



VMware VCP-310

VMware Certified Professional on VI3.5

Q&A with explanations

Version 27.0

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## **Questions and Answers = 295**

## Topic 1, Virtual Infrastructure (9 questions).

Part 1: Identify the characteristics of the products in the VMware product line and when to use each product. (9 questions).

### QUESTION NO: 1

**How does ESX Server 3.x differ from VMware Server 2?**

- A. ESX Server 3.x supports multiple processors in a virtual machine and VMware Server 2 does not.
- B. ESX Server 3.x supports Intranet and application servers in a production environment and VMware Server 2 does not.
- C. ESX Server 3.x manages the virtualization server application remotely through a web-based interface and VMware Server 2 does not.
- D. ESX Server 3.x supports virtual switches with VLAN capabilities and VMware Server 2 does not.
- E. ESX Server 3.x runs on top of Linux and VMware Server 2 does not.

**Answer: D**

**Explanation: VMware Server does not support VLAN**

### QUESTION NO: 2

**What are two reasons why Certifyme.com would choose to use VMware Server 2.x instead of using ESX Server 3.x? Select two.**

- A. ESX Server 3.x does not support the storage hardware the company wants to use.
- B. The company wants to utilize NIC teaming for network path failover and load balancing.
- C. The company wants to virtualize a large number of physical machines running legacy operating systems in their datacenter.
- D. VMware Server 2.x is a lower-cost solution for departmental virtualization projects.
- E. VM Server 2.x allows users to run the same number of virtual machines per CPU core as ESX Server 3.x does at the same performance levels at a lower cost.

**Answer: A, D**

**Explanation:**

**Reference:** <http://www.vmware.com/products/server>

**QUESTION NO: 3**

**Which of the following most closely describes the purpose of ACE (the Assured Computing Environment)?**

- A. ACE helps desktop managers provision secure, standardized PC environments throughout the enterprise.
- B. ACE enhances system security for ESX Server by providing firewall protection for both virtual machines and the Service Console.
- C. ACE enhances virtual infrastructure manageability by acting as a proxy between Virtual Center and the ESX and VMware Server systems under management.
- D. ACE enhances reliability of the virtual infrastructure by providing hardware redundancy for ESX Server.

**Answer: A**

**QUESTION NO: 4**

**All VMware virtualization products are based on the same underlying virtualization technology, but there are some differences among these products. Which one of the following statements is true?**

- A. VMware Server and VMware Workstation both provide tools for remote management of virtual machines.
- B. Because it runs on the bare metal, ESX Server supports a narrower range of physical hardware than either Workstation or VMware Server.
- C. ESX Server supports more types of guest operating system than Workstation or VMware Server.
- D. Only ESX Server allows virtual machines to be configured with multiple virtual CPUs.

**Answer: B**

ESX server doesn't need an underlying operating system such as Windows Server whereas VMware Server and Workstation need to be installed an underlying operating system. ESX is an operating system within itself. This means that it uses its own drivers for the server hardware. This also means that ESX Server supports a narrower range of physical hardware than either Workstation or VMware Server.

**QUESTION NO: 5**

**64-bit CPUs are supported for VMotion in VirtualCenter 2.0**

- A. only when migrating 32-bit Guest OSes.
- B. when migrating either 32-bit or 64-bit Guest OSes, so long as the Nx flag is hidden.
- C. when migrating either 32-bit or 64-bit Guest OSes, regardless of CPU compatibility
- D. when migrating either 32-bit or 64-bit Guest OSes, so long as the VMware CPU Compatibility Tool detects two compatible CPUs.

**Answer: D**

**QUESTION NO: 6**

**What are two reasons why Certifyme.com would choose to use ESX Server 3.x instead of using VMware Server 2.0? (Choose two.)**

- A. VMware Server 2.0 does not support running virtual machines in a production environment.
- B. ESX Server 3.x offers better resource management and better performance.
- C. The company needs the ability to run dual-processor virtual machines.
- D. ESX Server 3.x is a lower-cost solution for small software testing environments.
- E. The company wants the ability to use VMotion.

