

Microsoft

70-743 Exam

**Microsoft Upgrading Your Skills to MCSA: Windows Server 2016
Exam**

**Questions & Answers
Demo**

Version: 17.0

Question: 1

You have a server named Server1 that runs Windows Server 2016.
You need to configure Server1 as a multitenant RAS Gateway.
What should you install on Server1?

- A. the Network Controller server role
- B. the Remote Access server role
- C. the Data Center Bridging feature
- D. the Network Policy and Access Services server role

Answer: B

Explanation:

RAS Gateway - Multitenant. You can deploy RAS Gateway as a multitenant, software-based edge gateway and router when you are using Hyper-V Network Virtualization or you have VM networks deployed with virtual Local Area Networks (VLANs). With the RAS Gateway, CloudService Providers (CSPs) and Enterprises can enable datacenter and cloud network traffic routing between virtual and physical networks, including the Internet. With the RAS Gateway, your tenants can use point-to-site VPN connections to access their VM network resources in the datacenter from anywhere. You can also provide tenants with site-to-site VPN connections between their remote sites and your CSP datacenter. In addition, you can configure the RAS Gateway with BGP for dynamic routing, and you can enable Network Address Translation (NAT) to provide Internet access for VMs on VM networks.

References:

<https://technet.microsoft.com/en-us/windows-server-docs/networking/remote-access/remote-access>

Question: 2

HOTSPOT

You have a server named Server1 that runs Windows Server 2016. Server1 is a Hyper-V host.

You have two network adapter cards on Server1 that are Remote Direct Memory Access (RDMA)-capable.

You need to aggregate the bandwidth of the network adapter cards for a virtual machine on Server1. The solution must ensure that the virtual machine can use the RDMA capabilities of the network adapter cards.

Which commands should you run first? To answer, select the appropriate options in the answer area.

Answer Area

<div style="background-color: #f0f0f0; padding: 2px; border-bottom: 1px solid gray;">▼</div> <ul style="list-style-type: none"> Add-NetLbfoTeamNic Add-VmNetworkAdapter Add-VmSwitch New-NetbfoTeam New-VmSwitch 	<pre>-Name Production -NetAdapterName "NIC 1", "NIC 2"</pre>	<div style="background-color: #f0f0f0; padding: 2px; border-bottom: 1px solid gray;">▼</div> <ul style="list-style-type: none"> -EnableEmbeddedTeaming -EnableIov -EnablePacketDirect 	\$true
---	--	--	--------

Answer:

Answer Area

<div style="background-color: #f0f0f0; padding: 2px; border-bottom: 1px solid gray;">▼</div> <ul style="list-style-type: none"> Add-NetLbfoTeamNic Add-VmNetworkAdapter Add-VmSwitch New-NetbfoTeam <li style="border: 2px solid red;">New-VmSwitch 	<pre>-Name Production -NetAdapterName "NIC 1", "NIC 2"</pre>	<div style="background-color: #f0f0f0; padding: 2px; border-bottom: 1px solid gray;">▼</div> <ul style="list-style-type: none"> <li style="border: 2px solid red;">-EnableEmbeddedTeaming -EnableIov -EnablePacketDirect 	\$true
--	--	---	--------

Explanation:

A new feature of Windows Server 2016 is SET (Switch Embedded Teaming).

Create a SET team

You must create a SET team at the same time that you create the Hyper-V Virtual Switch with the New-VMSwitch Windows PowerShell command.

When you create the Hyper-V Virtual Switch, you must include the new EnableEmbeddedTeaming parameter in your command syntax.

In the following example, a Hyper-V switch named TeamedvSwitch with embedded teaming and two initial team members is created.

```
New-VMSwitch -Name TeamedvSwitch -NetAdapterName "NIC 1","NIC 2"
```

```
-EnableEmbeddedTeaming $true
```

References:

<https://technet.microsoft.com/en-gb/library/mt403349.aspx>

Question: 3

DRAG DROP

You have a server named Server1 that runs Windows Server 2016.

You need to deploy the first cluster node of a Network Controller cluster.

Which four cmdlets should you run in sequence? To answer, move the appropriate cmdlets from the list of cmdlets to the answer area and arrange them in the correct order.

