



the Internet is for  
everyone

## When the Internet sneezes, the World Wide Web catches a cold...

Leslie Daigle, Chief Internet Technology Officer, ISOC

W3C Technical Plenary week, Media Breakfast  
November 3, 2009.



InternetSociety.org

## The Internet Society

- Founded in 1992
- A global community with
  - 100 organization members
  - over 90 chapters around the world
  - tens of thousands individual members
- Focused on promoting and sustaining the Internet as a platform for innovation and economic development
- One area of focus is promoting the continued health of the Internet's technical architecture
- The Internet Society is part of the overall “Internet Ecosystem” of organizations building standards, managing resources, collaborating.



## The Internet sneeze...

- Running out of IPv4 addresses
  - last allocation from Internet Assigned Number Authority (IANA) – predicted for October 2011
  - last allocation to ISP (anywhere in the world) predicted for February 2013
- Lots of IPv6 addresses
  - It's not going to be an IPv6 Internet before the last IPv4 address is handed out
- Making do with the IPv4 addresses we have
  - More Network Address Translators (NATs)
  - NATs in the network (not at the edges)

## The WWW cold

- IP Affinity breaks!
  - A recent roundtable of industry leaders we held included representatives from Google, Yahoo, Akamai, Netflix, and Comcast
  - Discussed impending impact on
    - geolocation, geoproximity
    - management of distribution of copyrighted materials
  - See: [http://www.isoc.org/educpillar/resources/docs/ipv6\\_200905.pdf](http://www.isoc.org/educpillar/resources/docs/ipv6_200905.pdf)
- Multiple open streams breaks!
  - Sharing addresses => fewer ports => AJAX apps have troubles
  - Poor performance of web pages, eg Google maps

## Have a tissue?

- Major ISPs and content providers are including IPv6 in their current deployment plans
  - Wireless broadband (LTE) has IPv6 “baked in”
  - Large countries, new economies are embracing IPv6 (India, China)
  - IPv6 is the way forward, but we’re in for a bumpy transition
- 
- <http://isoc.org/ipv6>

