

Net Neutrality

A Presentation to the Torch Club of the Fox Valley

October 11, 2007

Here is how I decided to do this talk on this topic: About a month ago, I was browsing my daily blogs and RSS feeds and came upon numerous stories about how ATT tried to censor a webcast of a concert by Pearl Jam. On that day, when Pearl Jam began a version of Pink Floyd's "Another Brick in the Wall," Eddie Vedder sang, "George Bush, leave this world alone" and "George Bush, find yourself another home."

Somehow, the lyrics about George Bush never made it through to the audiences of the webcast. How did that happen? And why does it matter even if you have no interest whatsoever in Pearl Jam? This incident has been brought forward as an example of why "Network Neutrality" is so important. I'd been hearing about net neutrality for some time, and I knew it was sort of about "protecting the Internet". But I realized that I needed to figure out more about the whole debate. What better way to find out about something than having to prepare a Torch speech about it. We'll come back to Pearl Jam after we explore the "net neutrality" concept a little.

So – what IS net neutrality? According to Bob Bocher, of the State of Wisconsin Division for Libraries, Technology and Community Learning, net neutrality means that accessing any content or using any service or application on the Internet is done in a neutral fashion. That is, there is no network configuration, policy or practice, outside of end user control, that discriminates against certain content, services, or applications. Net

neutrality ensures that all users can access the content or run the applications or devices of their choice. With net neutrality, the network's only job is to move data – not choose which data to privilege with higher service quality. Net neutrality argues for smart terminals at the ends of a dumb network, rather than the older concept in centralized data processing of dumb terminals and a smart network.

Professor Tim Wu, of Columbia Law School points out that this concept is not new with the Internet. On the electrical grid, for example, the grid doesn't care if you plug in a toaster, a microwave or a television set. And the same electricity that ran a radio in 1930 will run a flat screen digital TV set today. The utility itself has survived extensive innovation and change and is still fully functional (**AND** profitable to the utility company by the way).

The origins of net neutrality ideals may extend as far back as the 16th century British common law concept of a common carrier. Under this principle, a private entity serving a public purpose is expected to extend that service on a non-discriminatory basis. That expectation may be written into law, or it may just be a part of the common understanding of what is right. We could hope that enlightened self interest will prevail, and that telecom providers will do the right thing. But more and more people these days are beginning to think that the principal of net neutrality must be established in law.

Opponents worry that legislating neutrality will stifle innovation, and keep us all on the Internet of the 1980's. They suggest that if neutrality is required, then no one will make the investments needed to expand the functionality of the Internet and make new and

better services available to the masses. The group called “Hands off the Internet” contends that the Internet has succeeded primarily because no significant regulatory or legislative burden has been placed on it. This lack of regulation has expanded consumer choices and caused greater capital investment. They say that they need to be rewarded for their investment in the infrastructure, and that regulation is unnecessary. This is, according to Hands Off, one of the fundamental characteristics of freedom that we have come to expect of the Internet. Regulation will keep us all using the Internet equivalent of radio and we will never see digital flat screens. They further argue that the Internet is suffering from a glut of spam, and illegal use causing bottlenecks and slow service. Allowing providers to give priority to some services over others would solve that problem. But spam and illegal activity are not the only things that might suffer under this scheme.

Tim Wu counters with a differentiation between private and public networks, arguing that neutrality must remain on the public networks, but that private networks like cable television, etc. should be free to impose whatever restrictions they choose. Problem is, today we are seeing a major convergence of the telecom, cable TV and Internet Service Providers. Broadband service to every household is happening mainly through the auspices of the cable companies and the big telecommunications providers. So access to the “public” network is becoming more and more intertwined with the “private” networks of the providers.

According to statistics gathered by Bob Bocher of DLTCL, up until about the end of 2004, more people had dial-up access than had broadband at home. And there were MANY ISPs providing dialup access, which consumers could use regardless of who was

providing their phone service. But starting about Jan of 2005, broadband access has grown and dialup has faded, pushing more and more of us willingly into the hands of the major telecom/cable companies.

