

DHCP Relay Source Port Extension

draft-shen-dhc-client-port-02
IETF 96, Berlin

Problems

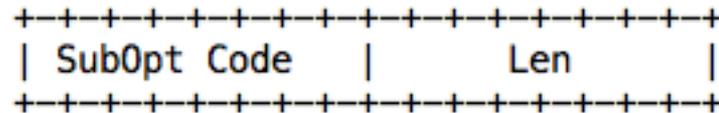
- Devices such as WLAN Controller may handle large number of APs
- The controller may launch multiple daemons to process the load, DHCP Relay is one of the functionalities
- Multiple processes on a controller need to communicate with DHCP server or servers. They can not listen on the same UDP port (on UDP port 67, or port 547 of DHCPv6)

Relax Source Port

- DHCP client does not need to change
- This problem is particular to large scale DHCP relay implementations
- This extension allows DHCP relay to use and listen on the UDP source port other than port (67/547) when sending/receiving message with DHCP servers
- This extension requires the DHCP server to use the same UDP port when replying back to the DHCP relay

DHCP Sub-Option

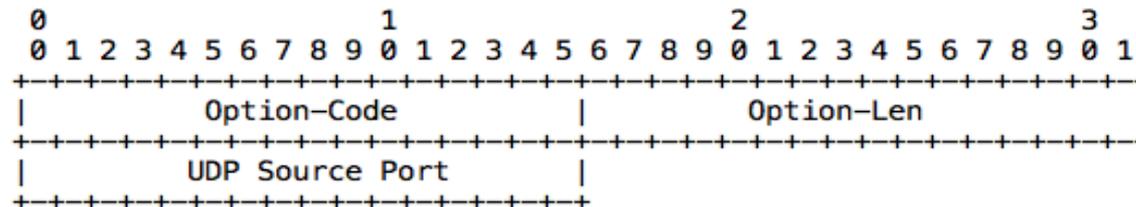
- DHCP Relay Agent Source Port Sub-option



- When DHCP server receives a message with this sub-option, it **MUST** remember the inbound message UDP source port from relay agent and use this same port for replying back to the same relay agent

DHCPv6 Option

- DHCPv6 Relay Agent Source Port Option



- Option-Len is 2 octets
- DHCPv6 may have cascading relay agents. The server or relay agents when forwarding downstream message, need to use the UDP port in this option for the downstream relay