

**DRAG DROP**

You have an Azure subscription that contains two on-premises locations named site1 and site2.

You need to connect site1 and site2 by using an Azure Virtual WAN.

Which four 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.

Select and Place:

Actions:

1. Create a virtual hub.
2. Create VPN sites.
3. Connect the virtual networks to the hub.
4. Create a Virtual WAN resource.
5. Connect the VPN sites to the hub.

4,1,2,5

1,3,5,2

1,2,4,5

5,1,4,3

**HOTSPOT**

You have an Azure subscription that contains the virtual networks shown in the following table

Name	Peered with	DNS server
VNET1	VNET2	Default (Azure-provided)
VNET2	VNET1	10.10 .0 .4

You have the virtual machines shown in the following table

Name	IP address	Network interface	Connects to
Server1	10.10 .0 .4	NIC1	VNET1/Subnet1
Server2	172.16 .0 .4	NIC2	VNET1/Subnet2
Server3	192.168 .0 .4	NIC3	VNET2/Subnet2

You have the virtual network interfaces shown in the following table.

Name	DNS server
NIC1	Inherit from virtual network
NIC2	10.10 .0 .4
NIC3	Inherit from virtual network

Server1 is a DNS server that contains the resources shown in the following table

Name	Type	Value
contoso.com	Primary DNS zone	Not applicable
Host1.contoso.com	A record	131.107 .10 .15

You have an Azure private DNS zone named contoso.com that has a virtual network link to VNET2 and the records shown in the following table.

Name	Type	Value
Host1	A record	131.107 .200 .20
Host2	A record	131.107 .50 .50

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

Server2 resolves host2.contoso.com to 131.107 .50 .50 . \_\_\_\_\_

Yes

No

Server2 resolves host1.contoso.com to 131.107 .10 .15 . \_\_\_\_\_

Yes

No

Server3 resolves host2.contoso.com to 131.107 .50 .50 \_\_\_\_\_

Yes

No

You have a virtual network named VNet1 as shown in the exhibit. (Click the Exhibit tab.)

Refresh Move Delete

Resource group (change)  
Production

Address space  
10.2.0.0/16

Location  
West US

DNS servers  
Azure provided DNS service

Subscription (change)  
Production subscription

Subscription ID  
14d26092-8e42-4ea7-b770-9dcf70fb1ea

Tags (change)  
Click here to add tags

Connected devices

Search connected devices

DEVICE	TYPE	IP ADDRESS	SUBNET
No results.			

No devices are connected to VNet1.

You plan to peer VNet1 to another virtual network named VNet2. VNet2 has an address space of 10.2.0.0/16.

You need to create the peering.

What should you do first?

Modify the address space of VNet1.

Add a gateway subnet to VNet1.

Create a subnet on VNet1 and VNet2.

Configure a service endpoint on VNet2.

Validate



### Solution:

#### Explanation:

The virtual networks you peer must have non-overlapping IP address spaces. The exhibit indicates that VNet1 has an address space of 10.2.0.0/16, which is the same as VNet2, and thus overlaps. We need to change the address space for VNet1.

#### Reference:

<https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-manage-peering#requirements-and-constraints>

<https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-faq>

You have the Azure virtual machines shown in the following table.

Name	IP address	Virtual network
VM1	10.0 .0 .4	VNET1
VM2	10.0 .0 .5	VNET1

VNET1 is linked to a private DNS zone named contoso.com that contains the records shown in the following table.

Name	Type	TTL	Value	Auto registered
comp1	TXT	3600	10.0.0.5	False
comp2	A	3600	10.0.0.5	False
comp3	CNAME	3600	comp1.contoso.com	False
comp4	PTR	3600	10.0.0.5	False

You need to ping VM2 from VM1.

Which DNS names can you use to ping VM2?

- comp2.contoso.com and comp4.contoso.com only
- comp1.contoso.com, comp2.contoso.com, comp3.contoso.com, and comp4.contoso.com
- comp2.contoso.com only
- comp1.contoso.com and comp2.contoso.com only
- comp1.contoso.com, comp2.contoso.com, and comp4.contoso.com only

**HOTSPOT**

You have a network security group (NSG) named NSG1 that has the rules defined in the exhibit. (Click the Exhibit tab.)

```
PS C:\> Get-AzNetworkSecurityGroup -Name "NSG1" -ResourceGroupName "RG1" | Select -ExpandProperty SecurityRules
Name          : ALLOW_HTTPS
Id           : /subscriptions/09d06b22-ff51-48b7-a8be-947f15cbd69d/resourceGroups/RG1/providers/Microsoft.Network/networkSecurityGroups/NSG1/securityRules/ALLOW_HTTPS
Etag          : W/"8e3e9995-aa78-41e2-bfea-44b50c389873"
ProvisioningState : Succeeded
Description    :
Protocol      : TCP
SourcePortRange : {*}
DestinationPortRange : {443}
SourceAddressPrefix  : {*}
DestinationAddressPrefix : {*}
SourceApplicationSecurityGroups : []
DestinationApplicationSecurityGroups : []
Access         : Allow
Priority       : 100
Direction      : Inbound

Name          : DENY_PING
Id           : /subscriptions/09d06b22-ff51-48b7-a8be-947f15cbd69d/resourceGroups/RG1/providers/Microsoft.Network/networkSecurityGroups/NSG1/securityRules/DENY_PING
Etag          : W/"8e3e9995-aa78-41e2-bfea-44b50c389873"
ProvisioningState : Succeeded
Description    :
Protocol      : ICMP
SourcePortRange : {*}
DestinationPortRange : {*}
SourceAddressPrefix  : {VirtualNetwork}
DestinationAddressPrefix : {*}
SourceApplicationSecurityGroups : []
DestinationApplicationSecurityGroups : []
Access         : Deny
Priority       : 111
Direction      : Outbound
```

NSG1 is associated to a subnet named Subnet1. Subnet1 contains the virtual machines shown in the following table.

