IETF 99
DHCPv6 Deployment Update

Background

- DHCP is essential to how DOCSIS and other cable technologies

  - DHCP is the primary protocol used to bootstrap devices that are used on cable networks

  - PacketCable, eRouter, etc.

- Since ~2005 this includes DHCPv6

Deployment update

- In large cable networks DHCPv6 is used for the following:
  - Cable modems (99% are IPv6 only)
  - eRouters (~90% and growing are dual stack enabled)
  - Set-top Boxes (99% are IPv6 only)

Client distribution

- Cable modems and other embedded devices often utilize home grown DHCPv6 implementations

- Some utilize various open source implementations
  - This includes retails, customer owned implementations

- Set-top boxes also utilize open source
  - dibbler

Observations

- Stable, quality implementation

- Binary size

- Configuring DOCSIS and DSG DHCPv6 options

- Protocol behavior

- Futures (stateless DHCPv6, etc.)