**Answer: B, E**

**Explanation: ESX Server offers better performance because it does not require an underlying operating system such as Windows Server.**

**QUESTION NO: 7**

**Which statement is true about the database used for VirtualCenter evaluations?**

- A. The VirtualCenter installer provides the option to automatically install and configure an MSDE database.
- B. MS Access may be used as an evaluation database, but it must be upgraded before VirtualCenter is used in a production environment.
- C. Evaluation licenses do not allow VirtualCenter to connect to a remote database.
- D. The optional MSDE database can only be used if installed prior to running the VirtualCenter installer.

**Answer: A**

**QUESTION NO: 8**

**Under which condition does VMware support VirtualCenter with SQL Server using Windows authentication?**

- A. as long as the SQL Server is installed on the same machine as VirtualCenter
- B. as long as the SQL Server is running on a physical machine
- C. as long as the connection between VirtualCenter and SQL Server is at least 1Gbps
- D. as long as the SQL Server is part of the same Active Directory domain

**Answer: D**

**QUESTION NO: 9**

**How does VMware Server 2.0 differ from ESX Server 3.x?**

- A. VMware Server 2.0 supports up to 64 GB of RAM and ESX Server 3.x does not.
- B. VMware Server 2.0 enhances software development and testing and ESX Server 3.x does not.
- C. VMware Server 2.0 supports desktop operating systems and ESX Server 3.x does not.
- D. VMware Server 2.0 runs on a Linux host and ESX Server 3.x does not.
- E. VMware Server 2.0 supports legacy operating systems and ESX Server 3.x does not.

**Answer: D**

**Topic 2, Deploy ESX Server (16 questions).**

**Part 1: Install VMware ESX server in different environments including local storage and boot from SAN. (7 questions).**

**QUESTION NO: 1**

**During the installation of ESX Server 3.5, you decide to manually define the partitioning scheme.**

**Which two are recommend minimum partition sizes? Select two.**

- A. /boot = 512 MB

- B. Swap = 544 MB
- C. / = 2500 MB
- D. /usr = 2048 MB
- E. /etc = 1500 MB
- F. / = 5 GB

**Answer: B, F**

**Explanation:** The minimum recommended Swap partition size is 544MB. The minimum recommended root partition size is 5GB for ESX Server 3.5. In previous versions of ESX server, the minimum recommended root partition size is 2560MB.

Ref: page 96 Installation Guide.

#### **QUESTION NO: 2**

**If the ESX Server does not have access to shared storage, which two additional partitions are required to be created on local storage? Select two.**

- A. /user
- B. VMkernel swap
- C. Vmkcore
- D. VMFS
- E. /var

**Answer: C, D**

**Explanation:**

Installation & Upgrade Guide\ Datastore Partitioning: Required Partitions

C: A 100MB vmkcore partition is required for each ESX Server host. A vmkcore partition can be located on a local SCSI volume, a networked SCSI volume, or a SAN. It cannot be located on a software iSCSI volume.

A vmkcore partition is used to store core dumps for debugging and technical support.

Each ESX Server host must have a vmkcore partition of 100MB. If multiple ESX Server hosts share a SAN, configure a vmkcore partition with 100MB for each host.

Installation & Upgrade Guide\ Datastore Partitioning: Required Partitions

D: A VMFS partition is required. However, VMFS partitions do not need to be located on a local or boot drive. VMFS partitions can be located on a local SCSI volume, a networked SCSI volume, a SAN. A VMFS partition is used to store virtual machine virtual disks. VMware recommends 4GB storage per virtual machine.

**QUESTION NO: 3**

**When installing ESX Server 3.x, which partition is required to store core dumps for debugging and for VMware technical support?**

- A. vmkcore
- B. vmkdump
- C. vmfscore
- D. vmimages

**Answer: A**

**Explanation:**

Installation & Upgrade Guide\ Datastore Partitioning : Required Partitions

An ESX Server local boot volume requires three specific partitions for operation. In addition, a local or remote VMFS partition is required to store your virtual machines, and a vmkcore partition is required to provide core dumps for technical support.

