Microsoft

Exam 74-409

Server Virtualization with Windows Server Hyper-V and System Center

Verson: Demo

[Total Questions: 10]

Question No : 1 DRAG DROP

A company has one Active Directory Domain Services (AD DS) forest that contains two domains. The company has a Hyper-V environment that runs Windows Server 2012 R2. The company also has two virtual machines (VMs) that run Windows Server 2012. The VMs are NOT part of a domain.

You plan to deploy a guest cluster by using a shared virtual hard disk (VHDX). You must use native disk support that is included in the Failover Clustering feature. The compliance department requires that you perform as many tasks as possible with your domain account for auditing purposes.

You need to prepare to create the guest cluster.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

| Install Windows Server 2012 R2 on the VMs. |
| Log on to the VMs by using your domain account and then configure the disks on the VMs as dynamic disks. |
| Join the VMs to separate AD DS domains. |
| Log on to the VMs by using your domain account and then configure the disks on the VMs as basic disks. |
| Join both VMs to the same AD DS domain by using an offline domain join. |

Answer:

Install Windows Server 2012 R2 on the VMs.		Install Windows Server 2012 R2 on the VMs.
Log on to the VMs by using your domain account and then configure the disks on the VMs as dynamic disks.		
Join the VMs to separate AD DS domains.		Join both VMs to the same AD DS domain by using an offline domain join.
Log on to the VMs by using your domain account and then configure the disks on the VMs as basic disks.		
Join both VMs to the same AD DS domain by using an offline domain join.		Log on to the VMs by using your domain account and then configure the disks on the VMs as basic disks.

Explanation:

- Install Windows Server 2012 R2 on the VMs.

- Join both VMs to the same AD DS domain by using an offline domain join.

- Log on to the VMs by using your domain account and then configure the disks on the VMs

as basic disks.

Question No : 2

You administer a Windows Server 2012 R2 Hyper-V host server that contains production and test virtual machines (VMs). You plan to optimize the performance of the VMs.

The following settings must be applied to the VMs:

- You must set a maximum value for the input/output operations per second (IOPS) on the test VMs.
- You must set a minimum value for the IOPS on the production VMs.

You need to configure the environment. What should you do?

A. On all VMs, enable Network Quality of Service (QoS).
B. Create a shared virtual hard disk (VHD).
C. On the Hyper-V host server, enable Resource Metering.
D. On all VMs, enable Storage Quality of Service (QoS).

Answer: D

Explanation: Ref: http://technet.microsoft.com/en-us/library/dn282281.aspx

Question No : 3

You administer a server that runs Windows Server 2012 R2 with the Hyper-V role installed. You plan to deploy a new virtual machine (VM) to the server. The data stored by the VM doubles each month.

You have the following requirements:

- The virtual hard disk (VHD) must minimize the storage space requirements.
- Changes to the VHD must NOT require user intervention.

You need to create the VHD. What should you create?

A. a dynamically expanding file that uses the VHD file format
B. a file that uses the VSV file format for the data LUN
C. a differencing file that uses the VHD file format
D. a differencing file that uses the VHDX file format

Answer: C

Question No : 4

You have a Windows Server 2012 R2 Hyper-V environment that includes System Center 2012 R2 Virtual Machine Manager (VMM). The environment includes five physical servers. The servers are configured as follows:

Server Name	Operating System	Memory	Disk Volumes
NYC-FS	Windows Server 2012 Datacenter	2048 MB	3 TB
NYC-DEV	Windows Server 2008 R2 Enterprise	1024 MB	1 TB
NYC-EX	Windows Server 2008 Standard 32-bit	4096 MB	4 TB
NYC-PR	Windows Server 2003 Enterprise x64 Service Pack 2	512 MB	500 GB
NYC-WEB	Windows Server 2003 Web Edition	768 MB	200 GB

You plan to use VMM to migrate physical machines to virtual machines.

You need to reconfigure the hardware on the servers to support a physical to virtual offline migration.

Which three servers should you reconfigure? Each correct answer presents part of the solution.

A. NYC-FS
B. NYC-DEV
C. NYC-EX
D. NYC-PR
E. NYC-WEB

Answer: A,C,D
Explanation:
You need to find servers which CANNOT go thru P2V migration.
P2V Prerequisites in VMM

Requirements on the source machine
The physical computer to be converted must meet the following requirements:
- Must have at least 512 MB of RAM.
- Cannot have any volumes larger than 2040 GB.

