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.)