Cmdlets	Answer Area
Install-NetworkControllerCluster	
Enable-NetworkControllerNode	⏪
New-NetworkControllerNodeObject	⏩
Install-WindowsFeature	⏴
Install-NetworkController	⏵

Answer:

Answer Area

Install-WindowsFeature

New-NetworkControllerNodeObject

Install-NetworkControllerCluster

Install-NetworkController

Explanation:

Deploy Network Controller using Windows PowerShell

Step 1: Install-WindowsFeature

Install the Network Controller server role

To install Network Controller by using Windows PowerShell, type the following commands at a Windows PowerShell prompt, and then press ENTER.

Install-WindowsFeature -Name NetworkController –IncludeManagementTools

Step 2: New-NetworkControllerNodeObject

You can create a Network Controller cluster by creating a node object and then configuring the cluster.

You need to create a node object for each computer or VM that is a member of the Network Controller cluster.

To create a node object, type the following command at the Windows PowerShell command prompt, and then press ENTER. Ensure that you add values for each parameter that are appropriate for your deployment.

New-NetworkControllerNodeObject –Name <string> -Server<String> -FaultDomain <string>-RestInte

Step 3: Install-NetworkControllerCluster

To configure the cluster, type the following command at the Windows PowerShell command prompt, and then press ENTER. Ensure that you add values for each parameter that are appropriate for your deployment.

Install-NetworkControllerCluster –Node <NetworkControllerNode[]> –ClusterAuthentication ...

Step 4: Install-NetworkController

To configure the Network Controller application, type the following command at the Windows PowerShell command prompt, and then press ENTER. Ensure that you add values for each parameter that are appropriate for your deployment.

Install-NetworkController –Node <NetworkControllerNode[]> –ClientAuthentication

References:

<https://technet.microsoft.com/en-us/library/mt282165.aspx>

Question: 4

You have an Active Directory domain that contains several Hyper-V hosts that run Windows Server 2016. You plan to deploy network virtualization and to centrally manage Datacenter Firewall policies. Which component must you install for the planned deployment?

- A. the Routing role service
- B. the Canary Network Diagnostics feature
- C. the Network Controller server role
- D. the Data Center Bridging feature

Answer: C

Explanation:

Using Windows PowerShell, the REST API, or a management application, you can use Network Controller to manage the following physical and virtual network infrastructure:

References:

<https://technet.microsoft.com/en-us/library/dn859239.aspx>

Question: 5

You have a virtual machine named VM1 that runs Windows Server 2016. VM1 hosts a service that requires high network throughput.

VM1 has a virtual network adapter that connects to a Hyper-V switch named vSwitch1. vSwitch1 has one network adapter. The network adapter supports Remote Direct Memory Access (RDMA), the Single Root I/O Virtualization (SR-IOV) interface, Quality of Service (QoS), and Receive Side Scaling (RSS).

You need to ensure that the traffic from VM1 can be processed by multiple networking processors.

Which Windows PowerShell command should you run on the host of VM1?

- A. Set-NetAdapterRss
- B. Set-NetAdapterRdma
- C. Set-NetAdapterSriov
- D. Set-NetAdapterQoS

Answer: A

Explanation:

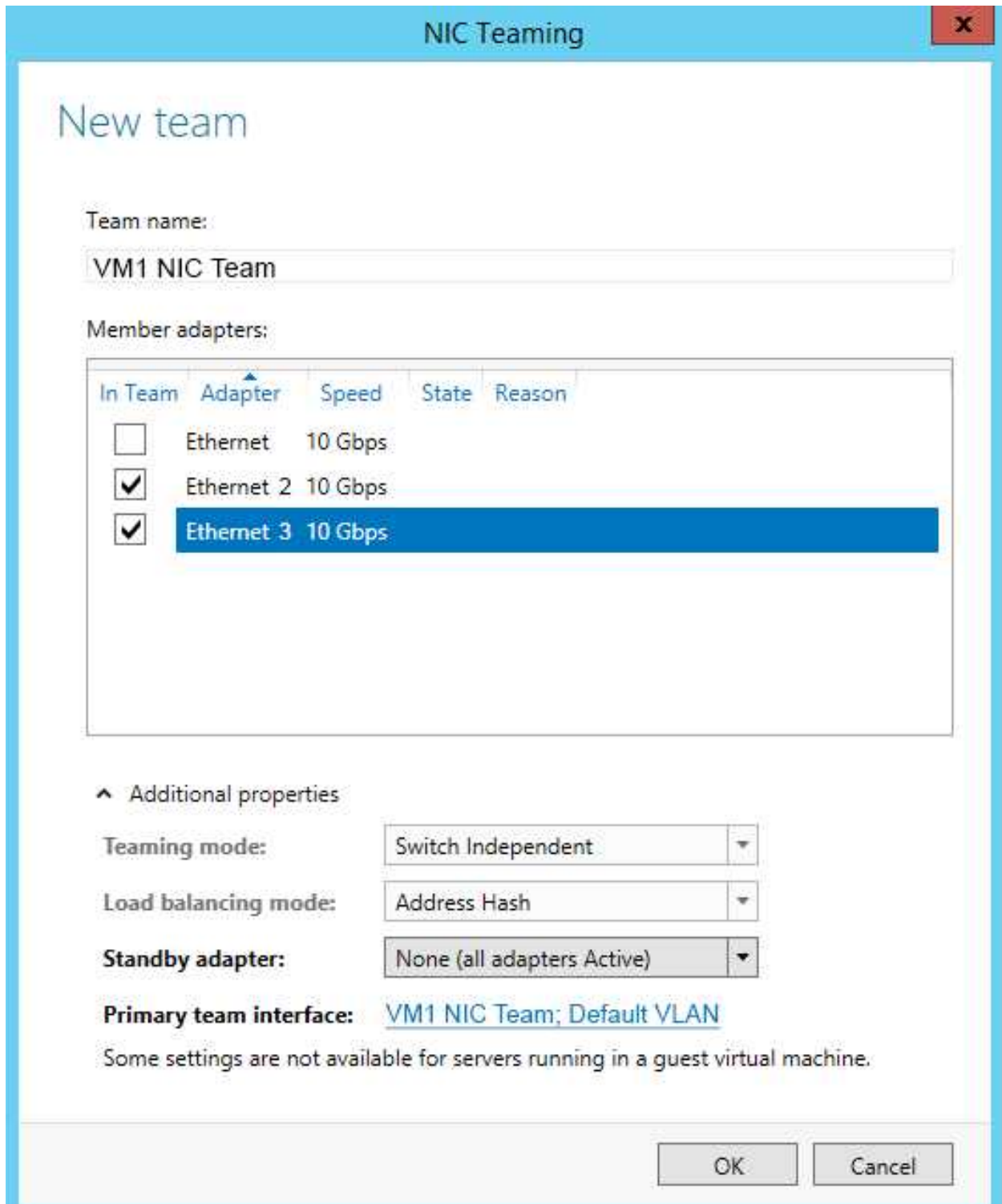
The Set-NetAdapterRss cmdlet sets the receive side scaling (RSS) properties on a network adapter. RSS is a scalability technology that distributes the receive network traffic among multiple processors by hashing the header of the incoming packet. Without RSS Windows Server 2012/2016; network traffic is received on the first processor which can quickly reach full utilization limiting receive network throughput. Many properties can be configured using the parameters to optimize the performance of RSS. The selection of the processors to use for RSS is an important aspect of load balancing. Most of the parameters for this cmdlet help to determine the processors used by RSS.

Question: 6

You have a server named Server1 that runs Windows Server 2016. Server1 is a Hyper-V host that hosts a virtual machine named VM1.

Server1 has three network adapter cards that are connected to virtual switches named vSwitch1, vSwitch2 and vSwitch3.

You configure NIC Teaming on VM1 as shown in the exhibit. (Click the Exhibit button.)



You need to ensure that VM1 will retain access to the network if a physical network adapter card fails on Server1.

What should you do?

- A. From Hyper-V Manager on Server1, modify the settings of VM1.
- B. From Windows PowerShell on VM1, run the `Set-VmNetworkAdapterTeamMapping` cmdlet.

