

Introducing IPv6 in Luxembourg – an end-user perspective

Patrick Vande Walle
Internet Society Luxembourg

Neumunster Abbey
28 January 2009

How important for the end-user ?

- The Internet is global. No IPv6 connectivity means no access to IPv6 services worldwide
 - Not only web, but also e-mail, file-sharing and forthcoming IPv6-based services

Impact for the end-user

- Customer premises equipment (CPE): router/modem: expected lifetime: 5 years
 - Replacing the legacy needs to be done ASAP
- Operating systems: most recent ones do support IPv6, but not always in an useful way (Windows Vista)

Impact for the end-user (-2)

- Should the user care ?
 - Yes, to a point. Make sure his environment is ready
 - Actually, no. Internet access is often sold as a « black box », with everything preconfigured by ISP, especially with triple play services
- Should the user notice ?
 - No. He is purchasing a global package and relies on ISP

Strategy

- ISPs: Start right now preparing for IPv6 roll-out.
 - Include IPv6 requirements in equipment procurement and network architecture
 - Start offering 6to4 tunnelling mechanisms in local infrastructure AND make sure CPE devices can use them.
 - Sign efficient peering and transit agreements for IPv6

Strategy (-2)

- ISPs: Think ahead
 - Respect standards
 - Broadband Forum WT177 (draft), TR-101
 - IETF Draft CPE: draft-wbeebee-ipv6-cpe-router-03
 - Plan for possible shared network access with other ISPs (NTT is in trouble with this)

Strategy (-3)

- Personal advice: assign more than a /64 to DSL sites, or they will be using NAT again in the future.
 - /64 cannot be subnetted, and there may a need for subnetting for SOHO sites in the future.
 - RFC 3177 says /48 (but mainly obsolete)
 - RIPE Community consensus is gearing towards /56

Thank you !

More about ISOC:

www.isoc.org

www.isoc.lu

www.isoc.lu/standards/ipv6-faq

info@isoc.lu



© 2009 ISOC Luxembourg ASBL

www.isoc.lu

