Here's Why Your Netflix Is Slowing Down

Mario Anzuoni / REUTERS

Cast member Robin Wright poses at the premiere for the second season of the television series "House of Cards" at the Directors Guild of America in Los Angeles, California February 13, 2014. Season 2 premieres on Netflix on February 14.

An escalating battle between Netflix and the largest Internet service providers is degrading service for the streaming video company's customers, according to multiple reports. The dispute, which involves secret negotiations about how Internet traffic is routed, has spilled into public view as the relationship between giant broadband providers like Verizon and online content companies like Netflix continues to deteriorate.

Most consumers don't care how Netflix videos arrive on their computer or TV — they just want the service to work. Behind the scenes, those videos must often pass through several bandwidth companies to get to the user. In order to ensure the reliable flow of traffic on the Internet, broadband companies strike so-called "peering" agreements in which they agree to carry each other's traffic.

The actual transfer of data takes place at a handful of "interconnection" hubs around the globe. These are large facilities — sometimes called "telecom carrier hotels" — where companies like Verizon and AT&T can physically share space with other bandwidth providers and Internet companies to exchange traffic under one roof. One of the most famous is 111 Eighth Ave. in New York City, which was purchased by Google in 2010 for almost $2 billion.

(**MORE**: Comcast Set to Buy Time Warner Cable for $45 Billion)

Traditionally, these peering agreements were straightforward deals between bandwidth companies that operated on a principle of symmetry. Telecom companies would agree to exchange delivery services in order to ensure that data like phone calls were routed across the country. These pacts helped ensure that calls from New York to Los Angeles could be completed, even if it took a few networks to actually complete the call. You connect my phone calls, I'll connect yours.

But with the explosion of high-bandwidth services like Netflix, which accounts for a massive amount of Internet traffic, the traditionally amicable peering relationship between bandwidth providers is starting to break down. Consumer broadband companies like Verizon and Time Warner Cable are increasingly demanding payment from intermediaries like Level 3 and Cogent in order to carry high bandwidth traffic in excess of peering agreements from other service providers. This feud is now harming Netflix service for consumers, according to the *Wall Street Journal*. (Time Warner Cable was spun off from TIME parent Time Warner in 2009.)

This is a scenario that open Internet advocates have been warning about for years. It's no secret that the big telecom and cable companies resent the fact that they are obliged to deliver high bandwidth content like Netflix — which competes against their own video offerings — in addition to less bandwidth-intensive traffic like emails and chats. In 2005, incoming AT&T CEO Ed Whitacre famously remarked that upstarts like Google would like to "use my pipes free, but I ain't going to let them do that because we have spent this capital and we have to have a return on it."

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The FCC's 2010 Open Internet order prohibited broadband companies like Comcast, AT&T and Verizon from blocking or discriminating against rival services on their networks. But last month, a federal court struck down most of the FCC's order, because the agency had earlier failed to classify broadband as a "telecommunications" service, which would have allowed it to establish "common carrier" regulations prohibiting the broadband giants from discriminating against rival services.

In the wake of that ruling, the nation's largest broadband companies insisted that they remain committed to open Internet principles. But the FCC's order specifically exempts "existing arrangements for network interconnection, including existing paid peering arrangements." That means that peering deals aren't covered by the rules. Now, it appears that the big broadband companies are shifting the battle over net neutrality from the so-called "last mile" consumer connection to private peering deals that weren't covered by the FCC's order in the first place.

"The dominant broadband companies have been working to favor their own services for years," says Lauren Weinstein, a tech policy expert who supports net neutrality and is a consultant to Google. "These broadband companies have absolute control of access to subscribers, which gives them enormous leverage in commercial peering agreements to the detriment of all competitors, and consumers are unaware because these agreements are typically not public."

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It's worth noting that Google anticipated how important peering agreements would become. In 2006, just as Google was finalizing its blockbuster deal to buy YouTube, which now ranks second to Netflix in bandwidth usage, the Silicon Valley tech giant moved into New York City's 111 Eighth Ave., one of the one of the world's most important telecom peering points. Google would later buy the building outright for $1.9 billion in 2010's largest U.S. real estate transaction.

One way for the big broadband companies to improve service for Netflix users would be to work with the video service's caching technology — using what's known as a content delivery network (CDN) — so that the content is closer to the end user. That way, Netflix could peer directly with the likes of Verizon and Time Warner Cable, without having to go through intermediaries like Level 3 or Cogent. Such a move could improve Netflix performance for subscribers, but Time Warner Cable, the nation's second largest cable company, has balked.

Time Warner Cable had been in talks with Netflix about making the video service available for consumers on the cable giant's set-top boxes. But those discussions have now broken down, according to Bloomberg, after Comcast's announcement that it intends to purchase Time Warner Cable in one of the largest media buyouts in history. Consumer advocates and public interest groups warn that the proposed deal, which will take a year to be approved by regulators, could limit consumer choice and raise prices. Comcast has dismissed such fears as "hysteria."

Now that the Open Internet rules have been struck down, the FCC faces a tough choice about whether to reclassify broadband as a "telecommunications" service. The big broadband companies aren't waiting for an answer. The FCC's now-defunct Open Internet order paved the way for commercial interconnection agreements, which is why private peering deals are the new front in the war between the broadband giants and Internet content companies.

Update: Feb. 19 — 3 p.m. ET. Shortly after this post was published, the FCC announced that it would not seek to reclassify broadband as a telecommunications service. The agency plans to move ahead with new open Internet rules using its existing authority.