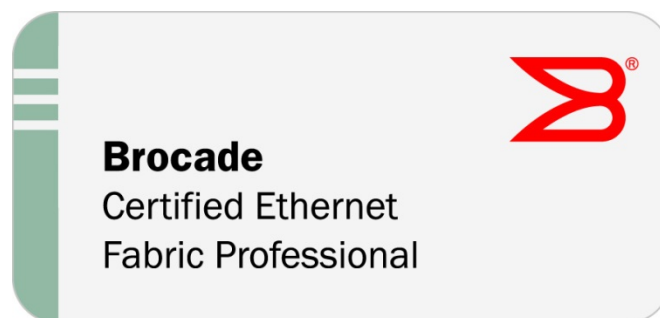




**Brocade Certified Ethernet Fabric Professional
Practice Questions w/Answers
For Exam 150-810**



Section 1

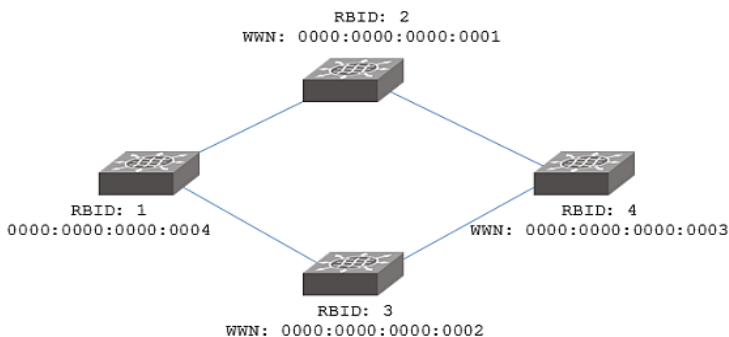
1) STP BPDUs are being forwarded into a Brocade VCS fabric using NOS v3.0.

How will these frames be forwarded?

- A) The edge VDX will forward all BPDUs to the multicast root bridge.
- B) The edge VDX will broadcast the BPDUs to all R Bridges.
- C) The edge VDX will drop all BPDUs.
- D) The edge VDX will forward all BPDUs to the STP root bridge.

Within the VCS fabric TRILL is used to form a loop free environment. Any STP BPDUs received on an edge port will be forwarded to all other edge ports by forwarding the BPDUs to the multicast root across the multicast tree.

2)



Referring to the graphic, which switch would be elected as the Principal RBridge?

- A) RBID 1
- B) RBID 2
- C) RBID 3
- D) RBID 4

During a VCS fabric rebuild the RBridge with the lowest WWN will become the principle (or coordinator) switch of the fabric.

3) You are currently evaluating the Port Based Policer feature for use in your Brocade VCS fabric. You received four Brocade VDX 8770 switches.

Which three features are supported in the switches? (Choose three.)

- A) policing options that allow packet headers to be modified for Class of Service (CoS)
- B) color-based priority mapping scheme for limiting traffic rate
- C) policing option that allows packet headers to be modified for FCoE precedence
- D) policing options that allow packets to be assigned to a traffic class
- E) policing options that prevent packets from being assigned to a traffic class

The Policer supports the following features:

- *Color-based priority mapping scheme for limiting traffic rate: one rate, two-color policing with conform color options. Violate color traffic will be dropped. Two-rate, three-color policing with conform and exceed color options. Violate color traffic will be dropped.*
 - *A policing option that allows packet headers to be modified for IP precedence.*
 - *Policing options that allow packet headers to be modified for Class of Service (COS).*
 - *Policing options that allow packet headers to be modified for Differentiated Services Code Point (DSCP).*
 - *Policing options that allow packets to be assigned to a traffic class (0-7).*
-

4) Which two statements describe the relationship between a Virtual Ethernet (VE) and a VLAN? (Choose two.)

- A) VE routing is enabled on a per RBridge basis.
- B) Every switch in the fabric must have a VE for every VLAN where routing is enabled.
- C) One switch in the fabric can act as the VE for the VLAN on all other switches in the fabric.
- D) A VE can be enabled on an ISL port.