**QUESTION NO: 4**

**Which statement is true about running an ESX Server virtual machine on a CIFS share?**

- A. ESX Server must be granted as a trusted member of the CIFS server.
- B. ESX Server does not support datastore on CIFS
- C. ESX Server requires gigabit Ethernet adapter in order for CIFS to be used as datastore.
- D. ESX Server must be on the same LAN as the CIFS server.

**Answer: B**

**QUESTION NO: 5**

**Hitting ESC when first powering on a VM in ESX Server 3.X**

- A. enters the boot order of the BIOS.
- B. does nothing, as ESC is not a valid option.



- C. directs the VM to directly boot from network.
- D. enters the general BIOS options and is an alternative to hitting F12.

**Answer: D**

**QUESTION NO: 6**

**What is a valid reason for choosing to boot from local storage rather than choosing to boot from SAN?**

- A. MSCS is not supported on boot from SAN.
- B. There is no way to restrict sharing of boot LUNs between ESX Servers on boot from SAN.
- C. RDM is not supported on boot from SAN.
- D. VMotion is not supported on boot from SAN.

**Answer: A**

**QUESTION NO: 7**

**A system administrator configures an ESX Server 3.X system to boot from SAN.**

**Which technology is NOT supported when booting from SAN?**

- A. RDM
- B. DRS
- C. MSCS
- D. VCB

**Answer: C**

Part 2: Troubleshoot ESX Server problems (9 questions)

**QUESTION NO: 1**

**You have a Windows virtual machine (VM) that is experiencing poor application performance. You suspect the problem is a lack of available memory. You open Windows Task Manager and see that 30% of the memory within the VM is not currently being used.**

**What does this indicate and what should you do next?**

- A. The application problems are definitely due to a non-memory related problem. You should check your CPU utilization in Windows Task Manager.
- B. The VM has memory available, however it may not actually have physical memory available. You should check for VMkernel swap activity on the ESX Server host.
- C. The application problems are definitely due to a non-memory related problem. You should check your CPU affinity settings for this VM.
- D. Windows Task Manager is not reading actual memory usage in the VM. You should run the Windows System Monitor to get a precise reading on memory usage.

**Answer: B**

#### **QUESTION NO: 2**

**While attempting to start a virtual machine (VM), you get an error message stating that there is insufficient memory available.**

**What can you do to start the VM?**

- A. increase the memory limit of your VM
- B. decrease the memory limit of your VM
- C. increase the memory reservation of your VM
- D. decrease the memory reservation of your VM

**Answer: D**

**Explanation: This as per definition of Memory reservation. VI infrastructure guide p. 178-179.**

The VM won't start because the amount of memory reserved for the VM is more than the amount of memory available on the host server. Therefore, you need to decrease the memory reservation of your VM.

#### **QUESTION NO: 3**

**When a single virtual machine (VM) crashes, where does it leave a core dump file?**

- A. in a configurable VMFS volume
- B. in the same directory as the VM's configuration file
- C. in the service console's root directory
- D. in a core dump partition

**Answer: B**

**QUESTION NO: 4**

**When deploying an ESX Server into production, you discover you have three extra days in the schedule (an additional 72 hours before the ESX Server goes live).**

**Which preventive action would be the BEST use of this time?**

- A. checking the memory for bad memory cards
- B. burning in the CPU
- C. checking the disk surface for bad blocks
- D. checking the network cards for speed and duplex mismatches

**Answer: A**

**QUESTION NO: 5**

**Which problem is MOST likely to be due to bad physical memory?**

- A. slow performance
- B. virtual machines not starting
- C. VMkernel panics
- D. Errors on virtual machines' virtual SCSI buses

