# Nokia

## Exam 4A0-103

## Nokia Multi Protocol Label Switching

**Verson: Demo**

**[ Total Questions:   10 ]**

## Topic break down

| Topic | No. of Questions |
|---|---|
| Topic 1: Volume A | 4 |
| Topic 2: Volume B | 3 |
| Topic 3: Volume C | 1 |
| Topic 4: Volume D | 2 |

**Topic 1, Volume A**

**Question No : 1 - (Topic 1)**

Click on the exhibit button below.

```
Exhibit                                                                   _ □ ×

*A:MPLS_R5# show router mpls lsp "toR8-5" path detail

===========================================================================
MPLS LSP toR8-5 Path  (Detail)
===========================================================================
Legend :
    @ - Detour Available           # - Detour In Use
    b - Bandwidth Protected        n - Node Protected
    s - Soft Preemption
===========================================================================
-----------------------------------------------------------------------
LSP toR8-5 Path loose
-----------------------------------------------------------------------
LSP Name    : toR8-5                    Path LSP ID : 27694
From        : 10.10.10.5                To          : 10.10.10.8
Adm State   : Up                        Oper State  : Down
Path Name   : loose                     Path Type   : Primary
Path Admin  : Up                        Path Oper   : Down
OutInterface: n/a                       Out Label   : n/a
Path Up Time: 0d 00:00:00               Path Dn Time: 0d 00:01:40
Retry Limit : 0                         Retry Timer : 30 sec
RetryAttempt: 4                         NextRetryIn : 21 sec
SetupPriori*: 7                         Hold Priori*: 0
Preference  : n/a
Bandwidth   : No Reservation            Oper Bw     : 0 Mbps
Hop Limit   : 255                       Class Type  : 0
Backup CT   : None
MainCT Retry: n/a                       MainCT Retry: 0
    Rem     :                               Limit   :
Oper CT     : None
Record Route: Record                    Record Label: Record
Oper MTU    : 0                          Neg MTU     : 0
Adaptive    : Enabled                   Oper Metric : 65535
Include Grps:                           Exclude Grps:
None                                    None
Path Trans  : 2                         CSPF Queries: 1
Failure Code: looseHopsInFRRLsp         Failure Node: 10.10.10.5
ExplicitHops:
    No Hops Specified
Actual Hops :
    No Hops Specified
ResigEligib*: False
LastResignal: n/a                       CSPF Metric : 0
===========================================================================
* indicates that the corresponding row element may have been truncated.

 Close              Tile                 Comment              Help
```

LSP "toR8-5" requests fast reroute protection on the primary loose path. What could be done to remove the Failure Code shown?

**A.** CSPF must be enabled at head-end on fast reroute protected loose path LSPs
**B.** Fast reroute must first be enabled on the downstream routers.
**C.** CSPF must be enabled on all downstream loose hop routers.
**D.** Global revertive path optimization must be enabled so the path will be re-optimized around a failed node.

**Answer: A**

**Question No : 2  - (Topic 1)**

Which of the following statements regarding RSVP refresh reduction are true1? (Choose two)

**A.** Message-IDs replace individual refresh messages.
**B.** Refresh reduction applies only to reservation messages.
**C.** RSVP generates a summary-refresh message for each LSP.
**D.** An LSP state change causes an incremented Message-ID.

**Answer: A,D**

**Question No : 3  - (Topic 1)**

Which of the following statements regarding LSP path configuration are true? (Choose three)

**A.** The path must include at least one hop.
**B.** The path may be used multiple times in a single LSP.
**C.** The path may comprise loose hop entries only.
**D.** The path must define the LSP's tail end.
**E.** The path may be used for multiple LSPs.

**Answer: C,E**

**Question No : 4  - (Topic 1)**

Which of the following statements is true of an established LDP session?

**A.** It uses a UDP connection with an arbitrary port number.
**B.** It uses a UDP connection with well known port number 646.
**C.** It uses a TCP connection with an arbitrary port number.
**D.** It uses a TCP connection with well known port number 646.

**Answer: D**

**Topic 2, Volume B**

## Question No : 5 - (Topic 2)

What MPLS function should be performed by a router that receives a data packet containing an MPLS label value of 3?

