

Boost up Your Certification Score

Nokia

4A0-220

Nokia GMPLS-Controlled Optical Networks



For More Information – Visit link below:

<https://www.examsboost.com/>

Product Version

- ✓ Up to Date products, reliable and verified.
- ✓ Questions and Answers in PDF Format.

Latest Version: 6.0

Question: 1

Which of the following is not a key feature of GMPLS?

- A. Self-discovery
- B. Fast protection
- C. Restoration
- D. Resource optimization

Answer: D

Explanation:

GMPLS is a protocol suite that extends the MPLS signaling and routing capabilities to control different types of switching technologies, such as optical, TDM, and packet switching¹. GMPLS has several key features, such as self-discovery, fast protection, and restoration. Self-discovery allows GMPLS nodes to automatically discover their neighbors and exchange information about their capabilities and resources². Fast protection enables GMPLS nodes to quickly switch to backup paths in case of a failure, without relying on the control plane³. Restoration allows GMPLS nodes to dynamically establish new paths in the network after a failure, using the control plane³. Resource optimization is not a key feature of GMPLS, but rather a potential benefit of using GMPLS to efficiently utilize the network resources and avoid over-provisioning. Reference:

1: Nokia GMPLS-controlled Optical Networks Course | Nokia

2: GMPLS - Nokia

3: Traffic survivability through Protection and Restoration Combined (PRC) - YouTube

[4]: GMPLS: Architecture and Applications - Google Books

Question: 2

Automation is one of the key features of GMPLS. What is its main benefit?

- A. Reducing OPEX
- B. Reducing CAPEX
- C. Providing resilience against multiple failures
- D. Supporting multi-vendor networks

Answer: A

Explanation:

Automation is one of the key features of GMPLS that allows dynamic provisioning of optical transport connections between IP routers and optical network elements². Automation reduces the operational time and administrative overhead required to provision new connectivity, which in turn reduces the operational expenditure (OPEX) of the network. Reducing CAPEX, providing resilience against multiple failures, and supporting multi-vendor networks are not direct benefits of automation, but rather possible outcomes of using GMPLS in general. Reference:

1: Nokia GMPLS-controlled Optical Networks Course | Nokia

2: GMPLS - Nokia

3: Traffic survivability through Protection and Restoration Combined (PRC) - YouTube

[4]: GMPLS: Architecture and Applications - Google Books

Question: 3

Which of the following statements best describes a distributed control plane for GMPLS?

- A. The control plane is active in some network nodes and not in others.
- B. Each router has software to run the GMPLS protocols and can modify the node's switching fabric.
- C. The network manager controls all the routing for the network.
- D. The network is managed by more than one network management system.

Answer: B

Explanation:

A distributed control plane for GMPLS means that each router has software to run the GMPLS protocols and can modify the node's switching fabric. This allows the routers to communicate with each other and establish Label Switched Paths (LSPs) across the network without relying on a centralized controller or network manager. A distributed control plane can improve the scalability, reliability, and efficiency of the network. Reference : Nokia GMPLS-controlled Optical Networks Course | Nokia, GMPLS - Nokia

Question: 4

What is a Label Switched Path (LSP)?

- A. A protocol used by nodes to exchange information about the state of labels
- B. A switched protection path
- C. The path created by MPLS nodes
- D. A High Order Container for client signal

Answer: C

Explanation:

A Label Switched Path (LSP) is the path created by MPLS nodes that use labels to forward packets across the network. A label is a short identifier that is attached to each packet and indicates the next hop or destination of the packet. The nodes use a label forwarding table to switch packets based on their labels, without inspecting the packet headers. This can improve the performance, security, and quality of service of the network. An LSP can be established by using GMPLS protocols such as OSPF-TE and RSVP-TE, which exchange information about the network topology, resources, and constraints. Reference : Nokia GMPLS-controlled Optical Networks Course | Nokia, GMPLS - Nokia

Question: 5

Which label is swapped in an MPLS label stack at an intermediate node?

- A. The label on the bottom
- B. The label with the highest value
- C. The label with the lowest value
- D. The label on the top

Answer: D

Explanation:

The label on the top of the MPLS label stack is swapped at an intermediate node. This is because the top label is the one that is visible to the node and determines the forwarding decision. The node looks up the top label in its label forwarding table and swaps it with a new label that corresponds to the next hop or destination. The node then forwards the packet to the next node, which repeats the same process. The bottom label is only used to indicate the end of the label stack and is not swapped. Reference : [Nokia GMPLS-controlled Optical Networks Course | Nokia], [MPLS Label Stack - Nokia]

Thank You for Trying Our Product

For More Information – **Visit link below:**

<https://www.examsboost.com/>

15 USD Discount Coupon Code:

G74JA8UF

FEATURES

- ✓ **90 Days Free Updates**
- ✓ **Money Back Pass Guarantee**
- ✓ **Instant Download or Email Attachment**
- ✓ **24/7 Live Chat Support**
- ✓ **PDF file could be used at any Platform**
- ✓ **50,000 Happy Customer**



Visit us at: <https://www.examsboost.com/test/4a0-220>