**Answer: C**

**QUESTION NO: 6**

**You work as an administrator at Certifyme.com. Your desktop PC, like all desktop PCs at the Certifyme office, has the Virtual Infrastructure Client application installed. Your PC cannot connect to a certain virtual machine (VM) on your ESX Server.**

**Which troubleshooting test would be LEAST helpful in determining the cause of this problem?**

- A. try to connect to a different VM
- B. try to ping the IP address of a VM that is known to be up and working
- C. try to ping the IP address of your service console
- D. try to ping the DNS hostname of your service console

**Answer: B**

**QUESTION NO: 7**

**You want to troubleshoot poor remote console performance for a virtual machine on an ESX Server.**

**Which is a possible cause of the problem?**

- A. The virtual NIC assigned to the virtual machine has a speed or duplex mismatch
- B. The physical NIC assigned to the virtual machine port group has a speed or duplex mismatch
- C. The virtual machine has an IP address conflict
- D. To conserve memory, the ESX Server has initiated Transport Page Sharing.

**Answer: B**

**Explanation:**

A speed or duplex mismatch can cause poor performance to a VM.

**Incorrect Answers:**

- A:** A virtual NIC doesn't have speed or duplex settings.
- C:** An IP address conflict would disable network communication to the VM.
- D:** This would not affect network communication.

**QUESTION NO: 8**

**You experience problems with a virtual machine which has been running stable for a long time.**

**What is the least likely source of the problem?**

- A. OS bug

- B. VMware bug
- C. VI misconfiguration

**Answer: C**

**QUESTION NO: 9**

**Windows 2000 has been running without incident in a virtual machine (VM) for several months. This morning it blue-screens.**

Which is the LEAST likely cause of the problem?

- A. a VM misconfiguration
- B. a software bug in Windows 2000
- C. a software bug in the application
- D. a service console misconfiguration

**Answer: D**

### Topic 3, Networking (22 questions).

Part 1: Given a set of requirements and a particular hardware environment, create and configure a virtual switch (10 questions)

**QUESTION NO: 1**

**What is necessary to connect a running virtual machine (VM) to a newly created vSwitch VLAN inside an ESX Server?**

- A. install the proper network device inside the VM
- B. power off the VM, connect it to the newly created VLAN, and power it back on again using the Virtual Infrastructure Client
- C. install the appropriate VLAN tagging software inside the VM
- D. connect to the newly created VLAN using the Virtual Infrastructure Client

**Answer: D**

**QUESTION NO: 2**

**Exhibit:**

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**Certifyme.com deploys a Virtual Infrastructure with 3 ESX hosts and VirtualCenter using host-based licensing. The VirtualCenter server and the Virtual Infrastructure Client are on network A. The ESX Server hosts are on network B. There is a firewall between networks A and B.**

**Which ports, at a minimum, need to be open on the firewall to allow full use of the Virtual Infrastructure Client?**

- A. Port 902 and 905
- B. Ports 22, 80, and 902
- C. Ports 902, 27000, and 27010
- D. Ports 902 and 903
- E. Ports 443 and 902

**Answer: D**

#### **QUESTION NO: 3**

**What are the three available virtual switch connection types? (Choose three.)**

- A. virtual machine
- B. vswif0
- C. VMkernel
- D. internal only
- E. service console

**Answer: A, C, E**

#### **QUESTION NO: 4**

**A physical Network device associated with a vSwitch is overloaded.**

**Which of the following actions can be taken to reduce the overload? Select three.**

- A. add the VMKernel TCP/IP networking stack
- B. add an additional vmnic to the affected VSwitch
- C. configure additional VLAN port groups on the same vSwitch
- D. configure traffic shaping
- E. move virtual machines from the affected vSwitch to other available vSwitches.

