###### L3 DHCPv4 Relay Setup

***Objective:***

Objective is to setup L3 DHCP Relay (IPv4 only).

VLAN 51 VLAN 52



192.168.2.15/24

192.168.2.14/24

192.168.1.16/24

51xx,3 5170

DHCP L3 DHCP Server

192.168.1.101

***Procedure:***

* Create the classifier and flow points and forwarding domains on the L3 DHCP Relay :

***#Classifiers***

config

classifiers classifier vlan51 filter-entry vtag-stack vtags 1 vlan-id 51

classifiers classifier vlan52 filter-entry vtag-stack vtags 1 vlan-id 52

exit

***#Forwarding-domains***

config

fds fd FDRelayClient mode vpls fds fd FDRelayServer mode vpls

exit

***#Flow-points***

config fps

fp fp15

fd-name FDRelayClient logical-port 15

classifier-list-precedence 7 stats-collection on classifier-list vlan51

mtu-size 2000

egress-l2-transform push-vid-51 vlan-stack 1

push-tpid tpid-8100 push-vid 51

exit exit exit exit

fps

fp fp16

fd-name FDRelayServer logical-port 16

classifier-list-precedence 7 stats-collection on classifier-list vlan52

mtu-size 2000

egress-l2-transform push-vid-52 vlan-stack 1

push-tpid tpid-8100 push-vid 52

exit exit exit

***#IP interfaces***

oc-if:interfaces interface if15 config name if15 vrfName default cn- if:type ip mtu 2000 admin-status true underlay-binding config fd FDRelayClient

oc-if:interfaces interface if15 ipv4 addresses address 192.168.2.15 config ip 192.168.2.15 prefix-length 24

oc-if:interfaces interface if16 config name if16 vrfName default cn- if:type ip mtu 1500 admin-status true underlay-binding config fd FDRelayServer

oc-if:interfaces interface if16 ipv4 addresses address 192.168.1.16 config ip 192.168.1.16 prefix-length 24

* Configure L3 Relay:

config

l3-relay-agent instance toi\_dtw admin-enabled true

dhcp-server-addresses 192.168.1.101

ip-interfaces if15

flow-points fp15 flow-point-trusted true

cid-string cid-client

ip-interface-enabled true ip-interface-trusted true exit

ip-interfaces if16

flow-points fp16 flow-point-trusted true cid-string cid-server

ip-interface-enabled true ip-interface-trusted true

* Display L3 Relay Configuration:

5170-010> show dhcpl3relay

+---- DHCP L3 RELAY CONFIGURATION +

| Name | Value |

+ + +

| Instance | toi\_dtw |

| Admin State | Enabled |

| Circuit ID Type | String |

| Remote ID Type | String |

| Remote ID String | rid-server |

| Option 82 | On |

| DHCP Server(s) | 192.168.1.101 |

| IP Interface | if15 |

| Circuit ID String | cid-client |

| Admin State | Enabled |

| Trust State | Trusted |

| IP Interface | if16 |

| Circuit ID String | cid-server |

| Admin State | Enabled |

| Trust State | Trusted |

+ + +

+ DHCP L3 RELAY STATUS +

| Name | Value |

+ + +

| Instance | toi\_dtw |

| Status Message | Interface if15 is not configured with an IPv4 address |

| Operational State | Disabled |

+ + +

Test Case Results:

Passed: Yes No Verified by Date/Time Comments