- Must have an Advanced Configuration and Power Interface (ACPI) BIOS. Vista WinPE will not install on a non-ACPI BIOS.
- Must be accessible by VMM and by the virtual machine host.
- Cannot be in a perimeter network.
--> A perimeter network, which is also known as a screened subnet, is a collection of devices and subnets that are placed between an intranet and the Internet to help protect the intranet from unauthorized Internet users. The source computer for a physical-to-virtual (P2V) conversion can be in any other network topology in which the VMM management server can connect to the source machine to temporarily install an agent and can make Windows Management Instrumentation (WMI) calls to the source computer.
- The source computer should not have encrypted volumes.
--> If the source computer has encrypted volumes, an offline P2V conversion may render the computer unbootable.
Answer: So based on the prerequisites, NYC-FS, NYC-EX and NYC-PR needs to be re-configured.

UPDATE:
As of System Center 2012 R2, you can no longer perform P2V conversions in VMM.
For information about how to use an earlier version of Virtual Machine Manager to mitigate this change, see the:

"How to perform a P2V in a SCVMM 2012 R2 environment blog" - http://blogs.technet.com/b/scvmm/archive/2013/10/03/how-to-perform-a-p2v-in-a-scvmm-2012-r2-environment.aspx
Technet Reference: http://technet.microsoft.com/en-us/library/hh427293.aspx

Question No : 5 DRAG DROP

You have a Windows Server 2012 R2 server that has the Hyper-V role installed.

The company has the following requirements for the Hyper-V host server:

- ✍ Virtual machines (VMs) must only communicate with other VMs and the Hyper-V host server.
- ✍ You must be able to monitor all TCP/IP packets to and from VMs from the moment that VMs are able to communicate.
- ✍ You must support a third-party program that uses the Network Driver Interface Specification (NDIS) API to monitor the TCP/IP packets between VMs.

You need to configure the environment.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.

| Create an internal virtual switch. |
| Create a private virtual switch. |
| Enable the Microsoft NDIS Capture switch extension on the internal virtual switch. |
| Configure the VMs to use the private virtual switch. |
| Disable the Microsoft Windows Filtering Platform switch extension. |
| Configure the VMs to use the internal virtual switch. |

Answer:

Create an internal virtual switch.		Create an internal virtual switch.
Create a private virtual switch.		
Enable the Microsoft NDIS Capture switch extension on the internal virtual switch.		Enable the Microsoft NDIS Capture switch extension on the internal virtual switch.
Configure the VMs to use the private virtual switch.		Configure the VMs to use the internal virtual switch.
Disable the Microsoft Windows Filtering Platform switch extension.		
Configure the VMs to use the internal virtual switch.		

Explanation:

- Create an internal virtual switch

- Enable the Microsoft NDIS Capture switch extension on the internal virtual switch

- Configure the VMs to use the internal virtual switch

Question No : 6

A company has two offices in New York and one office in San Francisco. There is no shared storage between the San Francisco office and the New York headquarters. All offices are connected by a wide area network (WAN). The Hyper-V environment is

configured as shown in the following table:

Office	Hyper-V Host	Operating System	Number of Virtual Machines
New York headquarters	NYC-Host1	Windows Server 2012 R2	3
San Francisco branch office	SFC-Host1	Windows Server 2012 R2	6
New York branch office	NYC-Host2	Windows Server 2012 R2	5

All virtual machines must be highly available.

You need to configure the environment.

What should you implement?

A. a separate Hyper-V replica between NYC-Host1 and SFC-Host1
B. a Hyper-V cluster that includes NYC-Host1, NYC-Host2, and SFC-Host1
C. a Hyper-V cluster between NYC-Host1 and SFC-Host1
D. a Hyper-V replica between NYC-Host1 and NYC-Host2 with an extended replica between NYC-Host1 and SFC-Host1

Answer: D

Explanation:
Ref: http://blogs.technet.com/b/virtualization/archive/2013/10/22/what-s-new-in-windows-server-2012-r2.aspx

Role/Feature description
Hyper-V Replica provides asynchronous replication of Hyper-V virtual machines between two hosting servers. It is simple to configure and does not require either shared storage or any particular storage hardware. Any server workload that can be virtualized in Hyper-V can be replicated. Replication works over any ordinary IP-based network, and the replicated data can be encrypted during transmission. Hyper-V Replica works with standalone servers, failover clusters, or a mixture of both. The servers can be physically co-located or widely separated geographically. The physical servers do not need to be in the same domain, or even joined to any domain at all.

