

Show LDP Commands

adv-adj-addr-only

Syntax	adv-adj-addr-only
Context	show>router>ldp
Description	This command displays the local interfaces used to establish hello adjacencies with an LDP peer.

Output

```
*A:SR4>config>router>ldp>peer-params# peer 110.20.1.1 adv-adj-addr-only
*A:SR4>config>router>ldp>peer-params#
*A:SR4>config>router>ldp>peer-params# show router ldp session
- session [<ip-addr[:label-space]>] [session-type] [state <state>] [summary|detail]
- session [<ip-addr[:label-space]>] local-addresses [sent|rcv] [ip-addr <ip-
address>]
- session [<ip-addr[:label-space]>] statistics [packet-type] [session-type]
<ip-addr[:label-sp*> : ip-addr - a.b.c.d
label-space - [0..65535]
<statistics> : keyword - display statistics
<packet-type> : hello|keepalive|init|label|notification|address - keywords
<session-type> : link|targeted|both
<state> : up - Established
down - Initialized, OpenRecv, OpenSent, Nonexistent
<summary|detail> : summary|detail
<local-addresses> : keyword
<sent|rcv> : keyword
<ip-address> : a.b.c.d

*A:SR4>config>router>ldp>peer-params# show router ldp session 110.20.1.1 local-
addresses
=====
LDP Session Local-Addresses
=====
-----
Session with Peer 110.20.1.1:0, Local 110.20.1.3:0
-----
Sent Addresses: 6.2.6.3 6.2.7.3 6.2.49.3 6.2.57.3
110.20.1.3 200.0.0.3
Recv Addresses:
=====
*A:SR4>config>router>ldp>peer-params# peer 110.20.1.1 no adv-adj-addr-only
*A:SR4>config>router>ldp>peer-params# show router ldp session 110.20.1.1 local-
addresses
=====
LDP Session Local-Addresses
=====
-----
Session with Peer 110.20.1.1:0, Local 110.20.1.3:0
-----
Sent Addresses: 1.2.11.3 1.2.12.3 1.2.111.3 1.2.121.3
6.2.6.3 6.2.7.3 6.2.49.3 6.2.50.3
6.2.57.3 6.2.58.3 6.2.61.3 6.2.71.3
10.100.40.3 34.34.34.34 35.35.35.35 60.60.60.60
71.17.71.1 88.88.87.1 88.88.88.1 88.88.89.1
104.104.0.3 104.104.1.3 104.104.2.3 104.104.3.3
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Show Commands

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104.104.4.3 104.104.5.3 104.104.6.3 104.104.7.3
104.104.8.3 104.104.9.3 104.104.10.3 104.104.11.3
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104.104.22.3 104.104.23.3 104.104.24.3 104.104.25.3
104.104.26.3 104.104.27.3 104.104.28.3 104.104.29.3
104.104.30.3 104.104.31.3 104.104.32.3 104.104.33.3
104.104.40.3 104.104.41.3 104.104.42.3 104.104.43.3
104.104.44.3 104.104.45.3 104.104.46.3 104.104.47.3
104.104.48.3 104.104.49.3 104.104.50.3 104.104.51.3
104.104.52.3 104.104.53.3 104.104.60.3 104.104.61.3
104.104.62.3 104.104.63.3 104.104.64.3 104.104.65.3
104.104.66.3 104.104.67.3 104.104.68.3 104.104.69.3
104.104.70.3 104.104.71.3 104.104.72.3 104.104.73.3
110.3.1.51 110.3.2.51 110.3.3.51 110.3.4.51
110.3.5.51 110.3.6.51 110.3.7.51 110.3.8.51
110.3.9.51 110.3.10.51 110.3.11.51 110.3.12.51
110.3.13.51 110.3.14.51 110.3.15.51 110.3.16.51
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110.3.29.51 110.3.30.51 110.3.31.51 110.3.32.51
110.3.33.51 110.3.34.51 110.3.35.51 110.3.36.51
110.3.37.51 110.3.38.51 110.3.39.51 110.3.40.51
110.3.41.51 110.3.42.51 110.3.43.51 110.3.44.51
110.3.45.51 110.3.46.51 110.3.47.51 110.3.48.51
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110.3.57.51 110.3.58.51 110.3.59.51 110.3.60.51
110.3.61.51 110.3.62.51 110.3.63.51 110.3.64.51
110.3.65.51 110.3.66.51 110.3.67.51 110.3.68.51
110.3.69.51 110.3.70.51 110.3.71.51 110.3.72.51
110.3.73.51 110.3.74.51 110.3.75.51 110.3.76.51
110.3.77.51 110.3.78.51 110.3.79.51 110.3.80.51
110.3.81.51 110.3.82.51 110.3.83.51 110.3.84.51
110.3.85.51 110.3.86.51 110.3.87.51 110.3.88.51
110.3.89.51 110.3.90.51 110.3.91.51 110.3.92.51
110.3.93.51 110.3.94.51 110.3.95.51 110.3.96.51
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110.3.109.51 110.3.110.51 110.3.111.51 110.3.112.51
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110.3.125.51 110.3.126.51 110.3.127.51 110.3.128.51
110.3.129.51 110.3.130.51 110.3.131.51 110.3.132.51
110.3.133.51 110.3.134.51 110.3.135.51 110.3.136.51
110.3.137.51 110.3.138.51 110.3.139.51 110.3.140.51
110.3.141.51 110.3.142.51 110.3.143.51 110.3.144.51
110.3.145.51 110.3.146.51 110.3.147.51 110.3.148.51
110.3.149.51 110.3.150.51 110.3.151.51 110.3.152.51
110.3.153.51 110.3.154.51 110.3.155.51 110.3.156.51
110.3.157.51 110.3.158.51 110.3.159.51 110.3.160.51
110.3.161.51 110.3.162.51 110.3.163.51 110.3.164.51
110.3.165.51 110.3.166.51 110.3.167.51 110.3.168.51
110.3.169.51 110.3.170.51 110.3.171.51 110.3.172.51
110.3.173.51 110.3.174.51 110.3.175.51 110.3.176.51
110.3.177.51 110.3.178.51 110.3.179.51 110.3.180.51
110.3.181.51 110.3.182.51 110.3.183.51 110.3.184.51
110.3.185.51 110.3.186.51 110.3.187.51 110.3.188.51
110.3.189.51 110.20.1.3 110.20.1.51 110.20.3.1
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110.20.3.2 110.20.3.3 110.20.3.4 110.20.3.5
110.20.3.6 110.20.3.7 110.20.3.8 110.20.3.9
110.20.3.10 110.20.3.11 110.20.3.12 110.20.3.13
110.20.3.14 110.20.3.15 110.20.3.16 110.20.3.17
110.20.3.18 110.20.3.19 110.20.3.20 110.20.3.21
110.20.3.22 110.20.3.23 110.20.3.24 110.20.3.25
110.20.3.26 110.20.3.27 110.20.3.28 110.20.3.29
110.20.3.30 110.20.3.31 150.50.0.3 150.50.1.3
150.50.2.3 150.50.3.3 150.50.4.3 150.50.5.3
150.50.6.3 150.50.7.3 150.50.8.3 150.50.9.3
150.50.10.3 150.50.11.3 150.50.12.3 150.50.13.3
150.50.20.3 150.50.21.3 150.50.22.3 150.50.23.3
150.50.24.3 150.50.25.3 150.50.26.3 150.50.27.3
150.50.28.3 150.50.29.3 150.50.30.3 150.50.31.3
150.50.32.3 150.50.33.3 150.50.40.3 150.50.41.3
150.50.42.3 150.50.43.3 150.50.44.3 150.50.45.3
150.50.46.3 150.50.47.3 150.50.48.3 150.50.49.3
150.50.50.3 150.50.51.3 150.50.52.3 150.50.53.3
150.50.60.3 150.50.61.3 150.50.62.3 150.50.63.3
150.50.64.3 150.50.65.3 150.50.66.3 150.50.67.3
150.50.68.3 150.50.69.3 150.50.70.3 150.50.71.3
150.50.72.3 150.50.73.3 150.60.30.3 150.60.31.3
150.60.31.10 150.60.31.19 150.60.31.27 150.60.31.35
150.60.31.43 150.60.31.51 150.60.31.59 150.60.31.67
150.60.31.75 150.60.31.83 150.60.31.98 150.60.31.106
150.60.70.3 150.60.71.3 150.60.71.10 150.60.71.19
150.60.71.27 150.60.71.35 150.60.71.43 150.60.71.51
150.60.71.59 150.60.71.67 150.60.71.75 150.60.71.83
150.60.71.98 150.60.71.106 150.60.75.3 150.60.76.3
150.60.76.10 150.60.76.19 150.60.76.27 150.60.76.35
150.60.76.43 150.60.76.51 150.60.76.59 150.60.76.67
150.60.76.75 150.60.76.83 150.60.76.98 150.60.76.106
170.70.90.3 170.70.91.3 180.60.100.3 180.60.110.3
180.100.3.3 193.127.0.1 200.0.0.3 203.0.0.3
Recv Addresses: 40.40.1.1 40.40.2.1
=====
*A:SR4>config>router>ldp>peer-params#
*A:SR4>config>router>ldp>peer-params# peer 110.20.1.1 adv-adj-addr-only
*A:SR4>config>router>ldp>peer-params# show router ldp session 110.20.1.1 local-
addresses sent
=====
LDP Session Local-Addresses
=====
-----
Session with Peer 110.20.1.1:0, Local 110.20.1.3:0
-----
Sent Addresses: 6.2.6.3 6.2.7.3 6.2.49.3 6.2.57.3
110.20.1.3 200.0.0.3
=====
*A:SR4>config>router>ldp>peer-params# show router ldp session 110.20.1.1 local-
addresses recv
=====
LDP Session Local-Addresses
=====
-----
Session with Peer 110.20.1.1:0, Local 110.20.1.3:0
-----
Recv Addresses: 6.2.6.1 6.2.7.1 6.2.49.1 6.2.50.1
6.2.57.1 6.2.58.1 6.2.61.1 6.2.71.1
7.1.1.1 7.1.2.1 7.1.3.1 7.1.4.1
7.1.5.1 7.1.6.1 7.1.7.1 7.1.8.1

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Show Commands

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7.1.9.1 7.1.10.1 7.1.11.1 7.1.12.1
7.1.13.1 7.1.14.1 7.1.15.1 7.1.16.1
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7.1.33.1 7.1.34.1 7.1.35.1 7.1.36.1
7.1.37.1 7.1.38.1 7.1.39.1 7.1.40.1
7.1.41.1 7.1.42.1 7.1.43.1 7.1.44.1
7.1.45.1 7.1.46.1 7.1.47.1 7.1.48.1
7.1.49.1 7.1.50.1 7.1.51.1 7.1.52.1
7.1.53.1 7.1.54.1 7.1.55.1 7.1.56.1
7.1.57.1 7.1.58.1 7.1.59.1 7.1.60.1
7.1.61.1 7.1.62.1 7.1.63.1 7.1.64.1
7.1.65.1 7.1.66.1 7.1.67.1 7.1.68.1
7.1.69.1 7.1.70.1 7.1.71.1 7.1.72.1
7.1.73.1 7.1.74.1 7.1.75.1 7.1.76.1
7.1.77.1 7.1.78.1 7.1.79.1 7.1.80.1
7.1.81.1 7.1.82.1 7.1.83.1 7.1.84.1
7.1.85.1 7.1.86.1 7.1.87.1 7.1.88.1
7.1.89.1 7.1.90.1 7.1.91.1 7.1.92.1
7.1.93.1 7.1.94.1 7.1.95.1 7.1.96.1
7.1.97.1 7.1.98.1 7.1.99.1 7.1.100.1
7.1.101.1 7.1.102.1 7.1.103.1 7.1.104.1
7.1.105.1 7.1.106.1 7.1.107.1 7.1.108.1
7.1.109.1 7.1.110.1 7.1.111.1 7.1.112.1
7.1.113.1 7.1.114.1 7.1.115.1 7.1.116.1
7.1.117.1 7.1.118.1 7.1.119.1 7.1.120.1
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7.1.129.1 7.1.130.1 7.1.131.1 7.1.132.1
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7.1.145.1 7.1.146.1 7.1.147.1 7.1.148.1
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7.1.237.1 7.1.238.1 7.1.239.1 7.1.240.1
7.1.241.1 7.1.242.1 7.1.243.1 7.1.244.1
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7.1.249.1 7.1.250.1 7.2.1.1 7.2.2.1
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7.2.175.1 7.2.176.1 7.2.177.1 7.2.178.1
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7.2.183.1 7.2.184.1 7.2.185.1 7.2.186.1
7.2.187.1 7.2.188.1 7.2.189.1 7.2.190.1
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7.2.199.1 7.2.200.1 7.2.201.1 7.2.202.1
7.2.203.1 7.2.204.1 7.2.205.1 7.2.206.1
7.2.207.1 7.2.208.1 7.2.209.1 7.2.210.1
7.2.211.1 7.2.212.1 7.2.213.1 7.2.214.1
7.2.215.1 7.2.216.1 7.2.217.1 7.2.218.1
7.2.219.1 7.2.220.1 7.2.221.1 7.2.222.1
7.2.223.1 7.2.224.1 7.2.225.1 7.2.226.1
7.2.227.1 7.2.228.1 7.2.229.1 7.2.230.1
7.2.231.1 7.2.232.1 7.2.233.1 7.2.234.1
7.2.235.1 7.2.236.1 7.2.237.1 7.2.238.1
7.2.239.1 7.2.240.1 7.2.241.1 7.2.242.1
7.2.243.1 7.2.244.1 7.2.245.1 7.2.246.1

Show Commands

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7.2.247.1 7.2.248.1 7.2.249.1 7.2.250.1
7.3.1.1 7.3.2.1 7.3.3.1 7.3.4.1
7.3.5.1 7.3.6.1 7.3.7.1 7.3.8.1
7.3.9.1 7.3.10.1 7.3.11.1 7.3.12.1
7.3.13.1 7.3.14.1 7.3.15.1 7.3.16.1
7.3.17.1 7.3.18.1 7.3.19.1 7.3.20.1
7.3.21.1 7.3.22.1 7.3.23.1 7.3.24.1
7.3.25.1 7.3.26.1 7.3.27.1 7.3.28.1
7.3.29.1 7.3.30.1 7.3.31.1 7.3.32.1
7.3.33.1 7.3.34.1 7.3.35.1 7.3.36.1
7.3.37.1 7.3.38.1 7.3.39.1 7.3.40.1
7.3.41.1 7.3.42.1 7.3.43.1 7.3.44.1
7.3.45.1 7.3.46.1 7.3.47.1 7.3.48.1
7.3.49.1 7.3.50.1 7.3.51.1 7.3.52.1
7.3.53.1 7.3.54.1 7.3.55.1 7.3.56.1
7.3.57.1 7.3.58.1 7.3.59.1 7.3.60.1
7.3.61.1 7.3.62.1 7.3.63.1 7.3.64.1
7.3.65.1 7.3.66.1 7.3.67.1 7.3.68.1
7.3.69.1 7.3.70.1 7.3.71.1 7.3.72.1
7.3.73.1 7.3.74.1 7.3.75.1 7.3.76.1
7.3.77.1 7.3.78.1 7.3.79.1 7.3.80.1
7.3.81.1 7.3.82.1 7.3.83.1 7.3.84.1
7.3.85.1 7.3.86.1 7.3.87.1 7.3.88.1
7.3.89.1 7.3.90.1 7.3.91.1 7.3.92.1
7.3.93.1 7.3.94.1 7.3.95.1 7.3.96.1
7.3.97.1 7.3.98.1 7.3.99.1 7.3.100.1
7.3.101.1 7.3.102.1 7.3.103.1 7.3.104.1
7.3.105.1 7.3.106.1 7.3.107.1 7.3.108.1
7.3.109.1 7.3.110.1 7.3.111.1 7.3.112.1
7.3.113.1 7.3.114.1 7.3.115.1 7.3.116.1
7.3.117.1 7.3.118.1 7.3.119.1 7.3.120.1
7.3.121.1 7.3.122.1 7.3.123.1 7.3.124.1
7.3.125.1 7.4.1.1 7.4.2.1 7.4.3.1
7.4.4.1 7.4.5.1 7.4.6.1 7.4.7.1
7.4.8.1 7.4.9.1 7.4.10.1 7.4.11.1
7.4.12.1 7.4.13.1 7.4.14.1 7.4.15.1
7.4.16.1 7.4.17.1 7.4.18.1 7.4.19.1
7.4.20.1 7.4.21.1 7.4.22.1 7.4.23.1
7.4.24.1 7.4.25.1 7.4.26.1 7.4.27.1
7.4.28.1 7.4.29.1 7.4.30.1 7.4.31.1
7.4.32.1 7.4.33.1 7.4.34.1 7.4.35.1
7.4.36.1 7.4.37.1 7.4.38.1 7.4.39.1
7.4.40.1 7.4.41.1 7.4.42.1 7.4.43.1
7.4.44.1 7.4.45.1 7.4.46.1 7.4.47.1
7.4.48.1 7.4.49.1 7.4.50.1 7.4.51.1
7.4.52.1 7.4.53.1 7.4.54.1 7.4.55.1
7.4.56.1 7.4.57.1 7.4.58.1 7.4.59.1
7.4.60.1 7.4.61.1 7.4.62.1 7.4.63.1
7.4.64.1 7.4.65.1 7.4.66.1 7.4.67.1
7.4.68.1 7.4.69.1 7.4.70.1 7.4.71.1
7.4.72.1 7.4.73.1 7.4.74.1 7.4.75.1
7.4.76.1 7.4.77.1 7.4.78.1 7.4.79.1
7.4.80.1 7.4.81.1 7.4.82.1 7.4.83.1
7.4.84.1 7.4.85.1 7.4.86.1 7.4.87.1
7.4.88.1 7.4.89.1 7.4.90.1 7.4.91.1
7.4.92.1 7.4.93.1 7.4.94.1 7.4.95.1
7.4.96.1 7.4.97.1 7.4.98.1 7.4.99.1
7.4.100.1 7.4.101.1 7.4.102.1 7.4.103.1
7.4.104.1 7.4.105.1 7.4.106.1 7.4.107.1
7.4.108.1 7.4.109.1 7.4.110.1 7.4.111.1
7.4.112.1 7.4.113.1 7.4.114.1 7.4.115.1
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7.4.116.1 7.4.117.1 7.4.118.1 7.4.119.1
7.4.120.1 7.4.121.1 7.4.122.1 7.4.123.1
7.4.124.1 7.4.125.1 7.5.1.1 7.5.2.1
7.5.3.1 7.5.4.1 7.5.5.1 7.5.6.1
7.5.7.1 7.5.8.1 7.5.9.1 7.5.10.1
7.5.11.1 7.5.12.1 7.5.13.1 7.5.14.1
7.5.15.1 7.5.16.1 7.5.17.1 7.5.18.1
7.5.19.1 7.5.20.1 7.5.21.1 7.5.22.1
7.5.23.1 7.5.24.1 7.5.25.1 7.5.26.1
7.5.27.1 7.5.28.1 7.5.29.1 7.5.30.1
7.5.31.1 7.5.32.1 7.5.33.1 7.5.34.1
7.5.35.1 7.5.36.1 7.5.37.1 7.5.38.1
7.5.39.1 7.5.40.1 7.5.41.1 7.5.42.1
7.5.43.1 7.5.44.1 7.5.45.1 7.5.46.1
7.5.47.1 7.5.48.1 7.5.49.1 7.5.50.1
7.5.51.1 7.5.52.1 7.5.53.1 7.5.54.1
7.5.55.1 7.5.56.1 7.5.57.1 7.5.58.1
7.5.59.1 7.5.60.1 7.5.61.1 7.5.62.1
7.5.63.1 7.5.64.1 7.5.65.1 7.5.66.1
7.5.67.1 7.5.68.1 7.5.69.1 7.5.70.1
7.5.71.1 7.5.72.1 7.5.73.1 7.5.74.1
7.5.75.1 7.5.76.1 7.5.77.1 7.5.78.1
7.5.79.1 7.5.80.1 7.5.81.1 7.5.82.1
7.5.83.1 7.5.84.1 7.5.85.1 7.5.86.1
7.5.87.1 7.5.88.1 7.5.89.1 7.5.90.1
7.5.91.1 7.5.92.1 7.5.93.1 7.5.94.1
7.5.95.1 7.5.96.1 7.5.97.1 7.5.98.1
7.5.99.1 7.5.100.1 7.5.101.1 7.5.102.1
7.5.103.1 7.5.104.1 7.5.105.1 7.5.106.1
7.5.107.1 7.5.108.1 7.5.109.1 7.5.110.1
7.5.111.1 7.5.112.1 7.5.113.1 7.5.114.1
7.5.115.1 7.5.116.1 7.5.117.1 7.5.118.1
7.5.119.1 7.5.120.1 7.5.121.1 7.5.122.1
7.5.123.1 7.5.124.1 7.5.125.1 7.6.1.1
7.6.2.1 7.6.3.1 7.6.4.1 7.6.5.1
7.6.6.1 7.6.7.1 7.6.8.1 7.6.9.1
7.6.10.1 7.6.11.1 7.6.12.1 7.6.13.1
7.6.14.1 7.6.15.1 7.6.16.1 7.6.17.1
7.6.18.1 7.6.19.1 7.6.20.1 7.6.21.1
7.6.22.1 7.6.23.1 7.6.24.1 7.6.25.1
7.6.26.1 7.6.27.1 7.6.28.1 7.6.29.1
7.6.30.1 7.6.31.1 7.6.32.1 7.6.33.1
7.6.34.1 7.6.35.1 7.6.36.1 7.6.37.1
7.6.38.1 7.6.39.1 7.6.40.1 7.6.41.1
7.6.42.1 7.6.43.1 7.6.44.1 7.6.45.1
7.6.46.1 7.6.47.1 7.6.48.1 7.6.49.1
7.6.50.1 7.6.51.1 7.6.52.1 7.6.53.1
7.6.54.1 7.6.55.1 7.6.56.1 7.6.57.1
7.6.58.1 7.6.59.1 7.6.60.1 7.6.61.1
7.6.62.1 7.6.63.1 7.6.64.1 7.6.65.1
7.6.66.1 7.6.67.1 7.6.68.1 7.6.69.1
7.6.70.1 7.6.71.1 7.6.72.1 7.6.73.1
7.6.74.1 7.6.75.1 7.6.76.1 7.6.77.1
7.6.78.1 7.6.79.1 7.6.80.1 7.6.81.1
7.6.82.1 7.6.83.1 7.6.84.1 7.6.85.1
7.6.86.1 7.6.87.1 7.6.88.1 7.6.89.1
7.6.90.1 7.6.91.1 7.6.92.1 7.6.93.1
7.6.94.1 7.6.95.1 7.6.96.1 7.6.97.1
7.6.98.1 7.6.99.1 7.6.100.1 7.6.101.1
7.6.102.1 7.6.103.1 7.6.104.1 7.6.105.1
7.6.106.1 7.6.107.1 7.6.108.1 7.6.109.1

Show Commands