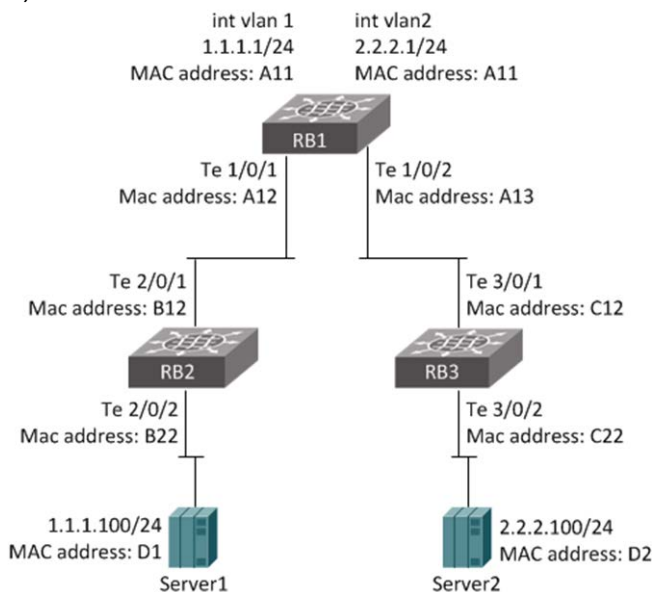
A virtual Ethernet (Ve) interface is a logical port associated with a Layer 3 Virtual LAN (VLAN) configured on a Layer 3 switch. You can configure routing parameters on the virtual interface to enable the Layer 3 switch to route protocol traffic from one Layer 3 VLAN to the other, without using an external router. A corresponding VLAN must be configured before you can configure the VE interface.

5) Which two statements describe the benefit of VRRP-E Short Path Forwarding? (Choose two.)

- A) Short Path Forwarding may be configured on any interface.
- B) Short Path Forwarding is supported on the Brocade VDX 8770.
- C) Using VRRP-E results in active-active load-balancing.
- D) The virtual IP address may be the same as the real IP address.

VRRP-E active-active load-balancing is achieved with ingress RBridge, by hashing either the L2-7 header information (VDX 8770) or the destination MAC address (VDX 67xx) to determine the path.

6)



The graphic shows a 3-node Brocade VCS fabric in which only RB1 has L3 routing enabled. ARP resolution and Server1's ARP table includes an entry for Server2.

What will the destination MAC address be for frames sent by Server1?

- A) D2
- B) B22
- C) A12
- D) A11

Since Server 1 and Server 2 are on different VLAN's and subnets then L2 frames have to be set to a router. The router for Server 1 is RB1 with an IP address of 1.1.1.1/24 and a MAC address of A11. Frames destined to Server 2 will therefore be destined for MAC address A11.

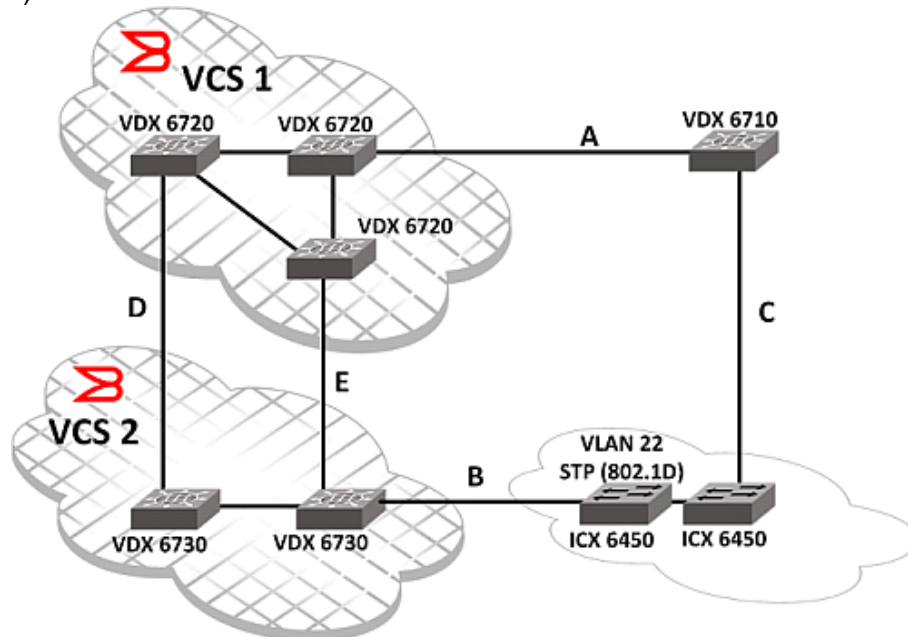
7) Which function is provided by the ASIC on the Switch Fabric Module (SFM)?

