vce trainer



Reference Solution for AZ-103.69q

AZ-103

AZ-103

Microsoft Azure Administrator

Score: 800/1000

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Version:

Time Limit: 120 Minutes

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Manage Azure subscriptions and resources

(10 questions)

Question 1

You have an Azure subscription that contains a resource group named RG1. RG1 contains 100 virtual machines.

Your company has three cost centers named Manufacturing, Sales, and Finance.

You need to associate each virtual machine to a specific cost center.

What should you do?

- ☐ Configure locks for the virtual machine.
- ☐ Add an extension to the virtual machines.
- ☒ Assign tags to the virtual machines.
- ☐ Modify the inventory settings of the virtual machine.

Explanation:

References:

https://docs.microsoft.com/en-us/azure/billing/billing-getting-started

https://docs.microsoft.com/en-us/azure/azure-resource-manager/resource-group-using-tags

Question 2

You have an Azure subscription named Subscription1 that contains an Azure Log Analytics workspace named Workspace1.

You need to view the error events from a table named Event.

Which query should you run in Workspace1?

- ☐ Get-Event Event | where ($_.EventType –eq "error")
- ☐ Get-Event Event | where ($_.EventType == "error")
- ☐ search in (Event) * | where EventType –eq "error"
- ☒ search in (Event) "error"
- ☐ select *from Event where EventType == "error"
- ☐ Event | where EventType is "error"

Explanation:

Explanation:

To search a term in a specific table, add in (table-name) just after the search operator

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References:

https://docs.microsoft.com/en-us/azure/azure-monitor/log-query/search-queries

https://docs.microsoft.com/en-us/azure/azure-monitor/log-query/get-started-portal

Question 3

You have an Azure subscription named Subscription1. Subscription1 contains the resource groups in the following table.

Name	Azure region	Policy
RG1	West Europe	Policy1
RG2	North Europe	Policy2
RG3	France Central	Policy3

RG1 has a web app named WebApp1. WebApp1 is located in West Europe.

You move WebApp1 to RG2.

What is the effect of the move?

- ☐ The App Service plan for WebApp1 moves to North Europe. Policy2 applies to WebApp1.
- ☒ The App Service plan for WebApp1 remains in West Europe. Policy2 applies to WebApp1.
- ☐ The App Service plan for WebApp1 moves to North Europe. Policy1 applies to WebApp1.
- ☐ The App Service plan for WebApp1 remains in West Europe. Policy1 applies to WebApp1.

Explanation:

Explanation:

You can move an app to another App Service plan, as long as the source plan and the target plan are in the same resource group and geographical region.

The region in which your app runs is the region of the App Service plan it's in. However, you cannot change an App Service plan's region.

References:

https://docs.microsoft.com/en-us/azure/app-service/app-service-plan-manage

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Question 4

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 named Subscription1. Subscription1 contains a resource group named RG1. RG1 contains resources that were deployed by using templates.

You need to view the date and time when the resources were created in RG1.

Solution: From the Subscriptions blade, you select the subscription, and then click Programmatic deployment.

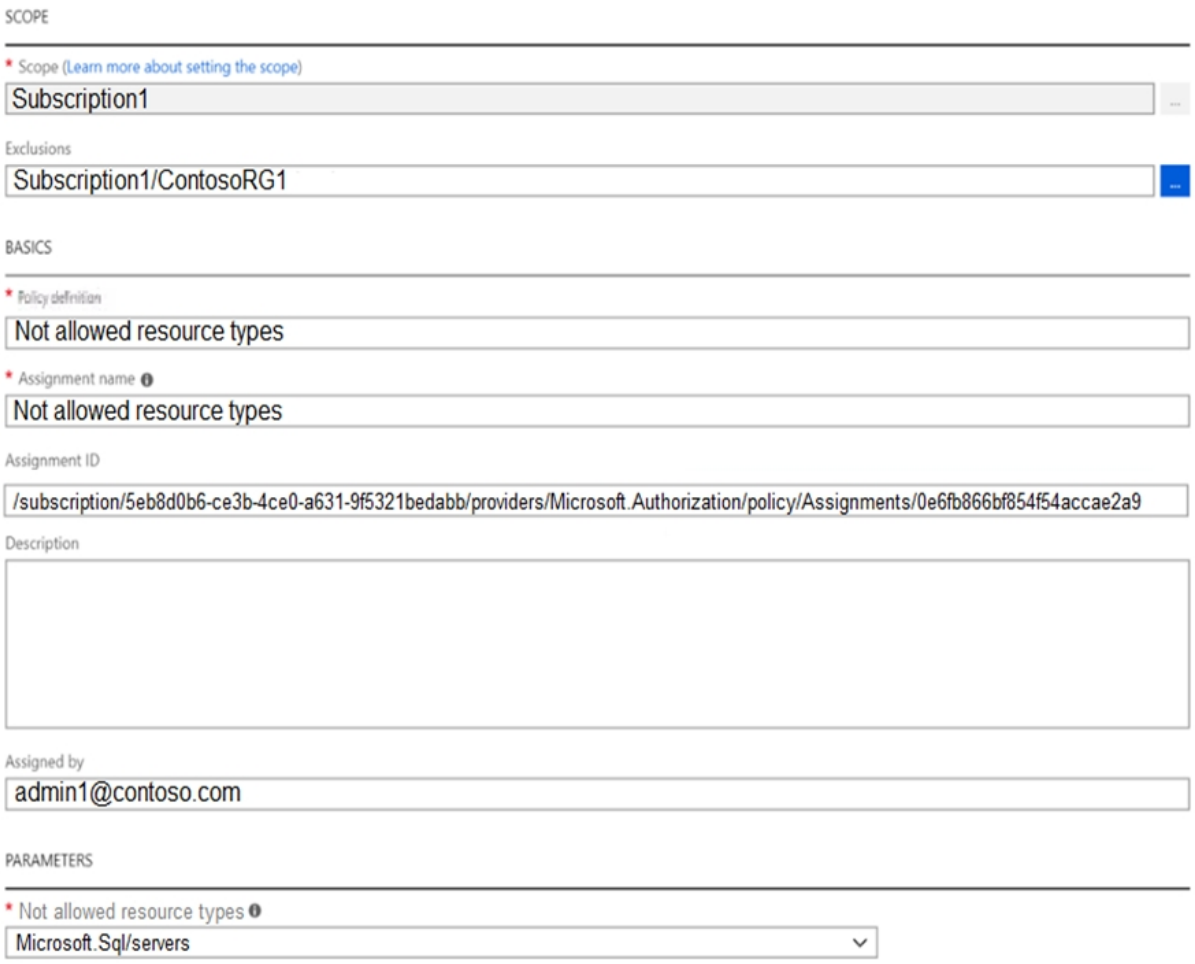
Does this meet the goal?

- ☐ Yes
- ☒ No

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Question 5

You have an Azure policy as shown in the following exhibit.



What is the effect of the policy?

- ☐ You are prevented from creating Azure SQL Servers in ContosoRG1 only.
- ☒ You can create Azure SQL servers in ContosoRG1 only.
- ☐ You can create Azure SQL servers in any resource group within Subscription1.
- ☐ You are prevented from creating Azure SQL servers anywhere in Subscription1.

Explanation:

Explanation:

You are prevented from creating Azure SQL servers anywhere in Subscription 1 with the exception of ContosoRG1

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Question 6

You have an Azure Active Directory (Azure AD) tenant that contains 5,000 user accounts.

You create a new user account named AdminUser1.

You need to assign the User administrator administrative role to AdminUser1.

What should you do from the user account properties?

- ☒ From the Directory role blade, modify the directory role.
- ☐ From the Licenses blade, assign a new license.
- ☐ From the Groups blade, invite the user account to a new group.

Explanation:

Explanation:

Assign a role to a user

Sign in to the Azure portal with an account that's a global admin or privileged role admin for the directory.

Select Azure Active Directory, select Users, and then select a specific user from the list.

For the selected user, select Directory role, select Add role, and then pick the appropriate admin roles from the Directory roles list, such as Conditional access administrator.

Press Select to save.

References:

https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-users-assign-role-azure-portal

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Question 7

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 Active Directory (Azure AD) tenant named Adatum and an Azure Subscription named Subscription1. Adatum contains a group named Developers. Subscription1 contains a resource group named Dev.

You need to provide the Developers group with the ability to create Azure logic apps in the Dev resource group.

Solution: On Subscription1, you assign the Logic App Operator role to the Developers group.

Does this meet the goal?

- ☐ Yes
- ☒ No

Explanation:

Explanation:

You would need the Logic App Contributor role.

References:

https://docs.microsoft.com/en-us/azure/role-based-access-control/built-in-roles

https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-securing-a-logic-app

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Question 8

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 named Subscription1. Subscription1 contains a resource group named RG1. RG1 contains resources that were deployed by using templates.

You need to view the date and time when the resources were created in RG1.

Solution: From the Subscriptions blade, you select the subscription, and then click Resource providers.

Does this meet the goal?

- ☐ Yes
- ☒ No

Question 9

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 Active Directory (Azure AD) tenant named Adatum and an Azure Subscription named Subscription1. Adatum contains a group named Developers. Subscription1 contains a resource group named Dev.

You need to provide the Developers group with the ability to create Azure logic apps in the Dev resource group.

Solution: On Dev, you assign the Logic App Contributor role to the Developers group.

Does this meet the goal?

- ☒ Yes
- ☐ No

Explanation:

Explanation:

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The Logic App Contributor role lets you manage logic app, but not access to them. It provides access to view, edit, and update a logic app.

References:

https://docs.microsoft.com/en-us/azure/role-based-access-control/built-in-roles

https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-securing-a-logic-app

Question 10

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 named Subscription1. Subscription1 contains a resource group named RG1. RG1 contains resources that were deployed by using templates.

You need to view the date and time when the resources were created in RG1.

Solution: From the RG1 blade, you click Automation script.

Does this meet the goal?

- ☐ Yes
- ☒ No

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Case Study (2 questions)

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 AllInformation 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

Humongous Insurance is an insurance company that has three offices in Miami, Tokyo and Bangkok. Each office has 5.000 users.

Existing Environment
Active Directory Environment
Humongous Insurance has a single-domain Active Directory forest named humongousinsurance.com. The functional level of the forest is Windows Server 2012.

You recently provisioned an Azure Active Directory (Azure AD) tenant.

Network Infrastructure
Each office has a local data center that contains all the servers for that office. Each office has a dedicated connection to the Internet.

Each office has several link load balancers that provide access to the servers.

Active Directory Issue
Several users in humongousinsurance.com have UPNs that contain special characters.

You suspect that some of the characters are unsupported in Azure AD.

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Licensing Issue
You attempt to assign a license in Azure to several users and receive the following error message: "Licenses not assigned. License assignment failed for one user."

You verify that the Azure subscription has the available licenses.

Requirements
Planned Changes
Humongous Insurance plans to open a new office in Paris. The Paris office will contain 1,000 users who will be hired during the next 12 months. All the resources used by the Paris office users will be hosted in Azure.

Planned Azure AD Infrastructure
The on-premises Active Directory domain will be synchronized to Azure AD.

All client computers in the Paris office will be joined to an Azure AD domain.

Planned Azure Networking Infrastructure
You plan to create the following networking resources in a resource group named All_Resources:

Default Azure system routes that will be the only routes used to route traffic
A virtual network named Paris-VNet that will contain two subnets named Subnet1 and Subnet2
A virtual network named ClientResources-VNet that will contain one subnet named ClientSubnet
A virtual network named AllOffices-VNet that will contain two subnets named Subnet3 and Subnet4

You plan to enable peering between Paris-VNet and AllOffices-VNet. You will enable the Use remote gateways setting for the Paris-VNet peerings.