```
7.6.110.1 7.6.111.1 7.6.112.1 7.6.113.1
7.6.114.1 7.6.115.1 7.6.116.1 7.6.117.1
7.6.118.1 7.6.119.1 7.6.120.1 7.6.121.1
7.6.122.1 7.6.123.1 7.6.124.1 7.6.125.1
10.100.14.1 10.100.15.1 20.20.1.1 20.20.2.1
33.66.33.1 33.66.34.1 33.66.35.1 33.66.63.1
33.66.64.1 33.66.65.1 40.40.1.1 40.40.2.1
57.57.57.57 60.60.1.1 60.60.2.1 70.70.1.1
70.71.2.1 99.99.0.1 110.1.1.51 110.1.2.51
110.1.3.51 110.1.4.51 110.1.5.51 110.1.6.51
110.1.7.51 110.1.8.51 110.1.9.51 110.1.10.51
110.1.11.51 110.1.12.51 110.1.13.51 110.1.14.51
110.1.15.51 110.1.16.51 110.1.17.51 110.1.18.51
110.1.19.51 110.1.20.51 110.1.21.51 110.1.22.51
110.1.23.51 110.1.24.51 110.1.25.51 110.1.26.51
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110.1.31.51 110.1.32.51 110.1.33.51 110.1.34.51
110.1.35.51 110.1.36.51 110.1.37.51 110.1.38.51
110.1.39.51 110.1.40.51 110.1.41.51 110.1.42.51
110.1.43.51 110.1.44.51 110.1.45.51 110.1.46.51
110.1.47.51 110.1.48.51 110.1.49.51 110.1.50.51
110.1.51.51 110.1.52.51 110.1.53.51 110.1.54.51
110.1.55.51 110.1.56.51 110.1.57.51 110.1.58.51
110.1.59.51 110.1.60.51 110.1.61.51 110.1.62.51
110.1.63.51 110.1.64.51 110.1.65.51 110.1.66.51
110.1.67.51 110.1.68.51 110.1.69.51 110.1.70.51
110.1.71.51 110.1.72.51 110.1.73.51 110.1.74.51
110.1.75.51 110.1.76.51 110.1.77.51 110.1.78.51
110.1.79.51 110.1.80.51 110.1.81.51 110.1.82.51
110.1.83.51 110.1.84.51 110.1.85.51 110.1.86.51
110.1.87.51 110.1.88.51 110.1.89.51 110.1.90.51
110.1.91.51 110.1.92.51 110.1.93.51 110.1.94.51
110.1.95.51 110.1.96.51 110.1.97.51 110.1.98.51
110.1.99.51 110.1.100.51 110.1.101.51 110.1.102.51
110.1.103.51 110.1.104.51 110.1.105.51 110.1.106.51
110.1.107.51 110.1.108.51 110.1.109.51 110.1.110.51
110.1.111.51 110.1.112.51 110.1.113.51 110.1.114.51
110.1.115.51 110.1.116.51 110.1.117.51 110.1.118.51
110.1.119.51 110.1.120.51 110.1.121.51 110.1.122.51
110.1.123.51 110.1.124.51 110.1.125.51 110.1.126.51
110.1.127.51 110.1.128.51 110.1.129.51 110.1.130.51
110.1.131.51 110.1.132.51 110.1.133.51 110.1.134.51
110.1.135.51 110.1.136.51 110.1.137.51 110.1.138.51
110.1.139.51 110.1.140.51 110.1.141.51 110.1.142.51
110.1.143.51 110.1.144.51 110.1.145.51 110.1.146.51
110.1.147.51 110.1.148.51 110.1.149.51 110.1.150.51
110.1.151.51 110.1.152.51 110.1.153.51 110.1.154.51
110.1.155.51 110.1.156.51 110.1.157.51 110.1.158.51
110.1.159.51 110.1.160.51 110.1.161.51 110.1.162.51
110.1.163.51 110.1.164.51 110.1.165.51 110.1.166.51
110.1.167.51 110.1.168.51 110.1.169.51 110.1.170.51
110.1.171.51 110.1.172.51 110.1.173.51 110.1.174.51
110.1.175.51 110.1.176.51 110.1.177.51 110.1.178.51
110.1.179.51 110.1.180.51 110.1.181.51 110.1.182.51
110.1.183.51 110.1.184.51 110.1.185.51 110.1.186.51
110.1.187.51 110.1.188.51 110.1.189.51 110.20.1.1
150.50.80.1 150.50.81.1 150.50.100.1 150.50.101.1
150.50.120.1 150.50.121.1 150.50.140.1 150.50.141.1
150.60.10.1 150.60.20.1 150.60.40.1 160.60.80.1
160.60.81.1 170.70.70.1 180.1.110.1 180.1.111.1
180.100.1.1 200.0.0.1 201.0.0.1
```



```

=====
*A:SR4>config>router>ldp>peer-params#
*A:SR4>config>router>ldp>peer-params# show router ldp session 110.20.1.1 local-
addresses recv ip-addr 201.0.0.1
=====
LDP Session Local-Addresses
=====
-----
Session with Peer 110.20.1.1:0, Local 110.20.1.3:0
-----
Recv Addresses: 201.0.0.1
=====
*A:SR4>config>router>ldp>peer-params#
*A:SR4>config>router>ldp>peer-params# show router ldp session 110.20.1.1 local-
addresses sent ip-addr 6.2.7.3
=====
LDP Session Local-Addresses
=====
-----
Session with Peer 110.20.1.1:0, Local 110.20.1.3:0
-----
Sent Addresses: 6.2.7.3
=====

```

auth-keychain

Syntax	auth-keychain [<i>keychain</i>]
Context	show>router>ldp
Description	This command displays LDP sessions using a particular authentication key-chain.
Parameters	<i>keychain</i> — Specifies an existing keychain name.

Sample Output

```

*A:ALA-48>config>router>ldp# show router ldp auth-keychain
=====
LDP Peers
=====
Peer          TTL Security Min-TTL-Value Authentication Auth key chain
-----
10.20.1.3     Disabled      n/a           Disabled      eta_keychain1
-----
No. of Peers: 1
=====
*A:ALA-48>config>router>ldp#

```

bindings

Syntax	bindings [fec-type <i>fec-type</i> [detail summary]] [session <i>ip-addr[:label-space]</i>] bindings [fec-type p2mp] [p2mp < <i>identifier</i> > root < <i>ip-address</i> >] [detail summary] [session <i>ip-addr[:label-space]</i> > bindings [<i>label-type</i>] [<i>start-label</i> [<i>end-label</i>] bindings { prefix <i>ip-prefix/mask</i> [detail]} [session <i>ip-addr[:label-space]</i>] bindings active [prefix <i>ip-prefix/mask</i>][summary egress-nh <i>ip-prefix/mask</i> egress-if <i>port-id</i> egress-lsp <i>tunnel-id</i>] bindings active [fec-type <i>prefixes</i>] [prefix < <i>ip-prefix/mask</i> >] [egress-nh < <i>ip-prefix/mask</i> > egress-if < <i>port-id</i> > egress-lsp < <i>tunnel-id</i> >] [summary] bindings active [fec-type p2mp] [p2mp-id < <i>identifier</i> > root < <i>ip-address</i> >] [egress-nh < <i>ip-prefix/mask</i> > egress-if < <i>port-id</i> > egress-lsp < <i>tunnel-id</i> >] [summary] bindings service-id <i>service-id</i> [detail] bindings vc-type <i>vc-type</i> [{ vc-id <i>vc-id</i> agi <i>agi</i> }] [session <i>ip-addr[:label-space]</i>] bindings vc-type <i>vc-type</i> agi < <i>agi</i> > <i>sail-type2</i> < <i>global-id:prefix:ac-id</i> > <i>taii-type2</i> < <i>global_id:prefix:ac_id</i> > [detail] bindings p2mp-id < <i>identifier</i> > root < <i>ip-address</i> > [detail]
Context	show>router>ldp
Description	This command displays the contents of the label information base.
Parameters	fec-type <i>fec-type</i> — Specify the kind of FEC that the label mapping, withdraw, release and request messages are referring to. detail — Displays detailed information. summary — Displays information in a summarized format. session <i>ip-addr</i> — displays configuration information about LDP sessions. <i>ip-prefix</i> — Specify information for the specified IP prefix and mask length. Host bits must be 0. <i>mask</i> — Specifies the 32-bit address mask used to indicate the bits of an IP address that are being used for the subnet address. Values 0 — 32 <i>label-space</i> — Specifies the label space identifier that the router is advertising on the interface. Values 0 — 65535 <i>start-label</i> — Specifies a label value to begin the display. Values 16 — 1048575 <i>end-label</i> — Specifies a label value to end the display. Values 17 — 1048575 <i>vc-type</i> — Specifies the VC type to display. Values ethernet , vlan , mirror <i>vc-id</i> — Specifies the VC ID to display. Values 1 — 4294967295

service-id — Specifies the service ID number to display.

Values 1 — 2147483647

egress-lsp tunnel-id —

Values 0 — 4294967295

egress-if port-id — Specifies the egress interface port ID.

Values slot[/mda[/port]] or slot/mda/port[.channel]
 aps-id aps-group-id[.channel]
 aps keyword
 group-id 1— 64
 ccag-id slot/mda/path-id[cc-type]
 path-id a, b
 cc-type .sap-net, .net-sap

Output **LDP Bindings Output** — The following table describes the LDP bindings fields.

Label	Description
Legend	U: Label In Use A: Apipe service N: Label Not In Use F: Fpipe service W: Label Withdrawn I: IES service S: Status Signaled Up R: VPRN service D: Status Signaled Down P: Ipipe service E: Epipe service WP: Label Withdraw Pending V: VPLS service C: Cpipe service M: Mirror service TLV: (Type, Length: Value)
Type	The service type exchanging labels in the SDP. The possible types displayed are VPLS, Epipe, Spoke, and Unknown.
VCId	The value used by each end of an SDP tunnel to identify the VC.
SvcID	The unique service identification number identifying the service in the service domain.
SDPId	The SDP number identifying the SDP in the service domain.
Peer	The IP address of the peer.
EgrIntf/LspId	Displays the LSP Tunnel ID (not the LSP path ID).
IngLbl	The ingress LDP label. U — Label in use. R — Label released.
EgrLbl	The egress LDP label.
LMTU	The local MTU value.
RMTU	The remote MTU value.

Show Commands

Label	Description (Continued)
No. of Service Bindings	The total number of LDP bindings on the router.

Sample Output

