

HP

Exam HP0-Y43

Implementing HP Network Infrastructure Solutions

Version: 10.0

[Total Questions: 62]

Question No : 1

A customer requires an HP FlexCampus solution with a core that scales to 40/100G. Which HP switch fabric meets this need?

- A. the 7500's CLOS switch fabric
- B. the 10500's CLOS switch fabric
- C. the 7500's crossbar switch fabric
- D. the 10500's crossbar switch fabric

Answer: B

Explanation: HP 10500 Switch Series

Key features

- * Leading CLOS architecture
- * Greater than 11 terabit-per-second capacity
- * Full Layer 3 features and IPv6/MPLS functionality
- * HP IRF for simpler, flatter, more agile networks
- * Ultra-high 10GbE/Gigabit density; 40/100GbE ready

Reference: QuickSpecs, HP 10500 Switch Series

Question No : 2

What is the role of neighbor solicitation (NS) messages in the autoconfiguration of an IPv6 address?

- A. An IPv6 node sends an NS message to inform a node undergoing autoconfiguration that it is already using a particular address.
- B. An IPv6 node sends an NS message for its tentative address to determine whether another node is using it.
- C. An IPv6 node sends an NS message for the global prefix to prompt other IPv6 nodes to advertise the addresses that they are using on that prefix.
- D. An IPv6 node sends an NS message to prompt an IPv6 router on the link to advertise the global prefixes associated with the link immediately.

Answer: B

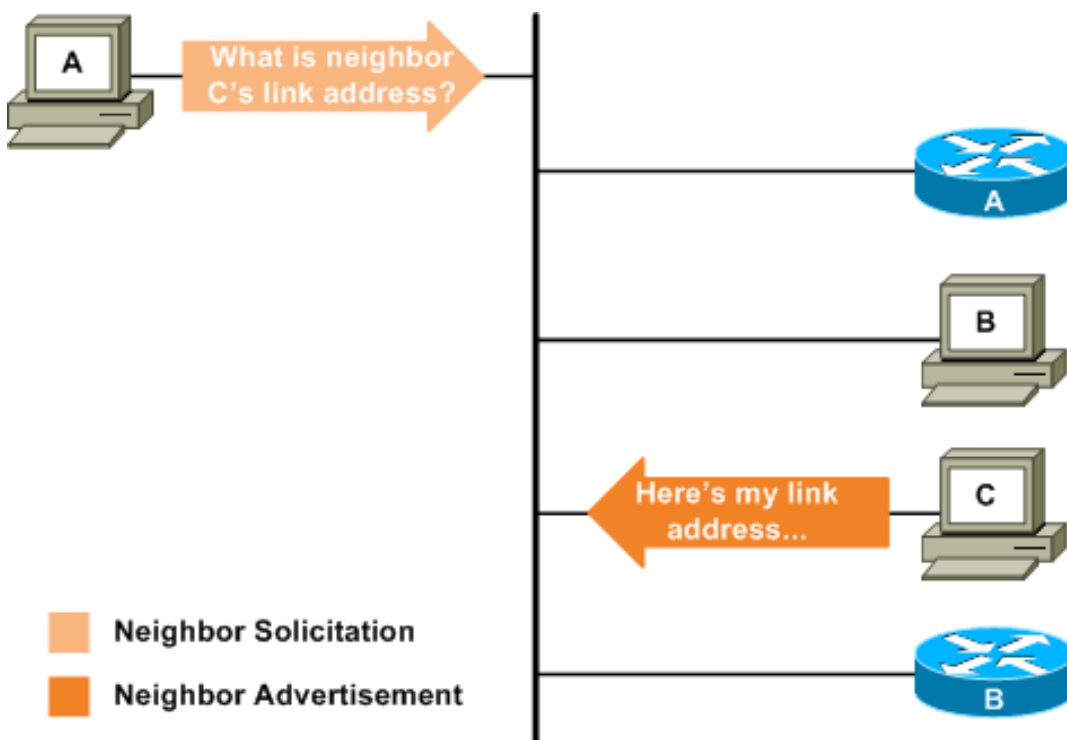
Explanation: Duplicate Address Detection

When a host first joins a link, it multicasts neighbor solicitations for its own IPv6 address for a short period before attempting to use that address to communicate. If it receives a neighbor advertisement in response, the host realizes that another neighbor on the link is already using that address. The host will mark the address as a duplicate and will not use it on the link.