- A) intrachassis switching
- B) packet processor
- C) firmware storage
- D) distributed processing

Switch Fabric Modules (SFM) interconnect all line cards within the chassis.

Section 2

8)



Referring to the graphic, there is a broadcast storm in VCS fabric 2. ELD is configured on VCS 1 and not configured in VCS 2.

Which three links will be disabled? (Choose three.)

- A) A
- B) B
- C) C
- D) D
- E) E

Since VCS fabric 2 does not have ELD configured link B will not shut down and the devices at either end of link C do not support ELD. To minimize the number of disabled ports, ELD assigns a priority to each port and a unique receive limit (pdu-rx-limit) to each Brocade VCS Fabric cluster. The port priority determines whether the sending or receiving edge port of the cluster is disabled. The pdu-rx-limit determines on which Brocade VCS Fabric the action takes place. Without these configured values, it is possible that a Layer 2 loop could be detected in multiple clusters at the same time. As a result, multiple ports would be disabled, stopping traffic among the Brocade VCS Fabric clusters.

9) Which statement is correct about Priority Flow Control?

- A) Pause On/Off can only be specified for TX direction.
- B) There are seven high-water and low-water thresholds for each input port.
- C) The queue levels are managed per input port, per priority.**
- D) Both ends of a link are auto-negotiated and configured identically for Priority Flow Control.

Priority Flow Control (PFC), 802.3x is used on Data Center Bridging (DCB) links to pause traffic on a per-priority (or class of service) basis. The DCB link has 8 priority queues and PFC is configured per priority (or lane of the highway).

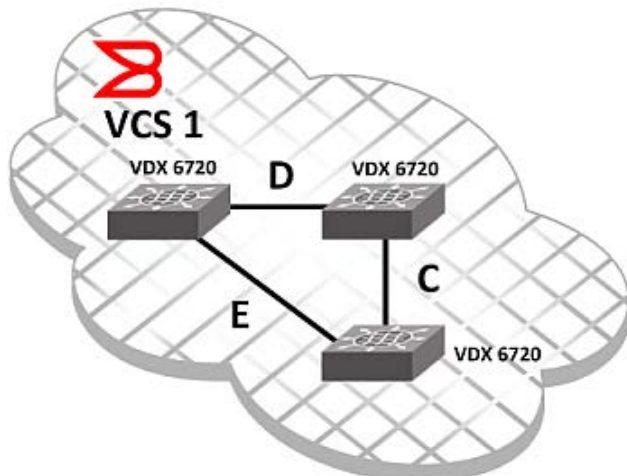
10) You are creating a vLAG from the Brocade VCS fabric to another vendor's switch.

Which two statements are true about this connection? (Choose two.)

- A) The configuration should be the same on all members of the vLAG.**
- B) The port channels are type standard.**
- C) The ports in the vLAG may be different speeds.
- D) This configuration ensures no duplication of broadcast and multicast packets.

For the vLAG to work correctly the configuration MUST be configured consistently on all R Bridges. There are two types of LAGs on the VDX product line. Type Brocade is proprietary and needs Brocade products at either end. Type Standard would be used when connecting to another vendor's switch.

11)



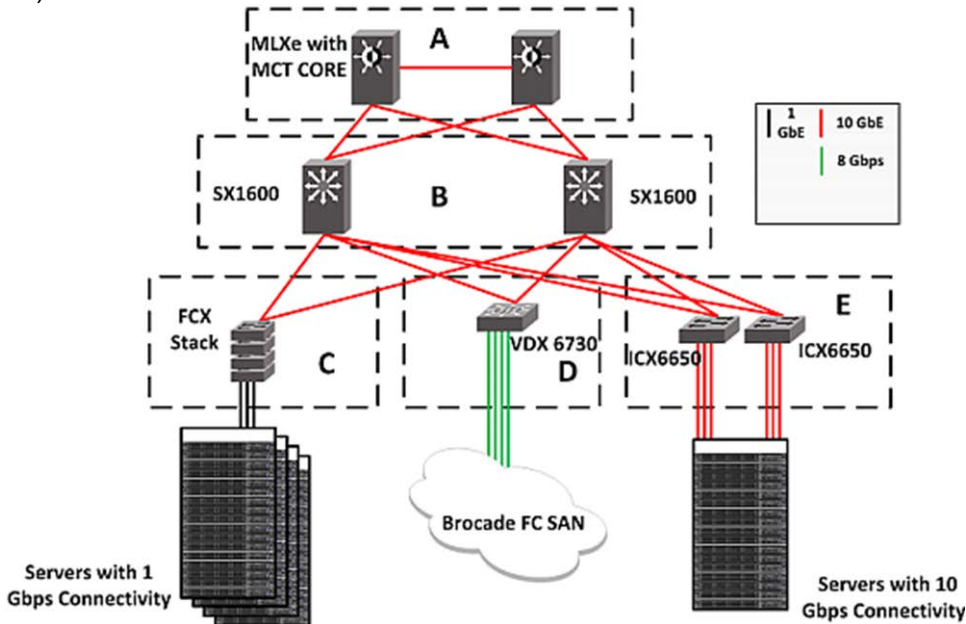
Referring to the graphic, link D has come up as a four-port Brocade VCS ISL trunk.