You plan to create a private DNS zone named humongousinsurance.local and set the registration network to the ClientResources-VNet virtual network.

Planned Azure Computer Infrastructure
Each subnet will contain several virtual machines that will run either Windows Server 2012 R2, Windows Server 2016, or Red Hat Linux.

Department Requirements
Humongous Insurance identifies the following requirements for the company's departments:

Web administrators will deploy Azure web apps for the marketing department. Each web app will be added to a separate resource group. The initial configuration of the web apps will be identical. The web administrators have permission to deploy web apps to resource groups.
During the testing phase, auditors in the finance department must be able to review all Azure costs from the past week.
Authentication Requirements
Users in the Miami office must use Azure Active Directory Seamless Single Sign-on (Azure AD Seamless SSO) when accessing resources in Azure.

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Question 11

You need to resolve the licensing issue before you attempt to assign the license again.

What should you do?

- ☒ From the Groups blade, invite the user accounts to a new group.
- ☐ From the Profile blade, modify the usage location.
- ☐ From the Directory role blade, modify the directory role.

Explanation:

Explanation:

License cannot be assigned to a user without a usage location specified.

Scenario: Licensing Issue

You attempt to assign a license in Azure to several users and receive the following error message: "Licenses not assigned. License agreement failed for one user."

You verify that the Azure subscription has the available licenses.

Question 12

You need to resolve the Active Directory issue.

What should you do?

- ☒ Run the IdFix tool then use the Update actions.
- ☐ From Active Directory Domains and Trusts, modify the list of UPN suffixes.
- ☐ From Azure AD Connect, modify the outbound synchronization rule.
- ☐ From Active Directory Users and Computers, select the user accounts and then modify the UPN suffix value.

Explanation:

Explanation:

IdFix is used to perform discovery and remediation of identity objects and their attributes in an on-premises Active Directory environment in preparation for migration to Azure Active Directory. IdFix is intended for the Active Directory administrators responsible for directory synchronization with Azure Active Directory.

Scenario: Active Directory Issue

Several users in humongousinsurance.com have UPNs that contain special characters.

You suspect that some of the characters are unsupported in Azure AD.

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References:

https://www.microsoft.com/en-us/download/details.aspx?id=36832

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Implement and manage storage

(7 questions)

Question 13

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

Explanation:

Explanation:

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

References:

https://docs.microsoft.com/en-us/azure/site-recovery/azure-to-azure-tutorial-enable-replication

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Question 14

SIMULATION

Please wait while the virtual machine loads. Once loaded, you may proceed to the lab section. This may take a few minutes, and the wait time will not be deducted from your overall test time.

When the Next button is available, click it to access the lab section. In this section, you will perform a set of tasks in a live environment. While most functionality will be available to you as it would be in a live environment, some functionality (e.g, copy and paste, ability to navigate to external websites) will not be possible by design.

Scoring is based on the outcome of performing the tasks stated in the lab. In other words, it doesn't matter how you accomplish the task, if you successfully perform it, you will earn credit for that task.

Labs are not timed separately, and this exam may have more than one lab that you must complete. You can use as much time as you would like to complete each lab. But, you should manage your time appropriately to ensure that you are able to complete the lab(s) and all other sections of the exam in the time provided.

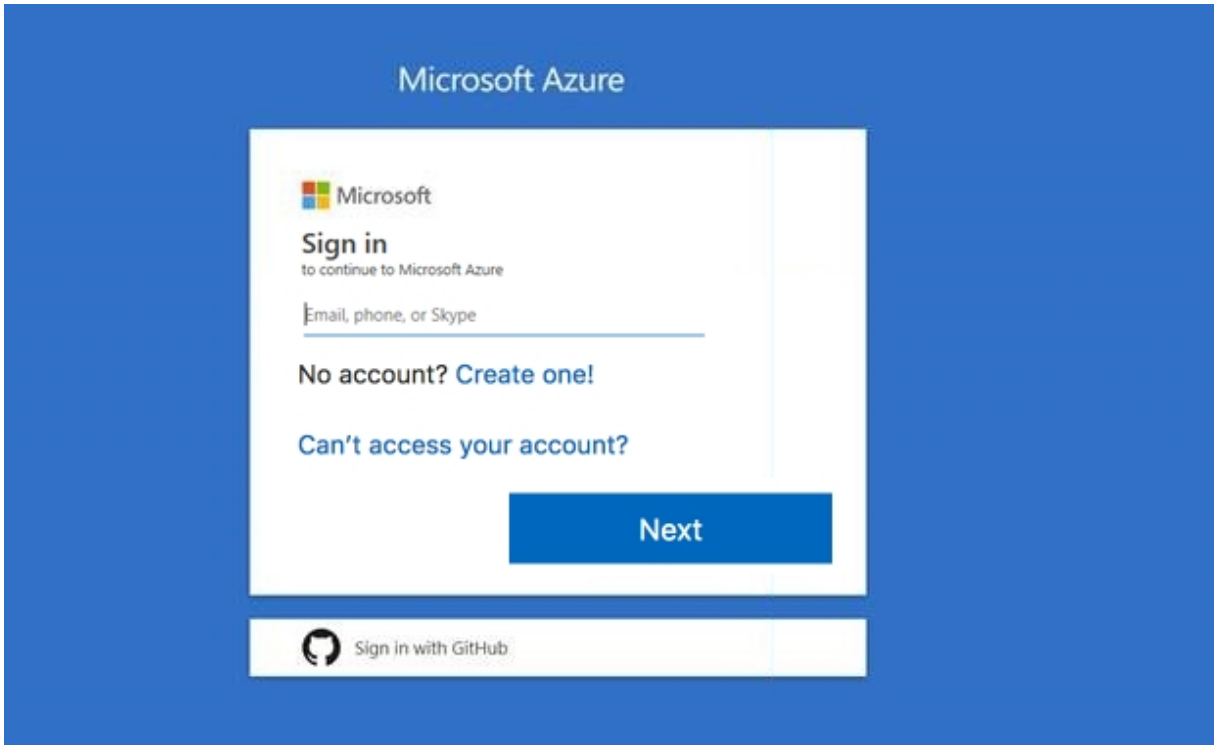
Please note that once you submit your work by clicking the Next button within a lab, you will NOT be able to return to the lab.

You may now click next to proceed to the lab.

Use the following login credentials as needed:

Azure Username: XXXXXXX
Azure Password: XXXXXXX
The following information is for technical support purposes only:
Lab Instance: 9172796

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Task 3

Your company plans to host in Azure the source files of several line-of-business applications.

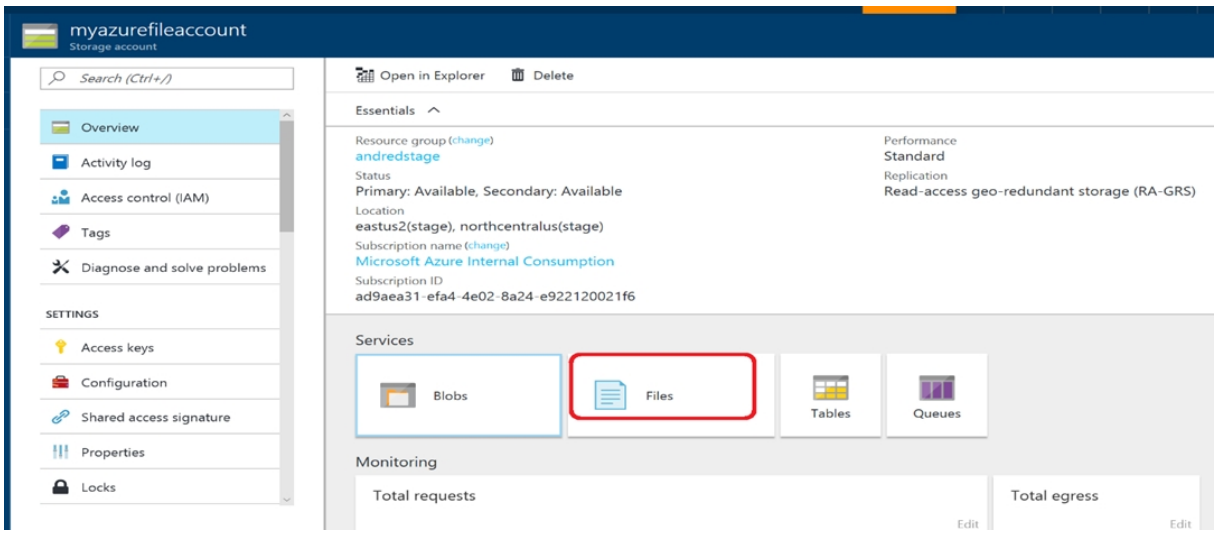
You need to create an Azure file share named corpsoftware in the storagelod9272261 storage account. The solution must ensure that corpsoftware can store only up to 250 GB of data.

What should you do from the Azure portal?

Explanation:

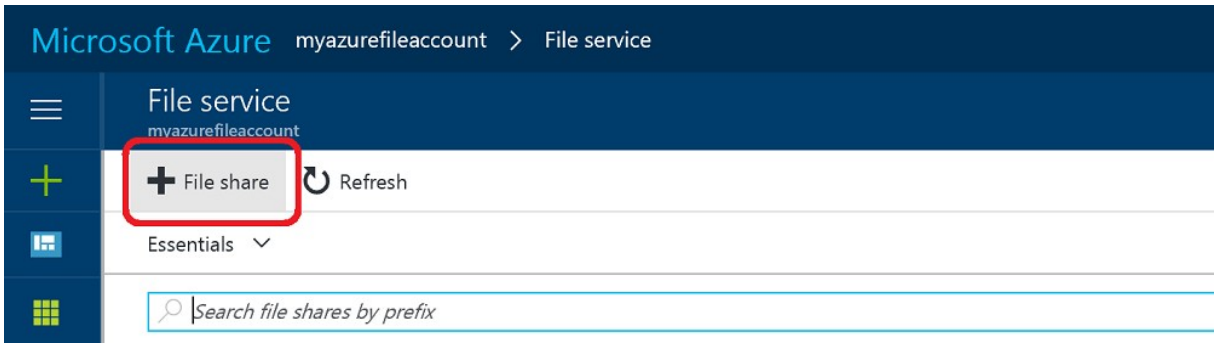
Explanation:

Step 1: Go to the Storage Account blade on the Azure portal:

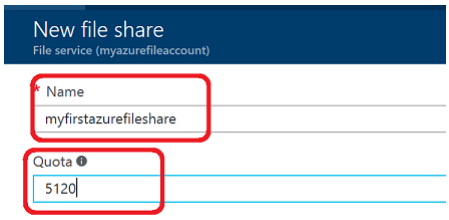


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Step 2: Click on add File Share button:



Step 3: Provide Name (storagelod9272261) and Quota (250 GB).



References:

https://docs.microsoft.com/en-us/azure/storage/files/storage-how-to-create-file-share

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Question 15

SIMULATION

Please wait while the virtual machine loads. Once loaded, you may proceed to the lab section. This may take a few minutes, and the wait time will not be deducted from your overall test time.

When the Next button is available, click it to access the lab section. In this section, you will perform a set of tasks in a live environment. While most functionality will be available to you as it would be in a live environment, some functionality (e.g, copy and paste, ability to navigate to external websites) will not be possible by design.

