###### WebGUI – Enable LDP

***Objective:***

Validate the enabling of LDP as MPLS transport tunnel using WebGUI.

***Procedure:***

* From CLI, check for any existing provisioning of LDP.

Show ldp route Show ldp lsp

Show ldp sessions Show ldp adjacencies

5162-004> show ldp route

+ LDP ROUTES STATE +

| Prefix | Next Hop | IF Name | Path Type |

+ + + + +

| | | | |

+ + + + +

5162-004> show ldp sessions

+ LDP SESSION STATE +

| Peer Address | Interface | Role | State | KeepAlive | Targeted LDP |

+ + + + + + +

| | | | | | |

+ + + + + + +

5162-004> show ldp lsp

+

LDP LSP STATE +

| FEC | Nexthop | State | Label | Req ID | Attr |

+ + + + + + +

| | | | | | |

+ + + + + + +

5162-004> show ldp adjacencies

+ LDP ADJACENCY STATE +

| | | Hold | | |

| IP Addr | Interface | Time (s) | LDP Identifier | Type |

+ + + + + +

| | | | | |

+ + + + + +

* On WebGUI, on navigation pane on left hand side, select LDP.
* On WebGUI, select Configure to configure an LDP instance. Click Save.

Graphical user interface, application

Description automatically generated

* After LDP instance provisioning, attach IP interfaces to the LDP instance. Click Save.

Graphical user interface, application

Description automatically generated

* Validate that the interfaces have been created on WebGUI.

Graphical user interface, text, application

Description automatically generated

* Enable MPLS on the LDP interfaces by clicking on MPLS in navigation pane on the WebGUI. Then click on Attach/Detach Interface. Enable label switching on selected interfaces. Click Save.

Graphical user interface, application

Description automatically generated

* Validate the MPLS and LDP sessions on CLI.

Show ldp adjacencies Show ldp sessions Show mpls ftn-table

Show mpls forwarding-table

5162-004> show ldp adjacencies

+ LDP ADJACENCY STATE +

| | | Hold | | |

| IP Addr | Interface | Time (s) | LDP Identifier | Type |

+ + + + + +

| 172.16.18.2 | if18 | 15 | 66.66.66.140:0 | LINK HELLO |

| 172.17.5.2 | if5 | 15 | 26.26.26.235:0 | LINK HELLO |

+ + + + + +

5162-004> show ldp sessions

+

LDP SESSION STATE +

| Peer Address | Interface | Role | State | KeepAlive | Targeted LDP |

+ + + + + + +

| 66.66.66.140 | if18 | Passive | OPERATIONAL | 30 | No |

| 26.26.26.235 | if5 | Active | OPERATIONAL | 30 | No |

+ + + + + + +

5162-004> show mpls ftn-table

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+

MPLS FTN TABLE

| | | FTN | | Oper | Admin | | | Label | | |

| Owner | FEC | ID | Row Status | Status | Status | Action Type | OpCode | In | Out | Out Intf | Next Hop |

+ + + +

+ + + +

+ + + + +

| LDP | 26.26.26.235/32 | 2 | active | UP | UP | Redirect to LSP | PUSH | - |

3 | if5 | 172.17.5.2 |

| LDP | 66.66.66.140/32 | 1 | active | UP | UP | Redirect to LSP | PUSH | - |

3 | if18 | 172.16.18.2 |

| LDP | 172.17.4.0/30 | 3 | active | UP | UP | Redirect to LSP | PUSH | - |

3 | if5 | 172.17.5.2 |

+ + + +

+ + + +

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5162-004> show mpls forwarding

+ +

| Codes: > - installed FTN, \* - selected FTN, p - stale FTN, B - BGP FTN, K - CLI FTN, |

| L - LDP FTN, R - RSVP-TE FTN, S - SNMP FTN, I - IGP-Shortcut, |

| U - unknown FTN, T - MPLS-TP Map FTN, O - SR-OSPF FTN, |

| i - SR-ISIS FTN, k - SR-CLI FTN |

+ +

+ MPLS FORWARDING TABLE +

| | | FTN | | Label | | |

| Code | FEC | ID | LSP-Type | In | Out | Out Intf | Next Hop |

+ + + + + + + + +

| > L | 26.26.26.235/32 | 2 | LSP\_DEFAULT | - | 3 | if5 | 172.17.5.2 |

| > L | 66.66.66.140/32 | 1 | LSP\_DEFAULT | - | 3 | if18 | 172.16.18.2 |

| > L | 172.17.4.0/30 | 3 | LSP\_DEFAULT | - | 3 | if5 | 172.17.5.2 |

+ + + + + + + + +

Test Case Results:

Passed: Yes No Verified by Date/Time Comments