



Architecting HP Network Solutions

Version: 6.0

[Total Questions: 60]



Question No: 1

Virtual Connect Flex-10 technology can divide a single 10GbE port into how many individual network connections?

- **A**. 2
- **B**. 4
- **C**. 5
- **D.** 10

Answer: B

Explanation: HP Virtual Connect (VC) Flex-10 technology is a hardware-based solution that lets you split a 10 Gb/s server network connection into four variable partitions.

Reference: HP Virtual Connect Flex-10 technology: Convergence with FlexFabric components

http://h20000.www2.hp.com/bc/docs/support/SupportManual/c01608922/c01608922.pdf(page 2)

Question No: 2

A network architect is planning anHP MultiService Mobilityfor a customer. The solution isintended provide wireless access for employees various branch locations. The solution includes twoMSM760 PremiumMobility Controllers, which are deployed at the main office, and 60 MSM460 Access Points (APs), which are deployed at branches (three at each branch).

The network architect is controllinginformation about the branch routers and firewalls. What is the one reason that the architectneeds this information?

- **A.** To determine whether to add bandwidth to the WAN link because wireless traffic must be tunneled to the controller regardless of its ultimate destination.
- **B.** To determine whether the branch routers support the type of tunnel that is required to connect the MSM APs to the controller.
- **C.** To determine whether the managers needs to open ports on the branch firewalls to allow communications between the APs and the MSM Controller.
- **D.** To determine whether the branch routers need to provide a virtual private gateway (VPN) solution to secure the wireless traffic.



Answer: A

Question No: 3

Which switch is best suited to act at the edge of a medium to large HP FlexFabric solution?

A. 10500

B. 5500

C. 9500

D. 5830

Answer: D

Explanation: D: The HP 5830AF Switch Series is a family of high-density 1 GbE top-of-rack data center and campus switches that are a part of the HP FlexFabric solution module of the HP FlexNetwork architecture. The two models, the 5830AF-48G and 5830AF-96G switches, are ideally suited for deployments at the server access layer in medium-sized and large enterprise data centers and campus networks.

Note: 5830 switches are typically in the edge, not the core.

Note 2: Flatten the network with Intelligent Resilient Framework

Intelligent Resilient Framework (IRF) overcomes the limitations of legacy spanning tree designs by providing rapid failover for delay-sensitive, mission-critical applications and dramatically improving network utilization and performance in the network core.

By deploying IRF in conjunction with highly-scalable 12500 switches in the core and 5830 GbE and 5820 10 GbE series switches in the access layer - IT can completely eliminate the requirement for a dedicated aggr egation layer as they scale-out data centers, and enjoy the benefits of large Layer 2 domains with increased network uptime and simplified management.

IRF is an innovative HP switch platform virtualization technology that allows customers to dramatically simplify the design and operations of their data center and campus Ethernet networks.

Question No: 4



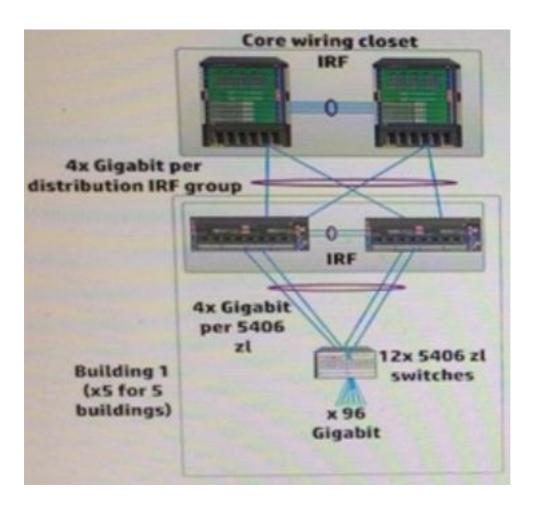
A network architect isplanning the productsthat will interconnect a main site campusLAN, Branches, and data center (located at the differentsite from the main campus). Which customer requirement wouldcause the networkarchitectto change HPenterprise-classmodular routers as opposed to deep-buffer 10Groutingswitches for this solution?

