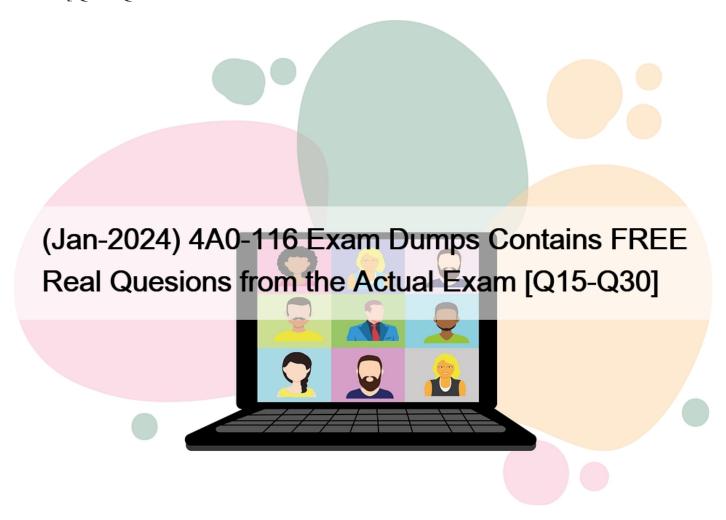
# (Jan-2024) 4A0-116 Exam Dumps Contains FREE Real Quesions from the Actual Exam [Q15-Q30



(Jan-2024) 4A0-116 Exam Dumps Contains FREE Real Quesions from the Actual Exam Free Test Engine Verified By Nokia Service Routing Architect Certified Experts

Nokia 4A0-116 (Nokia Segment Routing) Certification Exam is a professional certification exam designed for networking professionals who are interested in enhancing their knowledge and skills in segment routing technology. 4A0-116 exam is created by Nokia, a global leader in the field of telecommunications equipment and network solutions. It is an industry-recognized certification that validates the expertise of individuals in implementing segment routing technology.

Nokia Segment Routing Certification Exam is an important credential for professionals who work with Nokia networking technologies, including network architects, engineers, and administrators. Nokia Segment Routing Exam certification demonstrates to employers, clients, and colleagues that the candidate has a deep understanding of the Segment Routing technology and is capable of designing, deploying, and maintaining networks using this technology. Candidates who pass the Nokia 4A0-116 exam are recognized as experts in the field of network routing and are well positioned to advance their careers in this rapidly evolving industry.

#### **NEW QUESTION 15**

Which of the following statements about a Segment Routing SID is FALSE?

- \* A local Node-SID can be configured directly as an MPLS label.
- \* A router advertises its local Node-SID as a local SRGB and an index only if it is configured as an index.
- \* All routers do NOT need to have the same SRGB range configured.
- \* A local Node-SID can be configured as an index.

A router advertises its local Node-SID as a local SRGB and an index only if it is configured as an index: This statement is not true, A router will advertise its local Node-SID as a local SRGB and an index, whether it is configured as an index or not.

### **NEW QUESTION 16**

Which of the following list of SR-TE attributes has to be advertised among routers?

- \* Administrative groups that each link belongs to, TE metric of links, bandwidth availability of each link, SRLG that each link belongs to.
- \* Administrative groups that each link belongs to, TE metric of links, SRLG that each link belongs to.
- \* Administrative groups that each link belongs to, TE metric of links, bandwidth availability of each link, SRLG that each link belongs to, link status up/down.
- \* Administrative groups that each link belongs to, TE metric of links, SRLG that each link belongs to, link status up/down. In SR-TE, routers need to advertise certain attributes of their links to other routers in the network in order to calculate traffic-engineered paths. These attributes include:

Administrative groups that each link belongs to: This information is used to restrict the use of certain links to specific traffic types or groups.

TE metric of links: This information is used to calculate the cost of using a particular link for a traffic-engineered path.

Bandwidth availability of each link: This information is used to control the amount of traffic that can be sent over a particular link.