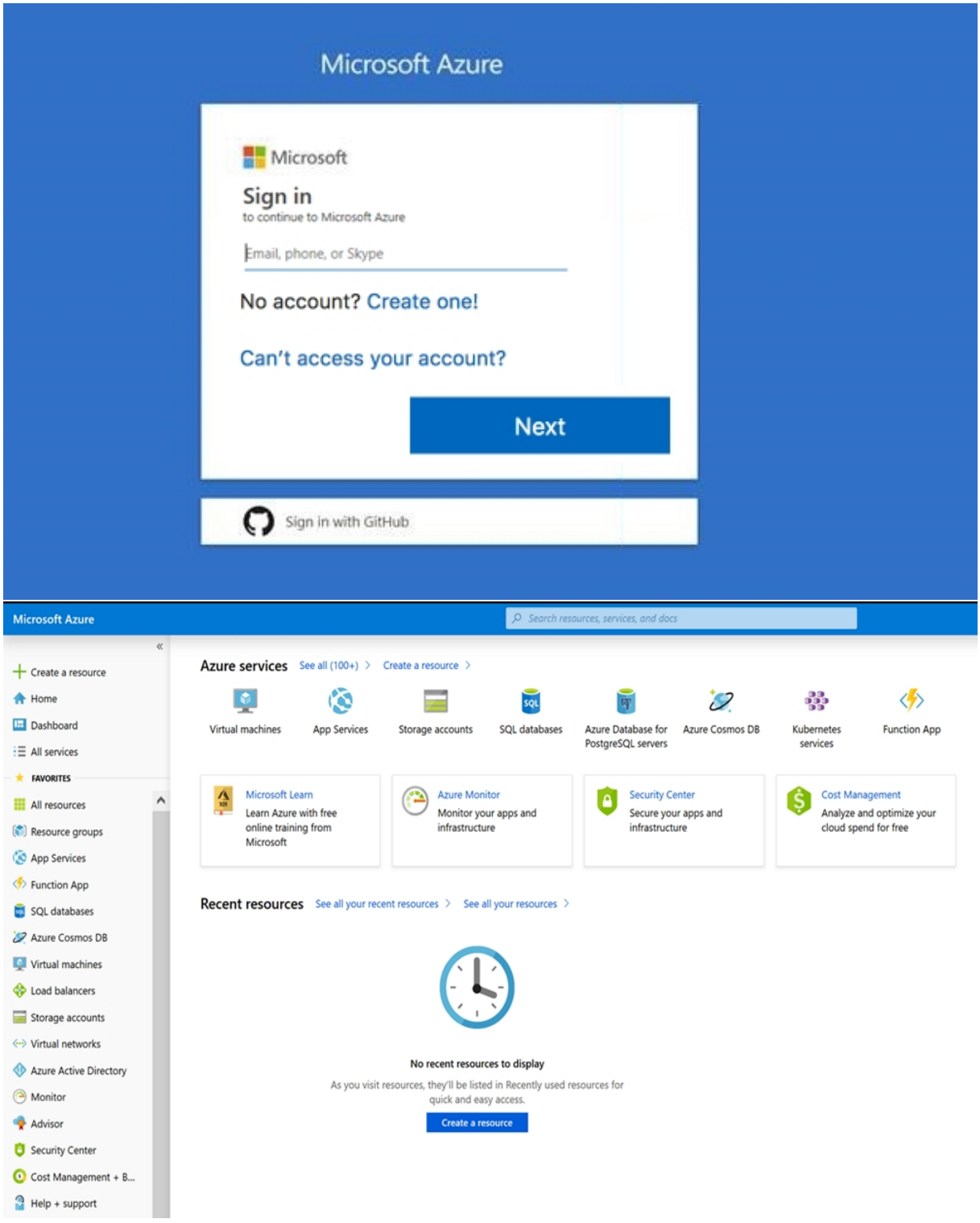
Scoring is based on the outcome of performing the tasks stated in the lab. In other words, it doesn't matter how you accomplish the task, if you successfully perform it, you will earn credit for that task.

Labs are not timed separately, and this exam may have more than one lab that you must complete. You can use as much time as you would like to complete each lab. But, you should manage your time appropriately to ensure that you are able to complete the lab(s) and all other sections of the exam in the time provided.

Please note that once you submit your work by clicking the Next button within a lab, you will NOT be able to return to the lab.

You may now click next to proceed to the lab.

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Task 1

You plan to migrate a large amount of corporate data to Azure Storage and to back up files stored on old hardware to Azure Storage.

You need to create a storage account named corpdata9172795n1 in the corpdatalod9172795 resource group. The solution must meet the following requirements:

Corpdata9172795n1 must be able to host the virtual disk files for Azure virtual machines.

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The cost of accessing the files must be minimized.
Replication costs must be minimized.

What should you do from the Azure portal?

Explanation:

Explanation:

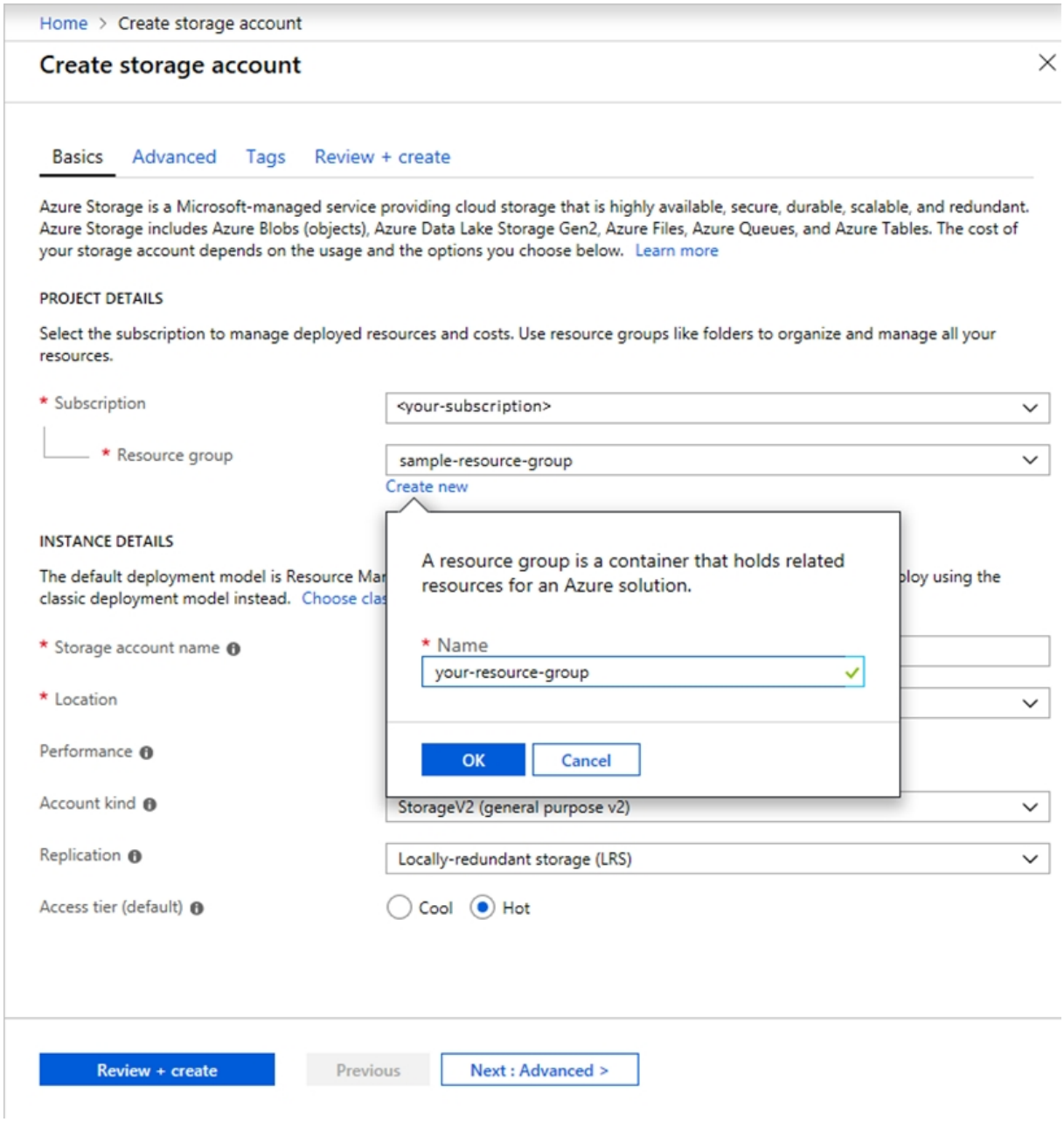
Step 1: In the Azure portal, click All services. In the list of resources, type Storage Accounts. As you begin typing, the list filters based on your input. Select Storage Accounts.

Step 2: On the Storage Accounts window that appears, choose Add.

Step 3: Select the subscription in which to create the storage account.

Step 4: Under the Resource group field, select corpdatalod9172795.

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Step 5: Enter a name for your storage account: corpdata9172795n1

Step 6: For Account kind select: General-purpose v2 accounts (recommended for most scenarios)

General-purpose v2 accounts is recommended for most scenarios. . General-purpose v2 accounts deliver the lowest per-gigabyte capacity prices for Azure Storage, as well as industry-competitive transaction prices.

Step 7: For replication select: Read-access geo-redundant storage (RA-GRS)

Read-access geo-redundant storage (RA-GRS) maximizes availability for your storage account. RA-GRS provides read-only access to the data in the secondary location, in addition to geo-replication across two regions.

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References:

https://docs.microsoft.com/en-us/azure/storage/common/storage-quickstart-create-account

https://docs.microsoft.com/en-us/azure/storage/common/storage-account-overview

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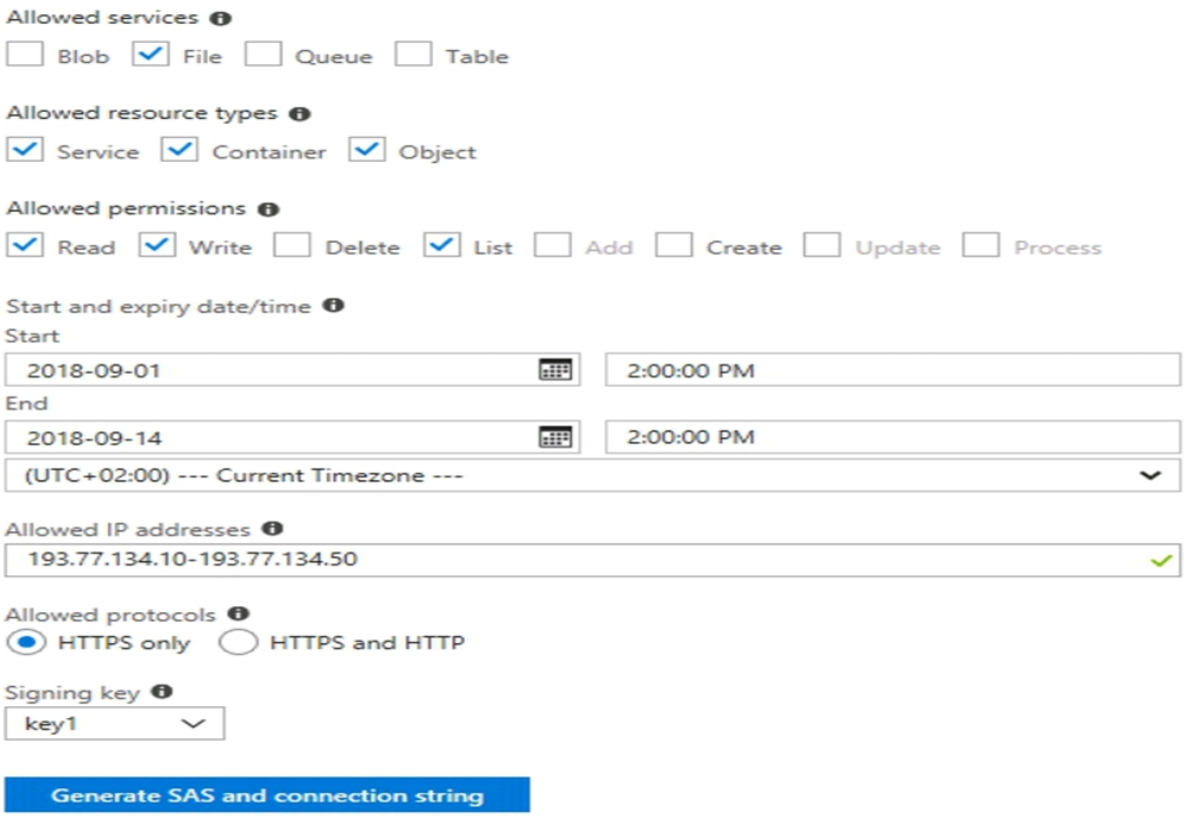
Question 16

HOTSPOT

You have an Azure subscription named Subscription1.