- **A.** The need for a fully redundant solution with two devices as a team
- **B.** The need for thousands of routers in the routing table
- C. The need for high speed routing
- **D.** The need for WAN connections that use T3/E3/J3

Answer: D

Question No: 5

Refer to the exhibit.



A network architect hasdesignedthe topologyin the exhibit. The Gigabitlinksbetween layerand the core uses OM3 grade multi-mode fiber between 100m and 150m long.



The solution is for an enterprise customer whose employees use mostly HTTP-based application and have medium utilization needs.

What should the networkarchitect do to resolveapotentialissue?

- **A.** Replace the modular switches at the access layer with switches that support stacked meshing.
- **B.** Add more bandwidth between each pair of distribution layer switches and the core switches.
- **C.** Add more links between each modular switch at the access layer and its distribution layer switch.
- **D.** Remove the distribution layer since it is not needed on this environment.

Answer: A

Question No: 6 HOTSPOT

A network architectdesigningHP addressesfor a customer. The network architectis planning a corerouting solution and these VLANs:

- Management (network infrastructure)
- # Employees Wired Floor1
- Consultants_Wired_Floor1

- # Employees_Wireless

The customer requiresaccess control lists(ACLs)that control users according to their identity, guest, employee, or contractor. As far as access control is connected, the customer does not careabout whether a user has wireless or wired access.

Which scheme enabledACLs to use theforest rules to controlusers according to the customer requirements? (Drag and Drop the marker on the scheme)



| VLAN | ID | IP address |
|--------------------------|----|--------------|
| Management | 2 | 10.1.2.0/24 |
| Voice_Floor1 | 11 | 10.1.11.0/24 |
| Voice_Floor2 | 12 | 10.1.12.0/24 |
| Employees_Wired_Floor1 | 21 | 10.1.21.0/24 |
| Employees_Wired_Floor2 | 22 | 10.1.22.0/24 |
| Employees_Wireless | 23 | 10.1.23.0/24 |
| Consultants_Wired_Floor1 | 31 | 10.1.31.0/24 |
| Consultants_Wired_Floor2 | 32 | 10.1.32.0/24 |
| Consultants_Wireless | 33 | 10.1.33.0/24 |
| Guest | 40 | 10.1.40.0/24 |

| VLAN | ID | IP address |
|--------------------------|----|--------------|
| Management | 2 | 10.1.2.0/24 |
| Voice_Floor1 | 11 | 10.1.11.0/24 |
| Voice_Floor2 | 12 | 10.1.12.0/24 |
| Employees_Wired_Floor1 | 21 | 10.1.21.0/24 |
| Employees_Wired_Floor2 | 22 | 10.1.22.0/24 |
| Consultants_Wired_Floor1 | 31 | 10.1.31.0/24 |
| Consultants_Wired_Floor2 | 32 | 10.1.32.0/24 |
| Guest | 40 | 10.1.40.0/24 |
| Employees_Wireless | 50 | 10.1.50.0/24 |
| Consultants_Wireless | 60 | 10.1.60.0/24 |

| VLAN | ID | IP address |
|--------------------------|----|--------------|
| Management | 2 | 10.1.2.0/24 |
| Voice_Floor1 | 8 | 10.1.8.0/24 |
| Voice_Floor2 | 9 | 10.1.9.0/24 |
| Employees_Wired_Floor1 | 16 | 10.1.16.0/24 |
| Employees_Wired_Floor2 | 17 | 10.1.17.0/24 |
| Employees_Wireless | 18 | 10.1.18.0/24 |
| Consultants_Wired_Floor1 | 24 | 10.1.24.0/24 |
| Consultants_Wired_Floor2 | 25 | 10.1.25.0/24 |
| Consultants_Wireless | 26 | 10.1.26.0/24 |
| Guest | 32 | 10.1.32.0/24 |