Note that this process is similar to IPv4 gratuitous ARP requests, but NDP elegantly allows for detection of two hosts with the same address before both hosts are actively sending traffic from the address.

Note: Address Resolution

The function of address resolution was handled by ARP for IPv4, but is handled by ICMPv6 for IPv6. In a process very similar to router discovery, two ICMPv6 messages are used: Neighbor Solicitation (type 135) and Neighbor Advertisement (type 136). A host seeking the link layer address of a neighbor multicasts a neighbor solicitation and the neighbor (if online) responds with its link layer address in a neighbor advertisement.



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 aggregation 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

How can a high density of ports and high throughput at the core of an HP FlexNetwork save customers money?

- A. Intelligence is offloaded from the edge switches, enabling customers to save money on the most numerous switches in their solutions.
- B. The customer can combine the data center and campus LAN core into a single entity,

reducing power and cooling costs.

C. The customer no longer needs to deploy modular switches at the distribution level and the edge, deploying more cost-effective stackable switches instead.

D. The architecture can be simplified, eliminating expensive distribution devices and reducing power and cooling costs.

Answer: D

Explanation: Simplifying the data center network architecture

In the core of the network, HP 12500 switches can be deployed in conjunction with IRF to completely eliminate the

aggregation layer found in conventional three-tier data center networks. IRF overcomes the limitations of legacy

spanning tree networks by fully leveraging all network connectivity (no inactive backup paths) and by providing rapid

failover to dramatically improve network utilization and performance in the network core.

A collapsed, two-tier data center network architecture enables direct-flight server-to-server performance, requires

significantly fewer connections and port counts (no aggregation switches), streamlines provisioning and network

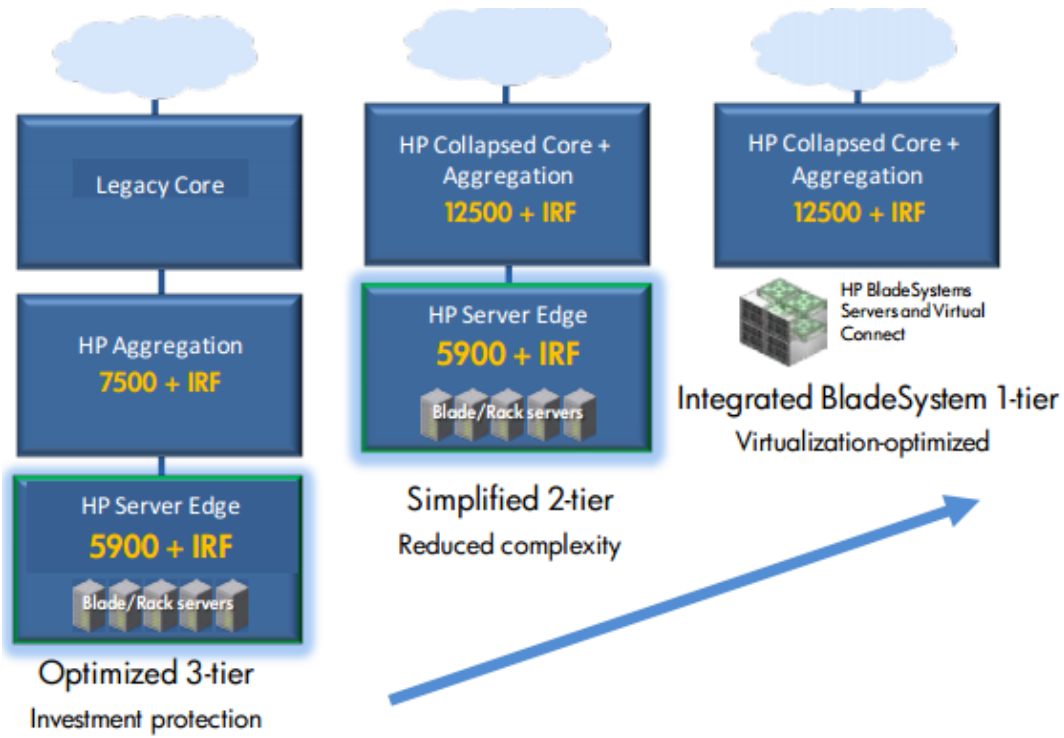
management, and reduces capital expense and energy consumption (D). In addition, these two-tier networks provide

