Exam Report: 6.14.7 Practice Questions

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Overall Performance

Your Score: 60%

Passing Score: 80%

View results by: Objective Analysis Individual Responses

Individual Responses

Question 1: Incorrect

You are an application developer. You use a hypervisor with multiple virtual machines installed to test your applications on various operating systems versions and editions.

Currently, all of your testing virtual machines are connected to the production network through the hypervisor's network interface. However, you are concerned that the latest application you are working on could adversely impact other network hosts if errors exist in the code.

To prevent issues, you decide to isolate the virtual machines from the production network. However, they still need to be able to communicate directly with each other.

What should you do? (Select two. Both responses are part of the complete solution.)

- [ ] Disable the switch port the hypervisor's network interface is connected to.
- [ ] Disconnect the network cable from the hypervisor's network interface.
- [x] ~~Create a new virtual switch configured for bridged (external) networking.~~
- [x] Connect the virtual network interfaces in the virtual machines to the virtual switch.
- [ ] Create a new virtual switch configured for host-only (internal) networking.
- [ ] Create MAC address filters on the network switch that block each virtual machine's virtual network interfaces.

Explanation

To allow the virtual machines to communicate with each other while isolating them from the production network, complete the following:

- Create a new virtual switch configured for host-only (internal) networking
- Connect the virtual network interfaces in the virtual machines to the virtual switch

Creating a bridged virtual switch would still allow the virtual machines to communicate on the production network through the hypervisor's network interface. Disconnecting the hypervisor's network cable, blocking the virtual machine's MAC addresses, or disabling the hypervisor's switch port would isolate the virtual machines from the production network, but would also prevent them from communicating with each other.

References

LabSim for Security Pro, Section 6.14.
[All Questions SecPro2017_v6.exm VIRT_NET_01]

Question 2: Correct

You are responsible for maintaining Windows workstation operating systems in your organization. Recently, an update from Microsoft was automatically installed on your workstations that caused an application that was developed in-house to stop working.

To keep this from happening again, you decide to test all updates on a virtual machine before allowing them to be installed on production workstations.

Currently, all of your testing virtual machines do not have a network connection. However, they need to be able to connect to the update servers at Microsoft to download and install updates.

What should you do? (Select two. Both responses are part of the complete solution.)

- [ ] Disable the switch port that the hypervisor's network interface is connected to.
- [x] Create a new virtual switch configured for bridged (external) networking.
- [x] Connect the virtual network interfaces in the virtual machines to the virtual switch.
- [ ] Create a new virtual switch configured for internal networking.
- [ ] Create a new virtual switch configured for host-only networking.

Explanation

To allow the virtual machines to communicate with the Microsoft update servers on the internet, complete the following:

- Create a new virtual switch configured for bridged (external) networking.
- Connect the virtual network interfaces in the virtual machines to the virtual switch.

Creating an internal or host-only virtual switch would not allow the virtual machines to communicate on the production network through the hypervisor's network interface. Disabling the hypervisor's switch port would also isolate the virtual machines from the production network.

References

LabSim for Security Pro, Section 6.14.
[All Questions SecPro2017_v6.exm VIRT_NET_02]

Question 3: Correct

Which of the following devices facilitates communication between different virtual machines by checking data packets before moving them to a destination?

- ( ) Virtual firewall
- ( ) Hypervisor
- ( ) Virtual router
- (•) Virtual switch

Explanation

A virtual switch is a software that facilitates the communication between different virtual machines. It does so by checking data packets before moving them to a destination. They may be already a part of software installed in the virtual machine, or they may be part of the server firmware.

References

LabSim for Security Pro, Section 6.14.
[All Questions SecPro2017_v6.exm VIRT_NET_03]

Question 4: Correct

Which of the following devices is computer software, firmware, or hardware that creates and runs virtual machines?

- ( ) Virtual firewall
- (•) Hypervisor
- ( ) Virtual switch

Virtual router

Explanation

A hypervisor is computer software, firmware, or hardware that creates and runs virtual machines. A computer on which a hypervisor runs one or more virtual machines is called a host machine. Each virtual machine is called a guest machine. The hypervisor provides the guest operating systems with a virtual operating platform and manages the execution of the guest operating systems.

References

LabSim for Security Pro, Section 6.14.
[All Questions SecPro2017_v6.exm VIRT_NET_04]

Question 5: Incorrect

Which of the following statements about virtual networks is true? (Select two.)

- [x] Multiple virtual networks can be associated with a single physical network adapter.
- [ ] Accessing network resources requires that the operating system on the virtual machine be configured on an isolated network.
- [ ] A virtual network is dependent on the configuration and physical hardware of the host operating system.
- [ ] Each virtual network must be associated with a single physical network adapter.
- [x] ~~A virtual network is independent of the configuration and physical hardware of the host operating system.~~

Explanation

A virtual network is made up of one or more virtual machines configured to access local or external network resources. Some important facts about virtual networks include:

- Virtual machines support an unlimited number of virtual networks, and an unlimited number of virtual machines can be connected to a virtual network.
- Multiple virtual networks can be associated with a single physical network adapter.
- When a virtual network is created, its configuration is dependent on the configuration and physical hardware, such as the type and number of network adapters, of the host operating system.
- Accessing a network and network resources requires that the operating system on the virtual machine be configured as a part of the network.

References

LabSim for Security Pro, Section 6.14.
[All Questions SecPro2017_v6.exm VIRT_NET_05]