```
*A:Dut-C# show router ldp bindings active fec-type p2mp
```

```
=====
LDP Generic P2MP Bindings (Active)
=====
```

P2MP-Id Interface	RootAddr Op	IngLbl	EgrLbl	EgrIntf/ LspId	EgrNextHop
1 73728	10.20.1.3 Push	--	262142	1/1/2:0	Unnumbered
1 73728	10.20.1.3 Push	--	262137	2/1/2:0	Unnumbered
2 73729	10.20.1.3 Push	--	262141	1/1/2:0	Unnumbered
2 73729	10.20.1.3 Push	--	262136	2/1/2:0	Unnumbered
3 73730	10.20.1.3 Push	--	262140	1/1/2:0	Unnumbered
3 73730	10.20.1.3 Push	--	262135	2/1/2:0	Unnumbered
4 73731	10.20.1.3 Push	--	262139	1/1/2:0	Unnumbered
4 73731	10.20.1.3 Push	--	262134	2/1/2:0	Unnumbered

```
{...snip...}
```

```
*A:Dut-C# show router ldp bindings fec-type p2mp
```

```
=====
LDP LSR ID: 10.20.1.3
=====
```

```
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn  
WP - Label Withdraw Pending, BU - Alternate For Fast Re-Route
```

```
=====
LDP Generic P2MP Bindings
=====
```

P2MP-Id Interface	RootAddr Peer	IngLbl	EgrLbl	EgrIntf/ LspId	EgrNextHop
1 73728	10.20.1.3 10.20.1.2	--	262142	1/1/2:0	Unnumbered

```

1          10.20.1.3
73728     10.20.1.4      --      262137 2/1/2:0      Unnumbered

2          10.20.1.3
73729     10.20.1.2      --      262141 1/1/2:0      Unnumbered

2          10.20.1.3
73729     10.20.1.4      --      262136 2/1/2:0      Unnumbered

3          10.20.1.3
73730     10.20.1.2      --      262140 1/1/2:0      Unnumbered

3          10.20.1.3
73730     10.20.1.4      --      262135 2/1/2:0      Unnumbered

4          10.20.1.3
73731     10.20.1.2      --      262139 1/1/2:0      Unnumbered

4          10.20.1.3
73731     10.20.1.4      --      262134 2/1/2:0      Unnumbered

```

{...snip...}

*A:Dut-C# show router ldp bindings fec-type p2mp detail

```

=====
LDP LSR ID: 10.20.1.3
=====

```

```

Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
       WP - Label Withdraw Pending, BU - Alternate For Fast Re-Route
=====

```

```

LDP Generic P2MP Bindings
=====

```

```

-----
P2MP Type      : 1                P2MP-Id       : 1
Root-Addr     : 10.20.1.3
-----

```

```

-----
Ing Lbl       : --                Peer          : 10.20.1.2
Egr Lbl      : 262142
Egr Int/LspId : 1/1/2:0
EgrNextHop   : Unnumbered
Egr. Flags   : None              Ing. Flags    : None
Egr If Name   : ip-10.180.3.3
Metric       : 1                Mtu          : 1496
-----

```

```

-----
P2MP Type      : 1                P2MP-Id       : 1
Root-Addr     : 10.20.1.3
-----

```

```

-----
Ing Lbl       : --                Peer          : 10.20.1.4
Egr Lbl      : 262137
Egr Int/LspId : 2/1/2:0
EgrNextHop   : Unnumbered
Egr. Flags   : None              Ing. Flags    : None
Egr If Name   : ip-10.180.11.3
Metric       : 1                Mtu          : 1496
-----

```

```

-----
P2MP Type      : 1                P2MP-Id       : 2
Root-Addr     : 10.20.1.3
-----

```

```

-----
Ing Lbl       : --                Peer          : 10.20.1.2
-----

```

Show Commands

```

Egr Lbl          : 262141
Egr Int/LspId    : 1/1/2:0
EgrNextHop       : Unnumbered
Egr. Flags       : None           Ing. Flags       : None
Egr If Name      : ip-10.180.3.3
Metric           : 1             Mtu              : 1496
-----
P2MP Type        : 1             P2MP-Id         : 2
Root-Addr        : 10.20.1.3
-----
Ing Lbl          : --           Peer             : 10.20.1.4
Egr Lbl          : 262136
Egr Int/LspId    : 2/1/2:0
EgrNextHop       : Unnumbered
Egr. Flags       : None           Ing. Flags       : None
Egr If Name      : ip-10.180.11.3
Metric           : 1             Mtu              : 1496
-----
{...snip...}

```

A:Dut-C# show router ldp bindings active

```

=====
Legend: (S) - Static           (M) - Multi-homed Secondary Support
        (B) - BGP Next Hop (BU) - Alternate Next-hop for Fast Re-Route
=====
LDP Prefix Bindings (Active)
=====
Prefix           Op    IngLbl   EgrLbl   EgrIntf/LspId  EgrNextHop
-----
10.20.1.1/32     Push  --       262143   1/1/1           Unnumbered
10.20.1.1/32     Swap  262138   262143   1/1/1           Unnumbered
10.20.1.2/32     Push  --       262143   lag-1           Unnumbered
10.20.1.2/32     Swap  262139   262143   lag-1           Unnumbered
10.20.1.3/32     Pop   262143   --       --              --
10.20.1.4/32     Push  --       262143   2/1/2           Unnumbered
10.20.1.4/32     Swap  262142   262143   2/1/2           Unnumbered
10.20.1.5/32     Push  --       262143   2/1/1           Unnumbered
10.20.1.5/32     Swap  262141   262143   2/1/1           Unnumbered
10.20.1.6/32     Push  --       262140   2/1/2           Unnumbered
10.20.1.6/32     Swap  262140   262140   2/1/2           Unnumbered
-----
No. of Prefix Active Bindings: 11
=====
{...snip...}

```

*A:Dut-C# show router ldp bindings

```

=====
LDP LSR ID: 10.20.1.3
=====
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
        S - Status Signaled Up, D - Status Signaled Down
        E - Epipe Service, V - VPLS Service, M - Mirror Service
        A - Apipe Service, F - Fpipe Service, I - IES Service, R - VPRN service
        P - Ipipe Service, WP - Label Withdraw Pending, C - Cpipe Service
        BU - Alternate For Fast Re-Route, TLV - (Type, Length: Value)
=====
LDP Prefix Bindings

```

```

=====
Prefix          IngLbl      EgrLbl      EgrIntf/    EgrNextHop
  Peer
-----
10.20.1.1/32    --          262143      1/1/1       Unnumbered
  10.20.1.1
10.20.1.1/32    262138U     262142      --           --
  10.20.1.2
10.20.1.1/32    262138U     262138      --           --
  10.20.1.4
10.20.1.1/32    262138U     262138      --           --
  10.20.1.5
10.20.1.2/32    262139U     262142      --           --
  10.20.1.1
10.20.1.2/32    --          262143      lag-1        Unnumbered
  10.20.1.2
10.20.1.2/32    262139U     262139      --           --
  10.20.1.4
10.20.1.2/32    262139U     262139      --           --
  10.20.1.5
10.20.1.3/32    262143U     --          --           --
  10.20.1.1
10.20.1.3/32    262143U     --          --           --
  10.20.1.2
10.20.1.3/32    262143U     --          --           --
  10.20.1.4
10.20.1.3/32    262143U     --          --           --
  10.20.1.5
10.20.1.4/32    262142U     262141      --           --
  10.20.1.1
10.20.1.4/32    262142U     262141      --           --
  10.20.1.2
10.20.1.4/32    --          262143      2/1/2        Unnumbered
  10.20.1.4
10.20.1.4/32    262142U     262141      --           --
  10.20.1.5
10.20.1.5/32    262141U     262138      --           --
  10.20.1.1
10.20.1.5/32    262141U     262139      --           --
  10.20.1.2
10.20.1.5/32    262141U     262141      --           --
  10.20.1.4
10.20.1.5/32    --          262143      2/1/1        Unnumbered
  10.20.1.5
10.20.1.6/32    262140U     262140      --           --
  10.20.1.1
10.20.1.6/32    262140U     262138      --           --
  10.20.1.2
10.20.1.6/32    262140N     262140      2/1/2        Unnumbered
  10.20.1.4
10.20.1.6/32    262140U     262140      --           --
  10.20.1.5
-----
No. of Prefix Bindings: 24
=====
 {...snip...}

*A:Dut-C# show router ldp bindings detail
=====
LDP LSR ID: 10.20.1.3

```

Show Commands

```
=====
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
       S - Status Signaled Up, D - Status Signaled Down
       E - Epipe Service, V - VPLS Service, M - Mirror Service
       A - Apipe Service, F - Fpipe Service, I - IES Service, R - VPRN service
       P - Ipipe Service, WP - Label Withdraw Pending, C - Cpipe Service
       BU - Alternate For Fast Re-Route, TLV - (Type, Length: Value)
=====
LDP Prefix Bindings
=====
-----
Prefix          : 10.20.1.1/32
-----
Ing Lbl         : --                Peer          : 10.20.1.1
Egr Lbl         : 262143
Egr Int/LspId   : 1/1/1
EgrNextHop      : Unnumbered
Egr. Flags      : None                Ing. Flags    : None
Egr If Name     : ip-10.10.2.3
Metric          : 1000                Mtu           : 1500
-----
Prefix          : 10.20.1.1/32
-----
Ing Lbl         : 262138U            Peer          : 10.20.1.2
Egr Lbl         : 262142
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags    : None
Egr If Name     : n/a
-----
Prefix          : 10.20.1.1/32
-----
Ing Lbl         : 262138U            Peer          : 10.20.1.4
Egr Lbl         : 262138
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags    : None
Egr If Name     : n/a
-----
Prefix          : 10.20.1.1/32
-----
Ing Lbl         : 262138U            Peer          : 10.20.1.5
Egr Lbl         : 262138
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags    : None
Egr If Name     : n/a
-----
Prefix          : 10.20.1.2/32
-----
Ing Lbl         : 262139U            Peer          : 10.20.1.1
Egr Lbl         : 262142
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags    : None
Egr If Name     : n/a
-----
{...snip...}
```



```
*A:SRR# show router ldp bindings fec-type p2mp | match BU pre-lines 5 post-lines 5
```

```
=====
LDP LSR ID: 110.20.1.2
=====
```

```
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
        WP - Label Withdraw Pending, BU - Alternate For Fast Re-Route
=====
```

```
LDP Generic P2MP Bindings
=====
```

P2MP-Id Interface	RootAddr Peer	IngLbl	EgrLbl	EgrIntf/ LspId	EgrNextHop
----------------------	------------------	--------	--------	-------------------	------------

8193 86055	110.20.1.1 20.20.1.1		254685BU	--	--
8193 86055	110.20.1.1 110.20.1.1		254318U	--	--
8194 86062	110.20.1.1 20.20.1.1		255758BU	--	--
8194 86062	110.20.1.1 110.20.1.1		254317U	--	--
8195 86043	110.20.1.1 20.20.1.1		254692BU	--	--

```
{....snip....}
```

```
*A:SRR# show router ldp bindings active fec-type p2mp | match BU pre-lines 5 post-lines 5
```

P2MP-Id Interface	RootAddr Op	IngLbl	EgrLbl	EgrIntf/ LspId	EgrNextHop
----------------------	----------------	--------	--------	-------------------	------------

8193 86055	110.20.1.1 Pop		254685BU	--	--
8193 86055	110.20.1.1 Pop		254318	--	--
8194 86062	110.20.1.1 Pop		255758BU	--	--
8194 86062	110.20.1.1 Pop		254317	--	--
8195 86043	110.20.1.1 Pop		254692BU	--	--
8195 86043	110.20.1.1 Pop		254316	--	--
8197 89107	110.20.1.1 Pop		254858	--	--

```
{....snip....}
```

```
*A:SRR# show router ldp bindings active fec-type p2mp p2mp-id 8193 root 110.20.1.1
```

Show Commands

```
=====
LDP Generic P2MP Bindings (Active)
=====
P2MP-Id      RootAddr
Interface    Op          IngLbl      EgrLbl      EgrIntf/    EgrNextHop
                LspId
-----
8193         110.20.1.1
86055        Pop         254685BU   --          --          --

8193         110.20.1.1
86055        Pop         254318     --          --          --

-----
No. of Generic P2MP Active Bindings: 2
=====
*A:SRR#
*A:SRR# show router ldp bindings fec-type p2mp p2mp-id 8193 root 110.20.1.1

=====
LDP LSR ID: 110.20.1.2
=====
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
        WP - Label Withdraw Pending, BU - Alternate For Fast Re-Route
=====
LDP Generic P2MP Bindings
=====
P2MP-Id      RootAddr
Interface    Peer        IngLbl      EgrLbl      EgrIntf/    EgrNextHop
                LspId
-----
8193         110.20.1.1
86055        20.20.1.1  254685BU   --          --          --

8193         110.20.1.1
86055        110.20.1.1 254318U    --          --          --

-----
No. of Generic P2MP Bindings: 2
=====
*A:SRR#
*A:SRR# show router ldp bindings fec-type p2mp p2mp-id 8193 root 110.20.1.1 detail

=====
LDP LSR ID: 110.20.1.2
=====
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
        WP - Label Withdraw Pending, BU - Alternate For Fast Re-Route
=====
LDP Generic P2MP Bindings
=====
P2MP Type      : 1
                P2MP-Id      : 8193
                Root-Addr   : 110.20.1.1

-----
Ing Lbl        : 254685BU      Peer          : 20.20.1.1
Egr Lbl        : --
Egr Int/LspId  : --
EgrNextHop     : --
Egr. Flags     : None        Ing. Flags    : None
```

```

-----
P2MP Type          : 1                      P2MP-Id           : 8193
Root-Addr          :                        Root-Addr         : 110.20.1.1
-----
Ing Lbl            : 254318U                 Peer              : 110.20.1.1
Egr Lbl            : --
Egr Int/LspId     : --
EgrNextHop        : --
Egr. Flags         : None                    Ing. Flags        : None
=====
No. of Generic P2MP Bindings: 2
=====
*A:SRR#

```

```
*A:Dut-B# show router ldp bindings fec-type p2mp p2mp-id 8193 root 10.20.1.2
```

```

=====
LDP LSR ID: 10.20.1.2
=====
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
       WP - Label Withdraw Pending, BU - Alternate For Fast Re-Route
=====
LDP Generic P2MP Bindings
=====
P2MP-Id      RootAddr      IngLbl  EgrLbl  EgrIntf/  EgrNextHop
Interface    Peer              Peer              LspId
-----
8193         10.20.1.2
79733       10.20.1.3         --      258092  2/1/4:1   10.10.1.1

8193         10.20.1.2
79733       10.20.1.4         --      124027  1/1/1:1   10.10.2.2

8193         10.20.1.2
79733       10.20.1.5         --      125579  2/1/8:1   10.10.17.1

```

```
-----
No. of Generic P2MP Bindings: 3
=====
```

```
*A:Dut-B# show router ldp bindings fec-type p2mp p2mp-id 8193 root 10.20.1.2 session 10.20.1.3
```

```

=====
LDP LSR ID: 10.20.1.2
=====
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
       WP - Label Withdraw Pending, BU - Alternate For Fast Re-Route
=====
LDP Generic P2MP Bindings
=====
P2MP-Id      RootAddr      IngLbl  EgrLbl  EgrIntf/  EgrNextHop
Interface    Peer              Peer              LspId
-----
8193         10.20.1.2
79733       10.20.1.3         --      258092  2/1/4:1   10.10.1.1

```

Show Commands