Do you think it would be a problem if your ISP decided to make it faster and easier for you to get to Yahoo than it was for you to get to Google? Or maybe vice versa, depending on who paid them the most? What would that say about open competition? The question is which way is more “neutral”? Competition for your attention and use by the information providers, or competition among them for bandwidth through the network?

Here are a couple of perhaps analogous scenarios: You can't buy a Coke at Kentucky Fried Chicken, and you can't buy Pepsi at McDonalds. That is because each of these businesses has made deals with different soft drink manufacturers. Is this a problem? Hardly anyone thinks so. We pretty much acknowledge the right of a business to make a deal with another business for reciprocal promotion.

But what if you could only drive a Ford automobile in the “fast lane” of I43? Everyone who drove Toyotas or Chevys or Oldsmobiles or anything else would have to share the slow lane. Would that be a problem? I think we all agree it would be. The right to travel fast on a public highway would be limited to those who had purchased a specific automobile. People might change the way they bought cars, buying the one that could use the Interstate more advantageously, rather than the one that was most reliable, efficient, prettiest, whatever. Car manufacturer competition would be focused on making deals with highways, rather than making better cars and marketing them to consumers. Not a pretty picture, in my opinion.

So is the Internet more like a fast food restaurant or a highway? What do you think?

Actually, in the US right now the Internet is really not treated in law much like a highway. Telecommunications services are regulated by Title II of the Telecommunications Act of 1996, with strong common carrier language guaranteeing access. Codified into “47 USC Sect. 202” it says: It shall be unlawful for any common carrier to make any unjust or unreasonable discrimination in charges, practices, or services by any means or device, or to subject any person to any unreasonable prejudice or disadvantage.”

But, in 2005, the FCC decided to classify the Internet as an Information service under the weaker Title I language rather than a Telecommunication service under Title II. Not just a semantic change, since it allows broadband providers to restrict services in many ways that they couldn't under Title II. Coincidentally, President Bush has an initiative to connect all Americans to broadband service by 2007. The companies supplying this service will be mainly cable companies and major telecoms or combinations of the two. Do we want the Internet to become another version of TV, controlled by corporate giants? I can tell you for sure that the Appleton Public Library couldn't afford to pay anyone to make our websites accessible in the “fast lane”.

Libraries care about all of this for a variety of reasons. First, we are content providers – our main website had over 165,000 page hits last month, and thousands of people use the online catalog online every day. And second, we are access providers – over 9,000

people a month use our computers to access the Internet. We are concerned with the digital divide, with diversity of opinions, and with equity of access, but we do not have deep pockets.

Another part of what is driving all of this is the concept of “the last mile”. Twenty years ago, the last mile was a big problem. The Internet infrastructure was pretty well built with regard to the major thoroughfares – connections among major educational, governmental and corporate sites, with traffic routing centralized in major locations, many government run. Back then, you even had to sign an Acceptable Use Agreement in order to get a connection to the ‘net – and commercial use was not allowed. But not many people had access in their homes. Even institutions like the Library had to pay major dollars for a connection to the backbone. Since then, the restrictions on commercial use have been lifted, and the Cable and telecom companies have invested significantly in development of the “last mile” and “on ramps” – the access we all enjoy today, and they feel entitled to profit from that investment. I don’t have a problem with that.

No one would argue - well, probably someone would, someone will argue anything... but I wouldn’t argue that service providers shouldn’t be able to charge for their service, and I would agree that they should be able to charge more to people who use more, or people who want a faster connection, etc. It is the other end that is most troubling – the charging of content providers to give higher Quality of Service to their content than is given to others who haven’t or can’t pay.

The FCC has stated these Broadband Access Principles as of August 2005:

To encourage broadband deployment and preserve and promote the open and interconnected nature of the Internet, consumers are entitled:

- **To access lawful Internet content of their choice**
- **To run applications or use services of their choice**
- **To connect their choice of devices that do not harm the network**
- **To their choice of network and content providers**

The American Library Association proposes that a principle of nondiscrimination should be added to this list. The Internet Freedom Preservation Act: Senate.215 is one proposal to accomplish this.