What are three characteristics of this link? (Choose three.)

- A) It provides equal frame load balancing (round-robin) among member links.**
- B) It allows ports of different speeds.**
- C) All ports must be members of the same port group.**
- D) It provides hash-based load balancing among member links.
- E) It does not require user intervention or configuration.**

If more than one ISL exists between two switches, then Brocade ISL trunks can automatically form. All ISLs connected to the same neighboring Brocade switch attempt to form a trunk. The trunks are formed only when the ports belong to the same port group. No user intervention is necessary to form these trunks. Deficit Weighted Round Robin (DWRR) is used for members of a VCS fabric trunk.

12)



You are planning to deploy several Brocade VDX 8770s.

Referring to the graphic, what are three Brocade recommended use cases? (Choose three.)

- A) A
- B) B**
- C) C**
- D) D
- E) E**

A VCS Fabric has been designed to work at the access layer (two switches at TOR, no VCS fabric license needed) and scale within the aggregation layer up to 24 R Bridges with NOS v 3.x.

13) You have been asked to ensure that your AMPP port-profile content is either MAC based or extended ACL based.

On which two attributes are the security profiles applied to the ACLs? (Choose two.)

- A) WWN
- B) user-defined profile**
- C) policy ID**
- D) port ID

A security profile defines all the security rules needed for the server port. A typical security profile contains attributes for MAC-based standard and extended ACLs. Security profiles are applied to the ACLs based on the profile or PolicyID. Therefore, multiple security profiles can be applied to the same profiled port.

14) You are in the process of migrating your VMs with FCoE port-profiles using AMPP.

What are two factors regarding the FCoE port-profile? (Choose two.)

- A) The fcoe-profile is only available on the default profile.
- B) User-defined port-profiles have access to the fcoe-profile.
- C) The fcoe-profile is only available on a user-defined profile.
- D) User-defined port-profiles do not have access to the fcoe-profile.

The FCoE profile can only be part of the default profile. When it is part of the default profile, FCoE is enabled globally and all the profiled ports automatically become FCoE ports.

Section 3

15) You are configuring zoning to share devices between a Brocade VCS fabric and a Brocade FC SAN.

Which two statements regarding these zones are true? (Choose two.)

- A) The zone names must be prefixed with "lsan_".
- B) The zones in both fabrics must have identical names.
- C) The zones must contain only nWWNs.
- D) The zones must contain only pWWNs.

A required naming convention; the name of an LSAN zone begins with the prefix "LSAN_". The LSAN name is case-insensitive; for example, lsan_ is equivalent to LSAN_, Lsan_, and so on. LSAN zone members in all fabrics must be identified by their WWN. You cannot use the port IDs, which are supported only in Fabric OS fabrics.

16)

```
vdxl28-rb2# sh qos int ten 2/0/9
Interface TenGigabitEthernet 2/0/9
  Provisioning mode cee
  CEE Map default
  FCoE CoS: 3
  Default CoS 0
  Interface COS trust cos
      In-CoS:   0   1   2   3   4   5   6   7
  -----
  Out-CoS/TrafficClass: 0/6 1/6 2/6 3/3 4/4 5/2 6/2 0/7
  Interface DSCP trust untrusted

Per-Traffic Class Tail Drop Threshold (bytes)
  TC:           0   1   2   3   4   5   6   7
  -----
  Threshold:    252  252  252 75284 75284 252 57456 9576

Flow control mode PFC
  CoS3 TX on, RX on
  CoS4 TX on, RX on

Multicast Packet Expansion Rate Limit 3000000 pkt/s, max burst 4096 pkts

Multicast Packet Expansion Tail Drop Threshold (packets)
  TrafficClass:  0   1   2   3   4   5   6   7
  -----
  Threshold:    64  64  64  64  64  64  64  64

Multicast Packet Expansion Traffic Class Scheduler
  TrafficClass:  0   1   2   3   4   5   6   7
```

Referring to the command output, a frame that has been received with a marked CoS of 6 would be transmitted on which Traffic Class?

