OARnet IPv6 Update

April 9th, 2008 Feb 11th, 2009

This slide is not an IPv6 primer...

- The "next" Internet Protocol
- It *will* replace IPv4.. eventually..
 - not this decade, maybe the next?
 - the only constant is change
- Addresses: 128-bit vs 32-bit
 - Written as colon-delimited 16-bit hexadecimal blocks
 - 2610:A8:18E0:4C53::1
- Incompatible with IPv4
- Can exists side-by-side: dual-stack

Status

- OARnet has /32 PI space from ARIN
- Deployed and functioning since Feb 2008
- Over 14 dozen backbone interfaces addressed
- 1,700 IPv6 unicast routes in DFZ
 Internet2 R&E and commodity
- Response has been tepid...

Who's in the water..

- 2/2008 NASA Glenn Research Center
- 3/2008 College of Wooster

Spring Break Summer Break Winter Break

- 1/2009 Oberlin College
- 2/2009 <<your school here>>

Address Allocations

- Allocations available
 - just open a ticket with OARnet NOC
- Start with a single /48
 - Provides 65,536 individual /64's
 - Contiguous /48's are reserved for each member

IPv6 Workshops

- OARnet provides support services for Internet2 workshops: http://www.internet2.edu/workshops/
 - IPv4 multicast, IPv6 unicast & multicast
 - cost-recovery model
- IPv6 unicast workshop
 - students design and set up a functioning IPv6 network
 - configure internal and external routing
 - connect to the global IPv6 internet
 - but wait, there's more!

Recent Workshops

- Texas A&M University (last week, 2/2009)
- University of Connecticut (12/08)
- Merit Networks (11/08)
- Georgia Tech (9/08)
- UC Irvine (6/08)
- South Dakota State University (5/08)

Interest in workshops?

- Gauge interest from OARnet members

 hosted at OARnet, or your campus
- IPv6
- IPv4 Multicast
- Contact: workshops@internet2.edu

Summary

- IPv6 is deployed and running
- Ancillary services *still* coming along (DNS, etc)
- Address allocations available
- Interest in IPv6 workshops?

Thank you.

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