```
No. of Generic P2MP Bindings: 1
=====

*A:Dut-A# show router ldp bindings active
=====
Legend: (S) - Static          (M) - Multi-homed Secondary Support
        (B) - BGP Next Hop (BU) - Alternate Next-hop for Fast Re-Route
=====
LDP Prefix Bindings (Active)
=====
Prefix                Op   IngLbl   EgrLbl   EgrIntf/LspId  EgrNextHop
-----
10.20.1.1/32          Pop  131071   --       --              --
10.20.1.2/32          Push --       131071   1/1/1         10.10.1.2
10.20.1.2/32          Swap 131070   131071   1/1/1         10.10.1.2
10.20.1.2/32          Push --       262141BU 1/1/2         10.10.2.3
10.20.1.2/32          Swap 131070   262141BU 1/1/2         10.10.2.3
10.20.1.3/32          Push --       131069BU 1/1/1         10.10.1.2
10.20.1.3/32          Swap 131069   131069BU 1/1/1         10.10.1.2
10.20.1.3/32          Push --       262143   1/1/2         10.10.2.3
10.20.1.3/32          Swap 131069   262143   1/1/2         10.10.2.3
10.20.1.4/32          Push --       131068   1/1/1         10.10.1.2
10.20.1.4/32          Swap 131068   131068   1/1/1         10.10.1.2
10.20.1.4/32          Push --       262140BU 1/1/2         10.10.2.3
10.20.1.4/32          Swap 131068   262140BU 1/1/2         10.10.2.3
10.20.1.5/32          Push --       131067BU 1/1/1         10.10.1.2
10.20.1.5/32          Swap 131067   131067BU 1/1/1         10.10.1.2
10.20.1.5/32          Push --       262139   1/1/2         10.10.2.3
10.20.1.5/32          Swap 131067   262139   1/1/2         10.10.2.3
10.20.1.6/32          Push --       131066   1/1/1         10.10.1.2
10.20.1.6/32          Swap 131066   131066   1/1/1         10.10.1.2
10.20.1.6/32          Push --       262138BU 1/1/2         10.10.2.3
10.20.1.6/32          Swap 131066   262138BU 1/1/2         10.10.2.3
-----
No. of Prefix Active Bindings: 21
=====
LDP P2MP Bindings (Active)
=====
P2MP-Id      RootAddr
Interface    Op           IngLbl   EgrLbl  EgrIntf/   EgrNextHop
                LspId
-----
No Matching Entries Found
=====

*A:Dut-A# show router ldp bindings
=====
LDP LSR ID: 10.20.1.1
=====
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
        S - Status Signaled Up, D - Status Signaled Down
        E - Epipe Service, V - VPLS Service, M - Mirror Service
        A - Apipe Service, F - Fpipe Service, I - IES Service, R - VPRN service
        P - Ipipe Service, WP - Label Withdraw Pending, C - Cpipe Service
        BU - Alternate Next-hop for Fast Re-Route, TLV - (Type, Length: Value)
=====
LDP Prefix Bindings
=====
```

Prefix	Peer	IngLbl	EgrLbl	EgrIntf/ LspId	EgrNextHop
10.20.1.1/32	10.20.1.2	131071U	--	--	--
10.20.1.1/32	10.20.1.3	131071U	--	--	--
10.20.1.2/32	10.20.1.2	--	131071	1/1/1	10.10.1.2
10.20.1.2/32	10.20.1.3	131070U	262141	1/1/2	10.10.2.3
10.20.1.3/32	10.20.1.2	131069U	131069	1/1/1	10.10.1.2
10.20.1.3/32	10.20.1.3	--	262143	1/1/2	10.10.2.3
10.20.1.4/32	10.20.1.2	131068N	131068	1/1/1	10.10.1.2
10.20.1.4/32	10.20.1.3	131068BU	262140	1/1/2	10.10.2.3
10.20.1.5/32	10.20.1.2	131067U	131067	1/1/1	10.10.1.2
10.20.1.5/32	10.20.1.3	131067N	262139	1/1/2	10.10.2.3
10.20.1.6/32	10.20.1.2	131066N	131066	1/1/1	10.10.1.2
10.20.1.6/32	10.20.1.3	131066BU	262138	1/1/2	10.10.2.3

No. of Prefix Bindings: 12

LDP P2MP Bindings

P2MP-Id Interface	RootAddr Peer	IngLbl	EgrLbl	EgrIntf/ LspId	EgrNextHop
No Matching Entries Found					

LDP Service FEC 128 Bindings

Type	VcId	SvcId	SDPId	Peer	IngLbl	EgrLbl	LMTU	RMTU
No Matching Entries Found								

LDP Service FEC 129 Bindings

AGI	SvcId	SDPId	Peer	IngLbl	EgrLbl	LMTU	RMTU
No Matching Entries Found							

*A:SR1-A# show router ldp bindings service-id 100 detail

LDP LSR ID: 1.1.1.1

Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
 S - Status Signaled Up, D - Status Signaled Down
 E - Epipe Service, V - VPLS Service, M - Mirror Service
 A - Apipe Service, F - Fpipe Service, I - IES Service, R - VPRN service
 P - Ipipe Service, WP - Label Withdraw Pending, C - Cpipe Service
 TLV - (Type, Length: Value)

LDP Service Binding

Type	: E-Eth	VcId	: 100
SvcId	: 100	SdpId	: 100
Peer Address	: 2.2.2.2	Vc-switching	: No
LMTU	: 986	RMTU	: 986

Show Commands

```
Egr. Lbl          : 130812D          Egr. Ctl Word     : No
Egr. Flags        : None             Egr. Status Bits  : Supported (0x1e)
Egr. Flow Label Tx : Yes/No          Egr. Flow Label Rx: Yes/No
Ing. Lbl          : 130808U          Ing. Ctl Word     : No
Ing. Flags        : None             Ing. Status Bits  : Supported (0x16)
Ing. Flow Label Tx : Yes/No          Ing. Flow Label Tx: Yes/No
```

```
=====
No. of VC Labels: 1
```

```
...
```

```
=====
*A:SR1-A#
```

```
*A:SRU4>config>router>ldp# show router ldp bindings fec-type prefixes
```

```
=====
LDP LSR ID: 110.20.1.4
```

```
=====
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
       WP - Label Withdraw Pending
```

```
=====
LDP Prefix Bindings
```

```
=====
Prefix          Peer          IngLbl  EgrLbl EgrIntf/  EgrNextHop
                Peer          LspId
-----
```

Prefix	Peer	IngLbl	EgrLbl	EgrIntf/ LspId	EgrNextHop
1.1.1.0/24	10.20.1.22	--	1301	--	--
1.2.10.0/24	10.20.1.22	--	618	--	--
1.2.11.0/24	10.20.1.22	--	617	--	--
1.2.12.0/24	10.20.1.22	--	619	--	--
1.2.101.0/24	10.20.1.22	--	656	--	--
1.2.111.0/24	10.20.1.22	--	341	--	--
1.2.121.0/24	10.20.1.22	--	346	--	--
1.38.38.0/24	10.20.1.22	--	624	--	--
1.38.39.0/24	10.20.1.22	--	625	--	--
1.38.138.0/24	10.20.1.22	--	368	--	--
1.38.139.0/24	10.20.1.22	--	626	--	--
...					
222.0.0.0/10	10.20.1.22	--	298	--	--
222.0.0.0/10	110.20.1.5	--	128741	--	--
222.9.69.0/24	10.20.1.22	--	1402	--	--
222.9.69.0/24	110.20.1.5	--	128778	--	--

```
=====
No. of Prefix Bindings: 2939
```

```
=====
*A:SRU4>config>router>ldp#
```

```
*A:SRU4# show router ldp bindings fec-type p2mp
```

```
=====
LDP LSR ID: 110.20.1.4
```

```
=====
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
       WP - Label Withdraw Pending
```

```
=====
LDP P2MP Bindings
```

```
=====
P2MP-Id RootAddr Interface Peer IngLbl EgrLbl EgrIntf/EgrNextHop LspId
-----
```

P2MP-Id	RootAddr	Interface	Peer	IngLbl	EgrLbl	EgrIntf/EgrNextHop	LspId
8193	110.20.1.4	74728	10.100.10.10	--	5738	3/1/6	180.100.4.10
8194	110.20.1.4	74729	10.100.10.10	--	7089	3/1/6	180.100.4.10
8195	110.20.1.4	74730	10.100.10.10	--	5766	3/1/6	180.100.4.10
8196	110.20.1.4	74731	10.100.10.10	--	6826	3/1/6	180.100.4.10
8197	110.20.1.4	74732	10.100.10.10	--	7412	3/1/6	180.100.4.10

```

8198 110.20.1.4 74733 10.100.10.10 -- 6548 3/1/6 180.100.4.10
8199 110.20.1.4 74734 10.100.10.10 -- 6544 3/1/6 180.100.4.10
8200 110.20.1.4 74735 10.100.10.10 -- 5736 3/1/6 180.100.4.10
8201 110.20.1.4 74736 10.100.10.10 -- 7718 3/1/6 180.100.4.10

```

Press any key to continue (Q to quit)

A:both2# show router ldp bindings fec-type services

=====

LDP LSR ID: 1.1.1.57

=====

Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
S - Status Signaled Up, D - Status Signaled Down
E - Epipe Service, V - VPLS Service, M - Mirror Service
A - Apipe Service, F - Fpipe Service, I - IES Service, R - VPRN service
P - Ipipe Service, WP - Label Withdraw Pending, C - Cpipe Service
TLV - (Type, Length: Value)

=====

LDP Service Bindings

=====

Type	VCId	SvcId	SDPIId	Peer	IngLbl	EgrLbl	LMTU	RMTU
E-Eth	100	1	1	1.1.1.30	131067U	131068S	1500	1500
E-Eth	500	5	1	1.1.1.30	131066W	131066	3960	3960

No. of VC Labels: 2

=====

A:both2#

*A:SRU4# show router ldp bindings session 10.8.100.15

=====

LDP LSR ID: 110.20.1.4

=====

Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
S - Status Signaled Up, D - Status Signaled Down
E - Epipe Service, V - VPLS Service, M - Mirror Service
A - Apipe Service, F - Fpipe Service, I - IES Service, R - VPRN service
P - Ipipe Service, WP - Label Withdraw Pending, C - Cpipe Service
TLV - (Type, Length: Value)

=====

LDP Prefix Bindings

=====

Prefix	Peer	IngLbl	EgrLbl	EgrIntf	EgrNextHop
No Matching Entries Found					

=====

LDP Service FEC 128 Bindings

=====

Type	VCId	SvcId	SDPIId	Peer	IngLbl	EgrLbl	LMTU	RMTU
No Matching Entries Found								

=====

LDP Service FEC 129 Bindings

=====

AGI	SAII	TAII					
Type	SvcId	SDPIId	Peer	IngLbl	EgrLbl	LMTU	RMTU
No Matching Entries Found							

=====

*A:SRU4#

Show Commands

```
A:ALA-12# show router ldp bindings ingress-label 2048 131071
=====
LDP LSR ID: 10.20.1.10
=====
Legend: U - Label In Use, R - Label Released
=====
LDP Prefix Bindings
=====
Prefix          Peer          IngLbl  EgrLbl  EgrIntf      EgrNextHop
-----
10.20.1.10/32   10.20.1.3     131069U  --      --           --
-----
No. of Prefix Bindings: 1
=====
LDP Service Bindings
=====
Type  VCId      SvcId      SDFId  Peer          IngLbl  EgrLbl  LMTU  RMTU
-----
No Matching Entries Found
=====
A:ALA-12#

*A:SRU4>config>router>ldp# show router ldp bindings active
=====
Legend: (S) - Static
=====
LDP Prefix Bindings (Active)
=====
Prefix          Op   IngLbl  EgrLbl  EgrIntf/LspId  EgrNextHop
-----
10.20.1.20/32   Push  --      0        3/2/1           10.100.30.20
10.20.1.20/32   Swap 131041  0        3/2/1           10.100.30.20
10.20.1.22/32   Push  --      0        3/2/7           160.60.60.2
10.20.1.22/32   Swap 131039  0        3/2/7           160.60.60.2
10.161.201.0/24 Push  --      0        3/2/7           160.60.60.2
10.161.201.0/24 Swap 131038  0        3/2/7           160.60.60.2
110.20.1.1/32   Push  --      441790  3/2/1           10.100.30.20
110.20.1.1/32   Swap 131045  441790  3/2/1           10.100.30.20
110.20.1.4/32   Pop   3        --      --              --
160.60.70.0/24  Push  --      0        3/2/7           160.60.60.2
160.60.70.0/24  Swap 131036  0        3/2/7           160.60.60.2
160.60.80.0/24  Push  --      0        3/2/7           160.60.60.2
160.60.80.0/24  Swap 129982  0        3/2/7           160.60.60.2
-----
No. of Prefix Bindings: 13
*A:SRU4>config>router>ldp#

A:Dut-B# show router ldp bindings prefix 10.20.1.3/32 detail
=====
LDP LSR ID: 10.20.1.2
=====
Legend: U - Label In Use, N - Label Not In Use, W - Label Withdrawn
      WP - Label Withdraw Pending
=====
LDP Prefix Binding
=====
Prefix          : 10.20.1.3/32
-----
Ing Lbl         : 130996U          Peer          : 1.1.2.2
```



```

Egr Lbl          : 131017
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags      : None
-----
Prefix          : 10.20.1.3/32
-----
Ing Lbl         : --                Peer           : 3.3.2.2
Egr Lbl         : 3
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags      : None
-----
Prefix          : 10.20.1.3/32
-----
Ing Lbl         : 130996U           Peer           : 4.4.2.2
Egr Lbl         : 130969
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags      : None
-----
Prefix          : 10.20.1.3/32
-----
Ing Lbl         : 130996U           Peer           : 5.5.2.2
Egr Lbl         : 131005
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags      : None
-----
Prefix          : 10.20.1.3/32
-----
Ing Lbl         : 130996U           Peer           : 6.6.2.2
Egr Lbl         : 130993
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags      : None
-----
Prefix          : 10.20.1.3/32
-----
Ing Lbl         : 130996U           Peer           : 10.10.1.1
Egr Lbl         : 131017
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags      : None
-----
Prefix          : 10.20.1.3/32
-----
Ing Lbl         : --                Peer           : 10.10.3.3
Egr Lbl         : 3
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags      : None
-----
Prefix          : 10.20.1.3/32
-----
Ing Lbl         : 130996U           Peer           : 10.10.4.4
Egr Lbl         : 130969
Egr Int/LspId   : --
EgrNextHop      : --
Egr. Flags      : None                Ing. Flags      : None
-----

```

Show Commands

```
Prefix                : 10.20.1.3/32
-----
Ing Lbl               :  --                Peer                : 10.10.12.3
Egr Lbl               :  3
Egr Int/LspId        :  lag-1
EgrNextHop           :  10.10.12.3
Egr. Flags           :  None                Ing. Flags            : None
Metric               :  333                Mtu                   : 1500
=====
No. of Prefix Bindings: 9
=====
*A:Dut-B#
```

discovery

Syntax **discovery** [{**peer** [*ip-address*]} | {**interface** [*ip-int-name*]}] [**state** *state*] [**detail**] [**adjacency-type** *type*]

Context show>router>ldp

Description This command displays the status of the interfaces participating in LDP discovery.

Parameters **peer** *ip-address* — Specifies to display the IP address of the peer.

interface *ip-int-name* — The name of an existing interface. If the string contains special characters (#, \$, spaces, etc.), the entire string must be enclosed within double quotes.

state *state* — Specifies to display the current operational state of the adjacency.

Values established, trying, down

detail — Specifies to display detailed information.

adjacency-type *type* — Specifies to display the adjacency type.

Values link, targeted

Output **LDP Discovery Output** — The following table describes LDP discovery output fields.

Label	Description
Interface Name	The name of the interface.
Local Addr	The IP address of the originating (local) router.
Peer Addr	The IP address of the peer.
Adj Type	The adjacency type between the LDP peer and LDP session is targeted.
State	Established — The adjacency is established. Trying — The adjacency is not yet established.
No. of Hello Adjacencies	The total number of hello adjacencies discovered.
Up Time	The amount of time the adjacency has been enabled.

Label	Description (Continued)
Hold-Time Remaining	The time left before a neighbor is declared to be down.
Hello Mesg Recv	The number of hello messages received for this adjacency.
Hello Mesg Sent	The number of hello messages that have been sent for this adjacency.
Remote Cfg Seq No	The configuration sequence number that was in the hello received when this adjacency started up. This configuration sequence number changes when there is a change of configuration.
Remote IP Address	The IP address used on the remote end for the LDP session.
Local Cfg Seq No	The configuration sequence number that was used in the hello sent when this adjacency started up. This configuration sequence number changes when there is a change of configuration.
Local IP Address	The IP address used locally for the LDP session.

Sample Output

```
*A:Dut-A# \show router ldp discovery peer 10.20.1.2 detail
```

```
=====
LDP Hello Adjacencies (Detail)
=====
```

```
-----
Peer 10.20.1.2
-----
```

```
Local Address      : 10.20.1.1          Peer Address       : 10.20.1.2
Adjacency Type    : Targeted          State              : Established
Up Time           : 0d 00:01:01        Hold Time Remaining : 59
Hello Mesg Recv   : 9                Hello Mesg Sent    : 8
Local IP Address  : 10.20.1.1          Remote IP Address  : 10.20.1.2
Local Hello Timeout: 60                Remote Hello Timeout: 60
Local Cfg Seq No  : 3601982061        Remote Cfg Seq No  : 894145223
```