**Answer: B, D, E**

**E:** as other vSwitches can be configured with another physical NIC.

**Not C:** moving virtual machines to different port groups wouldn't make any difference as they would essentially use the same physical NIC on the vSwitch

**QUESTION NO: 5**

**Suppose you have 65 virtual machines configured on a single ESX Server. You want to provide outbound connectivity for all of them.**

**What is the minimum number of virtual switches you would need to support this configuration?**

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

**Answer: A**

**Explanation:** The default number of logical ports for a vSwitch is 56. However, a vSwitch can be created with up to 1016 ports in ESX Server 3.X. You can connect one network adapter of a virtual machine to each port. Each uplink adapter associated with a vSwitch uses one port. Each logical port on the vSwitch is a member of a single port group. Each vSwitch can also have one or more port groups assigned to it.

**QUESTION NO: 6**

**You work as an administrator at Certifyme.com. A Virtual machine (VM) named CertifymeA is connected to virtual switch A, and a VM CertifymeB is connected to virtual switch B.**

**Which statement is true about the network between CertifymeA and CertifymeB?**

- A. Traffic between VM CertifymeA and VM CertifymeB flows through the physical NIC.
- B. Traffic between VM CertifymeA and VM CertifymeB stays within ESX Server.
- C. VM CertifymeA can communicate with VM CertifymeB if they have same security policies.
- D. VM CertifymeA can communicate with VM CertifymeB if they have same port group policies.



**Answer: A**

**QUESTION NO: 7**

**During ESX Server 3.X installation, selecting "Create a default network for virtual machines" will cause virtual machines to \_\_\_\_\_.**

- A. share a port group on VLAN 1
- B. share an internal only virtual switch
- C. share a network adapter with the service console
- D. share a bond with all available network adapters

**Answer: C**

**Explanation:**

Quick Start Guide\Installing VMware Infrastructure Components:Installing ESX Server:  
Installing ESX Server

If you select Create a default network for virtual machines, your virtual machines will share a network adapter with the service console, which is not the recommended configuration for optimum security.

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**QUESTION NO: 8**

**Which two statements are true about virtual switches in ESX Server? Select two.**

- A. Virtual switches can be created with or without physical NICs.
- B. Virtual switches cannot be created without physical NICs.
- C. A VMotion port group must not be created on a virtual switch used for virtual machine traffic.
- D. A service console port group can be created on a virtual switch used for virtual machine traffic.

**Answer: A, D**

**QUESTION NO: 9**

**Which two statements are true about internal-only virtual switches? Select two.**

- A. They are required for virtual machines to use private IP addresses.
- B. They disallow service console access to the virtual machines.
- C. They allow a group of virtual machines to communicate only with each other.
- D. They can contain multiple port groups.

**Answer: C, D**

**QUESTION NO: 10**

**During ESX Server 3.X installation, selecting "Create a default network for virtual machines" will cause virtual machines to \_\_\_\_\_.**

- A. share a port group on VLAN 1
- B. share an internal only virtual switch
- C. share a network adapter with the service console which is the recommend configuration for optimum security
- D. share a bond with all available network adapters
- E. share a network adapter with the service console which is not the recommend configuration for optimum security

**Answer: E**

**Explanation:**

Quick Start Guide\Installing VMware Infrastructure Components:Installing ESX Server:  
Installing ESX Server

If you select Create a default network for virtual machines, your virtual machines will share a network adapter with the service console, which is not the recommended configuration for optimum security. If you do not select this option, create a network connection for your virtual machines as described in Configuring Network Connections.

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**Part 2: Modify the virtual switch for advanced switch capabilities including**

VLAN, NIC team, traffic shaping, and layer 2 security policies (12 questions).

**QUESTION NO: 1**

**Which is a valid traffic shaping adjustment?**

- A. average bandwidth adjusted in Kbps.
- B. average bandwidth adjusted in Mbps.
- C. maximum bandwidth adjusted in Kbps.
- D. maximum bandwidth adjusted in Mbps.
- E. Burst bandwidth adjusted in Kbps

**Answer: A**

**Explanation:**

Only answer "Average bandwidth adjusted in Kbps" is correct. The other options in the configuration window are "Peak bandwidth" and "Burst size" which are not identical to any of the possible answers. This information can be found in the Server Configuration Guide, Page 56.

