



Cisco Visual Networking Index Projects Global IP Traffic to Reach Over Half a Zettabyte⁽¹⁾ in Next Four Years

Sixfold Increase Between 2007 and 2012 Due Mainly to Video, Social Networking

SAN JOSE, Calif., June 16, 2008 - The Cisco® Visual Networking Index (VNI) Forecast for 2007-2012 was released today, providing key findings on a variety of consumer and business Internet Protocol (IP) networking trends driven largely by the increasing use of video and Web 2.0 social networking and collaboration applications. The combination of these technologies represents what is known as visual networking. Based on Cisco's analysis and the forecasts of independent analysts, the updated study is part of the company's ongoing effort to forecast the growth and usage of IP networking worldwide.

Cisco VNI projections indicate that IP traffic will increase at a combined annual growth rate (CAGR) of 46 percent from 2007 to 2012, nearly doubling every two years. This will result in an annual bandwidth demand on the world's IP networks of approximately 522 exabytes², or more than half a zettabyte. In the consumer market, the advent of rich online video communications and entertainment, as well as social networking, has greatly increased the impact of online video on the network. In 2012, Internet video traffic alone will be 400 times the traffic carried by the U.S. Internet backbone in 2000. Representative of this trend, Internet video has jumped from 12 percent of the global consumer Internet traffic in 2006 to 22 percent in 2007. Video on demand, IPTV, peer-to-peer (P2P) video, and Internet video are forecast to account for nearly 90 percent of all consumer IP traffic in 2012.

Global business IP traffic is forecast to grow strongly at a CAGR of 35 percent from 2007 to 2012. Increased broadband penetration in the small-business segment and the increased adoption of advanced video communications (such as Cisco TelePresence) in the enterprise are major drivers for business IP traffic growth. Business IP traffic will grow fastest in the developing markets and Asia-Pacific. In volume, North America will continue to have the most business IP traffic through 2012, followed by Asia-Pacific and Western Europe.

Additional key findings from the Cisco VNI Forecast include:

- Global IP traffic will reach 44 exabytes per month in 2012, compared to less than seven per month in 2007.
- By comparison, global IP traffic in 2002 was five exabytes which means that the volume of IP traffic in 2012 will be 100 times as large.
- Monthly global IP traffic in December 2012 will be 11 exabytes higher than in December 2011, a single-year increase that will exceed the amount by which traffic has increased in the eight years since 2000.
- Mobile data traffic will roughly double each year from 2008 through 2012.

"The broad and increasing adoption of visual networking is having a significant impact on IP traffic growth for both consumer and business services markets worldwide," said Suraj Shetty, vice president of service provider marketing for Cisco. "Until just a few years ago, 'exabyte' was an unheard-of term. However, because of the massive growth we're seeing, by 2012 we will have to reorient our vocabulary once again, as the metric that we need then will be the zettabyte."

The [Cisco Visual Networking Index Forecast and Methodology, 2007-2012](#) and the associated updated [Cisco "Approaching the Zettabyte Era" White Paper](#) are part of the [Cisco Visual Networking Index](#), an ongoing Cisco initiative designed to provide quantitative and qualitative information regarding trends in IP network demand and usage.

⁽¹⁾ A zettabyte is equal to: 1 trillion gigabytes; 1,000 exabytes; 250 billion DVDs.

⁽²⁾ An exabyte is equal to: 1 billion gigabytes; 1,000 petabytes; 250 million DVDs.