

FCC approves Net Neutrality regulations

By Derek Richardson

Internet service providers were reclassified by the Federal Communications Commission on February 26, 2015 as “common carriers” in which many heralded as a win for net neutrality -- the idea that all data on the Internet is to be treated equally.

The five FCC members voted 3-2 along party lines, with three democrats voting for the new regulation which reclassifies the Internet as a public utility under Title II of the Communications Act of 1934.

According to the FCC fact sheet, ISPs (Internet Service Providers) can no longer block, or throttle access to legal content, applications, services or non-harmful devices. ISPs will not be allowed to favor or prioritize content with the creation of “fast lanes.” Fast lanes are something that have been talked about by the industry, but never actually implemented.

Some worry that parts of the regulation could have unintended consequences.

“For 20 years, there’s been a bipartisan consensus in favor of a free and open internet,” said FCC Commissioner Ajit Pai in a dissenting statement.

Pai said that every FCC chairman, republican and democrat, has let the Internet grow free from utility-style regulation and the results speak for themselves. He said the new regulation allows the FCC to direct where ISPs make investments and determine what service plans will be available to the American public.

“For all intents and purposes, the Internet didn’t exist until the private sector took it over in the 1990s, and its been the commercial Internet that has led to the innovation, the creativity, the engineering genius that we see today,” Pai said.

Pai questioned the FCCs claim that a threat to Internet openness exists. He said that the only evidence for threats are anecdotes or hypothesis and hysteria.

“A small ISP in North Carolina allegedly blocked VoIP calls a decade ago. Comcast capped BitTorrent traffic to ease upload congestion eight years ago,” said Pai, “Examples this picayune and stale aren’t enough to tell a coherent story about net neutrality. The bogeyman never had it so easy.”

Pai said that the Title II classification is not just a solution in search of a problem, it’s a government solution that creates a real-world problem.

John Haverty, assistant director of user services at Washburn’s Information Technology Services, said that he isn’t aware of any problems with throttling through Washburn’s Internet

provider.

“We haven’t seen any type of communications problems, network connection problems anywhere,” Haverty said.

Haverty said the issues of throttling and blocking have been an issue with commercial ISPs.

Washburns Internet comes from Kansas Research and Education Network. KanRen is a non-profit consortium of universities, colleges, and other school districts in Kansas that are organized for intercommunications with each other and with the Internet. It is a statewide network.

No single company or government owns the internet. It is made up of a series of interconnected networks that span the globe. When something is requested, whether it is a website or a Netflix video, the information is chopped up into individual “packets” that are sent over multiple networks until it reaches its final destination.

If the Internet were thought of as a series of highways and roads, the only piece that broadband ISPs control is the “last mile” of the internet; the connection from their network to an individual home. This is where the concept of net neutrality resides.

All packets on the Internet travel separately and are reassembled at their destinations. Packets travel along these roads and, like cars and trucks, they are subject to the same speed limit. But that speed limit varies depending on how congested the network is. Some packets arrive sooner than others and sometimes out of order. This isn’t a problem for a website, but it can make for a frustrating viewing of the latest episode of “House of Cards” on Netflix.

Companies like Netflix try to limit the distance traveled by reducing the number of “network hops” between the server and the end user. This provides fewer places for congestion to occur and makes for faster travel with packets arriving in order.

Video services in particular tend to build or buy servers all over the Internet that can store or “cache” popular videos closer to where customers access it. These are known as Content Delivery Networks, and they are like warehouses at the edge of town. In order for CDN to deliver content to users, the last mile still needs to be traversed.

This is where a dispute between Comcast and Netflix came up.

Netflix accounts for upwards of 35 percent of all United States Internet traffic. Comcast felt that this large exchange of data over their network to the end user was extremely one sided and Netflix should pay to help increase bandwidth.

This isn’t unheard of. Network hops occur all the time and packets are usually swapped

one-to-one in a barter-like system. Occasionally, one network asks another network to compensate if packet swaps are one sided.

Netflix argued that the improved quality of video to ISP customers from a clearer stream is so valuable that they should not be charged for the imbalance of traffic on their networks.

Reed Hastings, CEO of Netflix said in a blog post on March 20, 2014 that a strong form of net neutrality is required to prevent ISPs from charging a toll for interconnection to services like Netflix.

“They must provide sufficient access to their network without charge,” Hastings said.

But the FCC rules last week did not prevent companies like Comcast from charging “tolls” to companies like Netflix. Instead it gave itself authority to “hear complaints and take appropriate enforcement action if necessary if it determines the interconnection activity of the ISPs are not just and reasonable.”

Verizon was so frustrated by the FCC, they released a press release in Morse code dated Feb. 26, 1934.

According to the press release, “the FCCs move is regrettable because it is wholly unnecessary. The FCC had targeted tools available to preserve an open Internet, but instead chose to use this order as an excuse to adopt 300- plus pages of broad and open-ended regulatory arcana that will have unintended negative consequences for consumers and various parts of the Internet ecosystem for years to come.”

Regardless of any consequences, good or bad, the average person may remember Feb. 26, 2015 less by the reclassification of the Internet, and more by news of Ilama’s on the loose and over exposed pictures of a blue and black dress.

Haverty said students should always pay attention to what local and federal governments are doing.

“Definitely something you want to watch. See what’s going to happen with it. It could eventually hit you in the pocketbook,” Haverty said.