large Layer 2 domains to enable VM migration across the data center (move workloads from one server to another

server in the same VLAN/IP subnet.)

Figure: FlexFabric supports a range of network designs to support diverse customer requirements

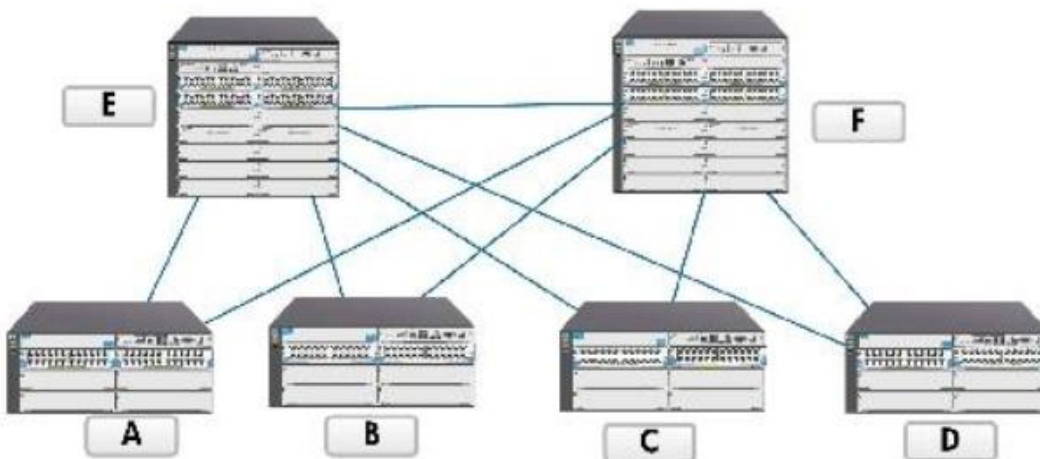
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Reference: HP FlexFabric Reference Architecture Overview, Technical white paper

Question No : 5

View the exhibit.



HP HP0-Y43 : Practice Test

The exhibit shows a network with HP 5400 zl and 8200 zl switches throughout the core and edge. What is one advantage of implementing routing on edge switches?

- A. Typically, it is easier to implement user-based VLAN assignments.
- B. The topology has higher redundancy because edge switches can take over routing roles when necessary.
- C. Typically, the network can use fewer total VLANs when edge switches implement routing.
- D. Typically, it is easier to ensure that routed links between edge and core switches are fully utilized.

Answer: D

Question No : 6

A company has a network that includes HP 5800 and 12500 switches. Usage demands on the company's FTP servers have increased, causing performance issues during peak usage times. While analyzing link utilization, the network administrator noticed that the most heavily utilized links experience bursts of congestion, causing them to drop traffic. The links then experience brief periods of low utilization followed by another burst of congestion. This pattern continues periodically throughout the peak utilization time.

What should the network administrator do to attempt to create a more efficient traffic pattern on these links?