Name	IP address
VM1	10.1.0.10
VM2	10.1.0.11

You need to add a rule to NSG1 to ensure that VM1 can ping VM2. The solution must use the principle of least privilege. How should you configure the rule? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Direction: \_\_\_\_\_

Inbound

Outbound

Source: \_\_\_\_\_

Any

10.1.0.10

10.1.0.11

10.1.0.10;10.1.0.11

10.1.0.0/28

Destination: \_\_\_\_\_

Any

10.1.0.10

10.1.0.11

10.1.0.10;10.1.0.11

10.1.0.0/28

Priority: \_\_\_\_\_

110

111

112

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one

correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have a computer named Computer1 that has a point-to-site VPN connection to an Azure virtual network named VNet1. The point-to-site connection uses a self-signed certificate.

From Azure, you download and install the VPN client configuration package on a computer named Computer2.

You need to ensure that you can establish a point-to-site VPN connection to VNet1 from Computer2.

Solution: On Computer2, you set the Startup type for the IPSec Policy Agent service to Automatic.

Does this meet the goal?

Yes

No

Validate



#### Solution:

#### Explanation:

Each client computer that connects to a VNet using Point-to-Site must have a client certificate installed. You generate a client certificate from the self-signed root certificate, and then export and install the client certificate. If the client certificate is not installed, authentication fails.

#### Reference:

<https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-certificates-point-to-site>

## Case study

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case.

However, there may be additional case studies and sections on this exam. You must manage

your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies

might contain exhibits and other resources that provide more information about the scenario that is

described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you

move to the next section of the exam. After you begin a new section, you cannot return to this

section.

### To start the case study

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case

study before you answer the questions. Clicking these buttons displays information such as business

requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information

displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer

a question, click the Question button to return to the question.

### Overview

Litware, Inc. is a consulting company that has a main office in Montreal and two branch offices in Seattle and New York.

The Montreal office has 2,000 employees. The Seattle office has 1,000 employees. The New York office has 200 employees.

All the resources used by Litware are hosted on-premises.

Litware creates a new Azure subscription. The Azure Active Directory (Azure AD) tenant uses a domain named litware.onmicrosoft.com.

The tenant uses the Premium P1 pricing tier.

### Existing Environment

The network contains an Active Directory forest named litware.com. All domain controllers are configured as DNS servers and host the

litware.com DNS zone.

Litware has finance, human resources, sales, research, and information technology departments. Each department has an organizational

unit (OU) that contains all the accounts of that respective department. All the user accounts have the

department attribute set to their respective department. New users are added frequently.

Litware.com contains a user named User1.

All the offices connect by using private connections.

Litware has data centers in the Montreal and Seattle offices. Each office has a firewall that can be configured as a VPN device.

All infrastructure servers are virtualized. The virtualization environment contains the servers in the following table

Name	Role	Contains virtual machine
Server1	VMware vCenter server	VM1
Server2	Hyper-V host	VM2

Litware uses two web applications named App1 and App2. Each instance on each web application requires 1 GB of memory.

The Azure subscription contains the resources in the following table

Name	Type
VNet1	Virtual network
VM3	Virtual machine
VM4	Virtual machine

The network security team implements several network security groups (NSGs)

### Requirements

#### Planned Changes

- ❖ Litware plans to implement the following changes:
- ❖ Deploy Azure ExpressRoute to the Montreal office.
- ❖ Migrate the virtual machines hosted on Server1 and Server2 to Azure.
- ❖ Synchronize on-premises Active Directory to Azure Active Directory (Azure AD).
- ❖ Migrate App1 and App2 to two Azure web apps named WebApp1 and WebApp2.

#### Technical Requirements

Litware must meet the following technical requirements:

- ❖ Ensure that WebApp1 can adjust the number of instances automatically based on the load and can scale up to five instances.
- ❖ Ensure that VM3 can establish outbound connections over TCP port 8080 to the applications servers in the Montreal office.
- ❖ Ensure that routing information is exchanged automatically between Azure and the routers in the Montreal office.
- ❖ Enable Azure Multi-Factor Authentication (MFA) for the users in the finance department only.
- ❖ Ensure that webapp2.azurewebsites.net can be accessed by using the name app2.litware.com.
- ❖ Connect the New York office to VNet1 over the Internet by using an encrypted connection.

Create a workflow to send an email message when the settings of VM4 are modified.

- ❖ Create a custom Azure role named Role1 that is based on the Reader role.

- ❖ Minimize costs whenever possible.



Question : 7 ✓

Total: 50

Refer paragraph from above Q.No 7

### HOTSPOT

You need to meet the connection requirements for the New York office.

What should you do? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

### Hot Area:

From the Azure portal: \_\_\_\_\_

- Create an ExpressRoute circuit only.

- Create a virtual network gateway only.

- Create a virtual network gateway and a local network gateway.

- Create an ExpressRoute circuit and an on-premises data gateway.

- Create a virtual network gateway and an on-premises data gateway.

In the New York office: \_\_\_\_\_

- Deploy ExpressRoute.

- Deploy a DirectAccess server.

- Implement a Web Application Proxy.

- Configure a site-to-site VPN connection

Validate ✓

### Solution:

#### Explanation:

Box 1: Create a virtual network gateway and a local network gateway.

