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Rapid Internet Traffic Growth Continues in U.S. and Around Globe

As nearly every indicator of economic growth plummets, the Net maintains its rise.

Internet traffic in the U.S. and around the globe in 2008 grew at an annual rate of between 50% and 60%. This compound pace of growth has remained fairly steady for the past half-decade. Year-end 2008 data show monthly U.S. Internet traffic was about 1.5 exabytes, a 10-fold increase since 2002. An exabyte is one million terabytes, or a billion gigabytes.

In previous research, we projected U.S. Internet and IP traffic to grow at a compound annual rate of around 56% through 2015. (See “[Estimating the Exaflood](#)”; “[Unleashing the ‘Exaflood’](#)”; and “[The Coming Exaflood.](#)”)

The architecture, capabilities, and uses of the Internet and associated communications networks, however, are themselves rapidly changing. A vast range of proliferating networks and nodes that transmit large amounts of data do not technically qualify as “the Internet.” The measured rise in “Internet” traffic, therefore, may understate the true growth of content traversing the world’s communications webs.

Content delivery networks, such as Akamai, Limelight, and data centers that cache content closer to end-users, help deliver static images and non-real-time video to PC and mobile broadband consumers. Although this content is real and valuable to consumers, creators, and distributors, much of this traffic does not traverse Internet backbone networks and thus does not figure into the most recent Internet traffic estimates. High capacity private networks connecting corporate offices, for example, are also proliferating and also do not directly factor into Internet traffic estimates. It may therefore be useful to think of the 50-60% growth figure as a baseline – not top-line – estimate of communications growth.

Meanwhile, wireless data is booming. 3G networks and rich visual displays on the iPhone and similar new devices from RIM, Samsung, LG, and HTC, have jolted the mobile market. The mobile Internet is real for the first time. Opera Software reports that in January 2009 its Mini mobile browser, with 20 million users, generated 122 terabytes, five-fold growth from January 2008.

Internet traffic growth is just one measure of the Net’s health. But it is an important one. Continued investment in network infrastructure – core, edge, last mile, data center, wireless, and cyber-security – is crucial to help all our industries become more efficient in tough times and, more importantly, to ignite the next wave of innovation and economic growth.

– Bret Swanson

