

*A SLIS Perspective on Network Neutrality**On Network Neutrality*

The Internet is essentially a world-wide public forum. Its architecture is open and nondiscriminatory; that is, *any* two computers can exchange information using an agreed set of protocols. The "Transmission Control Protocol" and "Internet Protocol" (TCP/IP) are designed to send packets through a network from one computer to another, wholly without regard to what the packets contain. Network owners and operators, such as telephone and broadband cable companies, must then determine how to route these packets.¹

Advocates for Network Neutrality say that Internet Service Providers should not be allowed to discriminate based on the contents of these packets. Opponents, however, argue that ISPs will not have the incentive to build bigger, faster, more capable networks unless they are allowed to use free market principles to inform their routing practices. As Ed Whitacre, former Chairman and CEO of AT&T, has said:

Now what they would like to do is use my pipes for free, but I ain't going to let them do that [. . .] The Internet can't be free in that sense, because we and the cable companies have made an investment and for a Google or Yahoo! or Vonage or anybody to expect to use these pipes [for] free is nuts!²

In 1996, the landmark *ACLU v. Reno* case helped to establish the Internet as a public forum, according the Internet with the highest form of free speech protection as granted by the First Amendment. Judge Stewart Dalzell stated that the "Internet is a far more speech-enhancing medium than print, the village green, or the malls." He pointed to four characteristics of Internet communication that led him to his conclusion:

First, the Internet presents very low barriers to entry. Second, these barriers to entry are identical for both speakers and listeners. Third, as a result of these low barriers, astoundingly diverse content is available on the Internet. Fourth, the Internet provides significant access to all who wish to speak in the medium, and even creates a relative parity among speakers.³

¹ My understanding of Internet architecture is influenced by Daniel J. Weitzner's article for the Center of Democracy & Technology, *The Neutral Internet: An Information Architecture for Open Societies*.

² O'Connell

³ Harris

In this sense, then, Net Neutrality is a matter of free speech protection. Numerous proponents of intellectual freedom, such as Tim Wu and Lawrence Lessig, the Center for Democracy and Technology, Public Knowledge, the Save the Internet Coalition and the American Library Association, have taken a formal stance in favor of Net Neutrality. They argue that blogging and other forms of political expression, including innovative and sometimes controversial videos and multimedia presentation, have had a tremendous impact on political and social discourse. Furthermore, "all of this has taken place without anyone needing to make arrangements with network operators or others before speaking, other than to obtain basic access services into the Internet".⁴ If ISPs are permitted to discriminate based on content, then the free nature of this discourse will surely suffer.

The ALA is concerned about the consequences that an unregulated Internet could have for libraries on a purely practical level, as well. In a brief prepared on behalf of the ALA Office for Information Policy in 2007, Mike Godwin writes:

A world in which librarians and other noncommercial enterprises are of necessity limited to the Internet's "slow lanes" while high-definition movies can obtain preferential treatment seems to us to be overlooking a central priority for a democratic society – the necessity of enabling educators, librarians, and, in fact, all citizens to inform themselves and each other just as much as the major commercial and media interest can inform them.⁵

Recent Developments

When the U.S. government funded the development of the Internet in the 1960s and 70s, the National Science Foundation restricted Internet use to non-proprietary research and education activities. In 1992, congress moved to permit commercial traffic on the Internet.⁶ However, this traffic occurred via telephone lines, which have been subject to common carrier regulations ever since congress enacted the Communications Act of 1934.

Telephone and cable companies are often state-granted monopolies. Most communities have just one or two service providers because the infrastructure is expensive to build, and once a cable has already been laid there is no need to lay another

⁴ Harris

⁵ Godwin

⁶ Weitzner

cable.⁷ The Communications Act of 1934 appointed a Federal Communications Commission (FCC) to regulate this natural lack of competition by prohibiting telephone companies from making “any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services.”⁸ When Internet traffic moved away from telephone lines to narrowband and then broadband cable, this left a regulatory “vacuum” on what had formerly been a non-commercial and then a neutral enterprise.

