



ISOC State of IPv6 Readiness

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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**



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

Thank You!

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