Information from the Thomas website of the Library of Congress:

S.215 Title: A bill to amend the Communications Act of 1934 to ensure net neutrality.

Sponsor: [Sen Dorgan, Byron L.](#) [ND] (introduced the bill on 1/9/2007)

the [Cosponsors](#) Were [Sen Boxer, Barbara](#) [CA] [Sen Clinton, Hillary Rodham](#) [NY] [Sen Harkin, Tom](#) [IA] [Sen Kerry, John F.](#) [MA] [Sen Leahy, Patrick J.](#) [VT] [Sen Obama, Barack](#) [IL] [Sen Sanders, Bernard](#) [VT] [Sen Snowe, Olympia J.](#) [ME] [Sen Wyden, Ron](#) [OR]

Latest Major Action: 1/9/2007 Status: Read twice and referred to the Committee on Commerce, Science, and Transportation.

SUMMARY AS OF:

1/9/2007--Introduced.

Internet Freedom Preservation Act - Amends the Communications Act of 1934 to establish certain Internet neutrality duties for broadband service providers (providers), including not interfering with, or discriminating against, the ability of any person to use broadband service in a lawful manner. Allows providers to engage in activities in furtherance of certain management and business-related practices, such as protecting network security and offering consumer protection services such as parental controls.

Prohibits a provider from requiring a subscriber, as a condition on the purchase of broadband service, to purchase any cable service, telecommunications service, or IP-enabled voice service.

Requires a report from the Federal Communications Commission (FCC) to specified congressional committees on provider delivery of broadband content, applications, and services.

A bill sitting in committee for over 9 months may not have a good chance of passage. I suspect that refinements and new proposals will come forward. But it hasn't been killed, and that seems to say that the issue is still alive.

Let's take a look at who's on which side of this debate:

Neutrality is generally supported by:

- Consumer organizations

- Organizations supporting the first amendment
- Content providers like Google, Microsoft, Yahoo, etc.
- Education and library community

Neutrality is generally opposed by:

- Telecom/cable companies
- Internet service providers
- Organizations that oppose all government regulation

Vinton Cerf, who has been called the “Founding Father of the Internet” since he and Bob Kahn are credited with developing the TCP/IP protocols that make it possible, is currently employed by Google as their “VP and Chief Internet Evangelist”. Gee, would I like to have either of those titles! Mr. Cerf says that the open and free nature of the Internet has been its genius. That to allow providers to put up “toll booths” would stifle innovation. We understand that the costs must be paid for, but which allows for greatest innovation - the public interest or corporate interests? He believes that network neutrality would create more business opportunity for everyone.

This whole issue is about control moving from the network’s edges (you and me) to its core (the telecoms, cable companies and ISPs). The concern is that a vertical market is evolving where mega-corporation conglomerates control the underlying network infrastructure, the actual access for consumers, and an increasing share of the content.

So, back to the Pearl Jam concert. ATT doesn't deny that they muted out those words. They further say that they don't censor, but that they do cut out "excessive profanity." And later they added the response that "The editing of the Pearl Jam performance on Sunday night was not intended, but rather a mistake by a webcast vendor and contrary to our policy. We have policies in place with respect to editing excessive profanity, but AT&T does not edit or censor performances." John Nichols writing in the Madison Capital Times opines that "In fact, "editing excessive profanity" is censorship." Beyond that, I don't fully understand how the words "George Bush, leave this world alone" could be considered profanity, BUT, they are clearly critical of the man who appoints the Federal Communications Commission members, who get to decide many things of great economic impact for ATT.

I will acknowledge that the Internet is still neutral enough that web savvy fans of Pearl Jam noticed the deletion pretty much right away and today you can find copies of videos of the complete performance all over YouTube and other sites. But how long will this last? If ATT will censor a performance in front of millions of fans and not worry about the consequences, what will they do when no one is looking?