- A. Configure an outbound traffic policing policy on the ports in question, setting the CIR at about sixty percent of the ports' capacity and the PIR at about eighty percent.
- B. Apply Weighted Fair Queuing (WFQ) or Weighted Round Robin (WRR) scheduling in preference to Strict Priority (SP) scheduling on the ports in question.
- C. Configure inbound traffic policing policies on ports at the core, setting the CIR at about sixty percent of the ports' capacity and the PIR at about eighty percent. Apply outbound generic traffic shaping (GTS) on ports facing the core ports, setting the CIR equal to the CIR on the core ports.
- D. Apply a WRED table to the ports in question, optionally adjusting the table values to drop lower priority traffic first.





Answer: D

Question No : 7

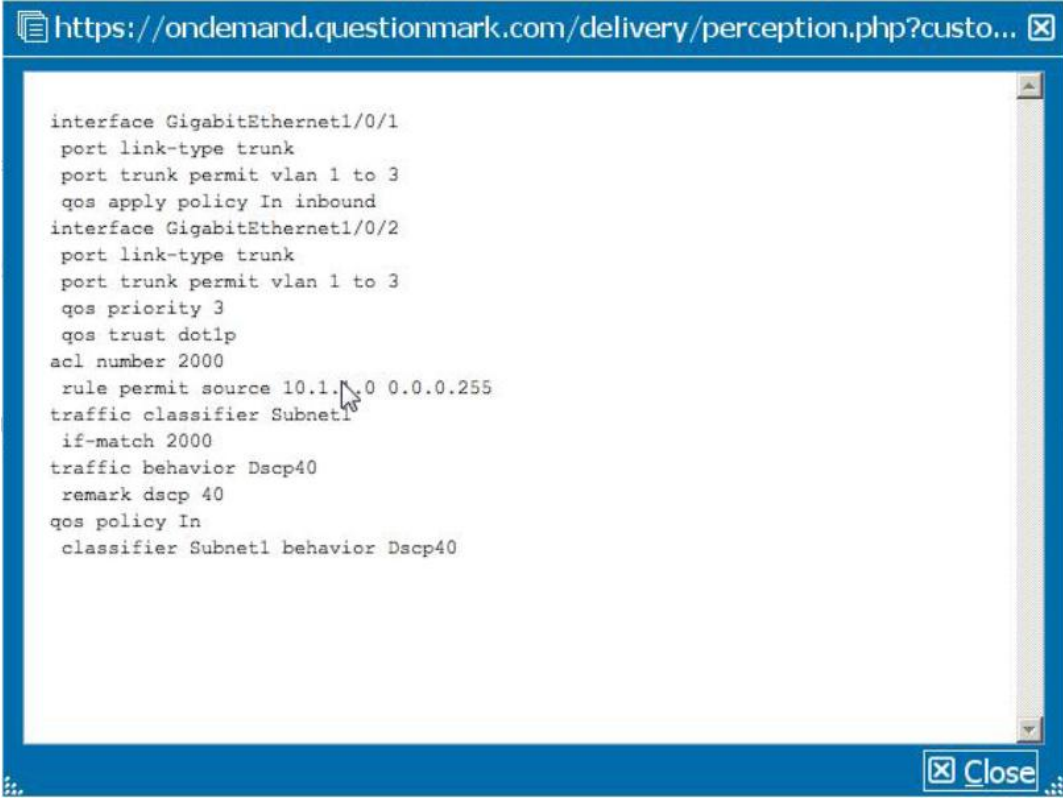
View the exhibits.

Exhibit 1

The frame has these characteristics:

-  VLANID = 3
-  802.1p = 3
-  DSCP=32
-  Source IP address = 10.1.1.5

Click here for Exhibit 2



```

interface GigabitEthernet1/0/1
 port link-type trunk
 port trunk permit vlan 1 to 3
 qos apply policy In inbound
interface GigabitEthernet1/0/2
 port link-type trunk
 port trunk permit vlan 1 to 3
 qos priority 3
 qos trust dot1p
acl number 2000
 rule permit source 10.1.1.0 0.0.0.255
traffic classifier Subnet1
 if-match 2000
traffic behavior Dscp40
 remark dscp 40
 qos policy In
 classifier Subnet1 behavior Dscp40
  
```

The frame shown in Exhibit 1 arrives on an HP 5800 switch's GigabitEthernet port 1/0/1. QoS maps are at their default settings. Based on the configuration shown in Exhibit 2, to which queue is the outbound packet assigned?