In Subscription1, you create an Azure file share named share1.

You create a shared access signature (SAS) named SAS1 as shown in the following exhibit.



To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

If on September 2, 2018, you run Microsoft Azure Storage Explorer on a computer that has an IP address of 193.77.134.1, and you use SAS1 to connect to the storage account, you

- will be prompted for credentials
- will have no access
- will have read, write, and list access
- will have read-only access

If on September 10, 2018, you run the `net use` command on a computer that has an IP address of 193.77.134.50, and you use SAS1 as the password to connect to share1, you

- will be prompted for credentials
- will have no access
- will have read, write, and list access
- will have read-only access

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Solution:

Answer Area

If on September 2, 2018, you run Microsoft Azure Storage Explorer on a computer that has an IP address of 193.77.134.1, and you use SAS1 to connect to the storage account, you

- will be prompted for credentials
- will have no access
- will have read, write, and list access
- will have read-only access

If on September 10, 2018, you run the `net use` command on a computer that has an IP address of 193.77.134.50, and you use SAS1 as the password to connect to share1, you

- will be prompted for credentials
- will have no access
- will have read, write, and list access
- will have read-only access

Explanation:

Explanation:

Box 1: Will have no access

The IP 193.77.134.1 does not have access on the SAS.

Box 2: Will have read, write, and list access

The net use command is used to connect to file shares.

References:

https://docs.microsoft.com/en-us/azure/storage/common/storage-dotnet-shared-access-signature-part-1

https://docs.microsoft.com/en-us/azure/vs-azure-tools-storage-manage-with-storage-explorer?tabs=windows

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Question 17

You create an Azure Storage account named contosostorage.

You plan to create a file share named data.

Users need to map a drive to the data file share from home computers that run Windows 10.

Which outbound port should you open between the home computers and the data file share?

- ☐ 80
- ☐ 443
- ☒ 445
- ☐ 3389

Explanation:

Explanation:

Ensure port 445 is open: The SMB protocol requires TCP port 445 to be open; connections will fail if port 445 is blocked.

References:

https://docs.microsoft.com/en-us/azure/storage/files/storage-how-to-use-files-windows

Question 18

You plan to use the Azure Import/Export service to copy files to a storage account.

Which two files should you create before you prepare the drives for the import job? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- ☒ a driveset CSV file
- ☐ a JSON configuration file
- ☐ a PowerShell PS1 file
- ☐ an XML manifest file
- ☒ a dataset CSV file

Explanation:

Explanation:

A: Modify the driveset.csv file in the root folder where the tool resides.

E: Modify the dataset.csv file in the root folder where the tool resides. Depending on whether you want to import a file or folder or both, add entries in the dataset.csv file

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References:

https://docs.microsoft.com/en-us/azure/storage/common/storage-import-export-data-to-files

Question 19

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

Name	Type
RG1	Resource group
Store1	Azure Storage account
Sync1	Azure File Sync

Store1 contains a file share named Data. Data contains 5,000 files.

You need to synchronize the files in Data to an on-premises server named Server1.

Which three actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- ☐ Download an automation script.
- ☒ Register Server1.
- ☒ Create a sync group.
- ☐ Create a container instance.
- ☒ Install the Azure File Sync agent on Server1.

Explanation:

Explanation:

Step 1 (E): Install the Azure File Sync agent on Server1

The Azure File Sync agent is a downloadable package that enables Windows Server to be synced with an Azure file share

Step 2 (B): Register Server1.

Register Windows Server with Storage Sync Service

Registering your Windows Server with a Storage Sync Service establishes a trust relationship between your server (or cluster) and the Storage Sync Service.

Step 3 (C): Create a sync group and a cloud endpoint.

A sync group defines the sync topology for a set of files. Endpoints within a sync group are kept in sync with each other. A sync group must contain one cloud endpoint, which represents an Azure file share and one or more server endpoints. A server endpoint represents a path on registered server.

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References:

https://docs.microsoft.com/en-us/azure/storage/files/storage-sync-files-deployment-guide

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Case Study (2 questions)

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 AllInformation 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

Contoso, Ltd. is a manufacturing company that has offices worldwide. Contoso works with partner organizations to bring products to market.

Contoso products are manufactured by using blueprint files that the company authors and maintains.

Existing Environment

Currently, Contoso uses multiple types of servers for business operations, including the following:

File servers
Domain controllers
Microsoft SQL Server servers

Your network contains an Active Directory forest named contoso.com. All servers and client computers are joined to Active Directory.

You have a public-facing application named App1. App1 is comprised of the following three tiers:

A SQL database
A web front end

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A processing middle tier

Each tier is comprised of five virtual machines. Users access the web front end by using HTTPS only.

Requirements

Planned Changes

Contoso plans to implement the following changes to the infrastructure:

Move all the tiers of App1 to Azure.
Move the existing product blueprint files to Azure Blob storage.
Create a hybrid directory to support an upcoming Microsoft Office 365 migration project.
Technical Requirements

Contoso must meet the following technical requirements:

Move all the virtual machines for App1 to Azure.
Minimize the number of open ports between the App1 tiers.
Ensure that all the virtual machines for App1 are protected by backups.
Copy the blueprint files to Azure over the Internet.
Ensure that the blueprint files are stored in the archive storage tier.
Ensure that partner access to the blueprint files is secured and temporary.
Prevent user passwords or hashes of passwprds from being stored in Azure.
Use unmanaged standard storage for the hard disks of the virtual machines.
Ensure that when users join devices to Azure Active Directory (Azure AD), the users use a mobile phone to verify their identity
Minimize administrative effort whenever possible
User Requirements

Contoso identifies the following requirements for users:

Ensure that only users who are part of a group named Pilot can join devices to Azure AD.
Designate a new user named Admin1 as the service admin for the Azure subscription.
Admin1 must receive email alerts regarding service outages.
Ensure that a new user named User3 can create network objects for the Azure subscription.

Question 20

You need to implement a backup solution for App1 after the application is moved.

What should you create first?

- ☐ a recovery plan
- ☒ a Recovery Services vault
- ☐ an Azure Backup Server
- ☐ a backup policy

Explanation:

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Explanation:

A Recovery Services vault is a logical container that stores the backup data for each protected resource, such as Azure VMs. When the backup job for a protected resource runs, it creates a recovery point inside the Recovery Services vault.

Scenario:

There are three application tiers, each with five virtual machines.

Move all the virtual machines for App1 to Azure.

Ensure that all the virtual machines for App1 are protected by backups.

References:

https://docs.microsoft.com/en-us/azure/backup/quick-backup-vm-portal

Question 21

You need to move the blueprint files to Azure.

What should you do?

- ☒ Use Azure Storage Explorer to copy the files.
- ☐ Use the Azure Import/Export service.
- ☐ Generate a shared access signature (SAS). Map a drive, and then copy the files by using File Explorer.
- ☐ Generate an access key. Map a drive, and then copy the files by using File Explorer.

Explanation:

Explanation:

Azure Storage Explorer is a free tool from Microsoft that allows you to work with Azure Storage data on Windows, macOS, and Linux. You can use it to upload and download data from Azure blob storage.

Scenario:

Planned Changes include: move the existing product blueprint files to Azure Blob storage.

Technical Requirements include: Copy the blueprint files to Azure over the Internet.

References:

https://docs.microsoft.com/en-us/azure/machine-learning/team-data-science-process/move-data-to-azure-blob-using-azure-storage-explorer

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Deploy and manage virtual machines (VMs)

(13 questions)

Question 22

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 virtual machine named VM1. VM1 was deployed by using a custom Azure Resource Manager template named ARM1.json.

You receive a notification that VM1 will be affected by maintenance.

You need to move VM1 to a different host immediately.

Solution: From the Update management blade, you click Enable.

Does this meet the goal?

- ☐ Yes
- ☒ No

Explanation:

Explanation:

You would need to redeploy the VM.

References:

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/redeploy-to-new-node

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Question 23

You have an Azure subscription named Subscription1 that is used by several departments at your company. Subscription1 contains the resources in the following table.

Name	Type
storage1	Storage account
RG1	Resource group
Container1	Blob container
Share1	File share

Another administrator deploys a virtual machine named VM1 and an Azure Storage account named Storage2 by using a single Azure Resource Manager template.

You need to view the template used for the deployment.

From which blade can you view the template that was used for the deployment?

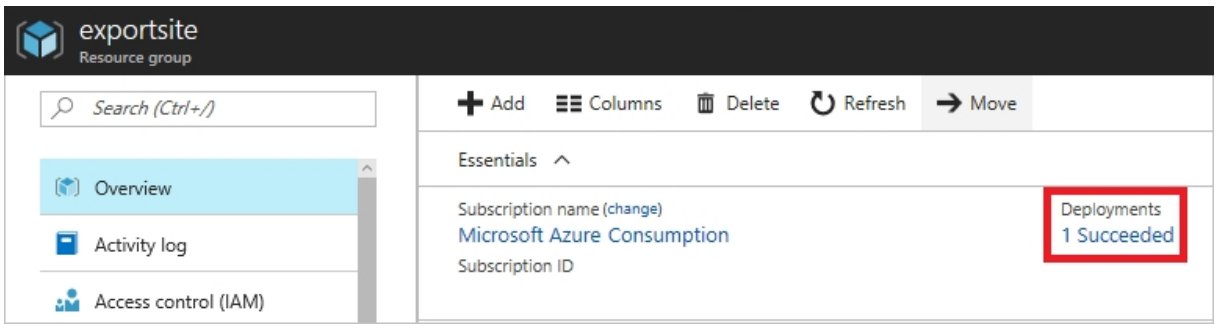
- ☐ Container1
- ☒ RG1
- ☐ VM1
- ☐ Storage2

Explanation:

Explanation:

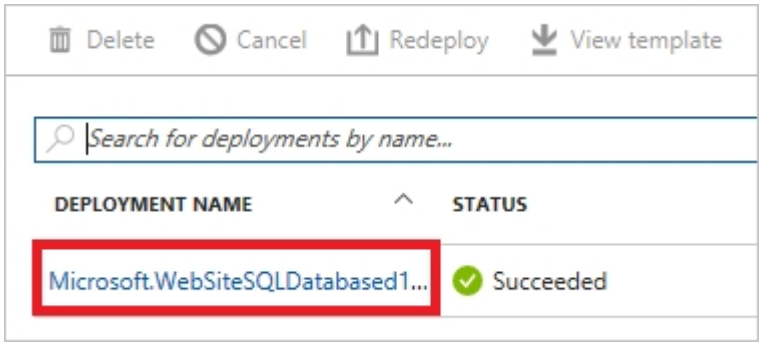
View template from deployment history

1. Go to the resource group for your new resource group. Notice that the portal shows the result of the last deployment. Select this link.

