



IPv6 Update for DREN

August 16, 2011

By Tim Quinn

U.S. Department of the Interior

Strategy

- Developed an overall transition plan and updated in April 2011 based on a dual stack implementation.
- Appointed a transition manager (Stu Mitchell – IPv6 Task Force Technical committee chair) and participate in the IPv6 Task Force meetings.
- Bureau of Indian Education (BIE) uses IPv6 for network management (since early 2010).
- Implement test servers. ipv6.bie.gov has been operational since January 2011
- Participate in meaningful testing projects, such as World IPv6 Day.
 - Successfully provided access to www.doi.gov and www.nps.gov, but had to turn off IPv6 because CDN didn't support IPv6
 - ipv6.doi.gov is still up for testing
- Developed a specific plan for the OMB 2012 public server/service deadline and beginning to integrate with IT Transformation programs.
- Meeting with acquisition bureau heads to raise awareness.
- Outside-In approach as part of future network optimization project
- Will use USGv6 to help validate TIC IPv6 functionality.



Acquisition

- Acquiring IPv6 capable products through normal life cycle replacement.
- Information Technology community
 - Need to raise awareness
 - Provide guidance about how to purchase IPv6 capable products
 - USGv6 well meaning, but hard to implement
- Acquisition community
 - Need to raise awareness
 - Different purchasing methods (e.g. credit cards)
 - Views IPv6 as a ‘technical specification’, but we need to communicate what to look for in a procurement package.
- Attempt to define ‘simple’ and ‘complex’ purchases.
 - Simple purchases will depend on the vendor community marking their products ‘IPv6 Ready’ or equivalent
 - Complex purchases will rely on enterprise based SME to develop profiles and interact with vendors to obtain SDOCs
- Partner with your Acquisition organization. They are helpful and willing, but will they don’t care about IPv6, per se. It’s just another technical spec.



Challenges

- Acquisition
 - Raising awareness of the IPv6 requirements in the FAR
 - USGv6 (NIST 500-267) is complicated to incorporate into DOI's procurement procedures
- Architecture
 - Bureau based networks and complex bureau connectors
 - Security devices not validated for IPv6
- Funding – no funding available for IPv6
- Vendors
 - IPv6 capabilities generally lag behind IPv4
 - Content Distribution Network was not able to support IPv6 Day requirements
 - Contracts will need modification to include IPv6 requirements
 - Our telecommunication vendor is very cooperative and willing to help
- Culture – no ROI for IPv6, why do we need to do this, just a technical spec, etc.



- The Department of the Interior plans to add IPv6 to the environment, instead of ‘transitioning’ to an all IPv6 network.
- Encourage agencies to work with the IPv6 Task Force and get involved in the subcommittees.
- Vendors should get involved with ACT-IAC as a way of understanding priorities and gauge government needs.
- Please contact Tim Quinn or Stu Mitchell for further information.



Questions?

