the first two quarters of 2005, while Level 3 lost \$265 million. Cogent stock, which reached \$40 a share last December, closed yesterday at \$4.66, down 23 cents, on the American Stock Exchange. Level 3 closed down 6 cents to \$2.21 on the Nasdaq stock exchange.

Cogent's Schaeffer said that he generally opposes government regulation of the Internet, but hopes federal officials will take action in this case. "They could effectively get a restraining order forcing the connection to continue," he said.

US Representative Edward J. Markey, a Massachusetts Democrat and ranking member of the House Telecommunications Subcommittee, hinted that the Federal Communications Commission might interfere in the matter. "Obviously, I hope the parties will reach a timely commercial arrangement to resolve this dispute," said Markey, "but the FCC must be prepared to take steps to assure continuity of service to consumers in the event that the parties fail to reach an agreement."

That won't happen soon enough for some Internet users. David Cardoza of Boston, who works for an electric power company that trades electricity over the Internet, was unable to conduct business with some clients, or with the company's bank in Philadelphia. Cardoza's company uses Cogent for its Internet access, while the affected clients and the bank were Level 3 customers. Cardoza was able to get through later in the day, after his company activated a secondary Internet connection provided by Level 3. But Cardoza said that businesses that used only Cogent for Internet service "are going to be in a lot of trouble."

In addition, The Boston Globe, which uses Level 3 for its Internet service, was unable to access the Cogent Internet site yesterday. On the other hand, [Keynote Systems Inc.](#), a San Jose, Calif., company that monitors overall Internet performance, reported late Thursday that it could see no sign of a large-scale disruption due to the Level 3-Cogent dispute.

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