Azure VPN gateway. The VPN gateway service enables you to connect the VNet to the on-premises network through a VPN appliance. For more information, see Connect an on-premises network to a Microsoft Azure virtual network. The

VPN gateway includes the following elements:

Virtual network gateway. A resource that provides a virtual VPN appliance for the VNet. It is responsible for routing traffic from the on-premises network to the VNet.

Local network gateway. An abstraction of the on-premises VPN appliance. Network traffic from the cloud application to the on-premises network is routed through this gateway.

Connection. The connection has properties that specify the connection type (IPSec) and the key shared with the on-premises VPN appliance to encrypt traffic.

Gateway subnet. The virtual network gateway is held in its own subnet, which is subject to various requirements, described in the Recommendations section below.

Box 2: Configure a site-to-site VPN connection

On premises create a site-to-site connection for the virtual network gateway and the local network gateway.



Scenario: Connect the New York office to VNet1 over the Internet by using an encrypted connection.

#### Incorrect Answers:

Azure ExpressRoute: Established between your network and Azure, through an ExpressRoute partner. This connection is private. Traffic does not go over the internet.

#### Reference:

<https://docs.microsoft.com/en-us/azure/architecture/reference-architectures/hybrid-networking/vpn>

Refer paragraph from above Q.No 7

You need to ensure that VM1 can communicate with VM4. The solution must minimize the administrative effort.

What should you do?

- Create an NSG and associate the NSG to VM1 and VM4.
- Establish peering between VNET1 and VNET3.
- Assign VM4 an IP address of 10.0.1.5/24.
- Create a user-defined route from VNET1 to VNET3.

You have an Azure web app named webapp1.

Users report that they often experience HTTP 500 errors when they connect to webapp1.

You need to provide the developers of webapp1 with real-time access to the connection errors. The solution must provide all the connection error details.

What should you do first?

- 
- From webapp1, enable Web server logging
  - From Azure Monitor, create a workbook
  - From Azure Monitor, create a Service Health alert
  - From webapp1, turn on Application Logging

You have an Azure subscription that has a Recovery Services vault named Vault1. The subscription contains the virtual machines shown in the following table:

Name	Operating system	Auto-shutdown
VM1	Windows Server 2012 R2	Off
VM2	Windows Server 2016	19: 00
VM3	Ubuntu Server 18.04 LTS	Off
VM4	Windows 10	19: 00

You plan to schedule backups to occur every night at 23:00.

Which virtual machines can you back up by using Azure Backup?

- VM1 and VM3 only
- VM1, VM2, VM3 and VM4
- VM1 and VM2 only
- VM1 only

Validate



#### Solution:

Azure Backup supports backup of 64-bit Windows server operating system from Windows Server 2008.

Azure Backup supports backup of 64-bit Windows 10 operating system.

Azure Backup supports backup of 64-bit Ubuntu Server operating system from Ubuntu 12.04.

Azure Backup supports backup of VM that are shutdown or offline.

#### Reference:

<https://docs.microsoft.com/en-us/azure/backup/backup-support-matrix-iaas>

<https://docs.microsoft.com/en-us/azure/virtual-machines/linux/endorsed-distros>

You have the Azure virtual machines shown in the following table:

Name	Azure region
VM1	West Europe
VM2	West Europe
VM3	North Europe
VM4	North Europe

You have a Recovery Services vault that protects VM1 and VM2.

You need to protect VM3 and VM4 by using Recovery Services.

What should you do first?

- Create a new Recovery Services vault
- Create a storage account
- Configure the extensions for VM3 and VM4
- Create a new backup policy

Validate



#### Solution:

A Recovery Services vault is a storage entity in Azure that houses data. The data is typically copies of data, or configuration information for virtual machines (VMs), workloads, servers, or workstations. You can use Recovery Services vaults to hold backup data for various Azure services

**HOTSPOT**

You create a Recovery Services vault backup policy named Policy1 as shown in the following exhibit:

Policy1

Associated items Delete Save Discard

Backup schedule

\* Frequency \* Time \* Timezone  
Daily 11:00 PM (UTC) Coordinated Universal Time

Retention range

Retention of daily backup point  
\* At 11:00 PM For 30 Day(s)

Retention of weekly backup point  
\* On Sunday \* At 11:00 PM For 10 Week(s)

Retention of monthly backup point  
**Week Based Day Based**  
\* On 1 \* At 11:00 PM For 36 Month(s)

Retention of yearly backup point  
**Week Based Day Based**  
\* In March \* On 1 \* At 11:00 PM For 10 Year(s)

Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE: Each correct selection is worth one point.

Hot Area:

The backup that occurs on Sunday, March 1, will be retained for [answer choice]. \_\_\_\_\_

- 30 days
- 10 weeks
- 36 months
- 10 years

The backup that occurs on Sunday, November 1 . will be retained for [answer choice]. \_\_\_\_\_

- 30 days
- 10 weeks
- 36 months
- 10 years

Validate ✓

**Solution:**

Explanation:

Box 1: 10 years

The yearly backup point occurs to 1 March and its retention period is 10 years.

Box 2: 36 months

The monthly backup point occurs on the 1st of every month and its retention period is 36 months.

**HOTSPOT**

You have an Azure subscription that contains an Azure Storage account named storage1 and the users shown in the following table.

Name	Member of
User1	Group1
User2	Group2
User3	Group1

You plan to monitor storage1 and to configure email notifications for the signals shown in the following table.

Name	Type	Users to notify
Ingress	Metric	User1 and User3 only
Egress	Metric	User1 only
Delete storage account	Activity log	User1, User2, and User3
Restore blob ranges	Activity log	User1 and User3 only

You need to identify the minimum number of alert rules and action groups required for the planned monitoring.