Read Technet for more on Extended replica

Question No : 7

You administer three Windows Server 2012 R2 servers named Server1, Server2, and

Server3. The servers are configured as follows:

Server Name	Role	Location
Server1	Hyper-V	local data center
Server2	Hyper-V	Windows Azure
Server3	File Services	Windows Azure

Each virtual machine on Server1 has a 50-TB logical unit number (LUN) to store data. There is limited bandwidth between the local data center and Windows Azure.

You have the following business continuity requirements:

- ✎ Virtual machines (VMs) on Server1 must be available within 30 minutes of an unexpected failure.
- ✎ VMs on Server1 must be available if the local datacenter is no longer available.

You need to configure the environment.

What should you do?

A. Implement live migration from Server1 to Server2.
B. Configure the VMs to use a checkpoint location on Server3. Then, create a daily snapshot.
C. Enable Hyper-V replication between Server1 and Server2.
D. Implement quick storage migration from Server1 to Server2.

Answer: C

Explanation: Ref: http://www.petri.co.il/hyper-v-replica-overview.htm

Question No : 8

You have a Windows Server 2012 R2 server with the Hyper-V role installed. The host server hosts a virtual machine (VM) named NYC-VM. The virtual switches for the host server are configured as follows:

Virtual Switch Name	Connection Type
EXT	External
INT	Internal
PRI	Private

NYC-VM must meet the following requirements:

- ✎ communicate with all of the VMs on the same virtualization host server
- ✎ communicate with the virtualization host server
- ✎ must NOT communicate with VMs on different virtualization host servers

You need to configure the virtual switch for NYC-VM.

What should you do?

A. On NYC-VM, enable virtual LAN identification.
B. Run the Windows PowerShell command Connect-VMNetworkAdapter -VMName NYC-VM -SwitchName INT.
C. Connect NYC-VM to the EXT switch.
D. Run the Windows PowerShell command Connect-VMNetworkAdapter -VMName NYC-VM -SwitchName EXT.

Answer: A

Explanation:

http://technet.microsoft.com/en-us/library/cc816585%28v=ws.10%29.aspx

Question No : 9 HOTSPOT

You have an environment that contains the servers as shown in the following table:

Name	Role	Operating System
VMM01	System Center 2012 R2 Virtual Machine Manager	Windows Server 2012 R2
Lib01	Library Server	Windows Server 2012 R2
Server01	No Role Installed	Windows Server 2012 R2

You purchase a physical server that supports out-of-band management to deploy as a bare-metal Hyper-V host server.

Administrators must be able to deploy standard Hyper-V host server images to bare-metal computers by using the least amount of administrative effort.

You need to prepare the environment.

What should you use? To answer, select the appropriate option from each drop-down menu in the answer area.

Server Name	Role, Feature, Tool or Profile
Server01	▾
	Web Server (IIS) server role
	System Preparation Tool (sysprep.exe)
	Network Load Balancing server feature
	Windows Deployment Services server role
Lib01	▾
	a host profile only
	a host profile and drivers
	a host profile and a generalized file that uses the VHDX file format
	a host profile, drivers, and a generalized file that uses the VHDX file format

Answer:

Server Name	Role, Feature, Tool or Profile
Server01	▾
	Web Server (IIS) server role
	System Preparation Tool (sysprep.exe)
	Network Load Balancing server feature
	Windows Deployment Services server role
Lib01	▾
	a host profile only
	a host profile and drivers
	a host profile and a generalized file that uses the VHDX file format
	a host profile, drivers, and a generalized file that uses the VHDX file format

Explanation:

Server Name	Role, Feature, Tool or Profile
Server01	▾
	Web Server (IIS) server role
	System Preparation Tool (sysprep.exe)
	Network Load Balancing server feature
	Windows Deployment Services server role
Lib01	▾
	a host profile only
	a host profile and drivers
	a host profile and a generalized file that uses the VHDX file format
	a host profile, drivers, and a generalized file that uses the VHDX file format

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Ref: http://technet.microsoft.com/en-us/library/gg610658.aspx

Question No : 10

A company has Hyper-V host servers that run Windows Server 2012. The company also has virtual machines that run Windows Server 2008 R2 or Windows Server 2012.

You upgrade the Hyper-V host servers to Windows Server 2012 R2.

You need to ensure that all virtual machines can PXE boot by using a standard network adapter.

What should you do?

A. Create Generation 2 virtual machines.
B. Upgrade all existing virtual machines to Windows Server 2012 R2.
C. Upgrade the existing virtual machines that run Windows Server 2008 R2 to Windows Server 2012 R2.
D. Create Generation 1 virtual machines.

Answer: A

Explanation:
Ref: http://technet.microsoft.com/en-us/library/dn282285.aspx
Gen 2 VMs allow PXE booting