- C. From Windows PowerShell on Server1, run the Set-VmNetworkAdapterFailoverConfiguration cmdlet.
- D. From Windows PowerShell on Server1, run the Set-VmSwitch cmdlet.

Answer: A

Explanation:

You can configure NIC teaming in the Guest OS; however, before NIC teaming will work in a virtual machine, you need to enable NIC teaming in the Advanced Features section of the VM settings.

Question: 7

HOTSPOT

You have an Active Directory domain named Contoso.com. The domain contains Hyper-V hosts named Server1 and Server2 that run Windows Server 2016. The Hyper-V hosts are configured to use NVGRE for network virtualization.

You have six virtual machines that are connected to an external switch. The virtual machines are configured as shown.

Virtual Machine Name	Hyper-V host	IP address	Netmask	GRE key
VM1	Server1	192.168.1.16	255.255.255.0	16
VM2	Server2	192.168.1.232	255.255.255.0	32
VM3	Server3	192.168.1.32	255.255.255.0	32
VM4	Server4	192.168.1.25	255.255.255.0	25
VM5	Server5	192.168.1.116	255.255.255.0	16
VM6	Server6	192.168.1.132	255.255.255.0	32

To which virtual machine or virtual machines can VM1 and VM3 connect? To answer, select the appropriate options in the answer area.

Answer Area

VM1 can connect to:

▼

VM2 only

VM5 only

VM2, VM3, VM5, and VM6 only

VM2, VM3, VM4, VM5, and VM6

VM3 can connect to:

▼

VM6 only

VM2, and VM6 only

VM4, VM5, and VM6 only

VM1, VM2, VM5, and VM6 only

VM1, VM2, VM4, VM5, and VM6

Answer:

Answer Area

VM1 can connect to:

- VM2 only
- VM5 only**
- VM2, VM3, VM5, and VM6 only
- VM2, VM3, VM4, VM5, and VM6

VM3 can connect to:

- VM6 only
- VM2, and VM6 only**
- VM4, VM5, and VM6 only
- VM1, VM2, VM5, and VM6 only
- VM1, VM2, VM4, VM5, and VM6

Explanation:

The GRE keys must match.

To separate the traffic between the two virtualized networks, the GRE headers on the tunneled packets include a GRE Key that provides a unique Virtual Subnet ID for each virtualized network.

References:

<https://blogs.technet.microsoft.com/keithmayer/2012/10/08/step-by-step-hyper-v-network-virtualization-31-days-of-favorite-features-in-winserv-2012-part-8-of-31/>

Question: 8

You have a Nano Server named Nano1.

You deploy several containers to Nano1 that use an image named Image1.

You need to deploy a new container to Nano1 that uses Image1.

What should you run?

- A. the Install-WindowsFeature cmdlet
- B. the docker run command
- C. the docker load command
- D. the Install-NanoServerPackage cmdlet

Answer: B

Explanation:

When an operator executes docker run, the container process that runs is isolated in that it has its own file system, its own networking, and its own isolated process tree separate from the host.

The basic docker run command takes this form:

```
$ docker run [OPTIONS] IMAGE[:TAG | @DIGEST] [COMMAND] [ARG...]
```

Question: 9

You have a failover cluster named Cluster1.

A virtual machine named VM1 is a highly available virtual machine that runs on Cluster1. A custom application named App1 runs on VM1.

You need to configure monitoring on VM1. If App1 adds an error entry to the Application event log, VM1 should be automatically rebooted and moved to another cluster node.

Which tool should you use?

- A. Resource Monitor
- B. Failover Cluster Manager
- C. Server Manager
- D. Hyper-V Manager

Answer: B

Explanation:

Do you have a large number of virtualized workloads in your cluster? Have you been looking for a solution that allows you to detect if any of the virtualized workloads in your cluster are behaving abnormally? Would you like the cluster service to take recovery actions when these workloads are in an unhealthy state? In Windows Server 2012/2016, there is a great new feature, in Failover Clustering called “VM Monitoring”, which does exactly that – it allows you monitor the health state of applications that are running within a virtual machine and then reports that to the host level so that it can take recovery actions.