How many alert rules and action groups should you identify? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Alert rules: \_\_\_\_\_

- 1
- 2
- 3
- 4

Action groups: \_\_\_\_\_

- 1
- 2
- 3
- 4

**HOTSPOT**

You have an Azure virtual machine named VM1 and a Recovery Services vault named Vault1.

You create a backup policy named Policy1 as shown in the exhibit. (Click the Exhibit tab.)

**Policy1**

Associated items  

Backup schedule  
\* Frequency: Daily   \* Time: 2:00 AM   \* Timezone: (UTC) Coordinated Universal Time

Retention range  
 Retention of daily backup point.  
\* At: 2:00 AM   For: 5 Day(s)

Retention of weekly backup point.  
\* On: Sunday   \* At: 2:00 AM   For: 20 Week(s)

Retention of monthly backup point.

Week Based    Day Based

\* On: 2   \* At: 2:00 AM   For: 24 Month(s)

You configure the backup of VM1 to use Policy1 on Thursday, January 1.

You need to identify the number of available recovery points for VM1.

How many recovery points are available on January 8 and January 15? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

January 8 at 2:00 PM (14:00): \_\_\_\_\_

- 5
- 6
- 8
- 9

January 15 at 2:00 PM (14:00): \_\_\_\_\_

- 5
- 8
- 17
- 19

✓

**Solution:**

Explanation:

Box 1: 6

5 latest daily recovery points, which includes the weekly backup from the previous Sunday, plus the monthly recovery point.

Box 2: 8

5 latest daily recovery points, plus two weekly backups, plus the monthly recovery point.

Reference:

<https://social.technet.microsoft.com/Forums/en-US/854ab6ae-79aa-4bad-ac65-471c4d422e94/daily-monthly-yearly-recovery-points-and-storage-used?forum=windowsazureonlinebackup>

**HOTSPOT**

You have an Azure Active Directory (Azure AD) tenant named contoso.onmicrosoft.com that contains the users shown in the following table.

Name	Member of	Role assigned
User1	Group1	None
User2	Group2	None
User3	Group1, Group2	User administrator

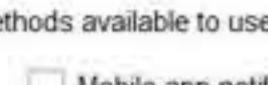
You enable password reset for contoso.onmicrosoft.com as shown in the Password Reset exhibit. (Click the Password Reset tab.)

Self-service password reset enabled:  None  Selected  All

Select group >  
Group2

 These settings only apply to end users in your organization. Admins are always enabled for self-service password reset and are required to use two authentication methods to reset their password. Click here to learn more about administrator password policies.

You configure the authentication methods for password reset as shown in the Authentication Methods exhibit. (Click the Authentication Methods tab.)

Number of methods required to reset:  1  2

Methods available to users:

- Mobile app notification
- Mobile app code
- Email
- Mobile phone
- Office phone
- Security questions

Number of questions required to register:  3  4  5

Number of questions required to reset:  3  4  5

Select security questions >  
10 security questions selected

 These settings only apply to end users in your organization. Admins are always enabled for self-service password reset and are required to use two authentication methods to reset their password. Click here to learn more about administrator password policies.

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

After User2 answers three security questions, he can reset his password immediately. \_\_\_\_\_

Yes

No

If User 1 forgets her password, she can reset the password by using the mobile phone app. \_\_\_\_\_

Yes

No

User 3 can add security questions to the password reset process. \_\_\_\_\_

Yes

No

**Validate** 

**Solution:**

Explanation:

Box 1: No

Two methods are required.

Box 2: No

Self-service password reset is only enabled for Group2, and User1 is not a member of Group2.

Box 3: Yes

As a User Administrator, User3 can add security questions to the reset process.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/authentication/quickstart-sspr>

<https://docs.microsoft.com/en-us/azure/active-directory/authentication/active-directory-passwords-faq>

Your company has a main office in London that contains 100 client computers.

Three years ago, you migrated to Azure Active Directory (Azure AD).

The company's security policy states that all personal devices and corporate-owned devices must be registered or joined to Azure AD.

A remote user named User1 is unable to join a personal device to Azure AD from a home network.

You verify that User1 was able to join devices to Azure AD in the past.

You need to ensure that User1 can join the device to Azure AD.

What should you do?

- Assign the User administrator role to User1.
- From the Device settings blade, modify the Maximum number of devices per user setting.
- Create a point-to-site VPN from the home network of User1 to Azure
- From the Device settings blade, modify the Users may join devices to Azure AD setting.

Validate



#### Solution:

#### Explanation:

The Maximum number of devices setting enables you to select the maximum number of devices that a user can have in Azure AD. If a user reaches this quota, they will not be able to add additional devices until one or more of the existing devices are removed.

devices are removed.

#### Incorrect Answers:

C: Azure AD Join enables users to join their devices to Active Directory from anywhere as long as they have connectivity with the Internet.

D: The Users may join devices to Azure AD setting enables you to select the users who can join devices to Azure AD. Options are All, Selected and None. The default is All.

#### Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/devices/device-management-azure-portal>

<http://techgenix.com/pros-and-cons-azure-ad-join/>

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution.

After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You have an Azure subscription that contains the following users in an Azure Active Directory tenant named contoso.onmicrosoft.com:

Name	Role	Scope
User1	Global administrator	Azure Active Directory
User2	Global administrator	Azure Active Directory
User3	User administrator	Azure Active Directory
User4	Owner	Azure Subscription

User1 creates a new Azure Active Directory tenant named external.contoso.onmicrosoft.com.

You need to create new user accounts in external.contoso.onmicrosoft.com.

Solution: You instruct User1 to create the user accounts.

Does that meet the goal?

Yes

No

You have an existing Azure subscription that contains 10 virtual machines.