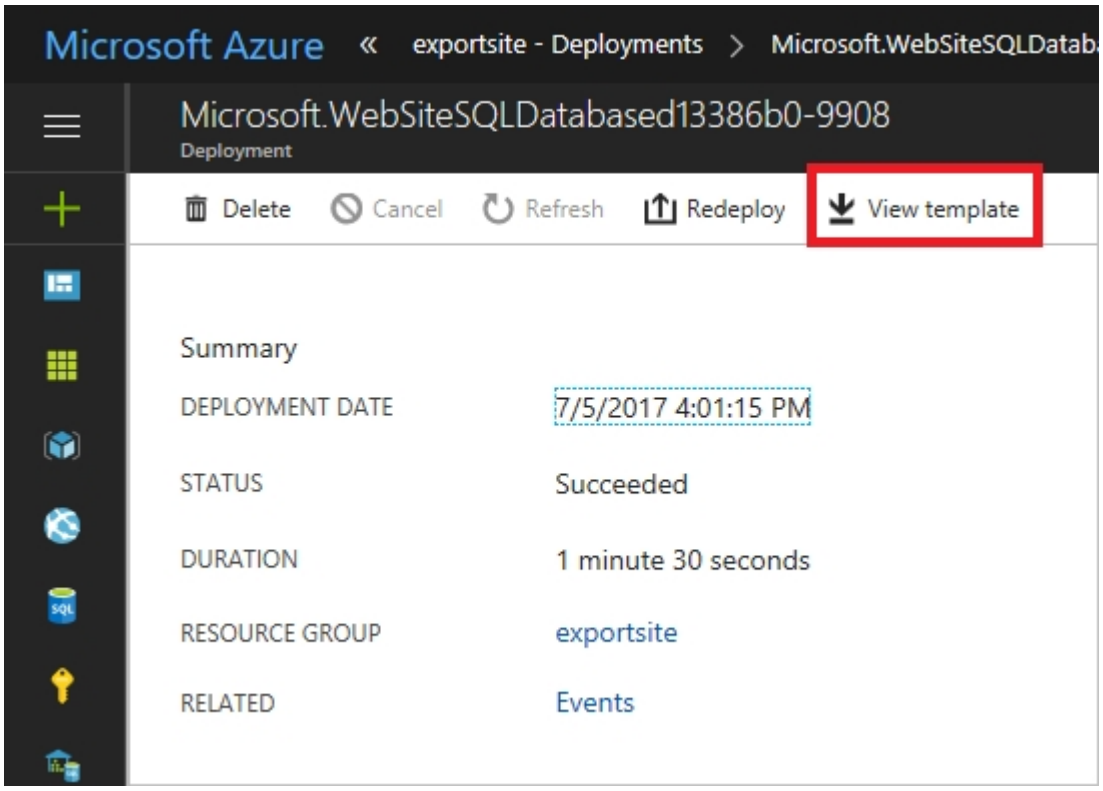


2. You see a history of deployments for the group. In your case, the portal probably lists only one deployment. Select this deployment.

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3. The portal displays a summary of the deployment. The summary includes the status of the deployment and its operations and the values that you provided for parameters. To see the template that you used for the deployment, select View template.



References:

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

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Question 24

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 virtual machine named VM1. VM1 was deployed by using a custom Azure Resource Manager template named ARM1.json.

You receive a notification that VM1 will be affected by maintenance.

You need to move VM1 to a different host immediately.

Solution: From the Overview blade, you move the virtual machine to a different subscription.

Does this meet the goal?

- ☐ Yes
- ☒ No

Explanation:

Explanation:

You would need to redeploy the VM.

References:

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/redeploy-to-new-node

Question 25

You download an Azure Resource Manager template based on an existing virtual machine. The template will be used to deploy 100 virtual machines.

You need to modify the template to reference an administrative password. You must prevent the password from being stored in plain text.

What should you create to store the password?

- ☒ an Azure Key Vault and an access policy
- ☐ a Recovery Services vault and a backup policy
- ☐ Azure Active Directory (AD) Identity Protection and an Azure policy
- ☐ an Azure Storage account and an access policy

Explanation:

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Explanation:

You can use a template that allows you to deploy a simple Windows VM by retrieving the password that is stored in a Key Vault. Therefore, the password is never put in plain text in the template parameter file.

References:

https://azure.microsoft.com/en-us/resources/templates/101-vm-secure-password/

Question 26

You have an Azure subscription that contains a virtual machine named VM1. VM1 hosts a line-of-business application that is available 24 hours a day. VM1 has one network interface and one managed disk. VM1 uses the D4s v3 size.

You plan to make the following changes to VM1:

Change the size to D8s v3.
Add a 500-GB managed disk.
Add the Puppet Agent extension.
Attach an additional network interface.

Which change will cause downtime for VM1?

- ☐ Add the Puppet Agent extension.
- ☒ Change the size to D8s v3.
- ☐ Add a 500-GB managed disk.
- ☐ Attach an additional network interface.

Explanation:

Explanation:

While resizing the VM it must be in a stopped state.

References:

https://azure.microsoft.com/en-us/blog/resize-virtual-machines/

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Question 27

You have an Azure virtual machine named VM1 that you use for testing. VM1 is protected by Azure Backup.

You delete VM1.

You need to remove the backup data stored for VM1.

What should you do first?

- ☐ Delete the Recovery Services vault.
- ☐ Delete the storage account.
- ☐ Stop the backup
- ☒ Modify the backup policy.

Explanation:

Explanation:

Azure Backup provides backup for virtual machines — created through both the classic deployment model and the Azure Resource Manager deployment model — by using custom-defined backup policies in a Recovery Services vault.

With the release of backup policy management, customers can manage backup policies and model them to meet their changing requirements from a single window. Customers can edit a policy, associate more virtual machines to a policy, and delete unnecessary policies to meet their compliance requirements.

Incorrect Answers:

B: You can't delete a Recovery Services vault if it is registered to a server and holds backup data. If you try to delete a vault, but can't, the vault is still configured to receive backup data.

References:

https://azure.microsoft.com/en-in/updates/azure-vm-backup-policy-management/

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Question 28

SIMULATION

Please wait while the virtual machine loads. Once loaded, you may proceed to the lab section. This may take a few minutes, and the wait time will not be deducted from your overall test time.

When the Next button is available, click it to access the lab section. In this section, you will perform a set of tasks in a live environment. While most functionality will be available to you as it would be in a live environment, some functionality (e.g, copy and paste, ability to navigate to external websites) will not be possible by design.

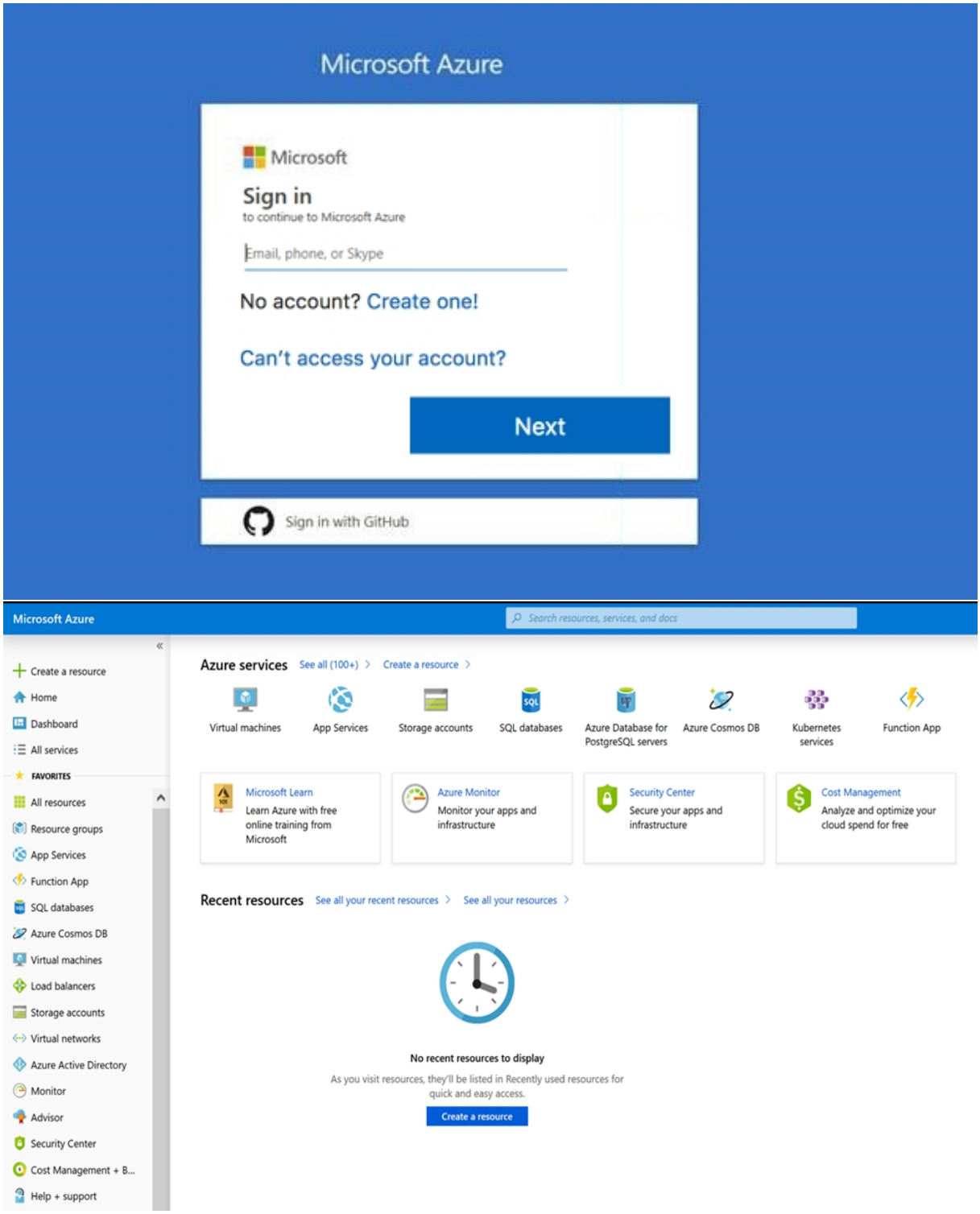
Scoring is based on the outcome of performing the tasks stated in the lab. In other words, it doesn't matter how you accomplish the task, if you successfully perform it, you will earn credit for that task.

Labs are not timed separately, and this exam may have more than one lab that you must complete. You can use as much time as you would like to complete each lab. But, you should manage your time appropriately to ensure that you are able to complete the lab(s) and all other sections of the exam in the time provided.

Please note that once you submit your work by clicking the Next button within a lab, you will NOT be able to return to the lab.

You may now click next to proceed to the lab.

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Task 3

You need to deploy two Azure virtual machines named VM1003a and VM1003b based on an Ubuntu Server image. The deployment must meet the following requirements:

Provide a Service Level Agreement (SLA) of 99.95 percent availability.
Use managed disks.

What should you do from the Azure portal?

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Explanation:

Explanation:

Step 1: Open the Azure portal.

Step 2: On the left menu, select All resources. You can sort the resources by Type to easily find your images.

Step 3: Select the image you want to use from the list. The image Overview page opens.

Step 4: Select Create VM from the menu.

Step 5: Enter the virtual machine information.

Select VM1003a as the name for the first Virtual machine.

The user name and password entered here will be used to log in to the virtual machine. When complete, select OK. You can create the new VM in an existing resource group, or choose Create new to create a new resource group to store the VM.

Step 6: Select a size for the VM. To see more sizes, select View all or change the Supported disk type filter.

Step 7: Under Settings, make changes as necessary and select OK.