SRLG that each link belongs to: This information is used to avoid routing over the same physical link. Link status up/down is not needed to be advertised as it is part of the IGP protocol and is used to check the reachability of a link.

# **NEW QUESTION 17**

Which of the following statements about a Segment Routing SID is FALSE?

- \* A Node-SID is usually associated with a router's system interface.
- \* A Prefix-SID can be configured directly as a label value or indirectly as an index.
- \* Adjacency-SID values are taken from the SRGB configured for the routing protocol.
- \* An Adjacency-SID does not have to be configured.

An Adjacency-SID does not have to be configured: this statement is not true, An Adjacency-SID is associated with a neighbor router, it is used to identify an adjacency between two routers. An Adjacency-SID must be configured to identify the adjacency.

#### **NEW QUESTION 18**

Which of the following statements about the Path Computation Element (PCE) is FALSE?

- \* The PCE can obtain topology and traffic-engineering information from the network using either a link-state IGP or BGP-LS.
- \* A stateful PCE proactively monitors all the existing LSPs and triggers the necessary repairs and re-optimizations.
- \* A stateless PCE can calculate cross-area traffic-engineering-constrained LSP paths.

\* A stateful PCE can allow LSPs to reserve bandwidth.

Stateful PCE can monitor the existing LSPs and trigger necessary repairs and re-optimizations, but it does not have the capability to reserve bandwidth.

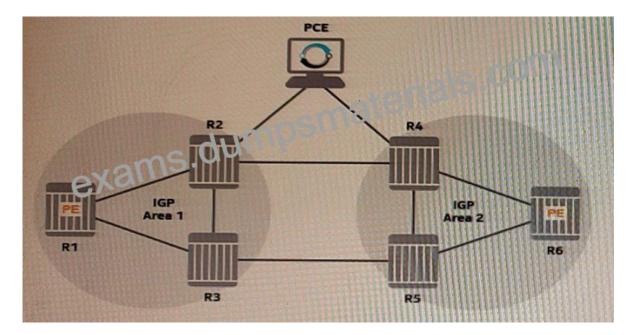
#### **NEW QUESTION 19**

Which of the following statements about path definitions is FALSE?

- \* Once a path is associated with an LSP, it cannot be used by other LSPs.
- \* A loose hop is one that does not have to be directly adjacent to the previous hop in the path list
- \* The path hops can be defined by either the system or physical interface IP address.
- \* In addition to the hops defined in the path list, the head-end and tail-end routers are implicitly added.

#### **NEW QUESTION 20**

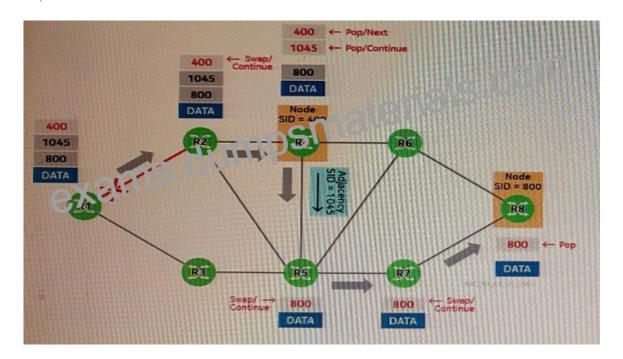
Based on the exhibit, which of the following is a viable option for the Path Computation Element (PCE) to obtain all the necessary topology and traffic-engineering information from the network, so that it can calculate LSP paths on behalf of the PE routers?



- \* Establishing an IGP adjacency with router R2
- \* Establishing IGP adjacencies with routers R1 and R2
- \* Establishing a BGP session using the BGP-LS address family with router R3
- \* Establishing BGP sessions using the BGP-LS address family with routers R3 and R4

# **NEW QUESTION 21**

The exhibit presents packets being transmitted inside an LSP's multi-segment primary path going from router R1 to router R8. The LSP also has a standby secondary path, and Seamless-BFD has been enabled on the primary path. The link between routers R1 and R2 fails, and fast re-route (FRR) is triggered. As a result, router R1 forwards the packets to router R3 and adds the proper FRR encapsulation to reach which router?