You need to monitor the latency between your on-premises network and the virtual machines.

What should you use?

- Service Map
- Connection troubleshoot
- Network Performance Monitor
- Effective routes

Validate



#### Solution:

#### Explanation:

Network Performance Monitor is a cloud-based hybrid network monitoring solution that helps you monitor network performance between various points in your network infrastructure. It also helps you monitor network connectivity to service

and application endpoints and monitor the performance of Azure ExpressRoute.

You can monitor network connectivity across cloud deployments and on-premises locations, multiple data centers, and branch offices and mission-critical multitier applications or microservices. With Performance Monitor, you can detect

network issues before users complain.

#### Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/insights/network-performance-monitor>

**DRAG DROP**

You have an Azure Linux virtual machine that is protected by Azure Backup.

One week ago, two files were deleted from the virtual machine.

You need to restore the deleted files to an on-premises Windows Server 2016 computer as quickly as possible.

Which four 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.

Select and Place:

**Actions**

1. Download and run the script to mount a drive on the local computer
2. Select a restore point that contains the deleted files
3. From the Azure portal, click Restore VM from the vault
4. From the Azure portal, click File Recovery from the vault
5. Mount a VHD
6. Copy the files by using AZCopy
7. Copy the files by using File Explorer

4,2,1,7

4,5,6,1

1,2,5,6

2,7,3,1

**Validate** ✓

**Solution:**

Explanation:

Step 1: From the Azure portal, click File Recovery from the vault

Step 2. Select a restore point that contains the deleted files

Step 3: Download and run the script to mount a drive on the local computer

Generate and download script to browse and recover files:

Step 4: Copy the files using File Explorer!

After the disks are attached, use Windows File Explorer to browse the new volumes and files. The restore files functionality provides access to all files in a recovery point. Manage the files via File Explorer as you would for normal files.

Step 1-3 below:

To restore files or folders from the recovery point, go to the virtual machine and perform the following steps:

1. Sign in to the Azure portal and in the left pane, select Virtual machines. From the list of virtual machines, select the virtual machine to open that virtual machine's dashboard.

2. In the virtual machine's menu, select Backup to open the Backup dashboard.

3. In the Backup dashboard menu, select File Recovery.



The File Recovery menu opens.

4. From the Select recovery point drop-down menu, select the recovery point that holds the files you want. By default, the latest recovery point is already selected.

5. Select Download Executable (for Windows Azure VMs) or Download Script (for Linux Azure VMs, a python script is generated) to download the software used to copy files from the recovery point.

Running the script and identifying volumes:

For Linux machines, a python script is generated. Download the script and copy it to the relevant/compatible Linux server.

Reference:

<https://docs.microsoft.com/en-us/azure/backup/backup-azure-restore-files-from-wm>

<https://docs.microsoft.com/en-us/azure/backup/backup-azure-vms-automationtrestore-files-from-an-azure-vm-backup>

**HOTSPOT**

You purchase a new Azure subscription named Subscription1.

You create a virtual machine named VM1 in Subscription1. VM1 is not protected by Azure Backup.

You need to protect VM1 by using Azure Backup. Backups must be created at 01:00 and stored for 30 days.

What should you do? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

---

Location in which to store the backups: \_\_\_\_\_

- A blob container
- A file share
- A Recovery Services vault
- A storage account

Object to use to configure the protection for VM1: \_\_\_\_\_

- A backup policy
- A batch job
- A batch schedule
- A recovery plan

You have an Azure virtual machine named VM1.

Azure collects events from VM1.

You are creating an alert rule in Azure Monitor to notify an administrator when an error is logged in the System event log of VM1.

Which target resource should you monitor in the alert rule?

- virtual machine extension
- virtual machine
- metric alert
- Azure Log Analytics workspace

Validate



#### Solution:

#### Explanation:

For the first step to create the new alert rule, under the Create Alert section, you are going to select your Log Analytics workspace as the resource, since this is a log based alert signal.

#### Reference:

<https://docs.microsoft.com/en-us/windows-server/storage/storage-spaces/configure-azure-monitor>

You have an Azure subscription that contains 100 virtual machines.

You regularly create and delete virtual machines.

You need to identify unattached disks that can be deleted.

What should you do?

- From Azure Cost Management, view Cost Analysis
- From Azure Advisor, modify the Advisor configuration
- From Microsoft Azure Storage Explorer, view the Account Management properties
- From Azure Cost Management, view Advisor Recommendations

Validate ✓

#### Solution:

#### Explanation:

From Home → Cost Management + Billing → Cost Management, scroll down on the options and select View Recommendations:

The screenshot shows the Azure Cost Management + Billing portal. On the left, there's a navigation sidebar with sections like Overview, Access control, Diagnose and solve problems, Cost Management, Cost analysis, Cost alerts, Budgets, Advisor recommendations, Cloudyn, Products + services (with Azure subscriptions and Azure reservations), Settings, Configuration, Exports, and Connectors for AWS (Preview). The main area has three main sections: 'Analyze cloud costs' (with a 'Learn more' link and a 'Open cost analysis' button), 'Monitor with budgets' (with a 'Create budget' button), and 'Optimize with recommendations' (with a 'View recommendations' button highlighted by a red oval). At the top right, there's a 'Validate' button with a green checkmark.

#### Azure Cost Management / Advisor

From here you will see the recommendations for your subscription, if you have orphaned disks, they will be listed.

#### Reference:

<https://codeserendipity.com/2020/07/08/microsoft-azure-find-unattached-disks-that-can-be-deleted-and-other-recommendations/>

You have an Azure subscription that contains the identities shown in the following table.