**A.** A router will never receive a packet containing this label value.
**B.** Request a new label from the peer that provided this label.
**C.** Pop the label.
**D.** PUSH an additional label onto the label stack.
**E.** Signal a new label to the peer that sent the packet.

**Answer: A**

## Question No : 6 - (Topic 2)

Click on the exhibit.

```
A:MPLS_R1# show router ldp session

==============================================================================
LDP Sessions
==============================================================================
Peer LDP Id          Adj Type    State         Msg Sent  Msg Recv  Up Time
------------------------------------------------------------------------------
10.10.10.2:0         Link        Nonexistent   0         1         0d 00:00:01
10.10.10.5:0         Link        Established   4         6         0d 00:00:03
------------------------------------------------------------------------------
No. of Sessions: 2
==============================================================================
```
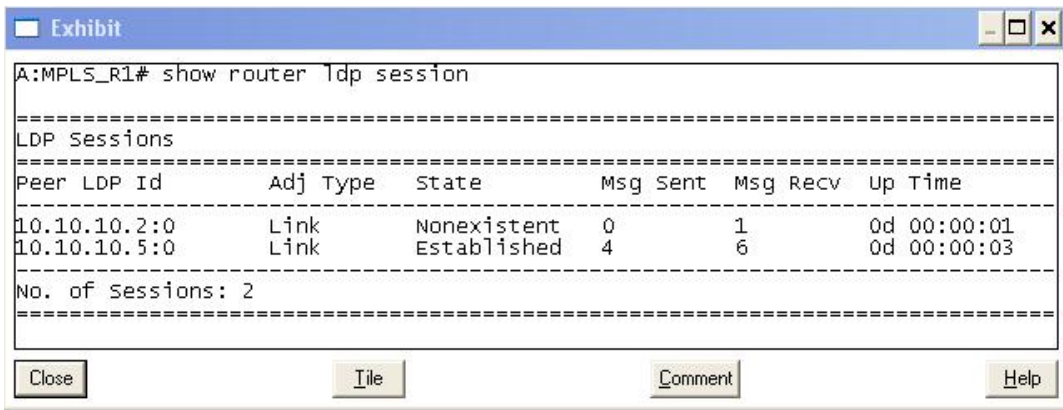
Under which condition might the peer entry with an LDP ID of 10.10.10.2:0 show the state "Nonexistent"?

**A.** When the interface to the peer router is down.
**B.** When router R1 has no route to the peer address 10.10.10.2.
**C.** When LDP is not configured on the peer router's interface.
**D.** When the targeted session is not configured.

**Answer: B**

## Question No : 7 - (Topic 2)

Click on the exhibit button below.

```
Exhibit                                                        _ □ ×

A:MPLS_R1# show router ldp session

===========================================================================
LDP Sessions
===========================================================================
Peer LDP Id          Adj Type    State        Msg Sent  Msg Recv  Up Time
---------------------------------------------------------------------------
10.10.10.2:0         Link        Nonexistent  0         1         0d 00:00:01
10.10.10.5:0         Link        Established  4         6         0d 00:00:03
---------------------------------------------------------------------------
No. of Sessions: 2
===========================================================================

 Close                  Tile                  Comment                 Help
```