- A. 2
- B. 3
- C. 4
- D. 5

Answer: D

Explanation: How this traffic gets marked?

- The policy is applied to the interface Gi 1/0/1 with inbound direction, which means that the traffic that comes into the port gets the policy applied.
- As the frame matches the ACL subnet, it will remark the value of DSCP to 40
- Looking at the default table parameters, the traffic gets into the queue 5
(The outbound packet in this case refers to the same packet being placed to go out of the interface, after the values have been applied)

Question No : 8

View the exhibit.

```
acl number 3000
 rule permit udp destination-port eq 5555
 traffic classifier ClassA
  if-match acl 3000
 traffic behavior DSCP32
  remark dscp 32
 traffic behavior Ip4
  remark Ip 4
 qos policy Policy1
  classifier ClassA behavior DSCP32
 qos policy Policy2
  classifier ClassA behavior Ip4
 interface GigabitEthernet1/0/1
  qos trust dot1p
  qos priority 3
```

A network administrator wants to configure an HP 5800 switch to place all incoming traffic on the GigabitEthernet 1/0/1 port in priority queue 3. However, one exception applies. All traffic incoming on that port that is destined to UDP port 55555 should be forwarded in priority queue 4 and marked with DSCP 32.

Based on the current configurations shown in the exhibit, which further steps must the network administrator perform? (Select two.)

- A.** Configure port GigabitEthernet 1/0/1 to trust DSCP
- B.** Apply QoS policy Policy1 as an inbound policy on port GigabitEthernet 1/0/1
- C.** Apply QoS policy Policy2 as an inbound policy on port GigabitEthernet 1/0/1

- D. Create a OoS Ip-dscp map that maps Ip value 4 to DSCP02
- E. Undo OoS trust on port GigabitEthernet 1/0/1

Answer: B,E

Question No : 9

A company has a service level agreement (SLA) with its service provider. The SLA specifies a 2 Mbps committed information rate (CIR) and 20 KB committed burst size (CBS). Lately, during peak usage times, the company has been experiencing brief periods of poor performance on its external connection (GigabitEthernet port 2/0/1 on an HP 5800 switch).

How can the network administrator configure the Comware switch to address this problem?

- A. Configure a traffic classifier that selects all traffic and a car traffic behavior that sets the CIR to 2 Mbps and the CBS to 20 KB. Create a QoS policy that maps the classifier to the action and apply this policy as an inbound policy on port GigabitEthernet 2/0/1.
- B. Enable Strict Priority (SP) scheduling on port GigabitEthernet 2/0/1 and ensure that all inbound traffic is marked with the correct priority.
- C. Configure generic traffic shaping (GTS) on the GigabitEthernet port 2/0/1, setting the CIR to 2 Mbps and the CBS to 20 KB.
- D. Configure a traffic classifier that selects all traffic and a car traffic behavior that sets the CIR to 2 Mbps and the CBS to 20 KB. Create a OoS policy that maps the classifier to the action and apply this policy as an outbound policy on port GigabitEthernet 2/0/1.

Answer: C

Explanation: Generic Traffic Shaping (GTS): Shapes irregular traffic or traffic exceeding the pre-defined specifications to facilitate bandwidth assignment in upstream and downstream networks. The nonconforming traffic is cached, so that fewer packets are dropped.

* CIR

* CBS

Note 2: CIR: Acronym for Committed Information Rate, the average rate (bits per second) at which the network guarantees to transfer information units over a specific measurement interval. This interval is the quotient of committed burst size divided by committed information rate (CBS/CIR).