Google's call for open Internet hedged in its own rules

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When Google was just a mighty search engine, the company championed an open, unfettered Internet. Now that it's selling ultra-fast broadband Internet and TV service in Kansas City, Mo., with plans to repeat the service elsewhere, the tech giant bars customers from hosting servers on the Google Fiber network without written permission.

In some tech circles, that's seen as at least a partial reversal by Google, one that might undercut the company's position in coming regulatory battles over the concept known as net neutrality.

In the past, Google has been an outspoken advocate for net neutrality, a set of regulations that prevent Internet service providers from giving a preference to any type of Internet traffic over another or blocking any lawful content, applications, services or devices.

Google Fiber spokeswoman Jenna Wandres said in a statement that the company's stance on net neutrality hadn't changed.

"Google is a strong supporter of the open Internet," Wandres said.

Yet in the fine print of Google Fiber's terms of service, legally binding language forbids customers from hosting any type of server "unless you have a written agreement with Google Fiber permitting you to do so."

"It really does feel like an about-face," said Dan Andresen, an associate professor of computing and information sciences at Kansas State

University. "There is kind of a sense of betrayal or concern that we thought Google was different (from other Internet service providers) and it turns out they aren't."

He said the policy might have a chilling effect on users, particularly entrepreneurs who may have moved to the Kansas City area to take advantage of Google Fiber's lightning-fast connection speed of one gigabit per second. That's roughly 100 times faster than most home broadband connections in the United States.

Even Skype, a nanny cam, Slingbox or the program that monitors the solar panel on Andresen's home could be considered servers, and therefore technically prohibited under Google Fiber's terms of service, he said.

"Google has made this effectively a consumption-only device while marketing all these cool things you can do with this gigabit connection," Andresen said. "Now they're coming and saying, 'Oh, but wait, there's a whole huge class of things that now we are forbidding.' "

Indeed, often overlooked is that Google Fiber promises not just light-speed downloads, but also uploads of a gigabit per second, a full thousand times faster than most home consumers experience. That capability makes running a server - the sort of computer that can host a website or channel peer-to-peer file-swapping operations - far more practical at home.

The net neutrality issue surfaced in a complaint filed by Douglas McClendon of Lawrence, Kan. - an area where Google Fiber has yet to announce any plans to sell Internet hookups - with the Federal Communications Commission.

Google had until this week to reply. On Monday, the company argued in

a letter to the FCC that its terms of service run consistent with industry standards and don't violate the government's open Internet rules.

The company noted in the letter that Google Fiber is intended as a residential offering only, not a business product. Despite general language in the terms of service, Google Fiber won't prevent the legal, noncommercial use of applications such as multi-player gaming, videoconferencing and home security, the letter said.

Google Fiber plans to offer a small business service in the future for customers who want to run commercial servers on the network, said Wandres, the Google spokeswoman. She couldn't estimate how much such a product would cost or predict when it would launch.

"We will allow small business servers on the network," she said.

Although Google's letter to the FCC ignited some outrage in the tech blogosphere, a few analysts found the reaction overblown.

Stacey Higginbotham, a blogger for GigaOM, wrote that the development was a "tempest in a teapot" that she hoped would spark serious debates over how to define servers and how to distinguish home broadband use from business use. The distinction can be blurry when so many people work from home or run startups from their basements, she said.

"Google will be at the forefront of these debates because it's trying to push the envelope on broadband offerings while still trying to turn a profit," Higginbotham wrote. "Like a bar owner or a central banker, it has to encourage exuberance, while curbing the obvious harms of irrational exuberance. That's a tough line to walk."

Google's earliest days as a fledgling search engine relied heavily on

getting Internet bandwidth, robust capacity that its founders commandeered surreptitiously on the campus of Stanford University.

Today, Google's problem is that whenever customers buy "unlimited" service for their homes, the Internet service provider is counting on the customers using it "normally," said Dan Wallach, a computer science professor at Rice University.

Ordinary home users might stream Netflix movies or play games online, Wallach said in an email, but they "generally don't pull or push a solid gigabit per second, flat out, all day long."

"What Google is worried about is the possibility that users will run full-blown Web services out of their homes and will truly run that gigabit link flat-out 24-7," he said. "That sort of usage would crush their backbone."

If you were to shop for such a service commercially, you'd pay much more than Google is charging, Wallach said. For example, RackSpace, one of the big commercial providers, charges $0.12 per gigabyte, or $120 per terabyte. Regularly moving such large chunks of data over Google Fiber-sized bandwidth would be unaffordable for most home consumers.

A gigabit connection in most American cities can easily cost $500 a month, compared with $70 per month from Google Fiber.

"Google's prices are either the bargain of the century," Wallach said, "or Google needs to have terms of service that discourage people from running data centers in their garages."

Google Fiber earlier reversed itself on how open its network would be. In 2010, Google said its fiber optic network would "operate an 'open

access' network, giving users the choice of multiple service providers." That meant it could lease its lines - distinctive because fiber optic wires go directly to homes - to competitors such as Time Warner Cable or Comcast. But last year, Google decided not to open the network to other Internet service providers.