- \* To reach router R2, which is the LSP's intended next-hop.
- \* To reach router R5, which is the shortest way to go back to the original path.
- \* To reach router R4, which is the tail-end of the active segment.
- \* To reach router R8, which is the tail-end of the LSP.

#### **NEW QUESTION 22**

Which of the following is NOT an advantage of using a PCE for the computation of TE-constrained LSP paths, as compared to using CSPF locally on the PE router?

- \* The ability to create cross-area TE-constrained LSP paths
- \* The ability to create LSP paths with bandwidth reservation
- \* The ability to create LSPs with primary and secondary paths
- \* The ability to ensure that some LSP paths are disjoint

PCE does not have the capability to reserve bandwidth, This is a function of a Resource Reservation Protocol (RSVP) or a Label Distribution Protocol (LDP) and is done locally on the PE.

PCE can have advantages such as:

The ability to create cross-area TE-constrained LSP paths

The ability to create LSPs with primary and secondary paths

The ability to ensure that some LSP paths are disjoint

it can be used to optimize the path computation by centralizing the path calculation and by taking into account a global view of the network.

#### **NEW QUESTION 23**

Which of the following is an advantage of enabling label stack reduction for a CSPF-calculated path, as compared to using plain

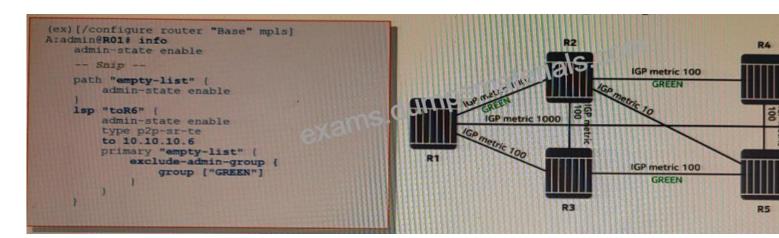
#### CSPF?

- \* The number of hops included in the end-to-end path is reduced.
- \* The path calculation can be delegated to an external path computation element (PCE).
- \* There is a larger list of traffic-engineering constraint types that can be imposed on the LSP path.
- \* The routers in the calculated path can take advantage of ECMP to better distribute the traffic load.

Once a path is associated with an LSP, it cannot be used by other LSPs is False. A path can be used by multiple LSPs, but each LSP can have different attributes like bandwidth, priority and other constraints.

#### **NEW QUESTION 24**

Examine the exhibit. Based upon the configuration, which routers will the LSP go through?



- \* R1, R3, R2, R5, R4 and R6
- \* R1, R2, R5 and R6
- \* R1, R3, R4 and R6
- \* R1, R2, R4 and R6

#### **NEW QUESTION 25**

Which of the following statements about segment routing fast re-route is FALSE?

- \* Fast re-route is a temporary fix that becomes active for a short period of time after a local network failure.
- \* Fast re-route typically protects the active segment of a tunnel, but under certain conditions it can protect an end-to-end multi-segment tunnel instead.
- $^{st}$  On a Nokia 7750 SR, R-LFA and TI-LFA can be enabled independently of each other.
- \* The parameter "max-sr-frr-labels" limits the number of labels that R-LFA can add to the data packet encapsulation.

On a Nokia 7750 SR, R-LFA and TI-LFA cannot be enabled independently; they must be enabled together. The parameter "max-sr-frr-labels" limits the number of labels that R-LFA can add to the data packet encapsulation.

#### **NEW QUESTION 26**

The exhibit shows the fast re-route configuration on router R1, in which both R-LFA and TI-LFA have been enabled. Assume that there are multiple potential backup paths for a given prefix. Which of the following options will router R1 use?

```
(ex) [/configure router "Base" isis 0]
A:admin@R01# info

-- Snip --
loopfree-matermate {
    remate-lya {
        node-protect {
        }
    }
    ti-lfa {
        max-sr-frr-labels 1
    }
}
```

- \* A standard LFA path that would not coincide with the path after IGP re-convergence.
- \* An R-LFA path that would not coincide with the path after IGP re-convergence.
- \* A D-LFA path that would not coincide with the path after IGP re-convergence.
- \* A D-LFA path that would coincide with the path after IGP re-convergence.