**QUESTION NO: 2**

**What are the three configurable security policy exceptions for a virtual switch?**

**Select three.**

- A. promiscuous mode
- B. traffic shaping
- C. MAC address change
- D. Spanning Tree Protocol
- E. Forged transmits

**Answer: A, C, E**

**Explanation:**

Server Configuration Guide\Advanced Networking: Virtual Switch Configuration: Virtual Switch Policies

Promiscuous Mode: Reject

Placing a guest adapter in promiscuous mode has no effect on which frames are received by the adapter, Accept Placing a guest adapter in promiscuous mode causes it to detect all frames passed on the vSwitch that are allowed under the VLAN policy for the port group that the adapter is connected to.

#### MAC Address Changes: Reject

If you set the MAC Address Changes to Reject and the guest operating system changes the MAC address of the adapter to anything other than what is in the .vmx configuration file, all inbound frames will be dropped. If the Guest OS changes the MAC address back to match the MAC address in the .vmx configuration file, inbound frames will be passed again, Accept Changing the MAC address from the Guest OS has the intended effect: frames to the new MAC address are received.

#### Forged Transmits: Reject

Any outbound frame with a source MAC address that is different from the one currently set on the adapter will be dropped, Accept No filtering is performed and all outbound frames

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#### QUESTION NO: 3

**If 0 is selected for the VLAN ID of a port group, or the VLAN ID is left blank, the port group can see \_\_\_\_\_**

- A. 802.3 ad traffic
- B. 802.1Q tagged traffic
- C. 802.3 untagged traffic
- D. 802.11 tagged traffic

**Answer: C**

**Explanation:**

**ESX 3 Server Configuration guide - Pg. 29**

If you are using a VLAN, in the VLAN ID field, enter a number between 1 and 4094.

If you are unsure what to enter, leave this field blank or ask your network administrator.

If you enter 0 or leave the field blank, the port group can see only untagged (non-VLAN) traffic. If you enter 4095, the port group can see traffic on any VLAN

while leaving the VLAN tags intact.

**QUESTION NO: 4**

**Which two statements are true about network traffic shaping? Select two.**

- A. The settings affect only inbound traffic.
- B. The settings affect only outbound traffic.
- C. The settings are defined on per port group basis.
- D. The settings affect inbound traffic and outbound traffic.

**Answer: B, C**

**Explanation:**

**ESX 3 Configuration Guide - Pg. 52**

**Traffic Shaping Policy**

ESX Server 3 shapes traffic by establishing parameters for three outbound traffic characteristics: average bandwidth, burst size, and peak bandwidth. You can set values for these characteristics through the VI Client, establishing a traffic shaping policy for each port group.

**QUESTION NO: 5**

**You are experiencing traffic overload on an Uplink network adapter.**

**Which three actions can be taken to reduce the overload? Select three.**

- A. configure traffic shaping to reduce contention
- B. move virtual machines to other VLAN port groups on the same vSwitch
- C. add NIC teaming to increase the available bandwidth
- D. move virtual machines to other vSwitches to reduce contention
- E. add the VMkernel TCP/IP networking stack to improve performance

**Answer: A, C, D**

**Explanation:**

**D:** as other vSwitches can be configured with another physical NIC.

**Not B:** moving virtual machines to different port groups wouldn't make any difference as they would essentially use the same physical NIC on the vSwitch

**QUESTION NO: 6**

**Which two statements are true about network traffic shaping? Select two.**

- A. The settings affect all vSwitch traffic.
- B. The settings affect only traffic coming into the uplink adapter from the physical network.
- C. The settings affect only traffic being sent out the uplink adapter to the physical network.
- D. The settings are defined on a per-virtual machine basis.
- E. The settings are defined on a per port group basis.

**Answer: C, E**

**Explanation:**

E: E" could be considered a correct answer because according to the VMWare Infrastructure 3:Install and Configure guide, "Traffic shaping may be defined at the virtual switch OR Port Group level. " The important distinction here is that they can be defined at this level, but they are APPLIED on a per-virtual machine basis or more directly, to the VM's virtual NIC's.