```
*A:SRU4>config>router>ldp# show router ldp discovery
```

```
=====
LDP Hello Adjacencies
=====
```

Interface Name	Local Addr	Peer Addr	AdjType	State
N/A	110.20.1.4	10.8.100.15	Targ	Estab
N/A	110.20.1.4	10.20.1.20	Targ	Estab
N/A	110.20.1.4	10.20.1.22	Targ	Estab
N/A	110.20.1.4	10.100.1.1	Targ	Trying
N/A	110.20.1.4	110.20.1.1	Targ	Estab
N/A	110.20.1.4	110.20.1.2	Targ	Trying
N/A	110.20.1.4	110.20.1.3	Targ	Estab
N/A	110.20.1.4	110.20.1.5	Targ	Estab
N/A	110.20.1.4	110.20.1.6	Targ	Trying
N/A	110.20.1.4	110.20.1.51	Targ	Trying

Show Commands

```

N/A          110.20.1.4      110.20.1.52      Targ    Trying
N/A          110.20.1.4      110.20.1.53      Targ    Trying
N/A          110.20.1.4      110.20.1.55      Targ    Trying
N/A          110.20.1.4      110.20.1.56      Targ    Trying
N/A          110.20.1.4      110.20.1.110     Targ    Trying
N/A          110.20.1.4      110.20.1.150     Targ    Trying
N/A          110.20.1.4      220.220.1.6      Targ    Trying
aps-1        110.20.1.4      110.20.1.3       Link    Estab
aps-2        110.20.1.4      110.20.1.3       Link    Estab
aps-3        110.20.1.4      110.20.1.3       Link    Estab
sr4-1        110.20.1.4      110.20.1.3       Link    Estab
ess-7-1     110.20.1.4      110.20.1.5       Link    Estab
ess-7-2     110.20.1.4      110.20.1.5       Link    Estab
ess-7-3     110.20.1.4      110.20.1.5       Link    Estab
ess-7-4     110.20.1.4      110.20.1.5       Link    Estab
ess-7-5     110.20.1.4      110.20.1.5       Link    Estab
hubA        110.20.1.4      110.20.1.3       Link    Estab
hubA        110.20.1.4      110.20.1.5       Link    Estab
hubA        110.20.1.4      200.0.0.1        Link    Estab
germ-1      110.20.1.4      110.20.1.110     Link    Estab
src-1.1     170.70.51.4     224.0.0.2        Link    Trying
src-1.2     170.70.52.4     224.0.0.2        Link    Trying
src-1.3     170.70.53.4     224.0.0.2        Link    Trying
src-1.4     170.70.54.4     224.0.0.2        Link    Trying
src-1.5     170.70.55.4     224.0.0.2        Link    Trying
src-1.6     170.70.56.4     224.0.0.2        Link    Trying
src-1.7     170.70.57.4     224.0.0.2        Link    Trying
src-1.8     170.70.58.4     224.0.0.2        Link    Trying
src-1.9     170.70.59.4     224.0.0.2        Link    Trying
src-1.10    170.70.60.4     224.0.0.2        Link    Trying
srl-1       110.20.1.4      33.66.32.1       Link    Estab
srl-3       110.20.1.4      33.66.33.1       Link    Estab
aps-8       110.20.1.4      33.66.34.1       Link    Estab
aps-9       110.20.1.4      33.66.35.1       Link    Estab
srr-1       110.20.1.4      11.22.10.2       Link    Estab
srr-2       110.20.1.4      11.22.11.2       Link    Estab
srr-3       110.20.1.4      1.1.1.1          Link    Estab
aps-11      110.20.1.4      11.22.13.2       Link    Estab
gsr1        110.20.1.4      10.8.100.15      Link    Estab
gsr2        110.20.1.4      10.20.1.22       Link    Estab
g7600       180.50.80.4     224.0.0.2        Link    Trying
ml60        110.20.1.4      10.20.1.20       Link    Estab

```

```
-----
No. of Hello Adjacencies: 52
=====
```

```
*A:SRU4>config>router>ldp#
```

```
*A:SRU4>config>router>ldp# show router ldp discovery peer 10.8.100.15
```

```
=====
LDP Hello Adjacencies
=====
```

Interface Name	Local Addr	Peer Addr	AdjType	State
N/A	110.20.1.4	10.8.100.15	Targ	Estab

```
-----
No. of Hello Adjacencies: 1
=====
```

```
*A:SRU4>config>router>ldp#
```

```

*A:SRU4>config>router>ldp# show router ldp discovery detail
=====
LDP Hello Adjacencies (Detail)
=====
-----
Peer 10.8.100.15
-----
Local Address      : 110.20.1.4      Peer Address      : 10.8.100.15
Adjacency Type    : Targeted        State             : Established
Up Time           : 0d 12:39:38    Hold Time Remaining : 43
Hello Mesg Recv   : 10403          Hello Mesg Sent   : 3243
Local IP Address  : 110.20.1.4      Remote IP Address  : 10.8.100.15
Local Hello Timeout: 45          Remote Hello Timeout: 90
Local Cfg Seq No  : 1828354504    Remote Cfg Seq No  : 0
-----
Peer 10.20.1.20
-----
Local Address      : 110.20.1.4      Peer Address      : 10.20.1.20
Adjacency Type    : Targeted        State             : Established
Up Time           : 0d 12:39:57    Hold Time Remaining : 40
Hello Mesg Recv   : 7495          Hello Mesg Sent   : 3244
Local IP Address  : 110.20.1.4      Remote IP Address  : 10.20.1.20
Local Hello Timeout: 45          Remote Hello Timeout: 45
Local Cfg Seq No  : 572902976    Remote Cfg Seq No  : 1
-----
...
-----
Interface "gsr2"
-----
Local Address      : 110.20.1.4      Peer Address      : 10.20.1.22
Adjacency Type    : Link          State             : Established
Up Time           : 0d 12:40:41    Hold Time Remaining : 11
Hello Mesg Recv   : 10414         Hello Mesg Sent   : 11260
Local IP Address  : 160.60.60.4    Remote IP Address  : 160.60.60.2
Local Hello Timeout: 15          Remote Hello Timeout: 15
Local Cfg Seq No  : 1911286684    Remote Cfg Seq No  : 0
-----
Interface "g7600"
-----
Local Address      : 180.50.80.4      Peer Address      : 224.0.0.2
Adjacency Type    : Link          State             : Trying
-----
Interface "m160"
-----
Local Address      : 110.20.1.4      Peer Address      : 10.20.1.20
Adjacency Type    : Link          State             : Established
Up Time           : 0d 12:40:47    Hold Time Remaining : 14
Hello Mesg Recv   : 10450         Hello Mesg Sent   : 11262
Local IP Address  : 10.100.30.4    Remote IP Address  : 10.100.30.20
Local Hello Timeout: 15          Remote Hello Timeout: 15
Local Cfg Seq No  : 2523051834    Remote Cfg Seq No  : 1
=====
*A:SRU4>config>router>ldp#

```

interface

Syntax `interface [ip-int-name | ip-address] [detail]`

Context `show>router>ldp`

Description This command displays configuration information about LDP interfaces.

Parameters *ip-int-name* — The name of an existing interface. If the string contains special characters (#, \$, spaces, etc.), the entire string must be enclosed within double quotes.

ip-address — The IP address of the LDP neighbor.

detail — Displays detailed information.

Output **LDP Interface Output** — The following table describes the LDP interface output fields.

Label	Description
Interface	Specifies the interface associated with the LDP instance.
Adm	Up — The LDP is administratively enabled. Down — The LDP is administratively disabled.
Opr	Up — The LDP is operationally enabled. Down — The LDP is operationally disabled.
Hello Factor	The value by which the hello timeout should be divided to give the hello time, for example, the time interval, in seconds, between LDP hello messages. LDP uses hello messages to discover neighbors and to detect loss of connectivity with its neighbors.
Hold Time	The hello time, also known as hold time. It is the time interval, in seconds, that LDP waits before declaring a neighbor to be down. Hello timeout is local to the system and is sent in the hello messages to a neighbor.
KA Factor	The value by which the keepalive timeout should be divided to give the keepalive time, for example, the time interval, in seconds, between LDP keepalive messages. LDP keepalive messages are sent to keep the LDP session from timing out when no other LDP traffic is being sent between the neighbors.
KA Timeout	The time interval, in seconds, that LDP waits before tearing down a session. If no LDP messages are exchanged during this time interval, the LDP session is torn down. Generally the value is configured to be 3 times the keepalive time (the time interval between successive LDP keepalive messages).
Auth	Enabled — Authentication using MD5 message based digest protocol is enabled. Disabled — No authentication is used.
No. of Interface	The total number of LDP interfaces.

Sample Output

```

*A:SICILY# show router ldp interface "srr" detail
=====
LDP Interfaces (Detail)
=====
-----
Interface "srr"
-----
Admin State       : Up                Oper State       : Down
Oper Down Reason  : noResources                iildp
Hold Time        : 140                Hello Factor    : 3
Oper Hold Time   : 140                Hello Reduction *: 3
Hello Reduction  : Disabled            Keepalive Factor: 3
Keepalive Timeout: 140                Last Modified   : 07/11/13 02:27:53
Transport Addr   : System              Active Adjacencies : 0
Creator          : manual              Template Name    : N/A
Tunneling        : Disabled
Lsp Name         : None
Local LSR Type   : Interface
Local LSR        : None
BFD Status       : Disabled
Multicast Traffic: Enabled
=====
* indicates that the corresponding row element may have been truncated.
*A:SICILY#

*A:SICILY# show router ldp interface resource-failures
=====
LDP Interface Resource Failures
=====
srr
=====
*A:SICILY#

*A:SR4# show router ldp interface detail
=====
LDP Interfaces (Detail)
=====
-----
Interface "aps-1"
-----
Admin State       : Up                Oper State       : Down
Oper Down Reason  : instanceDown
Hold Time        : 45                Hello Factor    : 3
Oper Hold Time   : 30                Hello Reduction *: 3
Hello Reduction  : Disabled            Keepalive Factor: 3
Keepalive Timeout: 30                Last Modified   : 07/26/11 02:09:50
Transport Addr   : System              Active Adjacencies : 0
Tunneling        : Disabled
Lsp Name         : None
Local LSR        : System
BFD Status       : Disabled
Multicast Traffic: Enabled
=====

*A:SRU4>config>router>ldp# show router ldp interface hubA

```

Show Commands

```
=====
LDP Interfaces
=====
Interface                Adm Opr  Hello  Hold  KA    KA    Transport
                        Factor  Time  Factor Timeout Address
-----
hubA                      Up  Up    3     15    3     30    System
-----
No. of Interfaces: 1
=====
*A:SRU4>config>router>ldp#

*A:SRU4>config>router>ldp# show router ldp interface hubA detail
=====
LDP Interfaces (Detail)
=====
Interface "hubA"
-----
Admin State      : Up                Oper State      : Up
Hold Time       : 15                Hello Factor    : 3
Keepalive Timeout : 30            Keepalive Factor : 3
Transport Addr  : System          Last Modified   : 03/03/2010 19:47:34
Active Adjacencies : 3
Tunneling       : Disabled
Lsp Name        : None
Local LSR       : System
BFD Status      : Disabled
=====
*A:SRU4>config>router>ldp#
Step 1: Configure loop back interface on router. For example, "ip-100.100.100.100"
Step 2: Assign this loopback to appropriate IGP Area/Level.
Step 3: Assign this loopback address as local-lsr-id using command under LDP inter-
face (ldp interface parameters):
config>router>ldp>interface-parameters>interface ip-10.10.25.2$local-lsr-id "ip-
100.100.100.100"

*A:Dut-B>config>router>ldp# show router ldp interface "ip-10.10.25.2" detail
=====
LDP Interfaces (Detail)
=====
Interface "ip-10.10.25.2"
-----
Admin State      : Up                Oper State      : Up
Hold Time       : 15                Hello Factor    : 3
Oper Hold Time  : 15
Hello Reduction : Disabled          Hello Reduction *: 3
Keepalive Timeout : 30            Keepalive Factor : 3
Transport Addr  : System          Last Modified   : 01/24/13 23:45:42
Active Adjacencies : 1
Tunneling       : Disabled
Lsp Name        : None
Local LSR Type  : Interface
Local LSR       : ip-100.100.100.100 // Local LSR Id is Loopback.
BFD Status      : Enabled
Multicast Traffic : Enabled
=====* indicates
that the corresponding row element may have been truncated.
```



```
*A:Dut-B>config>router>ldp#
```

fec-egress-stats

Syntax	fec-egress-stats [<i>ip-prefix/mask</i>] fec-egress-stats active
Context	show>router>ldp
Description	This command displays LDP prefix FECs egress statistics.
Parameters	<i>ip-prefix</i> — Specify information for the specified IP prefix and mask length. Host bits must be 0. <i>mask</i> — Specifies the 32-bit address mask used to indicate the bits of an IP address that are being used for the subnet address.
Values	0 — 32

fec-originate

- Syntax** **fec-originate** [*ip-prefix/mask*] [*operation-type*]
- Context** show>router>ldp
- Description** This command displays LDP static prefix FECs.
- Parameters**
- ip-prefix* — Specify information for the specified IP prefix and mask length. Host bits must be 0.
 - mask* — Specifies the 32-bit address mask used to indicate the bits of an IP address that are being used for the subnet address.
 - Values** 0 — 32
 - operation-type* — Specify the operation type to display.
 - Values** pop, swap
- Output** **FEC Originate Output** — The following table describes the FEC originate parameters output fields.

Label	Description
Prefix	Specifies the static prefix FEC.
NH Type	Specifies the type of next-hop represented by this row entry. unknown — The next-hop type has not been set. IP Addr — The next-hop is an IP address. pop — There is no next-hop (pop the label and route).
NextHop	The IP address of the next-hop.
IngLabel	Specifies the label that is advertised to the upstream peer. If this variable is set to the default value of 4294967295, the ingress label will be dynamically assigned by the label manager.
EgrLabel	Specifies the egress label associated with this next-hop entry. The LSR will swap the incoming label with the configured egress label. If this egress label has a value of 4294967295, the LSR will pop the incoming label.
OperIngLabel	Specifies the actual or operational value of the label that was advertised to the upstream peer.

```
*A:SRU4>config>router>ldp# show router ldp fec-originate
=====
LDP Static Prefix FECs
=====
Prefix           NHType  NextHop      IngLabel    EgrLabel    OperIngLabel
-----
24.1.0.0/16      Pop     n/a          --          --          0
24.1.0.1/32     Pop     n/a          --          --          0
24.1.0.2/32     Pop     n/a          --          --          0
24.1.0.3/32     Pop     n/a          --          --          0
24.1.0.4/32     Pop     n/a          --          --          0
```

```

24.1.0.5/32      Pop      n/a      --      --      0
24.1.0.6/32      Pop      n/a      --      --      0
24.1.0.7/32      Pop      n/a      --      --      0
24.1.0.8/32      Pop      n/a      --      --      0
24.1.0.9/32      Pop      n/a      --      --      0
...
24.251.0.0/16    Pop      n/a      --      --      0
24.252.0.0/16    Pop      n/a      --      --      0
24.253.0.0/16    Pop      n/a      --      --      0
24.254.0.0/16    Pop      n/a      --      --      0

```