- A) 1
- B) 2
- C) 4
- D) 6

Out-CoS/TrafficClass: 0/6 1/6 2/6 3/3 4/4 5/2 6/2 0/7
CoS 6 will be mapped to Traffic Class 2.

17) You have completely configured vCenter integration in your Brocade VCS fabric using NOS v3.0.

Which three will be automatically created in your fabric? (Choose three.)

- A) VLANs
- B) port-profiles
- C) QoS policies
- D) ACLs
- E) MAC associations

Based on discovered assets, the VCS fabric will automatically configure corresponding objects:

- *Port-profiles and VLAN creation*
 - *MAC address association to port-profiles*
 - *Port, LAGs, vLAGs are put into profile mode automatically based on ESX host connectivity*
-

18)

RBridge1

```
protocol vrrp
chassis virtual-ip 10.255.255.7/25
interface ve 10
 ip ospf area 0
 ip mtu 1500
 ip proxy-arp
 ip address 192.168.16.1/24
 no shutdown
 vrrp-extended-group 10
  virtual-ip 192.168.16.1
  track port-channel 20 priority 90
  enable
 preempt-mode
 short-path-forwarding
 priority 100
```

RBridge2

```
protocol vrrp
interface ve 10
 ip ospf area 0
 ip mtu 1500
 ip proxy-arp
 ip address 192.168.16.2/24
 no shutdown
 vrrp-extended-group 10
  virtual-ip 192.168.16.1
  track port-channel 20 priority 140
  enable
 preempt-mode
 short-path-forwarding
 priority 150
```

You are asked to evaluate the proposed configuration shown in the output for two Brocade VDX switches.

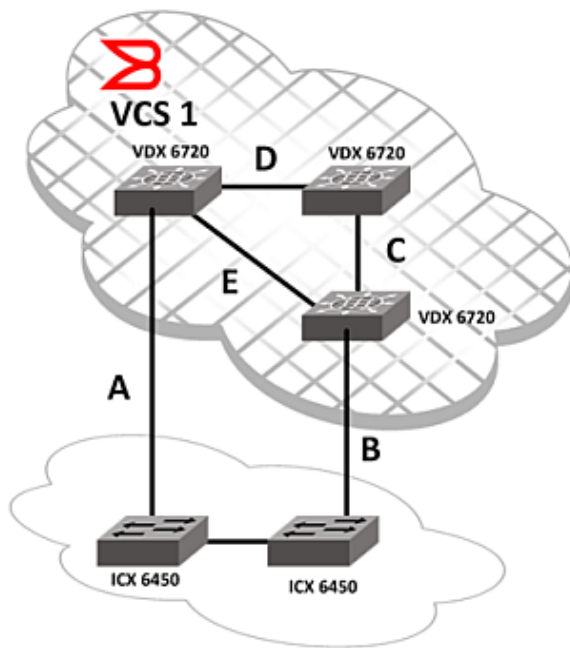
Which statement is true about this configuration?

- A) This configuration will not produce the desired result because the owner priority is lower than the backup priority.
- B) preempt mode cannot be configured within the protocol vrrp context.
- C) short-path-forwarding cannot be configured within the protocol vrrp context.
- D) This configuration will fail because the interface IP address and the virtualip configured on RBridge1 match.**

Both the interface IP address and the virtualip configured on RBridge1 are identical.

RB1: ip address 192.168.16.1/24, virtual-ip 192.168.16.1

19)



Referring to the graphic, which two statements about this network configuration are correct? (Choose two.)

- A) Links E and C are edge ports in the VCS fabric.
- B) Links D and C are ISL ports in the VCS fabric.
- C) Links A and B are edge ports in the VCS fabric.
- D) Links A and B are ISL ports in the VCS fabric.

Edge ports: in an Ethernet fabric, all switch ports used to connect external equipment, including end stations, switches, and routers. **Fabric ports:** the ports on either end of an inter-switch link (ISL) in an Ethernet fabric.

