Typical L2VPN-SVC Configuration

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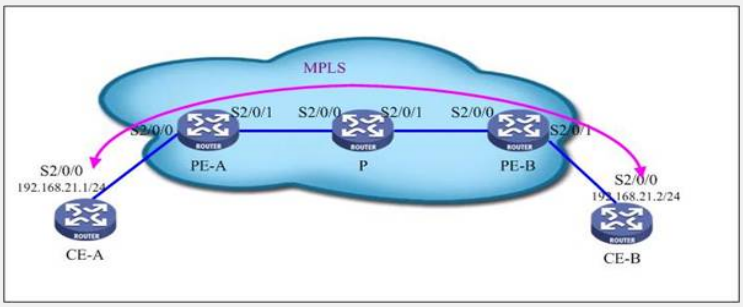
Typical L2VPN-SVC Configuration

[Requirements]

Set up an L2VPN SVC connection between the S2/0/0 of CE-A and the S2/0/0 of CE-B.

[Networking diagram]



[Configuration script]

Configuration script (CE-A)
sysname CE-A # radius scheme system # domain system # interface Serial2/0/0 link-protocol ppp ip address 192.168.21.1 255.255.255.0 # interface NULL0 # user-interface con 0 user-interface vty 0 4 # return
Configuration script (PE-A)

```
#
sysname PE-A
#
router id 1.1.1.1
#
mpls lsr-id 1.1.1.1
#
mpls l2vpn              /Enable MPLS L2VPN/
#
#
radius scheme system
#
mpls
#
mpls ldp
#
domain system
#
interface Serial2/0/0
link-protocol ppp
mpls static-l2vc destination 3.3.3.3 transmit-vpn-label 100 receive-vpn-label 3
00
/Create an SVC connection to CE-B/
#
interface Serial2/0/1
link-protocol ppp
ip address 10.0.0.1 255.255.255.252
mpls
mpls ldp enable
#
interface NULL0
#
interface LoopBack0
ip address 1.1.1.1 255.255.255.255
#
ospf 1
area 0.0.0.0
network 1.1.1.1 0.0.0.0
network 10.0.0.0 0.0.0.3
#
user-interface con 0
user-interface vty 0 4
#
return
```

Configuration script (P)

```
#
sysname P
#
router id 2.2.2.2
#
mpls lsr-id 2.2.2.2
#
mpls l2vpn
#
#
radius scheme system
#
mpls
#
mpls ldp
#
domain system
#
interface Serial2/0/0
link-protocol ppp
ip address 10.0.0.2 255.255.255.252
mpls
mpls ldp enable
#
interface Serial2/0/1
link-protocol ppp
ip address 10.0.0.5 255.255.255.252
mpls
mpls ldp enable
#
interface NULL0
#
interface LoopBack0
ip address 2.2.2.2 255.255.255.255
#
ospf 1
area 0.0.0.0
network 2.2.2.2 0.0.0.0
network 10.0.0.0 0.0.0.3
network 10.0.0.4 0.0.0.3
#
user-interface con 0
user-interface vty 0 4
#
return
```

Configuration script (PE-B)

```
#
sysname PE-B
#
router id 3.3.3.3
#
mpls lsr-id 3.3.3.3
#
mpls l2vpn
#
#
radius scheme system
#
mpls
#
mpls ldp
#
domain system
#
interface Serial2/0/0
link-protocol ppp
ip address 10.0.0.6 255.255.255.252
mpls
mpls ldp enable
#
interface Serial2/0/1
link-protocol ppp
mpls static-l2vc destination 1.1.1.1 transmit-vpn-label 300 receive-vpn-label 1
00
/Create an SVC connection to CE-A/
#
interface NULL0
#
interface LoopBack0
ip address 3.3.3.3 255.255.255.255
#
ospf 1
area 0.0.0.0
network 2.2.2.2 0.0.0.0
network 3.3.3.3 0.0.0.0
network 10.0.0.4 0.0.0.3
#
user-interface con 0
user-interface vty 0 4
#
return
```

Configuration script (CE-B)

```
#
sysname CE-B
#
radius scheme system
#
domain system
#
interface Serial2/0/0
link-protocol ppp
ip address 192.168.21.2 255.255.255.0
#
interface NULL0
#
user-interface con 0
user-interface vty 0 4
#
return
```

[Verification]

Display the SVC connection state on PE-A:

```
[PE-A]disp mpls static-l2vc
total connections:  1,  1 up,  0 down
ce-intf          state destination     tr-label  rcv-label tnl-type tnl-index
Serial2/0/0       up    3.3.3.3         100       300       LSP      2
```

Display the LSP on PE-A:

```
[PE-A]disp mpls lsp

----------------------------------------------------------------------
LSP Information: Ldp Lsp
----------------------------------------------------------------------

TOTAL:  3 Record(s) Found.
```

```
NO    FEC              NEXTHOP        I/O-LABEL    OUT-INTERFACE
1     1.1.1.1/32       127.0.0.1      3/-----      -------
2     2.2.2.2/32       10.0.0.2       -----/3      S2/0/1
3     3.3.3.3/32       10.0.0.2       -----/1024   S2/0/1
```

Display the LSP on P:

```
[P]disp mpls lsp

------------------------------------------------------------------------------
LSP Information: Ldp Lsp
------------------------------------------------------------------------------

TOTAL:  6 Record(s) Found.

NO    FEC              NEXTHOP        I/O-LABEL    OUT-INTERFACE
1     1.1.1.1/32       10.0.0.1       -----/3      S2/0/0
2     2.2.2.2/32       127.0.0.1      3/-----      -------
3     3.3.3.3/32       10.0.0.6       -----/3      S2/0/1
4     3.3.3.3/32       10.0.0.6       1024/3       S2/0/1
5     1.1.1.1/32       10.0.0.1       1025/3       S2/0/0
6     2.2.2.2/32       127.0.0.1      3/-----      -------
```

Display the LSP on PE-B:

```
[PE-B]disp mpls lsp

------------------------------------------------------------------------------
LSP Information: Ldp Lsp
------------------------------------------------------------------------------

TOTAL:  3 Record(s) Found.

NO    FEC              NEXTHOP        I/O-LABEL    OUT-INTERFACE
1     3.3.3.3/32       127.0.0.1      3/-----      -------
2     1.1.1.1/32       10.0.0.5       -----/1025   S2/0/0
3     2.2.2.2/32       10.0.0.5       -----/3      S2/0/0
```

Display the SVC connection state on PE-B:

```
[PE-B]disp mpls static-l2vc
total connections:  1,  1 up,  0 down
ce-intf          state destination    tr-label  rcv-label tnl-type tnl-index
Serial2/0/1       up    1.1.1.1       300       100       LSP      1
```