

Hello, Can You See Me Now?

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The last couple of months I wrote about the data found on the Connect Iowa (www.connectiowa.org) website and presented detailed statistics for the county level. This month I want to move sideways and present a snapshot of the ways in which people are using the high speed broadband.



Each year Cisco (network equipment manufacturer) updates their Visual Networking Index (VNI) Usage research. This research attempts to measure the impact of visual networking (a combination of video,

social networking and advanced collaboration applications). In other words, what images or files are people sharing, where are they sharing, and what are they using to share them.

Highlights of the Cisco VNI Usage Results

Currently, the average broadband connection generates 14.9 GB of Internet traffic per month. This is up from 11.4 GB per month last year, an increase of 31%.

“Busy hour” traffic grew at a faster pace than average traffic, growing 41% since last year. This hour’s Internet traffic is 72% higher than Internet traffic during an average hour.

Peer-to-peer (music swapping, etc.) file sharing is now 25% of global broadband traffic, down from 38% last year, a decrease of 34%. The report states that peer-to-peer is still growing, but growing more slowly than visual networking and other advanced applications. Peer-to-peer has been surpassed by online video (YouTube, etc.) as the largest category.

Over one-third of the top 50 sites by volume are video sites. There is a high degree of diversity among the video sites in the top 50, including video viewed on gaming consoles, Internet TV, short-form user-generated video, commercial video downloads, and video distributed via content delivery networks. Before going further it’s worth mentioning that the Cisco website states, “Contrary to popular belief, none of the top 50 global web sites (by traffic volume) featured explicit adult content.”

Voice and video communications traffic, such as voice over IP (VoIP) and voice and video over instant messaging, is now six times higher than data communications traffic (email, instant messaging, instant messaging file transfer). Voice and video communications traffic has reached two percent of all traffic, up from less than one percent last year.

Online video fluctuates more than file sharing traffic. Online video’s volatility (defined as the spread of traffic volume during the course of the day) is 51% higher than that of file sharing. The peak video hour is 91% higher than the average video hour, while the peak file sharing hour is 64% higher than the average file sharing hour.

The top 1 percent of broadband connections is responsible for more than 20 percent of total Internet traffic. The top 10% of connections is responsible for over 60% of Internet traffic, worldwide.

In an average day, Internet “prime time” ranges from approximately 9:00 pm to 1:00 am around the world. This contrasts to broadcast TV prime time, which is generally from 7:00 pm to 11:00 pm. I would guess this shift is in direct connection with the average user age being much lower for those of the Internet.

In summary, it appears that the use of video and the sharing of video will continue to grow, thus placing more demand on what we should expect of our connection to the internet. If the 3 meg I wrote about is adequate today, will it be viewed as a dialup connection in five years?

In February, I will write about the regional taskforces and how counties can work to make sure that their local telephone companies are listening.

1 Cisco Visual Networking Index: Usage, October 25, 2010, http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/Cisco_VNI_Usage_WP.pdf