20)

```
RB1# show port-channel 10
LACP Aggregator: Po 10
Aggregator type: Standard
Ignore-split is disabled
Admin Key: 0010 - Oper Key 0010
Partner System ID - 0x8000,00-05-1e-cd-10-0f
Partner Oper Key 0010
Member ports on rbridge-id 1:
  Link: Te 1/0/9 (0x18048008) sync: 1  *
  Link: Te 1/0/10 (0x18050009) sync: 0
```

```
RB1# show interface Port-channel 10
Port-channel 10 is up, line protocol is down (minimum links
not up)
Hardware is AGGREGATE, address is 0005.1ecd.0f29
  Current address is 0005.1ecd.0f29
Interface index (ifindex) is 671088650
Minimum number of links to bring Port-channel up is 4
MTU 2500 bytes
```

<truncated output>

You have a configured vLAG with four members, two from RB1 and two from RB2. You then are notified that po 10 is down. Command output from RB2 indicates proper configuration.

Referring to the exhibit, which two statements describe the cause of the vLAG's down status? (Choose two.)

- A) Ignore-split is disabled.
- B) Interface te 1/0/10 is down.
- C) The Admin Key and the Partner Key are using the same key.
- D) There are not enough links up for the vLAG to function.

```
switch(config-Port-channel-10)# minimum-links 4
```

Use this command to allow a port-channel to operate at a certain minimum bandwidth all the time. If the bandwidth of the port-channel drops below that minimum number, then the port-channel is declared operationally DOWN even though it has operationally UP members.

Section 4

21) You are using Brocade Network Advisor v11.3 and have been asked to perform an Ethernet Fabric Traceroute.

Which three values are required? (Choose three).

- A) source
- B) destination
- C) port
- D) test count
- E) VLAN

When configuring BNA, select a source address from the Source list or enter a MAC or IP address. Select a destination address from the Destination list or enter a MAC or IP address. Select a VLAN from the VLAN list.

22) You have installed a new standby management card into your Brocade VDX 8770-8.

What should you do to ensure that both management cards are using the same firmware version?

- A) Perform a firmware level by reloading the system.
- B) Perform a firmware commit to level the firmware.
- C) Perform a firmware restore to level the firmware.
- D) Perform a firmware sync to level the firmware.

When you replace a management module or insert a second management module into a chassis, the active management module automatically synchronizes the hot-plugged standby management module with the same firmware version. The standby management module reboots with the upgraded firmware. The automatic firmware synchronization takes place only if all of the following conditions are met:

- *The standby management module is inserted while the chassis is up (hot-plugged insert).*
- *There was no firmware download process running when the standby management module was inserted.*

Section 5

23)

```
VDX6730_2-250# sh fabric islports
Name:          VDX6730_2-250
Type:          96.5
State:         Online
Role:          Fabric Principal
VCS Id:        1
Config Mode:  Local-Only
Rbridge-id:    25
WWN:          10:00:00:05:33:bb:75:3e
FCF MAC:       00:05:33:bb:75:3e
```

```
Index   Interface      State   Operational State
-----
1       Te 25/0/1       Up      ISL segmented,(ESC mismatch, Unknown)(Trunk Primary)
2       Te 25/0/2       Up      ISL (Trunk port, Primary is Te 25/0/1)
```

You cable ports 1 and 2 on two different Brocade VDXs to form a three-node VCS fabric. The fabric will not join as shown in the output.

What is the reason for the segmentation?

- A) The SFPs are not of the same type.
- B) The VCS fabric license is not installed on both VDXs.
- C) The FCoE license is not installed.
- D) The firmware is not the same level on both VDXs.

Reasons for segmentation include an ESC mismatch, Unknown Only on one side of the ISL; the actual ESC mismatch reason code will be displayed. On the other end, Unknown will be displayed.

24)

```
CEE Map 'default'
Precedence: 1
Remap Fabric-Priority to Priority 0
Remap Lossless-Priority to Priority 4
Priority Group Table
1: Weight 40, PFC Enabled, BW% 40
2: Weight 30, PFC Disabled, BW% 30
3: Weight 30, PFC Disabled, BW% 30
15.0: PFC Disabled
15.1: PFC Disabled
15.2: PFC Disabled
15.3: PFC Disabled
15.4: PFC Disabled
15.5: PFC Disabled
15.6: PFC Disabled
15.7: PFC Disabled
Priority Table
CoS:    0    1    2    3    4    5    6    7
-----
PGID:   2    2    2    1    3    2    2 15.0
```

You are unable to configure PFC for Class of Service (CoS) 2 in your CEE map.