**QUESTION NO: 7**

**When defining a NIC team (bond) in ESX Server, it is possible to designate some of the physical NICs that make up the bond as "standby" NICs. Which statement most accurately describes the purpose of a standby NIC?**

**A standby NIC:**

- A. is used only when network traffic exceeds the capacity of the rest of the team.
- B. is used only in the case of the failure of other NICs in the team.
- C. is not used as part of the team until activated by the administrator.
- D. is used to implement traffic shaping for the rest of the team.

**Answer: B**

**Explanation: A standby NIC will be used if another NIC in the team fails.**

**QUESTION NO: 8**

**Which three technologies does the VMkernel TCP/IP networking stack support? (Choose three.)**

- A. DFS
- B. VMotion
- C. NFS
- D. CIFS
- E. iSCSI

**Answer: B, C, E**

**QUESTION NO: 9**

**What are two functions of zoning in SAN Fibre Switches? (Choose two.)**

- A. defines an Ethernet VLAN
- B. defines which HBAs can access which Storage Processor
- C. isolates traffic of a given zone from the other zones
- D. provides Name Resolution Service on the SAN

**Answer: B, C**

**QUESTION NO: 10**

**When traffic shaping is enabled, network traffic of a virtual machine is \_\_\_\_.**

- A. maintained at average bandwidth
- B. limited to peak bandwidth if the network is congested
- C. limited to spare bandwidth
- D. always limited to peak bandwidth

**Answer: D**

**QUESTION NO: 11**

**What is a requirement for enabling NIC teaming?**

- A. "Enable Teaming" should be checked on the virtual switch settings.
- B. Physical NICs should be connected to different virtual switches.
- C. All the physical NICs must be of the same type.
- D. Virtual switch should have more than one uplink.

**Answer: D**

**QUESTION NO: 12**

**When configuring a vSwitch NIC teaming policy, what happens when the "Notify Switches" option is set to yes?**

- A. The virtual switch is notified when a virtual NIC location changes.
- B. The physical switch is notified when a virtual NIC location changes.
- C. The virtual switch is notified when the physical NIC link state changes.
- D. The physical switch is notified when the virtual NIC link state changes.

**Answer: B**

**Topic 4, Storage (25 questions).**

**Part 1: Connect a VMware ESX server to Fibre Channel SAN storage (9 questions).**

**QUESTION NO: 1**

**Exhibit:**



**You work as an administrator at Certifyme.com. In this scenario the server has not been modified from the default program.**

**Given the information shown in the exhibit, which three statements are true? Select three.**

- A. HBA Failover occurred
- B. LUN has four paths
- C. LUN is on an Active/Active array
- D. Preferred Path is vmhba2:2:0
- E. LUN is on an Active/Passive array.

**Answer: A, B, E**

**Explanation:**

Viewing the exhibit, in the blue bar at the top shows "vmhba3:0:0 Manage Paths". This is the Preferred Path. Looking at the Status, vmhba3:0:0 shows Standby and vmhba2:2:0 shows Active. This is an indication that an HBA Failover occurred.

**QUESTION NO: 2**

**Where is LUN masking configured? Select two.**

- A. on the firewall
- B. on the Fibre Switch
- C. on the storage processor
- D. on the Ethernet switch
- E. on the host

**Answer: C, E**

**Explanation: Per ESX SAN Configuration Guide.**

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**QUESTION NO: 3**

**Exhibit:**

**The exhibit shows paths of a SAN LUN.**

**What is the LUN number?**

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4
- F. There is no LUN number.