On November 18, 2002, the Coalition of Broadband Users and Innovators submitted a letter to the FCC arguing that “[g]overnment must ensure that transmission network operators do not encumber relationships between their customers and destination networks.”⁹ Subsequently, the National Cable & Telecommunications Association submitted several letters arguing that regulation is unnecessary.¹⁰ Finally, on September 23, 2005, the FCC released a Policy Statement “to ensure that broadband networks are widely deployed, open, affordable, and accessible to all consumers.” The statement included the following four principles:

- Consumers are entitled to access the lawful Internet content of their choice.
- Consumers are entitled to run applications and use services of their choice, subject to the needs of law enforcement.
- Consumers are entitled to connect their choice of legal devices that do not harm the network.
- Consumers are entitled to competition among network providers, application and service providers, and content providers.¹¹

The next two years saw a flurry of thwarted congressional activity related to Net Neutrality. Senator Ron Wyden sponsored the Internet Non-Discrimination Act of 2006, to prohibit the blocking or modification of data in transit, except to filter spam and illegal content, and to mandate common carrier rules for network operators.¹² Representative Ed Markey then sponsored an amendment to the Communications Opportunity, Promotion and Enhancement Act of 2006 (COPE), to make existing net neutrality provisions more

⁷ *Network Neutrality*, American Library Association OITP

⁸ Communications Act of 1934, 47 U.S.C. 202(a)

⁹ Wu & Lessig

¹⁰ National Cable & Telecommunications Association Ex Parte Letter, Feb. 21, 2003

¹¹ Dortch

¹² Internet Non-Discrimination Act, S. 2360, 109Cong. (2006).

strict.¹³ In May 2006, Senators Ted Stevens and Daniel Inouye proposed an amendment to the Communications Act of 1934, to direct the FCC to conduct a study of abusive business practices predicted by the Save the Internet coalition and similar groups.¹⁴

Later that month, Representatives Jim Sensenbrenner and John Conyers sponsored the Internet Freedom and Nondiscrimination Act of 2006, to prohibit broadband providers from discriminating against any web traffic, refusing to connect to other providers, or blocking or impairing specific (legal) content.¹⁵ This bill was reintroduced in the next session of congress as the Internet Freedom Preservation Act, sponsored by Olympia Snowe and Byron Dorgan, and co-sponsored by Barack Obama, Hillary Clinton and John Kerry,¹⁶ and was then reintroduced once more as the Internet Freedom Preservation Act of 2008, sponsored by Representative Edward Markey and Charles Pickering.¹⁷ However, all attempts to legislate Net Neutrality have thus far failed.

In 2007, the ALA lobbied the FCC to amend its 2005 Policy Statement to include a principle of nondiscrimination.¹⁸ The ALA was concerned that the existing language was not strong enough and furthermore would not adequately be enforced. They proposed that the first of the existing principles be amended to read: “Consumers are entitled to access the lawful Internet content of their choice, *free of discriminating practices by transmission of providers and Internet Service Providers against content or applications providers.*”¹⁹ However, the FTC and FCC had conducted their own Broadband Report earlier that year and dismissed the ALA’s proposal, concluding that “[i]n evaluating whether new proscriptions are necessary, we advise proceeding with caution before enacting broad, *ex ante* restrictions in an unsettled, dynamic environment.”²⁰

Partway through 2007, it looked like Net Neutrality might never be legislated. Matt Davis, program director of IDC’s Consumer Multiplay Services program, said that he believed Net Neutrality was a dead issue “unless someone messes up.”²¹

¹³ Communications Opportunity, Promotion and Enhancement Act, H.R. 5252, 109 Cong. (2006).

¹⁴ Communications, Consumer’s Choice, and Broadband Deployment Act, S. 2686, 109 Cong. (2006).

¹⁵ Internet Freedom and Nondiscrimination Act, H.R. 5417, 109 Cong. (2006).

