DHCP4o6 Bulk & Active Leasequery

draft-cui-dhc-dhcp4o6-bulk-active-leasequery-01
Yong Cui, Zilong Liu, Cong Liu, Yiu Lee
Presenter: Tianxiang Li

Motivation

- DHCPv4 over DHCPv6 [RFC7341] provides a mechanism for obtaining IPv4 configuration dynamically in IPv6 networks.
- In some situations, may also contain IPv6 information.
 - E.g. Source address option

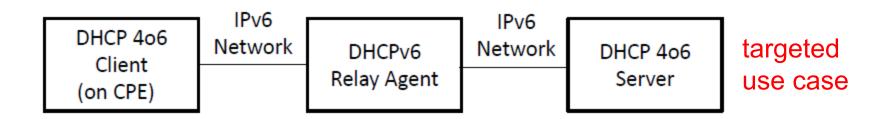
Current protocols:

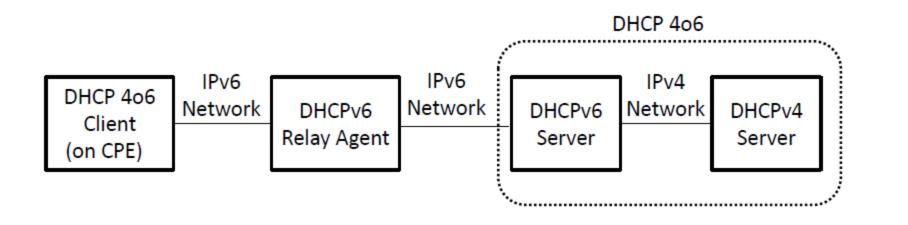
- DHCPv4/DHCPv6 Active/Bulk Leasequery can only carry DHCPv4/DHCPv6 information separately.
- DHCPv4/DHCPv6 information cannot be correlated (no DUID).

Requirement:

 Provide Active/Bulk Leasequery for DHCP4o6, to carry related DHCPv6 lease information along with the DHCPv4 lease information.

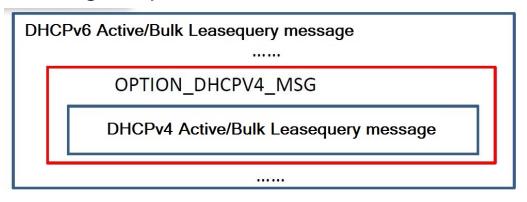
Applicability



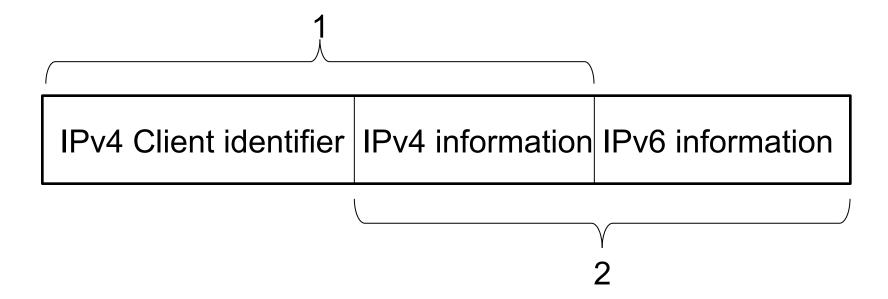


Solution

- Extend DHCPv6 Active/Bulk Leasequery to also carry DHCPv4 Active/Bulk Leasequery information
- Similar architecture to DHCP4o6
 - Using OPTION_DHCPV4_MSG (RFC7341) as container
 - DHCPv6 Active/Bulk Leasequery messages contains OPTION_DHCPV4_MSG option
 - OPTION_DHCPV4_MSG option contains DHCPv4 Active/Bulk Leasequery message
 - No new messages/options defined



DHCP4o6 server behavior



- 1. Server first gets IPv4 lease information according to the client identifier in the DHCPv4 leasequery message
- 2. Server gets IPv6 information according to the IPv4 information

Next Step

- Any comments?
- Comments and reviews are appreciated.
- Thank you