Step 8: On the summary page, you should see your image name listed as a Private image. Select Ok to start the virtual machine deployment.

Repeat the procedure for the second VM and name it VM1003b.

References:

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/create-vm-generalized-managed

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Question 29

You plan to automate the deployment of a virtual machine scale set that uses the Windows Server 2016 Datacenter image.

You need to ensure that when the scale set virtual machines are provisioned, they have web server components installed.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- ☒ Modify the extensionProfile section of the Azure Resource Manager template.
- ☐ Create an automation account.
- ☐ Upload a configuration script.
- ☒ Create a new virtual machine scale set in the Azure portal.
- ☐ Create an Azure policy.

Explanation:

Explanation:

Virtual Machine Scale Sets can be used with the Azure Desired State Configuration (DSC) extension handler. Virtual machine scale sets provide a way to deploy and manage large numbers of virtual machines, and can elastically scale in and out in response to load. DSC is used to configure the VMs as they come online so they are running the production software.

References:

https://docs.microsoft.com/en-us/azure/virtual-machine-scale-sets/virtual-machine-scale-sets-dsc

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Question 30

SIMULATION

Please wait while the virtual machine loads. Once loaded, you may proceed to the lab section. This may take a few minutes, and the wait time will not be deducted from your overall test time.

When the Next button is available, click it to access the lab section. In this section, you will perform a set of tasks in a live environment. While most functionality will be available to you as it would be in a live environment, some functionality (e.g, copy and paste, ability to navigate to external websites) will not be possible by design.

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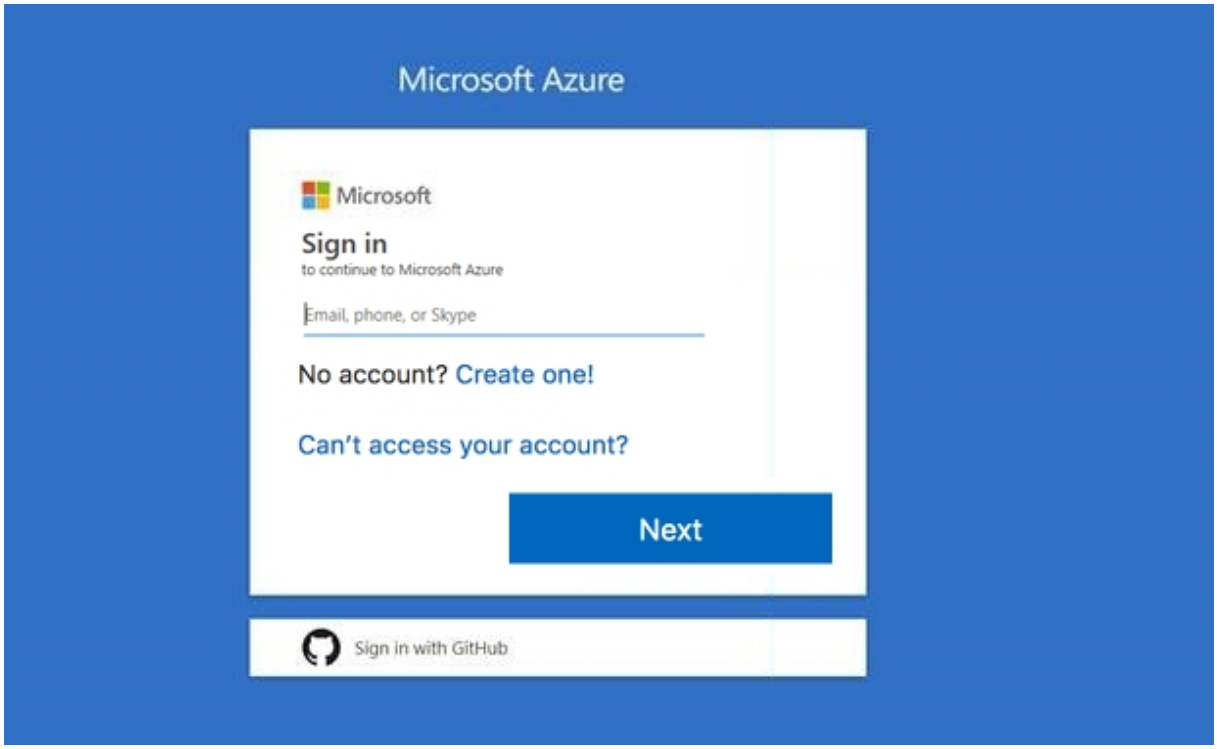
Please note that once you submit your work by clicking the Next button within a lab, you will NOT be able to return to the lab.

You may now click next to proceed to the lab.

Use the following login credentials as needed:

Azure Username: XXXXXXX
Azure Password: XXXXXXX
The following information is for technical support purposes only:
Lab Instance: 9172796

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Task 3

You plan to protect on-premises virtual machines and Azure virtual machines by using Azure Backup.

You need to prepare the backup infrastructure in Azure. The solution must minimize the cost of storing the backups in Azure.

What should you do from the Azure portal?

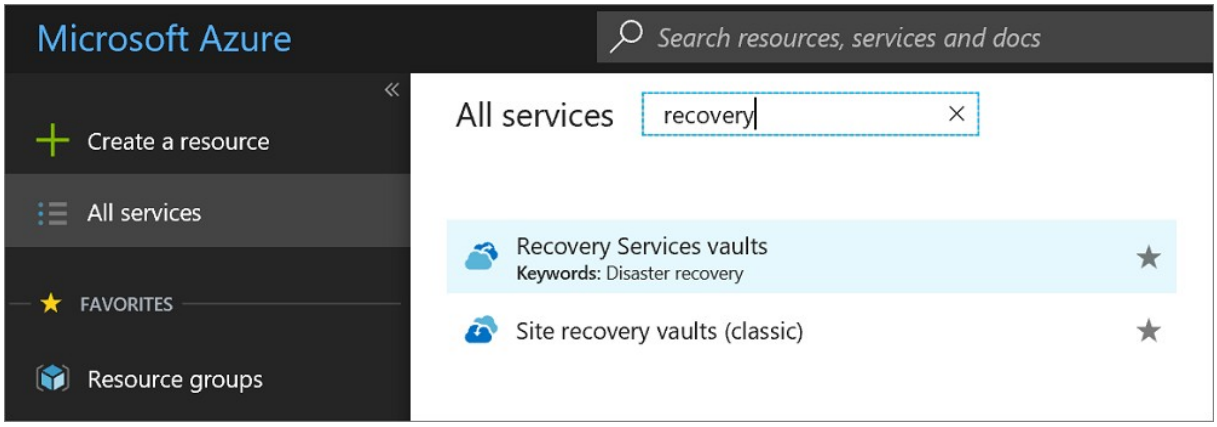
Explanation:

Explanation:

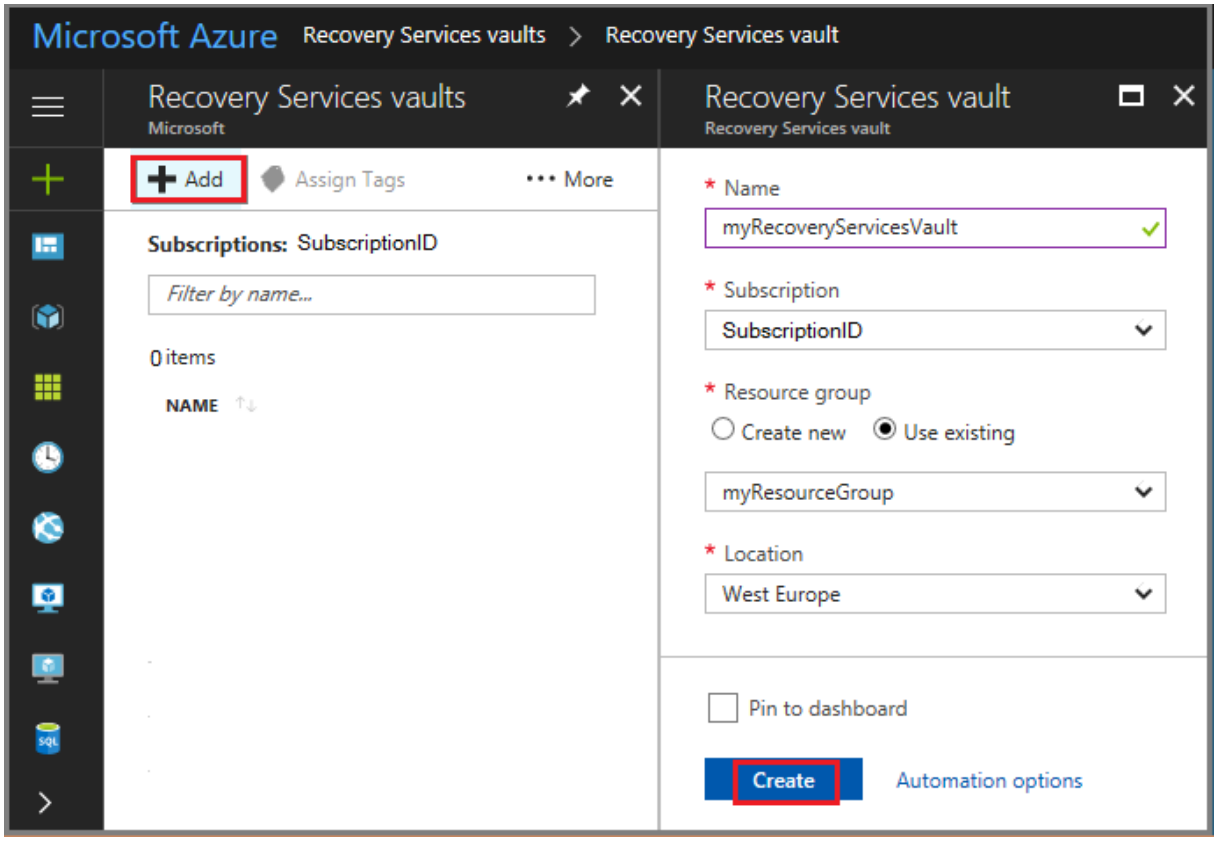
First, create Recovery Services vault.

Step 1: On the left-hand menu, select All services and in the services list, type Recovery Services. As you type, the list of resources filters. When you see Recovery Services vaults in the list, select it to open the Recovery Services vaults menu.

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Step 2: In the Recovery Services vaults menu, click Add to open the Recovery Services vault menu.



Step 3: In the Recovery Services vault menu, for example,

Type myRecoveryServicesVault in Name.

The current subscription ID appears in Subscription. If you have additional subscriptions, you could choose another subscription for the new vault.

For Resource group select Use existing and choose myResourceGroup. If myResourceGroup doesn't exist, select Create new and type myResourceGroup.

From the Location drop-down menu, choose West Europe.

Click Create to create your Recovery Services vault.

