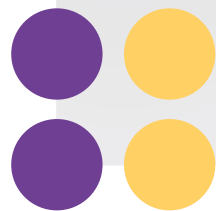
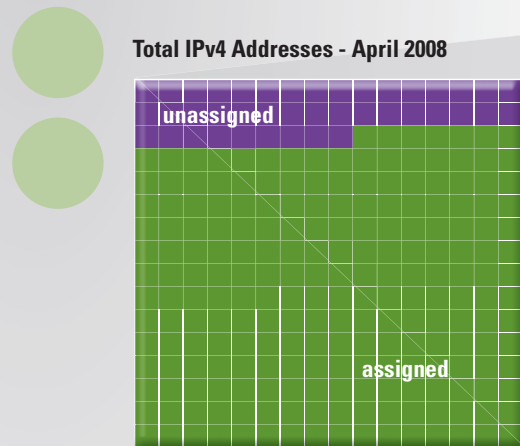
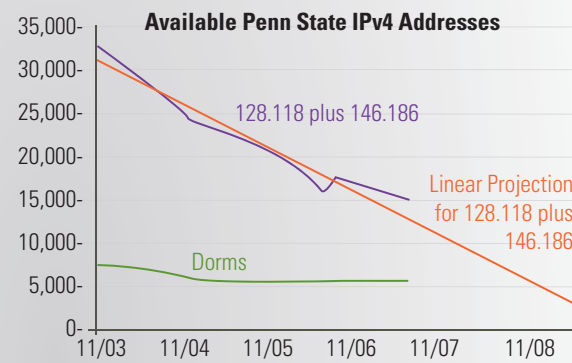


The Problem:

IPv4 addresses are running out.

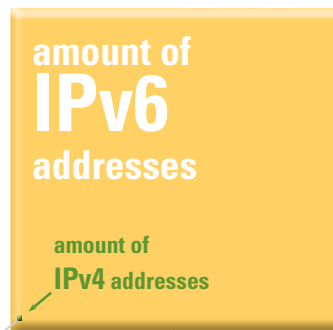


The Solution:

IPv6

Internet Protocol version 6

128-bit addressing leaves plenty of space for future growth.



IPv6 addresses can look like this:
2610:0008:6800:0001:0000:0000:0000:000a

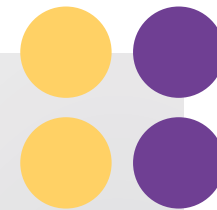
and abbreviate to this:
2610:8:6800:1:0:0:a

or this:
2610:8:6800:1::a

Penn State's IPv6 address range is
2610:8::/32

Penn State is already using IPv6:
Web: <http://wikispaces.psu.edu/>
DNS and NTP: otc2.psu.edu

- So are other Internet2 Institutions:
- Georgia Institute of Technology
 - Indiana University
 - Ohio University
 - Penn State
 - Portland State University
 - Princeton University
 - University of California, Berkeley
 - University of California, San Diego
 - University of Delaware
 - University of Illinois, Urbana-Champaign
 - University of Iowa
 - University of Notre Dame
 - University of Oregon
 - University of Pennsylvania
 - University of Rhode Island
 - University of South Florida
 - Wichita State University
 - Worcester Polytechnic Institute



Get Ready Now!

Deploy IPv6 by 2011.

- Use IPv6-capable interfaces for development.
- Leave room for IPv6 addresses in database and form fields: 39 characters vs. 15.
- Update your validation code.
- Note that IPv6 addresses contain colons, not periods, and may contain letters A-F.
- Add IPv6 addresses to IP-based ACLs.

For more info and to request an IPv6 address:

<http://tns.its.psu.edu/services/IB/IPv6.html>