Under which condition might the peer LDP ID 10.10.10.2:0 entry show state "Nonexistent"?
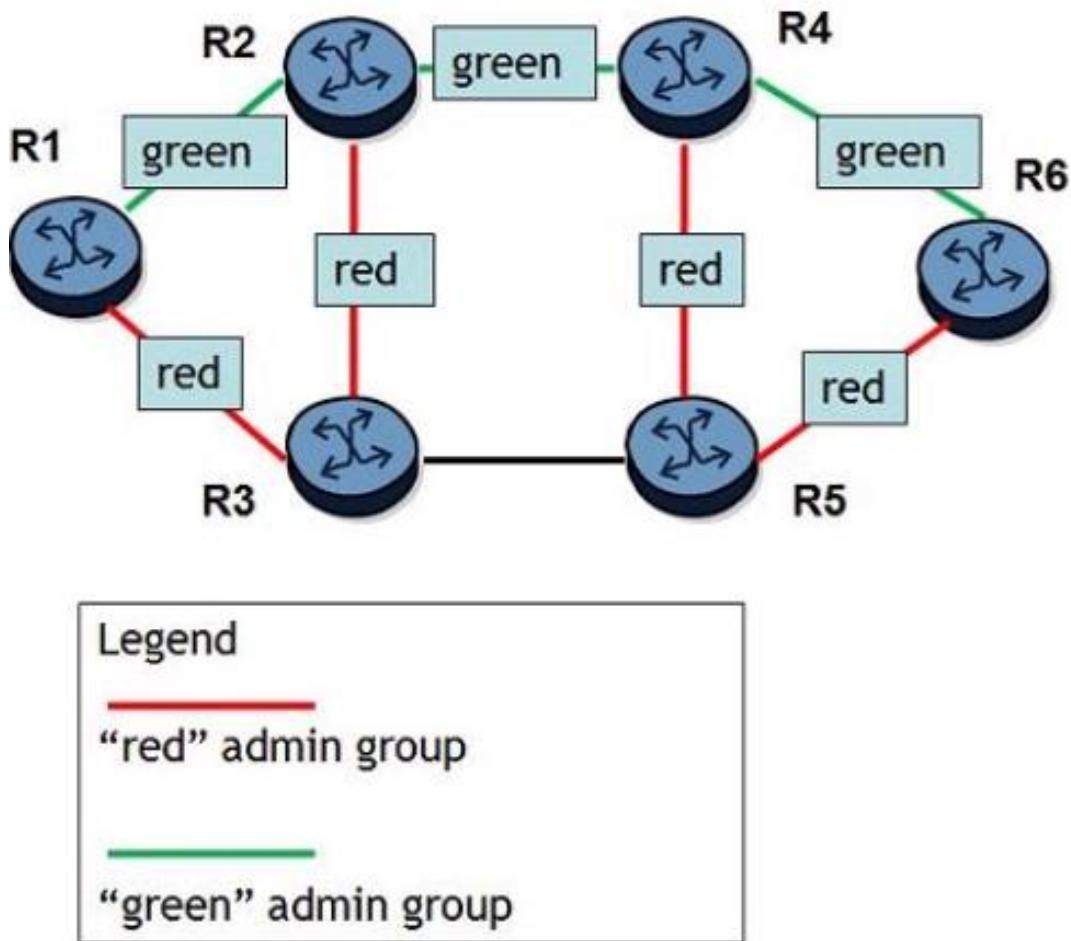
**A.** When the interface to the peer router is down.
**B.** When router R1 has no route to the peer address 10.10.10.2.
**C.** When the adjacency between the two routers fails.
**D.** When the targeted session is not yet configured.

**Answer: B**

**Topic 3, Volume C**

**Question No : 8  - (Topic 3)**

Click on the exhibit.

All links are of equal cost. A CSPF-enabled LSP is configured on R1 to R6. Its fully loose primary path is configured with an "include green" statement and the fully loose secondary path is configured with an "include red" statement.

Which paths will be taken by this LSP?

**A.** No primary path is established. The secondary path will take R1-R2-R4-R6.
**B.** The primary path will take R1-R3-R5-R6. The secondary path will take R1-R2-R4-R6.
**C.** The primary path will take R1-R2-R4-R6. No secondary path is established.
**D.** The primary path will take R1-R2-R4-R6. The secondary path will take R1-R3-R5-R6.

**Answer: C**

**Topic 4, Volume D**

**Question No : 9  - (Topic 4)**

An LSP is configured with one-to-one FRR and node protection on a Alcatel-Lucent 7750 SR. Which of the following is FALSE?

**A.** Each PLR signals a protection tunnel that avoids the downstream node.
**B.** A single protection tunnel can protect all LSPs that go through the same hop.
**C.** A link protection tunnel is signaled if a node protection tunnel cannot be established.
**D.** Protection tunnels used in this LSP are also detour tunnels.

**Answer: B**

**Question No : 10  - (Topic 4)**

If an LSP needs to use an admin group, which of the following configurations is NOT required on the Alcatel-Lucent 7750 SR?

**A.** Assign an admin group to a MPLS interface.
**B.** Configure CSPF on the LSP.
**C.** Configure at least one strict hop on the LSP path.
**D.** Configure an "include" or "exclude" statement on the LSP path.

**Answer: C**