¹⁶ Internet Freedom Preservation Act, S. 215, 110 Cong. (2007).

¹⁷ Internet Freedom Preservation Act, H.R. 5353, 110 Cong. (2008).

¹⁸ Sheketoff

¹⁹ Ibid.

²⁰ Luib, et al.

²¹ Wilson

Then, early in 2008, Comcast “messed up,” and the debate on Net Neutrality was revived. The FCC began investigating complaints made by BitTorrent that Comcast was restricting bandwidth when users tried to access their downloading services, even if the users had already paid for a higher bandwidth.²² BitTorrent believed that this violated the FCC’s 2005 policy statement because Comcast was not engaging in “reasonable network management.” On August 1, the FCC formally voted 3-2 to uphold these complaints, ruling that Comcast had illegally inhibited users of its high-speed Internet service from using file-sharing software.²³ This was a major victory for Net Neutrality.

The Canadian Association of Internet Providers lobbied similar complaints against Bell in 2008.²⁴ The association accused Bell of throttling smaller, independent Internet Service Providers. The Canadian Radio-television and Telecommunications Commission ruled in favor of Bell on November 19, finding that it had treated all customers equally. While this disappointed Net Neutrality advocates, the CRTC has stated that it will more thoroughly examine these issues during a formal proceeding in July 2009.

Meanwhile, in the United States, organizations on both sides are watching closely to see what an Obama administration will mean for Internet regulation. As one of the co-sponsors of the Internet Freedom and Preservation Act, the President-elect is a well-known advocate of Net Neutrality.

Staying Current

The ALA has suggested two guiding principles for the design of any Network Neutrality legislation. Although these principles were not adopted when the ALA lobbied the FCC in 2007, the Comcast ruling has sparked a renewed interest in Network Neutrality and these principles will likely be revisited. They are:

- Set the rates, and charge access, at the “on-ramps.” Users and content providers will buy bandwidth appropriate to their needs. Once that is done, the carrier should avoid discrimination among Internet uses and users to the extent possible.
- Encourage the Berners-Lee “ratchet” principle. Tim Berners-Lee, the inventor of the World Wide Web, has written, “Net Neutrality is this: *If I pay to connect to*

²² Labaton

²³ Rowland

²⁴ Geist

the Net with a certain quality of service, and you pay to connect with that or greater quality of service, then we can connect at that level. [. . .] Net Neutrality is NOT saying that one shouldn't pay more money for high quality of service. We always have, and we always will."²⁵

A widespread misconception has taken root that "Net Neutrality" means the Internet should be free. This is not true. Many Net Neutrality proponents propose tiers of service, or "service-level pricing." This means that users and content providers would pay more for higher bandwidth. Once they have paid for their bandwidth, however, they would be able to access all Internet content equally. ISPs would still be rewarded for building networks to accommodate Peer to Peer file sharing, video streaming, voice streaming and other service that require large amounts of bandwidth. As Paul Misener of Amazon has put it, "Amazon pays a lot more than 'Joe's-Internet-retail.com' simply because we use more capacity. But the important component here is that once the consumer has paid for his or capacity at home they ought to be able to use that capacity however they want."²⁶

With recent rulings by the FCC and CRTC on Net Neutrality, in addition to a new presidential administration with strong ties to the issue, 2009 will surely be an active year for lobbyists, legislators and policy makers regarding Internet regulation. For further reading on the most recent developments regarding Net Neutrality, the following blogs and websites are very informative:

- PublicKnowledge.org** – a Washington, DC-based public interest advocacy organization dedicated to promoting the public interest in access to information
- SavetheInternet.com** – a coalition of like-minded groups from across the political spectrum, all of whom believe that the Internet must remain neutral
- CDT.org** – the Center for Democracy and Technology works to promote democratic values and constitutional liberties in the digital age
- ALA.org** – the American Library Association Office of Information and Technology Policy provides information on Telecom Policy and Network Neutrality

²⁵ Godwin

²⁶ Godwin

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