```
-----
No. of FECs: 508
=====
```

```
*A:SRU4>config>router>ldp#
```

parameters

Syntax	parameters
Context	show>router>ldp
Description	This command displays configuration information about LDP parameters.
Output	LDP Parameters Output — The following table describes the LDP parameters output fields.

Label	Description
Keepalive Timeout	The time interval, in seconds, that LDP waits before tearing down a session. If no LDP messages are exchanged during this time interval, the LDP session is torn down. Generally the value is configured to be 3 times the keepalive time (the time interval between successive LDP keepalive messages).
Timeout Factor	The value by which the keepalive timeout should be divided to give the keepalive time, for example, the time interval, in seconds, between LDP keepalive messages. LDP keepalive messages are sent to keep the LDP session from timing out when no other LDP traffic is being sent between the neighbors.
Hold Time	The hello time, also known as hold time. It is the time interval, in seconds, that LDP waits before declaring a neighbor to be down. Hello timeout is local to the system and is sent in the hello messages to a neighbor.
Hello Factor	The value by which the hello timeout should be divided to give the hello time, for example, the time interval, in seconds, between LDP hello messages. LDP uses hello messages to discover neighbors and to detect loss of connectivity with its neighbors.
Auth	Enabled — Authentication using MD5 message based digest protocol is enabled. Disabled — No authentication is used.
Admin Status	inService — The LDP is administratively enabled.

Label	Description (Continued)
	<code>outService</code> – The LDP is administratively disabled.
Deaggregated FECs	<p><code>False</code> – LDP aggregates multiple prefixes into a single Forwarding Equivalence Class (FEC) and advertises a single label for the FEC. This value is only applicable to LDP interfaces and not for targeted sessions.</p> <p><code>True</code> – LDP de-aggregates prefixes into multiple FECs.</p>
Propagate Policy	<p>The Propagate Policy value specifies whether the LSR should generate FECs and which FECs it should generate.</p> <p><code>system</code> – LDP will distribute label bindings only for the router's system IP address.</p> <p><code>interface</code> – LDP will distribute label bindings for all LDP interfaces.</p> <p><code>all</code> – LDP will distribute label bindings for all prefixes in the routing table.</p> <p><code>none</code> – LDP will not distribute any label bindings.</p>
Transport Address	<p><code>interface</code> – The interface's IP address is used to set up the LDP session between neighbors. If multiple interfaces exist between two neighbors, the 'interface' mode cannot be used since only one LDP session is actually set up between the two neighbors.</p> <p><code>system</code> – The system's IP address is used to set up the LDP session between neighbors.</p>
Label-Retention	<p><code>liberal</code> – All advertised label mappings are retained whether they are from a valid next hop or not. When the label distribution value is downstream unsolicited, a router may receive label bindings for the same destination for all its neighbors. Labels for the non-next hops for the FECs are retained in the software but not used. When a network topology change occurs where a non-nexthop becomes a true next hop, the label received earlier is then used.</p> <p><code>conservative</code> – Advertised label mappings are retained only if they will be used to forward packets; for example if the label came from a valid next hop. Label bindings received from non-next hops for each FEC are discarded.</p>
Control Mode	<p><code>ordered</code> – Label bindings are not distributed in response to a label request until a label binding has been received from the next hop for the destination.</p> <p><code>independent</code> – Label bindings are distributed immediately in response to a label request even if a label binding has not yet been received from the next hop for the destination.</p>

Label	Description (Continued)
Route Preference	The route preference assigned to LDP routes. When multiple routes are available to a destination, the route with the lowest preference will be used. This value is only applicable to LDP interfaces and not for targeted sessions.
Loop Detection	<p><code>none</code> – Loop detection is not supported on this router. This is the only valid value since Path Vector based loop detection is not supported.</p> <p><code>other</code> – Loop detection is supported but by a method other than <code>hopCount</code>, <code>pathVector</code>, or <code>hopCountAndPathVector</code>.</p> <p><code>hopCount</code> – Loop detection is supported by hop count only.</p> <p><code>pathVector</code> – Loop detection is supported by path vector only.</p> <p><code>hopCountAndPathVector</code> – Loop detection is supported by both path vector and hop count.</p>
Keepalive Timeout	The factor used to derive the Keepalive interval.
Keepalive Factor	The time interval, in seconds, that LDP waits before tearing down the session.
Hold-Time	The time left before a neighbor is declared to be down.
Hello Factor	The value by which the hello timeout should be divided to give the hello time, for example, the time interval, in seconds, between LDP hello messages. LDP uses hello messages to discover neighbors and to detect loss of connectivity with its neighbors.
Auth	<p><code>Enabled</code> – Authentication using MD5 message based digest protocol is enabled.</p> <p><code>Disabled</code> – No authentication is used.</p>
Passive-Mode	<p><code>true</code> – LDP responds only when it gets a connect request from a peer and will not attempt to actively connect to its neighbors.</p> <p><code>false</code> – LDP actively tries to connect to its peers.</p>
Targeted-Sessions	<p><code>true</code> – Targeted sessions are enabled.</p> <p><code>false</code> – Targeted sessions are disabled.</p>

Sample Output

```
*A:Dut-A>config>router>ldp# \show router ldp parameters
```

```
=====
LDP Parameters (LSR ID 10.20.1.1)
=====
-----
Graceful Restart Parameters
-----
```

Show Commands

```
Nbor Liveness Time : 120 sec           Max Recovery Time : 120
-----
Interface Parameters
-----
Keepalive Timeout : 30 sec           Keepalive Factor : 3
Hold Time         : 15 sec           Hello Factor      : 3
Propagate Policy  : system           Transport Address : system
Deaggregate FECs  : False            Route Preference  : 9
Label Distribution : downstreamUnsolic* Label Retention   : liberal
Control Mode      : ordered           Loop Detection    : none
-----
Targeted Session Parameters
-----
Keepalive Timeout : 30 sec           Keepalive Factor : 3
Hold Time         : 15 sec           Hello Factor      : 3
Hello Reduction   : Enabled          Hello Reduction Fctr: 3
Passive Mode      : False            Targeted Sessions : Enabled
=====
* indicates that the corresponding row element may have been truncated.
```

```
*A:SRU4>config>router>ldp# show router ldp parameters
=====
LDP Parameters (LSR ID 110.20.1.4)
=====
Graceful Restart Parameters
-----
Nbor Liveness Time : 5 sec           Max Recovery Time : 30
-----
Interface Parameters
-----
Keepalive Timeout : 30 sec           Keepalive Factor : 3
Hold Time         : 15 sec           Hello Factor      : 3
Propagate Policy  : system           Transport Address : system
Deaggregate FECs  : False            Route Preference  : 9
Label Distribution : downstreamUnsolicited Label Retention   : liberal
Control Mode      : ordered           Loop Detection    : none
-----
Targeted Session Parameters
-----
Keepalive Timeout : 40 sec           Keepalive Factor : 4
Hold Time         : 45 sec           Hello Factor      : 3
Passive Mode      : False            Targeted Sessions : Enabled
=====
*A:SRU4>config>router>ldp#
```

peer

- Syntax** `peer [ip-address] [detail]`
- Context** `show>router>ldp`
- Description** This command displays configuration information about LDP peers.
- Parameters** *ip-address* — The IP address of the LDP peer.

detail — Displays detailed information.

Output LDP Peer Output — The following table describes LDP peer output.

Label	Description
Peer	The IP address of the peer.
Adm	Up — The LDP is administratively enabled. Down — The LDP is administratively disabled.
Opr	Up — The LDP is operationally enabled. Down — The LDP is operationally disabled.
Hello Factor	The value by which the hello timeout should be divided to give the hello time, for example, the time interval, in seconds, between LDP hello messages. LDP uses hello messages to discover neighbors and to detect loss of connectivity with its neighbors.
Hold Time	The hello time or hold time. The time interval, in seconds, that LDP waits before declaring a neighbor to be down. Hello timeout is local to the system and is sent in the hello messages to a neighbor.
KA Factor	The value by which the keepalive timeout should be divided to give the keepalive time, for example, the time interval, in seconds, between LDP keepalive messages. LDP keepalive messages are sent to keep the LDP session from timing out when no other LDP traffic is being sent between the neighbors.
KA Timeout	The time interval, in seconds, that LDP waits before tearing down a session. If no LDP messages are exchanged during this time interval, the LDP session is torn down. Generally the value is configured to be 3 times the keepalive time (the time interval between successive LDP keepalive messages).
Auth	Enabled — Authentication using MD5 message based digest protocol is enabled. Disabled — No authentication is used.
Passive Mode	The mode used to set up LDP sessions. This value is only applicable to targeted sessions and not to LDP interfaces. True — LDP responds only when it gets a connect request from a peer and will not attempt to actively connect to its neighbors. False — LDP actively tries to connect to its peers.
Auto Create	Specifies if a targeted peer was automatically created through service manager. For an LDP interface, this value is always false.
No. of Peers	The total number of LDP peers.
Tunneling	Enabled — Tunneling is enabled.

Label	Description (Continued)
	Disabled – No tunneling is used.
LSP	The LSP name.

Sample Output

```
*A:SICILY# show router ldp peer 110.20.1.4 detail

=====
LDP Peers (Detail)
=====
-----
Peer 110.20.1.4
-----
Admin State       : Up           Oper State       : Down
Oper Down Reason  : noResources
Hold Time        : 140           Hello Factor     : 3
Oper Hold Time    : 140           Hello Reduction Fact*: 3
Hello Reduction   : Disabled      Keepalive Factor : 3
Keepalive Timeout : 140           Last Modified    : 07/11/13 00:36:09
Passive Mode      : Disabled      Auto Created     : No
Active Adjacencies : 0           Template Name    : N/A
Creator          : manual
Tunneling        : Enabled
Lsp Name         : None
Local LSR        : None
BFD Status       : Enabled
Multicast Traffic : Disabled

=====
* indicates that the corresponding row element may have been truncated.
*A:SICILY#
```

```
*A:SR1-A# /show router ldp peer detail

=====
LDP Peers (Detail)
=====
-----
Peer 2.2.2.2
-----
Admin State       : Up           Oper State       : Up
Hold Time        : 45           Hello Factor     : 3
Oper Hold Time    : 45           Hello Reduction Fact*: 3
Hello Reduction   : Disabled      Keepalive Factor : 4
Keepalive Timeout : 40           Last Modified    : 07/17/13 21:08:20
Passive Mode      : Disabled      Auto Created     : No
Active Adjacencies : 1           Template Name    : N/A
Creator          : manual
Tunneling        : Disabled
Lsp Name         : None
Local LSR        : None
BFD Status       : Disabled
Multicast Traffic : Disabled

-----
Peer 3.3.3.3
```



```

-----
Admin State      : Up           Oper State      : Up
Hold Time       : 45           Hello Factor    : 3
Oper Hold Time  : 45
Hello Reduction : Disabled     Hello Reduction Fact*: 3
Keepalive Timeout : 40       Keepalive Factor : 4
Passive Mode    : Disabled    Last Modified   : 07/17/13 21:08:20
Active Adjacencies : 1       Auto Created    : Yes
Creator        : svcMgr      Template Name   : N/A
Tunneling      : Disabled
Lsp Name       : None
Local LSR      : None
BFD Status     : Disabled
Multicast Traffic : Disabled
-----

```

Peer 4.4.4.4

```

-----
Admin State      : Up           Oper State      : Up
Hold Time       : 45           Hello Factor    : 3
Oper Hold Time  : 45
Hello Reduction : Disabled     Hello Reduction Fact*: 3
Keepalive Timeout : 40       Keepalive Factor : 4
Passive Mode    : Disabled    Last Modified   : 07/17/13 21:11:29
Active Adjacencies : 0       Auto Created    : Yes
Creator        : template    Template Name   : templ1
Tunneling      : Disabled
Lsp Name       : None
Local LSR      : None
BFD Status     : Disabled
Multicast Traffic : Disabled
-----

```

```
*A:Dut-A>config>router>ldp# \show router ldp peer 10.20.1.2 detail
```

```
=====
LDP Peers (Detail)
=====
```

```
-----
Peer 10.20.1.2
-----
```

```

Admin State      : Up           Oper State      : Up
Hold Time       : 15           Hello Factor    : 3
Oper Hold Time  : 120
Hello Reduction : Enabled     Hello Reduction Fact*: 3
Keepalive Timeout : 30       Keepalive Factor : 3
Passive Mode    : Disabled    Last Modified   : 01/23/13 23:16:53
Active Adjacencies : 1       Auto Created    : No
Tunneling      : Enabled
Lsp Name       : None
Local LSR      : None
BFD Status     : Disabled
Multicast Traffic : Disabled
-----

```

=====* indicates
that the corresponding row element may have been truncated.

```
*A:SR4# show router ldp peer detail
```

Show Commands

```
LDP Peers (Detail)
=====
-----
Peer 10.8.100.15
-----
Admin State      : Up           Oper State       : Down
Oper Down Reason : instanceDown
Hold Time        : 45           Hello Factor     : 3
Keepalive Timeout : 40           Keepalive Factor : 4
Passive Mode     : Disabled      Last Modified    : 07/26/11 02:09:50
Active Adjacencies : 0           Auto Created     : No
Tunneling        : Enabled
Lsp Name         : None
Local LSR        : None
BFD Status       : Disabled
Multicast Traffic : Disabled
-----
```

```
*A:SRU4>config>router>ldp# show router ldp peer
```

```
LDP Peers
=====
-----
Peer           Adm  Opr  Hello  Hold   KA   KA   Passive  Auto
              Factor Time Factor Time  Factor Timeout Mode      Created
-----
10.8.100.15    Up   Up   3      45    4    40    Disabled No
10.20.1.20     Up   Up   3      45    4    40    Disabled No
10.20.1.22     Up   Up   3      45    4    40    Disabled No
10.100.1.1     Up   Up   3      45    4    40    Disabled No
110.20.1.1    Up   Up   3      45    4    40    Disabled No
110.20.1.2    Up   Up   3      45    4    40    Disabled No
110.20.1.3    Up   Up   3      45    4    40    Disabled No
110.20.1.5    Up   Up   3      45    4    40    Disabled No
110.20.1.6    Up   Up   3      45    4    40    Disabled No
110.20.1.51   Up   Up   3      45    4    40    Disabled No
110.20.1.52   Up   Up   3      45    4    40    Disabled No
110.20.1.53   Up   Up   3      45    4    40    Disabled No
110.20.1.55   Up   Up   3      45    4    40    Disabled No
110.20.1.56   Up   Up   3      45    4    40    Disabled No
110.20.1.110  Up   Up   3      45    4    40    Disabled No
110.20.1.150  Up   Up   3      45    4    40    Disabled No
220.220.1.6   Up   Up   3      45    4    40    Disabled No
-----
```

```
No. of Peers: 17
```

```
*A:SRU4>config>router>ldp#
```

```
*A:SRU4>config>router>ldp# show router ldp peer detail
```

```
LDP Peers (Detail)
=====
-----
Peer 10.8.100.15
-----
Admin State      : Up           Oper State       : Up
Hold Time        : 45           Hello Factor     : 3
Keepalive Timeout : 40           Keepalive Factor : 4
Passive Mode     : Disabled      Last Modified    : 03/03/2010 19:47:34
Active Adjacencies : 1           Auto Created     : No
Tunneling        : Disabled
```

```

Lsp Name          : None
Local LSR         : None
BFD Status       : Disabled
-----
Peer 10.20.1.20
-----
Admin State      : Up           Oper State      : Up
Hold Time       : 45           Hello Factor    : 3
Keepalive Timeout : 40         Keepalive Factor : 4
Passive Mode     : Disabled     Last Modified   : 03/03/2010 19:47:34
Active Adjacencies : 1         Auto Created    : No
Tunneling       : Disabled
Lsp Name        : None
Local LSR       : None
BFD Status      : Disabled
...
-----
Peer 220.220.1.6
-----
Admin State      : Up           Oper State      : Up
Hold Time       : 45           Hello Factor    : 3
Keepalive Timeout : 40         Keepalive Factor : 4
Passive Mode     : Disabled     Last Modified   : 03/03/2010 19:47:34
Active Adjacencies : 0         Auto Created    : No
Tunneling       : Disabled
Lsp Name        : None
Local LSR       : None
BFD Status      : Disabled

=====
*A:SRU4>config>router>ldp#

*A:SRU4>config>router>ldp#   show router ldp peer 10.8.100.15 detail
=====
LDP Peers (Detail)
=====
Peer 10.8.100.15
-----
Admin State      : Up           Oper State      : Up
Hold Time       : 45           Hello Factor    : 3
Keepalive Timeout : 40         Keepalive Factor : 4
Passive Mode     : Disabled     Last Modified   : 03/03/2010 19:47:34
Active Adjacencies : 1         Auto Created    : No
Tunneling       : Disabled
Lsp Name        : None
Local LSR       : None
BFD Status      : Disabled
=====
*A:SRU4>config>router>ldp#

```

peer-template

- Syntax** peer-template
- Context** show>router>ldp
- Description** This command displays the configured parameters of a peer-template

Sample Output

```
*A:SR1-A# show router ldp peer-template
=====
LDP Peer Template
=====
-----
Peer Template templ1
-----
Create Time       : 01/03/70 12:48:55  Last Modified    : 01/04/70 04:21:15
Admin State      : Up
Hello Timeout    : 45                  Hello Factor     : 3
Hello Reduction  : Disabled            Hello Reduction Fa*: 3
Keepalive Timeout : 40                  Keepalive Factor : 4
Tunneling        : Disabled
Local LSR        : None
BFD Status       : Disabled
-----
Peer Template templ2
-----
Create Time       : 01/03/70 13:14:48  Last Modified    : 01/04/70 04:47:08
Admin State      : Up
Hello Timeout    : 45                  Hello Factor     : 3
Hello Reduction  : Disabled            Hello Reduction Fa*: 3
Keepalive Timeout : 40                  Keepalive Factor : 4
Tunneling        : Disabled
Local LSR        : None
BFD Status       : Disabled
-----
Peer Template templ3
-----
Create Time       : 01/03/70 15:56:30  Last Modified    : 01/04/70 07:28:50
Admin State      : Up
Hello Timeout    : 45                  Hello Factor     : 3
Hello Reduction  : Disabled            Hello Reduction Fa*: 3
Keepalive Timeout : 40                  Keepalive Factor : 4
Tunneling        : Disabled
Local LSR        : None
BFD Status       : Disabled
-----
Peer Template templ4
-----
Create Time       : 01/03/70 17:02:12  Last Modified    : 01/04/70 08:34:32
Admin State      : Up
Hello Timeout    : 45                  Hello Factor     : 3
Hello Reduction  : Disabled            Hello Reduction Fa*: 3
Keepalive Timeout : 40                  Keepalive Factor : 4
Tunneling        : Disabled
Local LSR        : None
BFD Status       : Disabled
=====
```

peer-template-map

Syntax `peer-template-map [tldp-peers]`

Context `show>router>ldp`

Description This command displays peer template mappings to prefix policy.

Sample Output

