Internet Engineering Task Force: "We make the net work"

Russ Housley, IETF Chair
The IETF developed IPv6 when it became clear that the IPv4 address space was not sufficient

- IPv6 is defined in RFC 1883, December 1995
- Associated specifications stable in early 2000s
- IPv4 address is 32 bits → IPv6 address is 128 bits

The transition strategy was called “Dual Stack”

- Add support for IPv6 to devices until every device is reachable, then can stop supporting IPv4
- More than a decade to do so

This strategy has worked where it was used

Problem: until the IPv4 addresses are actually scarce, there is little economic incentive to actually deploy IPv6
IETF continues to assist

- Developing new tools are for new deployment scenarios, while existing tools support other cases

- Two new scenarios:
  1. Unilateral IPv6 deployment
  2. IPv6-only provider networks while still providing IPv4 connectivity to customers

Expecting results before the end of 2009