VM Monitoring can be easily configured using the Failover Cluster Manager through the following steps:

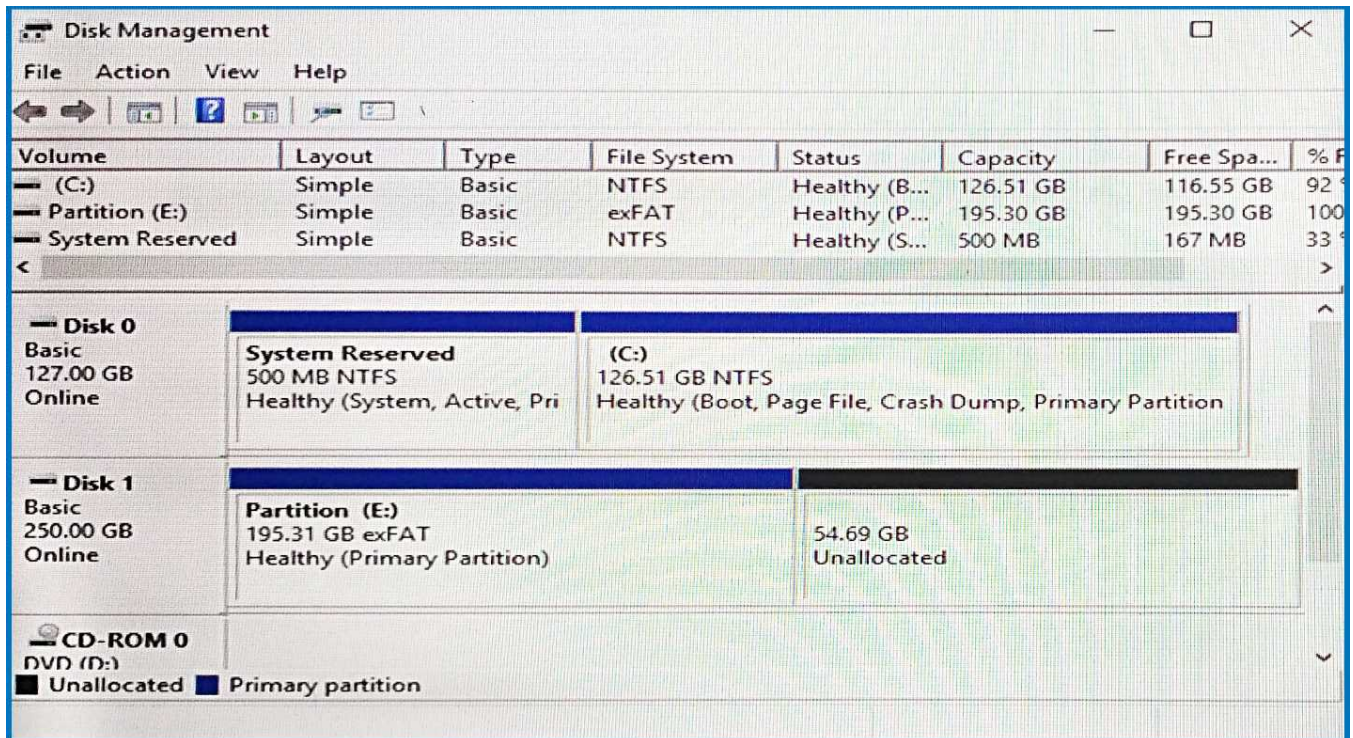
References:

<https://blogs.msdn.microsoft.com/clustering/2012/04/18/how-to-configure-vm-monitoring-in-windows-server-2012/>

Question: 10

You have a server named Server1 that runs Windows Server 2016.

The disk configuration for Server1 is shown in the exhibit. (Click the Exhibit button.)



You add Server1 to a cluster.

You need to ensure that you can use Disk 1 for Storage Spaces Direct.

What should you do first?

- A. Set Disk 1 to offline.
- B. Convert Partition (E:) to ReFS.
- C. Convert Disk 1 to a dynamic disk.
- D. Delete Partition (E:).

Answer: D

Explanation:

The disks used in Storage Spaces Direct cannot contain existing partitions.