**Answer: A**

**Explanation:** vmhba adapter:target\_ID:LUN:Partition

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**QUESTION NO: 4**

**What are two functions of zoning in SAN Fibre Switches? (Choose two.)**

- A. isolates traffic of a given zone from the other zones
- B. provides Name Resolution Service on the SAN
- C. prevents/allows access to a given LUN
- D. prevents/allows access to a given Storage Array

**Answer: A, C**

**Explanation: Zoning in SAN allows and prevents access to given LUN not Storage Array.**

**QUESTION NO: 5**

**What are two possible storage multipatching policies that you can set on an ESX Server 3.X? Select two.**

- A. Most Recently used (MRU)
- B. Open Shortest Path First (OSPF)
- C. Persistent Binding
- D. Fixed
- E. Dynamic Load Balancing

**Answer: A, D**

**Explanation: Per ESX SAN Configuration Guide.**  
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**QUESTION NO: 6**

**What is the characteristic of a mapped SAN LUN set to Virtual Compatibility mode?**

- A. allows the guest OS to access the hardware directly
- B. allows the virtual machine to use VMware snapshots
- C. allows the use of SAN-aware applications within a virtual machine
- D. allows the VMkernel to natively access NTFS data on the LUN

**Answer: B**

**QUESTION NO: 7**

**ESX 3.x Server supports access to \_\_\_\_\_ LUNs during the initial installation process.**

- A. 8
- B. 16
- C. 32
- D. 63
- E. 64
- F. 127
- G. 128
- H. 255
- I. 256
- J. 511
- K. 512
- L. 1024

**Answer: G**

**Explanation:** Although ESX Server supports up to 256 LUNs for operation, the installer supports a maximum of 128 LUNs. If you have more than 128 LUNs, connect them after the installation is complete.

**QUESTION NO: 8**

**Certifyme.com decides to implement application clustering in virtual machines between ESX Servers using Microsoft Cluster Service.**

**Which storage solution is most appropriate for the quorum disk?**

- A. NFS
- B. Fibre Channel SAN
- C. iSCSI
- D. local storage

**Answer: B**

**QUESTION NO: 9**

**Which two are requirements when booting from SAN? (Choose two.)**

- A. SAN connections must be attached to a switch fabric topology.
- B. Boot LUN must have an ID of 0.
- C. The storage array must have correctly configured active/active controllers.
- D. HBA BIOS for the Fibre Channel card must be enabled and correctly configured.

**Answer: A, D**

Part 2: Given a VMware ESX server attached to the appropriate storage, create and modify VMFS datastores (4 questions).

**QUESTION NO: 1**

**What is the maximum virtual disk size on a VMFS-3 volume?**

- A. 250 GB
- B. 512 GB
- C. 1 TB
- D. 2 TB
- E. 2.6 TB
- F. 3 TB
- G. 3.6 TB
- H. 4 TB
- I. There is no maximum size.

**Answer: D**

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**QUESTION NO: 2**

**During installation you manually create a local VMFS volume.**

**What is a possible purpose for this volume?**

**Answer: A, D**

- A. storage for service console log files
- B. decentralized storage for all VMkernel swap activity
- C. VMkernel swap files for locally configured virtual machines
- D. Service console swap files for overcommitment of service console RAM

**Answer: C**

**Explanation:**

**QUESTION NO: 3**

**Upgrading an ESX Server 2.x host's VMFS-2 volume to VMFS- 3, and then referencing the VMFS-3 volume from an ESX Server 3.X host:**

- A. will allow any VMs on the original VMFS-2 to be powered on.
- B. will allow the ESX Server 3.X host to view the VMs in read-only mode.
- C. will allow both the ESX Server 2.x and ESX Server 3.X hosts to view the VMs in read-only mode.
- D. requires both the ESX Server 2.x and ESX Server 3.X hosts to be managed by VirtualCenter 2.0 in order to perform the upgrade of the VMFS-2 volume.

**Answer: A**

**QUESTION NO: 4**

**What information must be specified when adding a mapped SAN LUN to a virtual machine (VM)? (Choose two.)**

- A. the compatibility mode
- B. the location of the device driver for the LUN
- C. the amount of space on the LUN to be made available to the VM
- D. the virtual device node