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| Voice_Floor2 | 9 | 10.1.9.0/24 |
| Employees_Wired_Floor1 | 16 | 10.1.16.0/24 |
| Employees_Wired_Floor2 | 17 | 10.1.17.0/24 |
| Consultants_Wired_Floor1 | 24 | 10.1.24.0/24 |
| Consultants_Wired_Floor2 | 25 | 10.1.24.0/24 |
| Guest | 32 | 10.1.32.0/24 |
| Employees_Wireless | 40 | 10.1.40.0/24 |
| Consultants_Wireless | 48 | 10.1.48.0/24 |

Answer:

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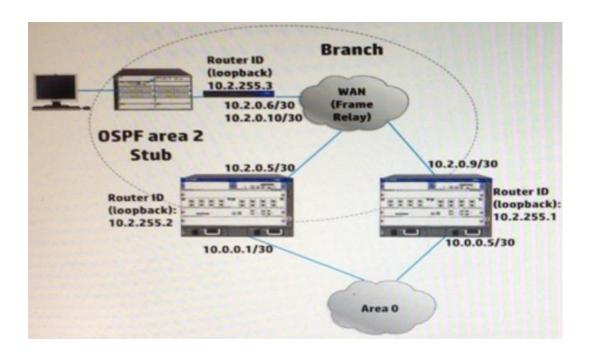
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| Employees_Wireless | 18 | 10.1.18.0/24 |
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Question No:7



Refer to the exhibit.



The branch routers have E1lines into the FrameRelay serviceprovider network. The exhibitshows just onebranchbut the networkactually has 30 branches. The Hp 6600 Servicesrouters, which are the area border routers (ABRs), have E3 linesinto the Frame Relay network.

The routers in the exhibit implement OpenShortest Path First (OSPF). They enable OSPFon networks as follows:

The customer requires resilience at the WAN core. Which Design Change best supports that requirement?

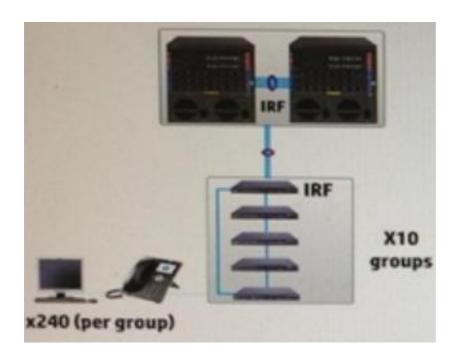
- **A.** At each branch, add a redundant link between the switch and the router.
- **B.** Add a Gigabit link between the HP 6600 Series routers with a network in area 0 and area 2.
- **C.** Place the HP 6600 Series routers in an intelligent Resilient Framework (IRF) group.
- **D.** On each branch router, add a floating static route to one of the ABRs in case the OSPF solution fails.

Answer: B

Question No:8



Refer to the exhibit.



A network architect isplanning a voice over IP(VoIP)solution for acustomer. A computer connects to eachVoIPphone,which is Link Layer Discovery Protocol Media Extensions (LLDP-MED) capableand supports802.1X. The Phone thenconnects to the Ethernet jack. The design currently calls foredge ports to enforce802.1x to a wireless Network Policy Server (NPS), and RADIUS policies assign users to VLANsbased on their identity.

How should the network architect planVLANs for the VoIP phones?

- **A.** Make sure that RADIUS policies assign each VoIP phone to the same VLAN that is expected for users.
- **B.** Plan a voice VLAN for each IRF group. Use LLDP.MED and the voice VLAN definition on edge ports to assign the VLAN to phones.
- **C.** Plan a voice VLAN that is associated with dynamic user VLAN. Make sure that RADIUS policies specify that as the tagged VLAN.
- **D.** Disable 802.1X on the phones so that they are placed in the same reason, and use the same VLAN, as the authenticated user on the computer.

Answer: C

Question No: 9 HOTSPOT

A network architect ispresenting aproposal to the customerand iscompiling information about the cost of powering several HP 5406zlswitches.