Name	Type	Member of
User1	User	None
User2	User	Group1
Principal1	Managed identity	None
Principal2	Managed identity	Group1

User1, Principal1, and Group1 are assigned the Monitoring Reader role.

An action group named AG1 has the Email Azure Resource Manager Role notification type and is configured to email the Monitoring Reader role.

You create an alert rule named Alert1 that uses AG1.

You need to identify who will receive an email notification when Alert1 is triggered.

Who should you identify?

- User1 and Principal1 only
- User1, User2, Principal1, and Principal2
- User1 only
- User1 and User2 only

Validate ✓

#### Solution:

#### Explanation:

Email will only be sent to Azure AD user members of the Monitoring Reader role. Email will not be sent to Azure AD groups or service principals.

#### Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/platform/action-groups>

Your company has several departments. Each department has a number of virtual machines (VMs).

The company has an Azure subscription that contains a resource group named RG1.

All VMs are located in RG1.

You want to associate each VM with its respective department.

What should you do?

- Create Azure Management Groups for each department.
- Create a resource group for each department.
- Assign tags to the virtual machines.
- Modify the settings of the virtual machines.

Note: The question-is included in a number of questions that depicts the identical set-up. However, every question-has a distinctive result. Establish if the solution satisfies the requirements.

Your company has an Azure Active Directory (Azure AD) subscription.

You want to implement an Azure AD conditional access policy.

The policy must be configured to require members of the Global Administrators group to use Multi-Factor Authentication and an Azure AD-joined device when they connect to Azure AD from untrusted locations.

Solution: You access the multi-factor authentication page to alter the user settings.

Does the solution meet the goal?

---

Yes

No

Note: The question-is included in a number of questions that depicts the identical set-up. However, every question-has a distinctive result. Establish if the solution satisfies the requirements.

Your company has an Azure Active Directory (Azure AD) subscription.

You want to implement an Azure AD conditional access policy.

The policy must be configured to require members of the Global Administrators group to use Multi-Factor Authentication and an Azure AD-joined device when they connect to Azure AD from untrusted locations.

Solution: You access the Azure portal to alter the session control of the Azure AD conditional access policy.

Does the solution meet the goal?

---

Yes

No

Note: The question is included in a number of questions that depicts the identical set-up. However, every question has a distinctive result. Establish if the solution satisfies the requirements.

Your company has an Azure Active Directory (Azure AD) subscription.

You want to implement an Azure AD conditional access policy.

The policy must be configured to require members of the Global Administrators group to use Multi-Factor Authentication and an Azure AD-joined device when they connect to Azure AD from untrusted locations.

Solution: You access the Azure portal to alter the grant control of the Azure AD conditional access policy.

Does the solution meet the goal?



Yes



No

You are planning to deploy an Ubuntu Server virtual machine to your company's Azure subscription.

You are required to implement a custom deployment that includes adding a particular trusted root certification authority (CA).

Which of the following should you use to create the virtual machine?

- The New-AzureRmVm cmdlet.
- The New-AzVM cmdlet.
- The Create-AzVM cmdlet.
- The az vm create command

Note: The question is included in a number of questions that depicts the identical set-up. However, every question has a distinctive result. Establish if the solution satisfies the requirements.

Your company makes use of Multi-Factor Authentication for when users are not in the office. The Per Authentication option has been configured as the usage model.

After the acquisition of a smaller business and the addition of the new staff to Azure Active Directory (Azure AD) obtains a different company and adding the new employees to Azure Active Directory (Azure AD), you are informed that these employees should also make use of Multi-Factor Authentication.

To achieve this, the Per Enabled User setting must be set for the usage model.

Solution: You reconfigure the existing usage model via the Azure portal.

Does the solution meet the goal?

Yes

No

Validate



#### Solution:

Since it is not possible to change the usage model of an existing provider as it is right now, you have to create a new one and reactivate your existing server with activation credentials from the new provider.

#### Reference:

<https://365lab.net/2015/04/11/switch-usage-model-in-azure-multi-factor-authentication-server/>

Note: The question-is included in a number of questions that depicts the identical set-up. However, every question-has a distinctive result. Establish if the solution satisfies the requirements.

Your company's Azure solution makes use of Multi-Factor Authentication for when users are not in the office. The Per Authentication option has been configured as the usage model.

After the acquisition of a smaller business and the addition of the new staff to Azure Active Directory (Azure AD) obtains a different company and adding the new employees to Azure Active Directory (Azure AD), you are informed that these employees should also make use of Multi-Factor Authentication.

To achieve this, the Per Enabled User setting must be set for the usage model.

Solution: You reconfigure the existing usage model via the Azure CLI.

Does the solution meet the goal?

Yes

No

Note: The question is included in a number of questions that depicts the identical set-up. However, every question has a distinctive result. Establish if the solution satisfies the requirements.

Your company's Azure solution makes use of Multi-Factor Authentication for when users are not in the office. The Per Authentication option has been configured as the usage model.

After the acquisition of a smaller business and the addition of the new staff to Azure Active Directory (Azure AD) obtains a different company and adding the new employees to Azure Active Directory (Azure AD), you are informed that these employees should also make use of Multi-Factor Authentication.

To achieve this, the Per Enabled User setting must be set for the usage model.

Solution: You create a new Multi-Factor Authentication provider with a backup from the existing Multi-Factor Authentication provider data.

Does the solution meet the goal?



Note: The question-is included in a number of questions that depicts the identical set-up. However, every question-has a distinctive result. Establish if the solution satisfies the requirements.

Your company has an Azure Active Directory (Azure AD) tenant named `weyland.com` that is configured for hybrid coexistence with the on-premises Active Directory domain.