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References:

https://docs.microsoft.com/en-us/azure/backup/tutorial-backup-vm-at-scale

Question 31

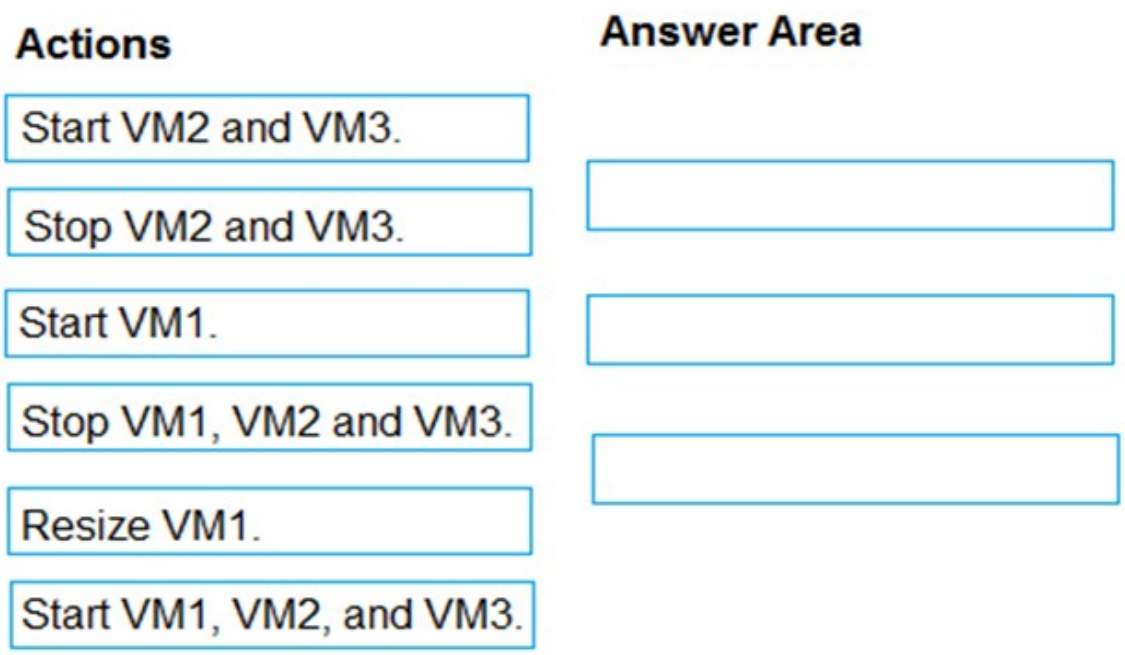
DRAG DROP

You have an availability set named AS1 that contains three virtual machines named VM1, VM2, and VM3.

You attempt to reconfigure VM1 to use a larger size. The operation fails and you receive an allocation failure message.

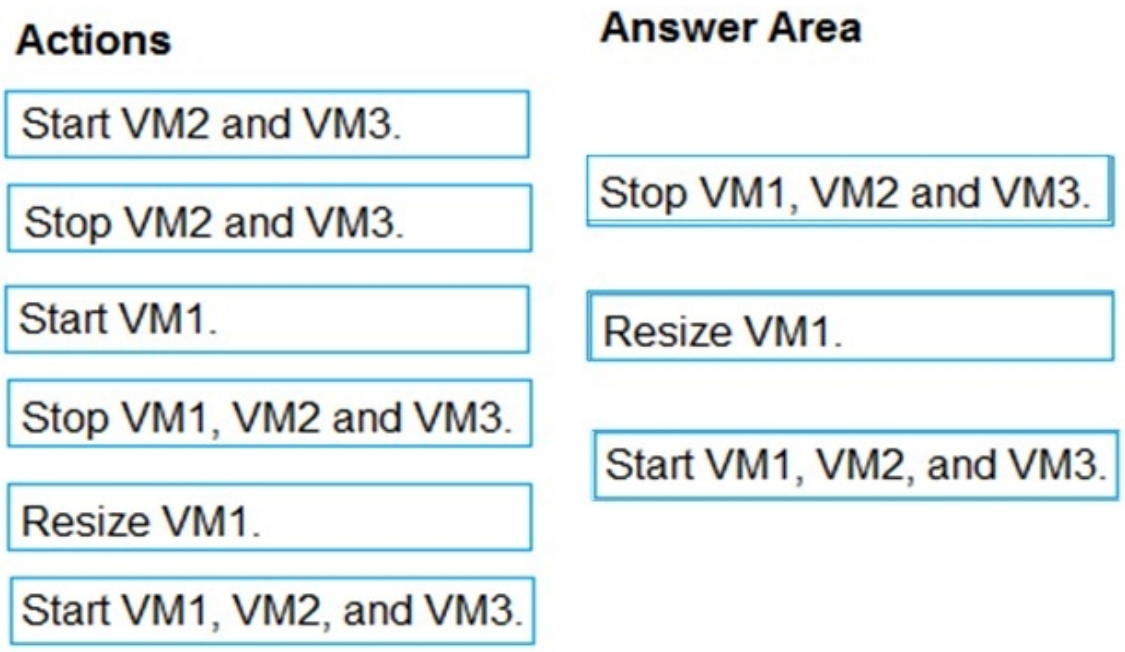
You need to ensure that the resize operation succeeds.

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.



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Solution:



Explanation:

Explanation:

Step 1: Stop VM1, VM, and VM3.

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.

Step 2: Resize VM1.

Step 3: Start VM1, VM2, and VM3.

References:

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

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Question 32

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.

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You have an Azure virtual machine named VM1. VM1 was deployed by using a custom Azure Resource Manager template named ARM1.json.

You receive a notification that VM1 will be affected by maintenance.

You need to move VM1 to a different host immediately.

Solution: From the Redeploy blade, you click Redeploy.

Does this meet the goal?

- ☒ Yes
- ☐ No

Explanation:

Explanation:

When you redeploy a VM, it moves the VM to a new node within the Azure infrastructure and then powers it back on, retaining all your configuration options and associated resources.

References:

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/redeploy-to-new-node

Question 33

You have an Azure subscription named Subscription1.

You deploy a Linux virtual machine named VM1 to Subscription1.

You need to monitor the metrics and the logs of VM1.

What should you use?

- ☒ the AzurePerformanceDiagnostics extension
- ☐ Azure HDInsight
- ☐ Linux Diagnostic Extension (LAD) 3.0
- ☐ Azure Analysis Services

Explanation:

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Explanation:

You can use extensions to configure diagnostics on your VMs to collect additional metric data.

The basic host metrics are available, but to see more granular and VM-specific metrics, you need to install the Azure diagnostics extension on the VM. The Azure diagnostics extension allows additional monitoring and diagnostics data to be retrieved from the VM.

References:

https://docs.microsoft.com/en-us/azure/virtual-machines/linux/tutorial-monitoring

Question 34

You plan to back up an Azure virtual machine named VM1.

You discover that the Backup Pre-Check status displays a status of Warning.

What is a possible cause of the Warning status?

- ☐ VM1 is stopped.
- ☒ VM1 does not have the latest version of WaAppAgent.exe installed.
- ☐ VM1 has an unmanaged disk.
- ☐ A Recovery Services vault is unavailable.

Explanation:

Explanation:

The Warning state indicates one or more issues in VM's configuration that might lead to backup failures and provides recommended steps to ensure successful backups. Not having the latest VM Agent installed, for example, can cause backups to fail intermittently and falls in this class of issues.

References:

https://azure.microsoft.com/en-us/blog/azure-vm-backup-pre-checks/

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Case Study (1 questions)

Case study

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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 AllInformation 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

Contoso, Ltd. 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 Contoso are hosted on-premises.

Contoso creates a new Azure subscription. The Azure Active Directory (Azure AD) tenant uses a domain named contoso.onmicrosoft.com. The tenant uses the P1 pricing tier.

Existing Environment

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

Contoso 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.

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Contoso.com contains a user named User1.

All the offices connect by using private links.

Contoso has data centers in the Montreal and Seattle offices. Each data center 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

Contoso uses two web applications named App1 and App2. Each instance on each web application requires 1GB 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).

Planned Changes

Contoso 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

Contoso 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.
Ensure 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.contoso.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.

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Minimize costs whenever possible.

Question 35

You discover that VM3 does NOT meet the technical requirements.

You need to verify whether the issue relates to the NSGs.

What should you use?

- ☐ Diagram in VNet1
- ☐ the security recommendations in Azure Advisor
- ☐ Diagnostic settings in Azure Monitor
- ☐ Diagnose and solve problems in Traffic Manager profiles
- ☒ IP flow verify in Azure Network Watcher

Explanation:

Explanation:

Scenario: Contoso must meet technical requirements including:

Ensure that VM3 can establish outbound connections over TCP port 8080 to the applications servers in the Montreal office.

IP flow verify checks if a packet is allowed or denied to or from a virtual machine. The information consists of direction, protocol, local IP, remote IP, local port, and remote port. If the packet is denied by a security group, the name of the rule that denied the packet is returned. While any source or destination IP can be chosen, IP flow verify helps administrators quickly diagnose connectivity issues from or to the internet and from or to the on-premises environment.

References:

https://docs.microsoft.com/en-us/azure/network-watcher/network-watcher-ip-flow-verify-overview

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Configure and manage virtual networks

(20 questions)

Question 36

You have an Azure subscription that contains a policy-based virtual network gateway named GW1 and a virtual network named VNet1.

You need to ensure that you can configure a point-to-site connection from VNet1 to an on-premises computer.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- ☐ Reset GW1.
- ☒ Create a route-based virtual network gateway.
- ☒ Delete GW1.
- ☐ Add a public IP address space to VNet1.
- ☐ Add a connection to GW1.
- ☐ Add a service endpoint to VNet1.

Explanation:

Explanation:

B: A VPN gateway is used when creating a VPN connection to your on-premises network.

Route-based VPN devices use any-to-any (wildcard) traffic selectors, and let routing/forwarding tables direct traffic to different IPsec tunnels. It is typically built on router platforms where each IPsec tunnel is modeled as a network interface or VTI (virtual tunnel interface).

C: Policy-based VPN devices use the combinations of prefixes from both networks to define how traffic is encrypted/decrypted through IPsec tunnels. It is typically built on firewall devices that perform packet filtering. IPsec tunnel encryption and decryption are added to the packet filtering and processing engine.

Incorrect Answers:

D: Point-to-Site connections do not require a VPN device or a public-facing IP address.

References:

https://docs.microsoft.com/en-us/azure/vpn-gateway/create-routebased-vpn-gateway-portal

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https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-connect-multiple-policybased-rm-ps

Question 37

You have a public load balancer that balances ports 80 and 443 across three virtual machines.

You need to direct all the Remote Desktop Protocol (RDP) connections to VM3 only.

What should you configure?

- ☒ an inbound NAT rule
- ☐ a load balancing rule
- ☐ a new public load balancer for VM3
- ☐ a frontend IP configuration

Explanation:

References:

https://docs.microsoft.com/en-us/azure/load-balancer/tutorial-load-balancer-port-forwarding-portal

https://pixelrobots.co.uk/2017/08/azure-load-balancer-for-rds/

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Question 38

HOTSPOT

You have an Azure subscription named Subscription1. Subscription1 contains the virtual networks in the following table.

Name	Address space	Subnet name	Subnet address range
VNet1	10.1.0.0/16	Subnet1	10.1.1.0/24
VNet2	10.10.0.0/16	Subnet2	10.10.1.0/24
VNet3	172.16.0.0/16	Subnet3	172.16.1.0/24

Subscription1 contains the virtual machines in the following table.

Name	Network	Subnet	IP address
VM1	VNet1	Subnet1	10.1.1.4
VM2	VNet2	Subnet2	10.10.1.4
VM3	VNet3	Subnet3	172.16.1.4

The firewalls on all the virtual machines are configured to allow all ICMP traffic.

You add the peerings in the following table.