```
*A:SR1-A# /show router ldp peer-template-map

=====
LDP Peer Template Map
=====
-----
Peer Template templ1
-----
Peer Policy 1           : policy1
-----
Peer Template templ2
-----
Peer Policy 1           : policy1
Peer Policy 2           : policy2
Peer Policy 3           : policy3
-----
Peer Template templ3
-----
Peer Policy 1           : policy2
=====

*A:SR1-A# /show router ldp peer-template-map tldp-peers

=====
LDP Peer Template Map TLDP Peers
=====
-----
Peer Template templ1
-----
10.0.10.1               10.0.10.2
10.0.10.3               10.0.10.4
10.0.10.5               10.0.10.6
10.0.10.7               10.0.10.8
10.0.10.9               10.0.10.10
10.0.10.11              10.0.10.12
10.0.10.13              10.0.10.14
10.0.10.15              10.0.10.16
10.0.10.17              10.0.10.18
10.0.10.19              10.0.10.20
10.0.10.21              10.0.10.22
10.0.10.23              10.0.10.24
10.0.10.25              10.0.10.26
10.0.10.27              10.0.10.28
10.0.10.29              10.0.10.30
10.0.10.31              10.0.10.32
10.0.10.33              10.0.10.34
10.0.10.35              10.0.10.36
10.0.10.37              10.0.10.38
10.0.10.39              10.0.10.40
10.0.10.41              10.0.10.42
10.0.10.43              10.0.10.44
```

Show Commands

```
10.0.10.45                               10.0.10.46
10.0.10.47                               10.0.10.48
10.0.10.49                               10.0.10.50
-----
Peer Template templ3
-----
30.1.3.5                                 30.1.3.6
30.1.3.7                                 30.1.3.8
30.1.3.9                                 30.1.3.10
30.1.3.11                                30.1.3.12
30.1.3.13                                30.1.3.14
=====
```

peer-parameters

- Syntax** `peer-parameters peer-ip-address`
- Context** `show>router>ldp`
- Description** This command displays LDP peer information.
- Parameters** *peer-ip-address* — Specify the peer IP address.
- LDP peer-parameters output** — The following table describes LDP peer-parameters output.

Label	Description
Peer	The IP address of the peer.
TTL security	Enabled — LDP peering sessions protected. Disabled — LDP peering sessions unprotected.
Min-TTL-Value	Displays the minimum TTL value for an incoming packet.
Auth	Enabled — Authentication using MD5 message based digest protocol is enabled. Disabled — No authentication is used.

Sample Output

```
*A:SRR# show router ldp peer-parameters
=====
LDP Peers
=====
Peer : 10.8.100.15
-----
TTL Security      : Disabled      Min-TTL      : n/a
Authentication Key : Enabled        DOD          : Disabled
Auth key chain    : n/a
```

```
FEC129 Cisco Inter*: Disabled      Path MTU Discovery:: Disabled
Import Policies      : None         Export Policies      : None
```

```
-----
Peer : 10.20.1.20
-----
```

```
TTL Security      : Disabled      Min-TTL            : n/a
Authentication Key : Disabled      DOD                : Disabled
Auth key chain    : n/a
FEC129 Cisco Inter*: Disabled      Path MTU Discovery:: Disabled
Import Policies   : None         Export Policies     : None
```

```
-----
*A:SRU4>config>router>ldp# show router ldp peer-parameters
```

```
=====
LDP Peers
=====
```

```
-----
Peer : 10.8.100.15
-----
```

```
TTL Security      : Disabled      Min-TTL            : n/a
Authentication Key : Disabled      DOD                : Disabled
Auth key chain    : n/a
FEC129 Cisco Inter*: Disabled
Import Policies   : None         Export Policies     : None
```

```
-----
Peer : 10.20.1.20
-----
```

```
TTL Security      : Disabled      Min-TTL            : n/a
Authentication Key : Disabled      DOD                : Disabled
Auth key chain    : n/a
FEC129 Cisco Inter*: Disabled
Import Policies   : None         Export Policies     : None
```

```
-----
Peer : 220.220.1.6
-----
```

```
TTL Security      : Enabled       Min-TTL            : 255
Authentication Key : Enabled       DOD                : Disabled
Auth key chain    : n/a
FEC129 Cisco Inter*: Disabled
Import Policies   : None         Export Policies     : None
```

```
-----
No. of Peers: 17
=====
```

```
* indicates that the corresponding row element may have been truncated.
```

```
*A:SRU4>config>router>ldp#
```

session

- Syntax** `session [ip-addr[:label-space]] [detail | statistics [packet-type]] [session-type]`
- Context** `show>router>ldp`
- Description** This command displays configuration information about LDP sessions.
- Parameters**
 - ip-address* — Specify the IP address of the LDP peer.
 - label-space* — Specifies the label space identifier that the router is advertising on the interface.
 - Values** 0 — 65535
 - detail** — Displays detailed information.
 - statistics** *packet-type* — Specify the packet type.
 - Values** hello, keepalive, init, label, notification, address
 - session-type* — Specifies to display the session type.
 - Values** link, targeted, both

Output **LDP Session Output** — The following table describes LDP session output fields.

Label	Description
Peer LDP ID	The IP address of the LDP peer.
Adj Type	The adjacency type between the LDP peer and LDP session is targeted. Link — Specifies that this adjacency is a result of a link hello. Targeted — Specifies that this adjacency is a result of a targeted hello.
State	Established — The adjacency is established. Trying — The adjacency is not yet established.
Mesg Sent	The number of messages sent.
Mesg Rcvd	The number of messages received.
Up Time	The amount of time the adjacency has been enabled.

Sample Output

```
*B:SRR# show router ldp session overload
=====
LDP Session Overload
=====
-----
Session with peer 10.8.100.15:0, Local 110.20.1.2:0
-----
Overload sent for      : 16155
```


Overload received for : 0

 Session with peer 10.20.1.22:0, Local 110.20.1.2:0

Overload sent for : 0
 Overload received for : 16155

*B:SRR# show router ldp session detail

=====
 LDP Sessions (Detail)
 =====

Legend: DoD - Downstream on Demand (for address FEC's only)
 DU - Downstream Unsolicited
 =====

 Session with Peer 10.8.100.15:0, Local 110.20.1.2:0

Adjacency Type	: Targeted	State	: Established
Up Time	: 0d 00:48:26		
Max PDU Length	: 4096	KA/Hold Time Remaining	: 131
Link Adjacencies	: 0	Targeted Adjacencies	: 1
Local Address	: 110.20.1.2	Peer Address	: 10.8.100.15
Local TCP Port	: 53718	Peer TCP Port	: 646
Local KA Timeout	: 140	Peer KA Timeout	: 180
Mesg Sent	: 37531	Mesg Recv	: 22526
FECs Sent	: 0	FECs Recv	: 1688
Adrrs Sent	: 417	Adrrs Recv	: 5
GR State	: Capable	Label Distribution	: DU
Nbr Liveness Time	: 5	Max Recovery Time	: 0
Number of Restart	: 0	Last Restart Time	: Never
P2MP	: Not Capable	MP MBB	: Not Capable
Dynamic Capability	: Not Capable	LSR Overload	: Not Capable
Advertise	: Service		
Addr FEC OverLoad Sent	: No	Addr FEC OverLoad Recv	: No
Mcast FEC Overload Sent	: No	Mcast FEC Overload Recv	: No
Serv FEC Overload Sent	: No	Serv FEC Overload Recv	: No

 Session with Peer 110.20.1.1:0, Local 110.20.1.2:0

Adjacency Type	: Link	State	: Established
Up Time	: 0d 00:13:45		
Max PDU Length	: 4096	KA/Hold Time Remaining	: 140
Link Adjacencies	: 2	Targeted Adjacencies	: 0
Local Address	: 110.20.1.2	Peer Address	: 110.20.1.1
Local TCP Port	: 53914	Peer TCP Port	: 646
Local KA Timeout	: 140	Peer KA Timeout	: 140
Mesg Sent	: 8032	Mesg Recv	: 6325
FECs Sent	: 1813	FECs Recv	: 1196
Adrrs Sent	: 417	Adrrs Recv	: 1054
GR State	: Capable	Label Distribution	: DU
Nbr Liveness Time	: 0	Max Recovery Time	: 0
Number of Restart	: 0	Last Restart Time	: Never
P2MP	: Capable	MP MBB	: Capable
Dynamic Capability	: Not Capable	LSR Overload	: Capable
Advertise	: Address		

Show Commands

```
Addr FEC OverLoad Sent : No           Addr FEC OverLoad Recv : No
Mcast FEC Overload Sent: No           Mcast FEC Overload Recv: No
Serv FEC Overload Sent : No           Serv FEC Overload Recv : No
-----
{...snip...}

*A:Dut-C# show router ldp session local-addresses

=====
LDP Session Local-Addresses
=====
-----
Session with Peer 10.20.1.2:0, Local 10.20.1.3:0
-----
Sent Addresses: 1.1.1.1      10.10.12.3    10.10.22.3    10.20.1.3
                 10.180.2.3    10.180.3.3    10.180.5.3    10.180.11.3
                 10.181.2.3    10.181.3.3    10.181.5.3    10.181.11.3
                 10.182.2.3    10.182.3.3    10.182.5.3    10.182.11.3

Recv Addresses: 2.2.2.2      10.10.12.2    10.20.1.2     10.180.1.2
                 10.180.3.2    10.180.4.2    10.181.1.2    10.181.3.2
                 10.181.4.2    10.182.1.2    10.182.3.2    10.182.4.2
-----
Session with Peer 10.20.1.4:0, Local 10.20.1.3:0
-----
Sent Addresses: 1.1.1.1      10.10.12.3    10.10.22.3    10.20.1.3
                 10.180.2.3    10.180.3.3    10.180.5.3    10.180.11.3
                 10.181.2.3    10.181.3.3    10.181.5.3    10.181.11.3
                 10.182.2.3    10.182.3.3    10.182.5.3    10.182.11.3

Recv Addresses: 10.10.22.4   10.20.1.4     10.180.4.4    10.180.6.4
                 10.180.9.4   10.180.11.4   10.181.4.4    10.181.6.4
                 10.181.9.4   10.181.11.4   10.182.4.4    10.182.6.4
                 10.182.9.4   10.182.11.4
-----
Session with Peer 10.20.1.5:0, Local 10.20.1.3:0
-----
Sent Addresses: 1.1.1.1      10.10.12.3    10.10.22.3    10.20.1.3
                 10.180.2.3    10.180.3.3    10.180.5.3    10.180.11.3
                 10.181.2.3    10.181.3.3    10.181.5.3    10.181.11.3
                 10.182.2.3    10.182.3.3    10.182.5.3    10.182.11.3

Recv Addresses: 10.20.1.5    10.180.5.5    10.180.6.5    10.180.10.5
                 10.181.5.5    10.181.6.5    10.181.10.5   10.182.5.5
                 10.182.6.5    10.182.10.5
=====
*A:Dut-C#

*A:Dut-C# show router ldp session local-addresses

=====
LDP Session Local-Addresses
=====
-----
Session with Peer 10.20.1.2:0, Local 10.20.1.3:0
-----
Sent Addresses: 1.1.1.1      10.10.12.3    10.10.22.3    10.20.1.3
```

```

10.180.2.3      10.180.3.3      10.180.5.3      10.180.11.3
10.181.2.3      10.181.3.3      10.181.5.3      10.181.11.3
10.182.2.3      10.182.3.3      10.182.5.3      10.182.11.3

Recv Addresses: 2.2.2.2      10.10.12.2      10.20.1.2      10.180.1.2
                 10.180.3.2      10.180.4.2      10.181.1.2      10.181.3.2
                 10.181.4.2      10.182.1.2      10.182.3.2      10.182.4.2

```

```
-----
Session with Peer 10.20.1.4:0, Local 10.20.1.3:0
-----
```

```

Sent Addresses: 1.1.1.1      10.10.12.3      10.10.22.3      10.20.1.3
                 10.180.2.3      10.180.3.3      10.180.5.3      10.180.11.3
                 10.181.2.3      10.181.3.3      10.181.5.3      10.181.11.3
                 10.182.2.3      10.182.3.3      10.182.5.3      10.182.11.3

Recv Addresses: 10.10.22.4      10.20.1.4      10.180.4.4      10.180.6.4
                 10.180.9.4      10.180.11.4      10.181.4.4      10.181.6.4
                 10.181.9.4      10.181.11.4      10.182.4.4      10.182.6.4
                 10.182.9.4      10.182.11.4

```

```
-----
Session with Peer 10.20.1.5:0, Local 10.20.1.3:0
-----
```

```

Sent Addresses: 1.1.1.1      10.10.12.3      10.10.22.3      10.20.1.3
                 10.180.2.3      10.180.3.3      10.180.5.3      10.180.11.3
                 10.181.2.3      10.181.3.3      10.181.5.3      10.181.11.3
                 10.182.2.3      10.182.3.3      10.182.5.3      10.182.11.3

Recv Addresses: 10.20.1.5      10.180.5.5      10.180.6.5      10.180.10.5
                 10.181.5.5      10.181.6.5      10.181.10.5      10.182.5.5
                 10.182.6.5      10.182.10.5

```

```
=====
*A:Dut-C#
```

```
*A:SRU4>config>router>ldp# show router ldp session
```

```
=====
LDP Sessions
=====
```

Peer LDP Id	Adj Type	State	Msg Sent	Msg Recv	Up Time
1.1.1.1:0	Link	Nonexistent	2	1	0d 00:00:04
10.8.100.15:0	Both	Nonexistent	14653	21054	0d 12:48:25
10.20.1.20:0	Both	Established	105187	84837	0d 12:48:27
10.20.1.22:0	Both	Established	144586	95148	0d 12:48:23
11.22.10.2:0	Link	Nonexistent	4	2	0d 00:00:16
11.22.11.2:0	Link	Nonexistent	4	4	0d 00:00:14
11.22.13.2:0	Link	Nonexistent	5	6	0d 00:00:20
33.66.33.1:0	Link	Nonexistent	6	7	0d 00:00:25
33.66.34.1:0	Link	Nonexistent	2	2	0d 00:00:05
33.66.35.1:0	Link	Nonexistent	4	4	0d 00:00:14
110.20.1.1:0	Targeted	Nonexistent	0	1	0d 00:00:04
110.20.1.3:0	Both	Established	94	97	0d 00:00:55
110.20.1.5:0	Both	Established	230866	286216	0d 12:48:27
110.20.1.110:0	Link	Nonexistent	2	2	0d 00:00:05
200.0.0.1:0	Link	Nonexistent	2	2	0d 00:00:05

```
-----
No. of Sessions: 15
=====
```

```
*A:SRU4>config>router>ldp#
```

Show Commands

```
*A:SRU4>config>router>ldp# show router ldp session 10.20.1.20:0
=====
LDP Sessions
=====
Peer LDP Id      Adj Type   State      Msg Sent   Msg Recv   Up Time
-----
10.20.1.20:0    Both      Established 105204     84859      0d 12:49:05
-----
No. of Sessions: 1
=====
*A:SRU4>config>router>ldp#

*A:SRU4# show router ldp session detail
=====
LDP Sessions (Detail)
=====
Legend: DoD - Downstream on Demand (for address FEC's only)
        DU - Downstream Unsolicited
=====
-----
Session with Peer 10.8.100.15:0
-----
Adjacency Type      : Both                State                : Nonexistent
Up Time             : 0d 00:50:30
Max PDU Length      : 4096                KA/Hold Time Remaining : 0
Link Adjacencies    : 1                   Targeted Adjacencies  : 1
Local Address       : 110.20.1.4          Peer Address          : 10.8.100.15
Local TCP Port      : 0                   Peer TCP Port         : 0
Local KA Timeout    : 30                  Peer KA Timeout       : 30
Mesg Sent           : 951                 Mesg Recv             : 1388
FECs Sent           : 0                   FECs Recv             : 0
GR State            : Capable             Label Distribution    : DU
Nbr Liveness Time   : 0                   Max Recovery Time     : 0
Number of Restart   : 0                   Last Restart Time     : Never
P2MP                : Not Capable         MP MBB                : Not Capable
Dynamic Capability  : Not Capable
Advertise           : Address/Servi*
-----
Session with Peer 10.20.1.20:0
-----
*A:SRU4>config>router>ldp# show router ldp session detail
=====
LDP Sessions (Detail)
=====
Legend: DoD - Downstream on Demand (for address FEC's only)
        DU - Downstream Unsolicited
=====
-----
Session with Peer 1.1.1.1:0
-----
Adjacency Type      : Link                State                : Nonexistent
Up Time             : 0d 00:00:22
Max PDU Length      : 4096                KA/Hold Time Remaining : 0
Link Adjacencies    : 1                   Targeted Adjacencies  : 0
Local Address       : 110.20.1.4          Peer Address          : 1.1.1.1
Local TCP Port      : 0                   Peer TCP Port         : 0
Local KA Timeout    : 30                  Peer KA Timeout       : 30
Mesg Sent           : 5                   Mesg Recv             : 2
FECs Sent           : 0                   FECs Recv             : 0
GR State            : Capable             Label Distribution    : DU
Nbr Liveness Time   : 0                   Max Recovery Time     : 0
```