The exhibit shows that both R-LFA and TI-LFA have been enabled on router R1. R-LFA (Remote Loop-Free Alternate) is a method that is used to protect the active segment of a tunnel, and it allows the router to find a backup path that coincides with the path that will become active after IGP reconvergence. TI-LFA (Topology Independent LFA) is a method that is used to protect an end-to-end multi-segment tunnel, it allows the router to find a backup path that does not rely on the IGP topology, but on the segment routing topology.

With R-LFA and TI-LFA enabled, router R1 will use a D-LFA (Dual-Loop-Free Alternate) path, which is a combination of both R-LFA and TI-LFA, this path will coincide with the path after IGP re-convergence.

A standard LFA, R-LFA, and D-LFA which do not coincide with the path after IGP re-convergence are not the options.

# **NEW QUESTION 27**

Which of the following statements about a Segment Routing SID is FALSE?

- \* A Node-SID is usually associated with a router's system interface.
- \* Adjacency-SID values are taken from the SRGB configured for the routing protocol.
- \* A Prefix-SID can be configured directly as a label value or indirectly as an index.
- \* An Adjacency-SID does not have to be configured.

An Adjacency-SID does not have to be configured: this statement is not true, An Adjacency-SID is associated with a neighbor router, it is used to identify an adjacency between two routers. An Adjacency-SID must be configured to identify the adjacency.

#### **NEW QUESTION 28**

Which of the following statements about the operation of seamless-BFD is FALSE?

- \* Seamless-BFD responses are sent back using the LSP label stack.
- \* To be able to respond to seamless-BFD messages, a router must be configured as a reflector.
- \* A seamless-BFD template needs to be configured on the head-end of the LSP.
- \* The routing protocol (OSPF or IS-IS) is used to carry the reflector discriminator information.

Seamless-BFD is a mechanism that allows the detection of faults in MPLS LSPs more quickly by using BFD (Bidirectional Forwarding Detection) protocol. Seamless-BFD responses are sent back using the MPLS data-plane, not the LSP label stack.

#### **NEW QUESTION 29**

Which of the following is NOT a valid option to steer traffic into a flex-algo segment-routing tunnel?

- \* Using a flex-algo Node-SID as an explicit hop in the path definition of an SR-TE LSP and enabling the sr-te tunnel type for a VPN service.
- \* Specifying the flex-algo instance ID as an additional TE constraint for an SR-TE LSP and enabling the sr-te tunnel type for a VPN service.
- \* Configuring and applying a VRF import policy to a VPRN service and enabling the sr-is-is or sr-ospf tunnel type for the service, depending on the underlying routing protocol.
- \* Configuring and applying a VSI import policy to an EVPN service and enabling the sr-is-is or sr-ospf tunnel type for the service, depending on the underlying routing protocol.

Applying a VSI import policy to an EVPN service and enabling the sr-is-is or sr-ospf tunnel type for the service is not a valid option for steering traffic into a flex-algo segment-routing tunnel, VSI is not related to flex-algo SR.

# **NEW QUESTION 30**

Loopfree-alternate has been enabled on a router for its link-state routing protocol. For which types of segments will the router attempt to find a backup path, so that they become protected by fast re-route?

- \* Only segments defined by a Node-SID.
- \* Only segments defined by an Adjacency-SID.
- \* Segments defined by a Node-SID and segments defined by an Adjacency-SID.
- \* No segments, unless segment-routing fast-reroute is also explicitly enabled.

Loopfree-alternate is a mechanism that enables fast re-route for link-state routing protocols, it allows the router to find a backup path for both Node-SID and Adjacency-SID segments, so that they become protected by fast re-route.

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