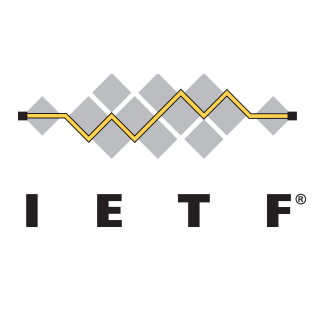


Internet Engineering Task Force: "We make *the net work*"

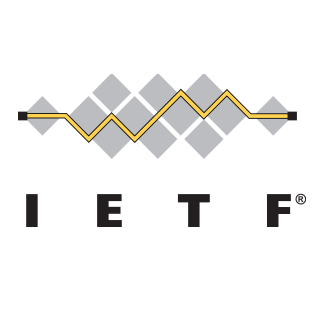
Russ Housley, IETF Chair





IETF: Home of IPv6

- 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