DHCPv6 bis Issues Needing Consensus

IETF-93 DHC WG, July 23, 2015

Status

- We continue to work on document
 - Ticket count dropping
 - But still have plenty outstanding
- We meet virtually first Wed each month and at IETF meetings when possible
- · We have a few issues we want WG input on
 - We have proposal for each
 - We will confirm any "decisions" on ML

ORO (#18 & 81)

- ORO Mandatory
 - Client MUST include (SOL_MAX / INFO_MAX)
 - However, server MUST NOT drop messages without
- Options in ORO
 - All DHCPv6 options client is willing to receive EXCEPT those clearly part of protocol (IA_*, IAADDR/IAPREFIX, Status Code, ...)
 - Includes encapsulated options (i.e., softwire MAP, ...)
 - Ted to formulate text and circulate it to WG

Lifetime Hints (#148)

- Lifetime hints can cause issues if honored by servers and poorly implemented in clients
 - Client might send same values as obtained earlier or, even worse, remaining time
 - Clients can always send Release
- Proposal: Drop lifetime hints; servers
 SHOULD/MUST ignore any supplied lifetimes
 (clients SHOULD NOT send)

T1/T2 Times (#131)

- If server unable to extend lifetimes on binding or remaining time is short, what T1/T2 times to send?
 - Case: Preferred lifetime is 0 (or 'small'), valid is > 0 (or small)
 - Server cannot send 0 T1/T2 as that means client choses value or sending small values could result in excess renewals (i.e., 30 seconds, 15 seconds, 7 seconds, 3 second, 1 second)

Proposal:

- Server sends T1 = T2 = valid lifetime
- Means client should Rebind or Solicit when lifetime expires

Reply Processing (#140)

- Reply message processing assumes top level Status-Code option (non-success) means failure and ignores other [most] options returned by server
- Proposal: Restructure the Reply message processing to say that the client processes everything but the top level status code and then checks the status code and deals with it
 - Process any IA_* options
 - Process any SOL_MAX_RT/INFO_MAX_RT options
 - **–** ...
- Note: We are only talking about "valid" Reply messages

Prefix Delegation Hints (#114)

- Issue raised at IET-92 (Dallas), but few details
- New <u>draft-cui-dhc-dhcpv6-prefix-length-hint-issue-00</u> draft
 - Describes problem cases
 - Suggests solution
- Please read draft and discuss on ML
- 3315bis coauthors will monitor to determine next steps
 - Let draft proceed on its own
 - Incorporate changes into 3315bis document
 - Intent is still to leave to server policy with PD length hints honored, but describe expected behavior if supported