You have a server named `DirSync1` that is configured as a DirSync server.

You create a new user account in the on-premise Active Directory. You now need to replicate the user information to Azure AD immediately.

Solution: You run the `Start-ADSyncSyncCycle -PolicyType Initial` PowerShell cmdlet.

Does the solution meet the goal?



Yes



No

Note: The question-is included in a number of questions that depicts the identical set-up. However, every question-has a distinctive result. Establish if the solution satisfies the requirements.

Your company has an Azure Active Directory (Azure AD) tenant named `weyland.com` that is configured for hybrid coexistence with the on-premises Active Directory domain.

You have a server named `DirSync1` that is configured as a DirSync server.

You create a new user account in the on-premise Active Directory. You now need to replicate the user information to Azure AD immediately.

Solution: You use Active Directory Sites and Services to force replication of the Global Catalog on a domain controller.

Does the solution meet the goal?

---

Yes

No

Note: The question-is included in a number of questions that depicts the identical set-up. However, every question-has a distinctive result. Establish if the solution satisfies the requirements.

Your company has an Azure Active Directory (Azure AD) tenant named `weyland.com` that is configured for hybrid coexistence with the on-premises Active Directory domain.

You have a server named `DirSync1` that is configured as a DirSync server.

You create a new user account in the on-premise Active Directory. You now need to replicate the user information to Azure AD immediately.

Solution: You restart the `NetLogon` service on a domain controller.

Does the solution meet the goal?

Yes

No

Your company has a Microsoft Azure subscription.

The company has datacenters in Los Angeles and New York.

You are configuring the two datacenters as geo-clustered sites for site resiliency.

You need to recommend an Azure storage redundancy option.

You have the following data storage requirements:

- ⌘ Data must be stored on multiple nodes.
- ⌘ Data must be stored on nodes in separate geographic locations.
- ⌘ Data can be read from the secondary location as well as from the primary location.

Which of the following Azure stored redundancy options should you recommend

- Geo-redundant storage
- Read-only geo-redundant storage
- Zone-redundant storage
- Locally redundant storage

Validate



#### Solution:

RA-GRS allows you to have higher read availability for your storage account by providing "read only" access to the data replicated to the secondary location. Once you enable this feature, the secondary location may be used to achieve higher availability in the event the data is not available in the primary region. This is an "opt-in" feature which requires the storage account be geo-replicated.

Reference: <https://docs.microsoft.com/en-us/azure/storage/common/storage-redundancy>

Note: The question-is included in a number of questions that depicts the identical set-up. However, every question-has a distinctive result. Establish if the solution satisfies the requirements.

Your company has an azure subscription that includes a storage account, a resource group, a blob container and a file share. A colleague named Jon Ross makes use of a solitary Azure Resource Manager (ARM) template to deploy a virtual machine and an additional Azure Storage account.

You want to review the ARM template that was used by Jon Ross.

Solution: You access the Virtual Machine blade.

Does the solution meet the goal?

Yes

No

Validate



**Solution:**

You should use the Resource Group blade

Reference: <https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-manager-export-template>

Note: The question-is included in a number of questions that depicts the identical set-up. However, every question-has a distinctive result. Establish if the solution satisfies the requirements.

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You want to review the ARM template that was used by Jon Ross.

Solution: You access the Resource Group blade.

Does the solution meet the goal?



Yes



No

Your company has three virtual machines (VMs) that are included in an availability set.

You try to resize one of the VMs, which returns an allocation failure message.

It is imperative that the VM is resized.

Which of the following actions should you take?

- You should only stop one of the VMs.
- You should stop two of the VMs.
- You should stop all three VMs.
- You should remove the necessary VM from the availability set.

Validate



#### Solution:

If the VM you wish to resize is part of an availability set, then you must stop all VMs in the availability set before changing the size of any VM in the availability set. The reason all VMs in the availability set must be stopped before

performing the resize operation to a size that requires different hardware is that all running VMs in the availability set must be using the same physical hardware cluster. Therefore, if a change of physical hardware cluster is required to

change the VM size then all VMs must be first stopped and then restarted one-by-one to a different physical hardware clusters.

#### Reference:

<https://azure.microsoft.com/es-es/blog/resize-virtual-machines/>

You have an Azure virtual machine (VM) that has a single data disk. You have been tasked with attaching this data disk to another Azure VM.

You need to make sure that your strategy allows for the virtual machines to be offline for the least amount of time possible.

Which of the following is the action you should take FIRST?

- Stop the VM that includes the data disk.
- Stop the VM that the data disk must be attached to.
- Detach the data disk.
- Delete the VM that includes the data disk.

Your company has an Azure subscription.

You need to deploy a number of Azure virtual machines (VMs) using Azure Resource Manager (ARM) templates. You have been informed that the VMs will be included in a single availability set.

You are required to make sure that the ARM template you configure allows for as many VMs as possible to remain accessible in the event of fabric failure or maintenance.

Which of the following is the value that you should configure for the platformFaultDomainCount property?

- 10
- 30
- Min Value
- Max Value

Your company has an Azure subscription.

You need to deploy a number of Azure virtual machines (VMs) using Azure Resource Manager (ARM) templates. You have been informed that the VMs will be included in a single availability set.

You are required to make sure that the ARM template you configure allows for as many VMs as possible to remain accessible in the event of fabric failure or maintenance.

Which of the following is the value that you should configure for the platformUpdateDomainCount property?

10

20

30

40

Validate



#### Solution:

Each virtual machine in your availability set is assigned an update domain and a fault domain by the underlying Azure platform. For a given availability set, five non-user-configurable update domains are assigned by default (Resource

Manager deployments can then be increased to provide up to 20 update domains) to indicate groups of virtual machines and underlying physical hardware that can be rebooted at the same time.

#### Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/availability-set-overview>

Your company has an Azure Active Directory (Azure AD) tenant that is configured for hybrid coexistence with the on-premises Active Directory domain.

The on-premise virtual environment consists of virtual machines (VMs) running on Windows Server 2012 R2 Hyper-V host servers.

You have created some PowerShell scripts to automate the configuration of newly created VMs. You plan to create several new VMs.

You need a solution that ensures the scripts are run on the new VMs.

Which of the following is the best solution?

- Configure a SetupComplete.cmd batch file in the %windir%\setup\scripts directory.
- Configure a Group Policy Object (GPO) to run the scripts as logon scripts.
- Configure a Group Policy Object (GPO) to run the scripts as startup scripts.
- Place the scripts in a new virtual hard disk (VHD).

Validate



#### Solution:

After you deploy a Virtual Machine you typically need to make some changes before it's ready to use. This is something you can do manually or you could use Remote PowerShell to automate the configuration of your VM after deployment

for example.

But now there's a third alternative available allowing you customize your VM: the CustomScriptExtension.

This CustomScript extension is executed by the VM Agent and it's very straightforward: you specify which files it needs to download from your storage account and which file it needs to execute. You can even specify arguments that need to be passed to the script. The only requirement is that you execute a .ps1 file.

Reference: <https://docs.microsoft.com/en-us/windows-hardware/manufacture/desktop/add-a-custom-script-to-windows-setup> <https://azure.microsoft.com/en-us/blog/automating-vm-customization-tasks-using-custom-script-extension/>

Your company has an Azure Active Directory (Azure AD) tenant that is configured for hybrid coexistence with the on-premises Active Directory domain.

You plan to deploy several new virtual machines (VMs) in Azure. The VMs will have the same operating system and custom software requirements.

You configure a reference VM in the on-premise virtual environment. You then generalize the VM to create an image.

You need to upload the image to Azure to ensure that it is available for selection when you create the new Azure VMs.

Which PowerShell cmdlets should you use?

Add-AzVM

Add-AzVhd

Add-AzImage

Add-AzImageDisk

Validate



#### Solution:

The Add-AzVhd cmdlet uploads on-premises virtual hard disks, in .vhd file format, to a blob storage account as fixed virtual hard disks.

#### Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/upload-generalized-managed>

Note: The question-is included in a number of questions that depicts the identical set-up. However, every question-has a distinctive result. Establish if the solution satisfies the requirements.

Your company's Azure subscription includes two Azure networks named VirtualNetworkA and VirtualNetworkB.

VirtualNetworkA includes a VPN gateway that is configured to make use of static routing. Also, a site-to-site VPN connection exists between your company's on-premises network and VirtualNetworkA.

You have configured a point-to-site VPN connection to VirtualNetworkA from a workstation running Windows 10. After configuring virtual network peering between VirtualNetworkA and VirtualNetworkB, you confirm that you are able to

access VirtualNetworkB from the company's on-premises network. However, you find that you cannot establish a connection to VirtualNetworkB from the Windows 10 workstation.

You have to make sure that a connection to VirtualNetworkB can be established from the Windows 10 workstation.

Solution: You choose the Allow gateway transit setting on VirtualNetworkA.

Does the solution meet the goal?

Yes

No

Note: The question is included in a number of questions that depicts the identical set-up. However, every question has a distinctive result. Establish if the solution satisfies the requirements.

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access VirtualNetworkB from the company's on-premises network. However, you find that you cannot establish a connection to VirtualNetworkB from the Windows 10 workstation.

You have to make sure that a connection to VirtualNetworkB can be established from the Windows 10 workstation.

Solution: You choose the Allow gateway transit setting on VirtualNetworkB.

Does the solution meet the goal?

Yes

No

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access VirtualNetworkB from the company's on-premises network. However, you find that you cannot establish a connection to VirtualNetworkB from the Windows 10 workstation.

You have to make sure that a connection to VirtualNetworkB can be established from the Windows 10 workstation.

Solution: You download and re-install the VPN client configuration package on the Windows 10 workstation.

Does the solution meet the goal?



Yes



No

Your company has virtual machines (VMs) hosted in Microsoft Azure. The VMs are located in a single Azure virtual network named VNet1.

The company has users that work remotely. The remote workers require access to the VMs on VNet1.

You need to provide access for the remote workers.

What should you do?

- Configure a Site-to-Site (S2S) VPN.
- Configure a VNet-toVNet VPN.
- Configure a Point-to-Site (P2S) VPN.
- Configure DirectAccess on a Windows Server 2012 server VM.
- Configure a Multi-Site VPN

Validate



#### Solution:

A Point-to-Site (P2S) VPN gateway connection lets you create a secure connection to your virtual network from an individual client computer.

#### Reference:

<https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-about-vpngateways>

Note: The question-is included in a number of questions that depicts the identical set-up. However, every question-has a distinctive result. Establish if the solution satisfies the requirements.

Your company has a Microsoft SQL Server Always On availability group configured on their Azure virtual machines (VMs).

You need to configure an Azure internal load balancer as a listener for the availability group.

Solution: You create an HTTP health probe on port 1433.

Does the solution meet the goal?

---

Yes

No

Note: The question-is included in a number of questions that depicts the identical set-up. However, every question-has a distinctive result. Establish if the solution satisfies the requirements.

Your company has a Microsoft SQL Server Always On availability group configured on their Azure virtual machines (VMs).

You need to configure an Azure internal load balancer as a listener for the availability group.

Solution: You set Session persistence to Client IP.

Does the solution meet the goal?

---

Yes

No