```

Number of Restart : 0                Last Restart Time      : Never
Advertise         : Address
-----
Session with Peer 10.8.100.15:0
-----
Adjacency Type   : Both              State                   : Nonexistent
Up Time          : 0d 12:49:26
Max PDU Length   : 4096              KA/Hold Time Remaining: 0
Link Adjacencies : 1                 Targeted Adjacencies   : 1
Local Address    : 110.20.1.4        Peer Address            : 10.8.100.15
Local TCP Port   : 0                 Peer TCP Port           : 0
Local KA Timeout : 30                Peer KA Timeout         : 30
Mesg Sent        : 14672             Mesg Recv               : 21081
FECs Sent        : 0                 FECs Recv               : 0
GR State         : Capable           Label Distribution      : DU
Nbr Liveness Time : 0                Max Recovery Time       : 0
A:cpm-a#
...
-----
Session with Peer 200.0.0.1:0
-----
Adjacency Type   : Link              State                   : Nonexistent
Up Time          : 0d 00:00:02
Max PDU Length   : 4096              KA/Hold Time Remaining: 28
Link Adjacencies : 1                 Targeted Adjacencies   : 0
Local Address    : 110.20.1.4        Peer Address            : 200.0.0.1
Local TCP Port   : 0                 Peer TCP Port           : 0
Local KA Timeout : 30                Peer KA Timeout         : 30
Mesg Sent        : 1                 Mesg Recv               : 1
FECs Sent        : 0                 FECs Recv               : 0
GR State         : Capable           Label Distribution      : DU
Nbr Liveness Time : 0                Max Recovery Time       : 0
Number of Restart : 0                Last Restart Time       : Never
Advertise         : Address
=====
* indicates that the corresponding row element may have been truncated.
*A:SRU4>config>router>ldp#

```

status

- Syntax** **status**
- Context** show>router>ldp
- Description** This command displays LDP status information.
- Output** **LDP Status Output** — The following table describes LDP status output fields.

Label	Description
Admin State	Up — The LDP is administratively enabled. Down — The LDP is administratively disabled.
Oper State	Up — The LDP is operationally enabled. Down — The LDP is operationally disabled.
Created at	The date and time when the LDP instance was created.
Up Time	The time, in hundredths of seconds, that the LDP instance has been operationally up.
Last Change	The date and time when the LDP instance was last modified.
Oper Down Events	The number of times the LDP instance has gone operationally down since the instance was created.
Active Adjacencies	The number of active adjacencies (established sessions) associated with the LDP instance.
Active Sessions	The number of active sessions (session in some form of creation) associated with the LDP instance.
Active Interfaces	The number of active (operationally up) interfaces associated with the LDP instance.
Inactive Interfaces	The number of inactive (operationally down) interfaces associated with the LDP instance.
Active Peers	The number of active LDP peers.
Inactive Peers	The number of inactive LDP peers.
Addr FECs Sent	The number of labels that have been sent to the peer associated with this FEC.
Addr FECs Recv	The number of labels that have been received from the peer associated with this FEC.
Serv FECs Sent	The number of labels sent to the peer associated with this FEC.
Serv FECs Recv	The number of labels received from the peer associated with this FEC.
Attempted Sessions	The total number of attempted sessions for this LDP instance.

Label	Description (Continued)
No Hello Err	The total number of “Session Rejected” or “No Hello Error” notification messages sent or received by this LDP instance.
Param Adv Err	The total number of “Session Rejected” or “Parameters Advertisement Mode Error” notification messages sent or received by this LDP instance.
Max PDU Err	The total number of “Session Rejected” or “Parameters Max PDU Length Error” notification messages sent or received by this LDP instance.
Label Range Err	The total number of “Session Rejected” or “Parameters Label Range Error” notification messages sent or received by this LDP instance.
Bad LDP Id Err	The number of bad LDP identifier fatal errors detected for sessions associated with this LDP instance.
Bad PDU Len Err	The number of bad PDU length fatal errors detected for sessions associated with this LDP instance.
Bad Mesg Len Err	The number of bad message length fatal errors detected for sessions associated with this LDP instance.
Bad TLV Len Err	The number of bad TLV length fatal errors detected for sessions associated with this LDP instance.
Malformed TLV Err	The number of malformed TLV value fatal errors detected for sessions associated with this LDP instance.
Shutdown Notif Sent	The number of shutdown notifications sent related to sessions associated with this LDP instance.
Keepalive Expired Err	The number of session Keepalive timer expired errors detected for sessions associated with this LDP instance.
Shutdown Notif Recv	The number of shutdown notifications received related to sessions associated with this LDP instance.

Sample Output

```
*B:SRR# show router ldp status
```

```
=====
LDP Status for LSR ID 110.20.1.2
=====
```

```
Admin State      : Up                Oper State       : Up
Created at       : 07/11/13 01:17:50  Up Time         : 0d 00:10:45
Oper Down Reason : n/a                Oper Down Events : 1
Last Change      : 07/11/13 01:23:46  Tunn Down Damp Time : 20 sec
Label Withdraw Del*: 0 sec             Implicit Null Label : Disabled
Short. TTL Prop Lo*: Disabled          Short. TTL Prop Tran*: Disabled
Import Policies  :                    Export Policies   :
    Import-LDP      Import-LDP
Tunl Exp Policies :
```

Show Commands

```
from-proto-bgp
Aggregate Prefix : True
FRR : Enabled
Dynamic Capability : False
MP MBB Capability : True
Overload Capability: True
Active Adjacencies : 26
Active Interfaces : 38
Active Peers : 11
Addr FECs Sent : 16155
Serv FECs Sent : 0
P2MP FECs Sent : 971
Attempted Sessions : 17
No Hello Err : 0
Max PDU Err : 0
Bad LDP Id Err : 0
Bad Mesg Len Err : 0
Unknown TLV Err : 0
Malformed TLV Err : 0
Shutdown Notif Sent: 0

Agg Prefix Policies : None
Mcast Upstream FRR : Enabled
P2MP Capability : True
MP MBB Time : 3

Active Sessions : 11
Inactive Interfaces : 0
Inactive Peers : 1
Addr FECs Recv : 13672
Serv FECs Recv : 0
P2MP FECs Recv : 2448

Param Adv Err : 0
Label Range Err : 0
Bad PDU Len Err : 0
Bad TLV Len Err : 1

Keepalive Expired Err: 0
Shutdown Notif Recv : 1
```

```
=====
* indicates that the corresponding row element may have been truncated.
*B:SRR#
```

```
*A:SRU4>config>router>ldp# show router ldp status
```

```
=====
LDP Status for LSR ID 110.20.1.4
=====
Admin State : Up
Created at : 07/11/13 00:37:31
Oper Down Reason : n/a
Last Change : 07/11/13 01:11:14
Label Withdraw Del*: 0 sec
Short. TTL Prop Lo*: Enabled
Import Policies :
  Import-LDP
Tunl Exp Policies :
  from-proto-bgp
Aggregate Prefix : True
FRR : Enabled
Dynamic Capability : False
MP MBB Capability : True
Overload Capability: True
Active Adjacencies : 38
Active Interfaces : 36
Active Peers : 19
Addr FECs Sent : 36206
Serv FECs Sent : 108
P2MP FECs Sent : 2411
Attempted Sessions : 166
No Hello Err : 0
Max PDU Err : 0
Bad LDP Id Err : 2
Bad Mesg Len Err : 0
Unknown TLV Err : 0
Malformed TLV Err : 0
Shutdown Notif Sent: 0

Oper State : Up
Up Time : 0d 00:44:09
Oper Down Events : 1
Tunn Down Damp Time : 20 sec
Implicit Null Label : Enabled
Short. TTL Prop Tran*: Enabled
Export Policies :
  Import-LDP
Agg Prefix Policies : None
Mcast Upstream FRR : Enabled
P2MP Capability : True
MP MBB Time : 10

Active Sessions : 16
Inactive Interfaces : 0
Inactive Peers : 0
Addr FECs Recv : 23413
Serv FECs Recv : 108
P2MP FECs Recv : 370

Param Adv Err : 0
Label Range Err : 0
Bad PDU Len Err : 0
Bad TLV Len Err : 19

Keepalive Expired Err: 21
Shutdown Notif Recv : 13
=====
```


* indicates that the corresponding row element may have been truncated.
 *A:SRU4>config>router>ldp#

*A:SRR# show router ldp status

=====

LDP Status for LSR ID 110.20.1.2

=====

Admin State	: Up	Oper State	: Up
Created at	: 07/26/11 05:49:52	Up Time	: 0d 15:20:48
Oper Down Reason	: n/a	Oper Down Events	: 12
Last Change	: 07/26/11 06:05:46	Tunn Down Damp Time	: 20 sec
Label Withdraw Del*	: 120 sec	Implicit Null Label	: Disabled
Short. TTL Prop Lo*	: Disabled	Short. TTL Prop Tran*	: Disabled
Import Policies	: None	Export Policies	: None
Tunl Exp Policies	: from-proto-bgp		
Aggregate Prefix	: True	Agg Prefix Policies	: None
FRR	: Enabled		
Dynamic Capability	: False	P2MP Capability	: True
MP MBB Capability	: True	MP MBB Time	: 3
Active Adjacencies	: 10	Active Sessions	: 6
Active Interfaces	: 34	Inactive Interfaces	: 3
Active Peers	: 18	Inactive Peers	: 1
Addr FECs Sent	: 3066	Addr FECs Recv	: 3066
Serv FECs Sent	: 0	Serv FECs Recv	: 0
P2MP FECs Sent	: 600	P2MP FECs Recv	: 1200
Attempted Sessions	: 8575		
No Hello Err	: 24	Param Adv Err	: 0
Max PDU Err	: 0	Label Range Err	: 0
Bad LDP Id Err	: 18020	Bad PDU Len Err	: 0
Bad Mesg Len Err	: 0	Bad TLV Len Err	: 0
Unknown TLV Err	: 0		
Malformed TLV Err	: 0	Keepalive Expired Err	: 1751
Shutdown Notif Sent	: 10	Shutdown Notif Recv	: 0

* indicates that the corresponding row element may have been truncated.

*A:SRR#

*B:Dut-B# show router ldp status

=====

LDP Status for LSR ID 10.20.1.2

=====

Admin State	: Up	Oper State	: Up
Created at	: 11/19/2010 23:45:01	Up Time	: 68d 01:00:07
Oper Down Reason	: n/a	Oper Down Events	: 0
Last Change	: 11/19/2010 23:45:01	Tunn Down Damp Time	: 3 sec
Label Withdraw Del*	: 0 sec	Implicit Null Label	: Disabled
Short. TTL Prop Lo*	: Enabled	Short. TTL Prop Tran*	: Enabled
Import Policies	: None	Export Policies	: None
Tunl Exp Policies	: None		
Aggregate Prefix	: False		
Agg Prefix Policies	: None		
Dynamic Capability	: False	P2MP Capability	: True
MP MBB Capability	: True	MP MBB Time	: 3
Active Adjacencies	: 3	Active Sessions	: 1
Active Interfaces	: 3	Inactive Interfaces	: 9
Active Peers	: 0	Inactive Peers	: 0
Addr FECs Sent	: 1	Addr FECs Recv	: 1
Serv FECs Sent	: 0	Serv FECs Recv	: 0
Attempted Sessions	: 0		

Show Commands

```
No Hello Err      : 0          Param Adv Err      : 0
Max PDU Err      : 0          Label Range Err    : 0
Bad LDP Id Err   : 0          Bad PDU Len Err    : 0
Bad Mesg Len Err : 0          Bad TLV Len Err    : 0
Unknown TLV Err  : 0
Malformed TLV Err : 0        Keepalive Expired Err: 0
Shutdown Notif Sent: 0      Shutdown Notif Recv : 0
=====
* indicates that the corresponding row element may have been truncated.
*B:Dut-B#

*A:SRU4# show router ldp statistics-summary
=====
Statistics Summary
=====
LDP FEC Prefix egress statistics : 0
=====
*A:SRU4#
```

Clear Commands

fec-egress-statistics

Syntax **fec-egress-statistics** [*ip-prefix/mask*]

Context clear>router>ldp

Description This command clears LDP FEC egress statistics..

ip-prefix — Specify information for the specified IP prefix and mask length. Host bits must be 0.

mask — Specifies the 32-bit address mask used to indicate the bits of an IP address that are being used for the subnet address.

Values 0 — 32

instance

Syntax **instance**

Context clear>router>ldp

Description This command resets the LDP instance.

interface

Syntax **interface** [*ip-int-name*]

Context clear>router>ldp

Description This command restarts or clears statistics for LDP interfaces.

Parameters *ip-int-name* — The name of an existing interface. If the string contains special characters (#, \$, spaces, etc.), the entire string must be enclosed within double quotes.

peer

Syntax **peer** [*ip-address*] [**statistics**]

Context clear>router>ldp

Description This command restarts or clears statistics for LDP targeted peers.

Parameters *ip-address* — The IP address of a targeted peer.
statistics — Clears only the statistics for a targeted peer

session

Syntax **session** [*ip-addr[:label-space]*] [**statistics**]

Context clear>router>ldp

Description This command restarts or clears statistics for LDP sessions.

Parameters *label-space* — Specifies the label space identifier that the router is advertising on the interface.

Values 0 — 65535

statistics — Clears only the statistics for a session.

statistics

Syntax **statistics**

Context clear>router>ldp

Description This command clears LDP instance statistics.

Debug Commands

The following output shows debug LDP configurations discussed in this section.

```
A:ALA-12# debug router ldp peer 10.10.10.104
A:ALA-12>debug>router>ldp# show debug ldp
debug
  router "Base"
    ldp peer 10.10.10.104
      event
        bindings
        messages
      exit
    packet
      hello
      init
      keepalive
      label
    exit
  exit
exit
A:ALA-12>debug>router>ldp#
```

ldp

Syntax	[no] ldp
Context	debug>router
Description	Use this command to configure LDP debugging.

interface

Syntax	[no] interface <i>interface-name</i>
Context	debug>router>ldp
Description	Use this command for debugging an LDP interface.
Parameters	<i>interface-name</i> — The name of an existing interface.

peer

Syntax	[no] peer <i>ip-address</i>
Context	debug>router>ldp
Description	Use this command for debugging an LDP peer.

Parameters *ip-address* — The IP address of the LDP peer.

event

Syntax [no] event

Context debug>router>ldp>if
debug>router>ldp>peer

Description This command configures debugging for specific LDP events.

bindings

Syntax [no] bindings

Context debug>router>ldp>peer>event

Description This command displays debugging information about addresses and label bindings learned from LDP peers for LDP bindings.

The **no** form of the command disables the debugging output.

messages

Syntax [no] messages

Context debug>router>ldp>if>event
debug>router>ldp>peer>event

Description This command displays specific information (for example, message type, source, and destination) regarding LDP messages sent to and received from LDP peers.

The **no** form of the command disables debugging output for LDP messages.

packet

Syntax packet [detail]
no packet

Context debug>router>ldp>if
debug>router>ldp>peer

Description This command enables debugging for specific LDP packets.

The **no** form of the command disables the debugging output.

Parameters **detail** — Displays detailed information.

Show Commands

hello

Syntax	hello [detail] no hello
Context	debug>router>ldp>if>packet debug>router>ldp>peer>packet
Description	This command enables debugging for LDP hello packets. The no form of the command disables the debugging output.
Parameters	detail — Displays detailed information.

init

Syntax	init [detail] no init
Context	debug>router>ldp>peer>packet
Description	This command enables debugging for LDP Init packets. The no form of the command disables the debugging output.
Parameters	detail — Displays detailed information.

keepalive

Syntax	[no] keepalive
Context	debug>router>ldp>peer>packet
Description	This command enables debugging for LDP Keepalive packets. The no form of the command disables the debugging output.

label

Syntax	label [detail] no label
Context	debug>router>ldp>peer>packet
Description	This command enables debugging for LDP Label packets. The no form of the command disables the debugging output.
Parameters	detail — Displays detailed information.