Referring to the output, what is the reason for this?

- A) There are multiple priorities in group 2.
- B) PFC is already configured for group 1.
- C) Lossless priority has been remapped to CoS 4.
- D) PFC may only be configured for FCoE priorities.

*Enabling Pause on a **per-user-priority** basis allows administrators to create lossless links for traffic requiring no-drop service, such as Fibre Channel over Ethernet (FCoE), while retaining frame-drop congestion management for IP traffic. Priority-Group-Table 2 is assigned to CoS 0, 1, 2 & 5 in the exhibit.*

25)

```
CEE Map 'default'
Precedence: 1
Remap Fabric-Priority to Priority 0
Remap Lossless-Priority to Priority 0
Priority Group Table
1: Weight 40, PFC Enabled, BW% 40
2: Weight 30, PFC Disabled, BW% 30
3: Weight 30, PFC Enabled, BW% 30
15.0: PFC Disabled
15.1: PFC Disabled
15.2: PFC Disabled
15.3: PFC Disabled
15.4: PFC Disabled
15.5: PFC Disabled
15.6: PFC Disabled
15.7: PFC Disabled
Priority Table
CoS:    0    1    2    3    4    5    6    7
-----
PGID:   2    2    2    1    3    2    2 15.0
```

Your VCS fabric is experiencing congestion issues for its iSCSI traffic during periods of bursty IP traffic. All iSCSI parameters are configured for the default values.

Referring to the output, which single step would increase iSCSI performance?

- A) Increase the weight for group 3.
- B) Decrease the weight for group 2.**
- C) Disable PFC for group 1.
- D) Increase the weight for group 1.

Priority-Group-Table 2 is configured for IP traffic. Reducing PGT 2's BW will also allow you to increase the iSCSI BW also.

26) Your Brocade VDX switch is experiencing connection problems with VCS to SAN routing. Fabric parameters indicate that your switch is isolated.

What are two reasons for this? (Choose two.)

- A) The RBridge ID matches the front domain ID.**
- B) Stale translate domains exist in an edge fabric.**
- C) The RBridge ID matches the translate domain ID.**
- D) Stale translate domains exist in an backbone fabric.

In an FCoE fabric that spans Network OS switches and Fabric OS switches, a Network OS switch with a routing bridge ID that matches a front phantom domain ID or translate phantom domain ID of a connecting Fibre Channel router can become isolated.

27) You notice that traffic disruptions are occurring during video conference broadcasts to all employees. The hosts are connected to a Brocade VDX 8770-4 which also has various connections of 1 GbE and 10 GbE host ports. VMs are powered off when not used and powered up to allocate the limited resources for the users, which may also be contributing to the traffic disruptions.

Which two changes would minimize the traffic disruptions between the hosts? (Choose two.)

- A) Implement local switching by connecting both hosts to the same line card.
- B) Implement BUM storm control on all ports.
- C) Implement ingress rate limiting on slower connections.
- D) Implement egress ACLs on one of the host ports.

A traffic storm occurs when packets flood the LAN, creating excessive traffic and degrading network performance. Multicast rate limiting is not supported on VDX 8770-4 and 8770-8 platforms, use BUM storm control. Broadcast, unicast and unknown multicast (BUM) storm control can prevent disruptions on Layer 2 physical ports.

28) You are experiencing an intermittent connectivity problem between a Brocade VCS fabric and a traditional IP network. You decide to engage Brocade Support to help resolve this issue.

What information should you provide? (Choose three.)

- A) any network traces captured using Wireshark software or other network analyzer
- B) a network diagram
- C) server operating system version
- D) directory services information for all connected systems
- E) topology information

Basic troubleshooting 101 procedures

29) You are troubleshooting intermittent frame corruption. To isolate this problem, Brocade Support asks you to gather a packet capture on the Brocade VDX switch.

Which two features allow you to do this? (Choose two.)

- A) Switch Port Analyzer
- B) tcpdump
- C) syslog server
- D) copy support

A Switch Port Analyzer is used on a network switch to send a copy of network packets seen on one switch port to a network monitoring connection on another switch port. The NOS command `tcpdump` is used to analyze network traffic.
