



# IPv6 Update for DREN

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# 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](http://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](http://www.doi.gov) and [www.nps.gov](http://www.nps.gov), but had to turn off IPv6 because CDN didn't support IPv6
  - [ipv6.doi.gov](http://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?

