Background

- Very distributed organisation

- Nearly 100 staff based in (at least) 23 countries on every continent

- Two main offices in Reston, USA and Geneva, Switzerland

- Regional offices in Amsterdam, Montevideo and Singapore

- Many staff are home-based

- Staff often highly tech-savvy

- Tends to be a MacOS X & iOS environment
IPv6 infrastructure

- Main offices in Reston and Geneva run IPv6 internally
  - Reston has native IPv6 connection to Internet
  - Geneva uses tunnelled IPv6 connection to Internet as ISP does not offer native IPv6 at affordable price
  - Amsterdam has native IPv6 connection via NLnet Labs
  - Montevideo probably has IPv6 connection as co-located with LACNIC.
  - Singapore possibly doesn’t have IPv6 connection as managed office space.
IPv6 external services

- Web servers support native IPv6

- ISOC Connect Platform used for community collaboration
  - Utilises gateway to support IPv6 connectivity
  - Key parts of platform such as CSS don’t support IPv6
  - Certain content will not display properly on IPv6 only connection

- Zoom Conferencing Platform
  - Used internal and community meetings
  - Doesn’t currently support IPv6, slated for ‘sometime in 2016’
IPv6 internal services

- ISOC has a diverse range of tools – often on departmental basis
  - Office 365, mostly supports IPv6 but not all features
  - Box, no IPv6 support and no specific implementation dates
  - Drupal & Wordpress, certain modules don’t handle IPv6
  - Basecamp, no IPv6 support
  - Skype, IPv6 support in Business Edition only?
  - Jabber/Adium, does support IPv6
ISOC IPv6 policy

- Officially our policy is use IPv6 supported tools, but...
  - Our hosting provider doesn’t support IPv6. Yes alternatives are possible, but contractual and personnel considerations
  - Legacy systems that need to be migrated/deprecated
  - ISOC staff have habit of introducing new tools to solve a particular problem at a particular time
  - Many specialist tools simply don’t have IPv6 support, and vendors claim no demand to add it
  - Home workers often can’t get IPv6, or not straightforward to obtain
Prospects for IPv6

- ISOC (like many) is highly dependent on the state of global connectivity

- Global IPv6 capability averages somewhere up to 10% (Google), but ranges from 0% (Ethiopia) to 40% (Belgium)

- I work in Amsterdam, Brisbane and Oxford
  - Virgin Media, currently no support for IPv6 and no timetable
  - iiNet (via NBN), no support for IPv6, although had 6rd trial
  - Ziggo (formerly UPC), are actively rolling out IPv6 ;-)

- Mobile connectivity is increasingly important
Go6lab

- ISOC supports the Go6lab ([https://go6lab.si](https://go6lab.si)) in Slovenia
- Actively testing IPv6 implementations + DNSSEC & DANE
- Hosting NAT64 solutions for public testing
- Other tools and measurements available
Thank You!

Kevin Meynell
Deploy360@isoc.org