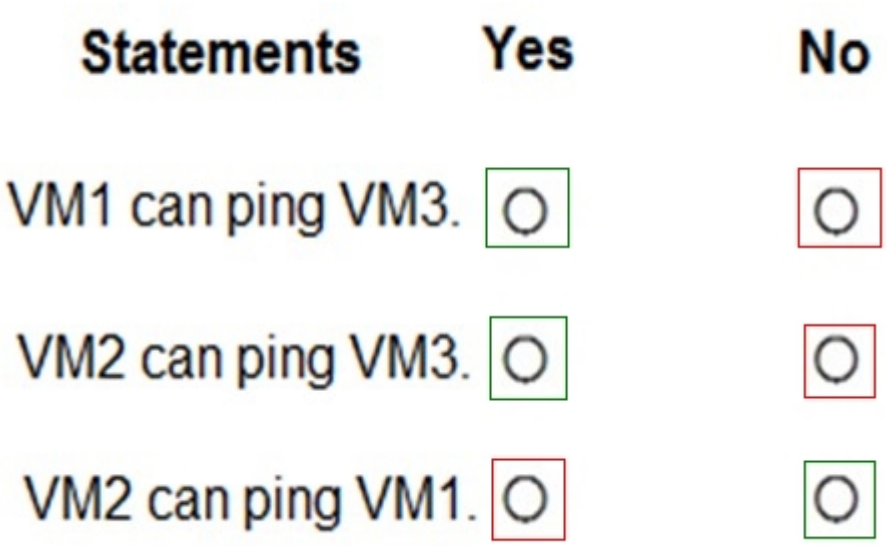
Virtual network	Peering network
VNet1	VNet3
VNet2	VNet3
VNet3	VNet1

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

NOTE: Each correct selection is worth one point.

Statements	Yes	No
VM1 can ping VM3.	○	○
VM2 can ping VM3.	○	○
VM2 can ping VM1.	○	○

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Solution:

Explanation:

Explanation:

Box 1: Yes

Vnet1 and Vnet3 are peers.

Box 2: Yes

Vnet2 and Vnet3 are peers.

Box 3: No

Peering connections are non-transitive.

References:

https://docs.microsoft.com/en-us/azure/architecture/reference-architectures/hybrid-networking/hub-spoke

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Question 39

You have an Azure subscription named Subscription1 that contains the resource groups shown in the following table.

Name	Region
RG1	East Asia
RG2	East US

In RG1, you create a virtual machine named VM1 in the East Asia location.

You plan to create a virtual network named VNET1.

You need to create VNET1, and then connect VM1 to VNET1.

What are two possible ways to achieve this goal? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- ☒ Create VNET1 in RG2, and then set East Asia as the location.
- ☐ Create VNET1 in a new resource group in the West US location, and then set West US as the location.
- ☐ Create VNET1 in RG1, and then set East US as the location.
- ☐ Create VNET1 in RG2, and then set East US as the location.
- ☒ Create VNET1 in RG1, and then set East Asia as the location.

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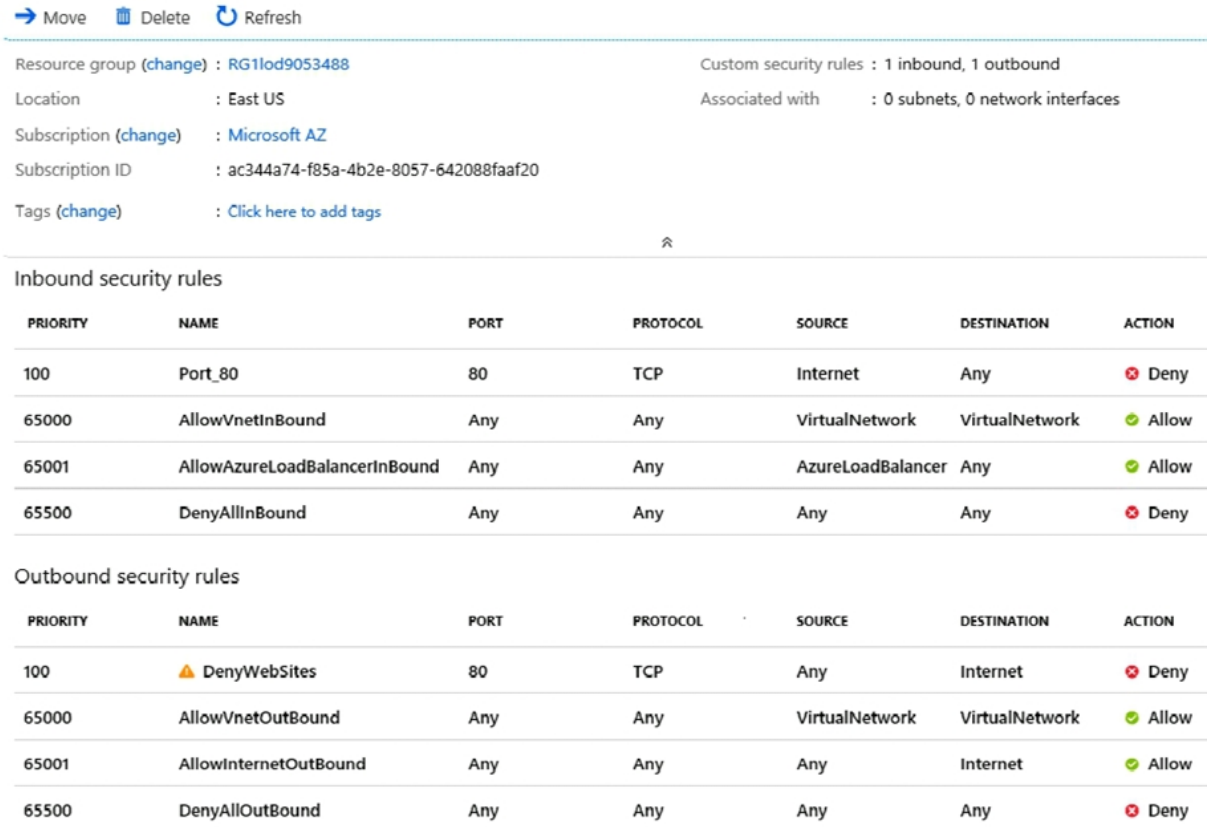
Question 40

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

Name	Type	Details
VNet1	Virtual network	*Not applicable*
Subnet1	Subnet	Hosted on VNet1
VM1	Virtual machine	On Subnet1
VM2	Virtual machine	On Subnet1

VM1 and VM2 are deployed from the same template and host line-of-business applications accessed by using Remote Desktop.

You configure the network security group (NSG) shown in the exhibit. (Click the Exhibit tab.)



You need to prevent users of VM2 and VM2 from accessing websites on the Internet over TCP port 80.

What should you do?

- ☐ Change the DenyWebSites outbound security rule.
- ☐ Change the Port_80 inbound security rule.
- ☐ Disassociate the NSG from a network interface.
- ☒ Associate the NSG to Subnet1.

Explanation:

Explanation:

You can associate or dissociate a network security group from a network interface or subnet.

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The NSG has the appropriate rule to block users from accessing the Internet. We just need to associate it with Subnet1.

References:

https://docs.microsoft.com/en-us/azure/virtual-network/manage-network-security-group

Question 41

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.

Your company registers a domain name of contoso.com.

You create an Azure DNS zone named contoso.com, and then you add an A record to the zone for a host named www that has an IP address of 131.107.1.10.

You discover that Internet hosts are unable to resolve www.contoso.com to the 131.107.1.10 IP address.

You need to resolve the name resolution issue.

Solution: You add an NS record to the contoso.com Azure DNS zone.

Does this meet the goal?

- ☒ Yes
- ☐ No

Explanation:

Explanation:

Before you can delegate your DNS zone to Azure DNS, you need to know the name servers for your zone. The NS record set contains the names of the Azure DNS name servers assigned to the zone.

References:

https://docs.microsoft.com/en-us/azure/dns/dns-delegate-domain-azure-dns

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Question 42

You have an Azure subscription that contains a virtual network named VNet1. VNet1 contains four subnets named Gateway, Perimeter, NVA, and Production.

The NVA subnet contains two network virtual appliances (NVAs) that will perform network traffic inspection between the Perimeter subnet and the Production subnet.

You need to implement an Azure load balancer for the NVAs. The solution must meet the following requirements:

The NVAs must run in an active-active configuration that uses automatic failover.
The NVAs must load balance traffic to two services on the Profuction subnet. The services have different IP addresses.

Which three actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- ☐ Add two load balancing rules that have HA Ports enabled and Floating IP disabled.
- ☒ Add a frontend IP configuration, two backend pools, and a health probe.
- ☒ Add two load balancing rules that have HA Ports and Floating IP enabled.
- ☒ Deploy a standard load balancer.
- ☐ Deploy a basic load balancer.
- ☐ Add a frontend IP configuration a backend pool, and a health probe.

Explanation:

Explanation:

A standard load balancer is required for the HA ports.

Two backend pools are needed as there are two services with different IP addresses.

Floating IP rule is used where backend ports are reused.

Incorrect Answers:

F: HA Ports are not available for the basic load balancer.

References:

https://docs.microsoft.com/en-us/azure/load-balancer/load-balancer-standard-overview

https://docs.microsoft.com/en-us/azure/load-balancer/load-balancer-multivip-overview

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Question 43

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 manage a virtual network named VNet1 that is hosted in the West US Azure region.

VNet1 hosts two virtual machines named VM1 and VM2 that run Windows Server.

You need to inspect all the network traffic from VM1 to VM2 for a period of three hours.

Solution: From Azure Network Watcher, you create a connection monitor.

Does this meet the goal?

- ☒ Yes
- ☐ No

Explanation:

References:

https://azure.microsoft.com/en-us/updates/general-availability-azure-network-watcher-connection-monitor-in-all-public-regions/

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Question 44

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.

Your company registers a domain name of contoso.com.

You create an Azure DNS zone named contoso.com, and then you add an A record to the zone for a host named www that has an IP address of 131.107.1.10.

You discover that Internet hosts are unable to resolve www.contoso.com to the 131.107.1.10 IP address.

You need to resolve the name resolution issue.

Solution: You create a PTR record for www in the contoso.com zone.

Does this meet the goal?

- ☐ Yes
- ☒ No

Explanation:

Modify the Name Server (NS) record.

References:

https://docs.microsoft.com/en-us/azure/dns/dns-delegate-domain-azure-dns

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Question 45

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

Name	Address space	Subnet	Resource group Azure region
VNet1	10.11.0.0./16	10.11.0.0./17	West US
VNet2	10.11.0.0./17	10.11.0.0./25	West US
VNet3	10.10.0.0./22	10.10.1.0./24	East US
VNet4	192.168.16.0/22	192.168.16.0/24	North Europe

To which virtual networks can you establish a peering connection from VNet1?

- ☐ VNet2 and VNet3 only
- ☐ VNet2 only
- ☐ VNet3 and VNet4 only
- ☒ VNet2, VNet3, and VNet4

Explanation:

References:

https://docs.microsoft.com/en-us/azure/virtual-network/tutorial-connect-virtual-networks-portal

Question 46

You are troubleshooting a performance issue for an Azure Application Gateway.

You need to compare the total requests to the failed requests during the past six hours.

What should you use?

- ☐ NSG flow logs in Azure Network Watcher
- ☒ Metrics in Application Gateway
- ☐ Connection monitor in Azure Network Watcher
- ☐ Diagnostics logs in Application Gateway

Explanation:

References:

https://docs.microsoft.com/en-us/azure/application-gateway/application-gateway-diagnostics#metrics

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Question 47

SIMULATION

Please wait while the virtual machine loads. Once loaded, you may proceed to the lab section. This may take a few minutes, and the wait time will not be deducted from your overall test time.

When the Next button is available, click it to access the lab section. In this section, you will perform a set of tasks in a live environment. While most functionality will be available to you as it would be in a live environment, some functionality (e.g, copy and paste, ability to navigate to external websites) will not be possible by design.

Scoring is based on the outcome of performing the tasks stated in the lab. In other words, it doesn't matter how you accomplish the task, if you successfully perform it, you will earn credit for that task.

Labs are not timed separately, and this exam may have more than one lab that you must complete. You can use as much time as you would like to complete each lab. But, you should manage your time appropriately to ensure that you are able to complete the lab(s) and all other sections of the exam in the time provided.

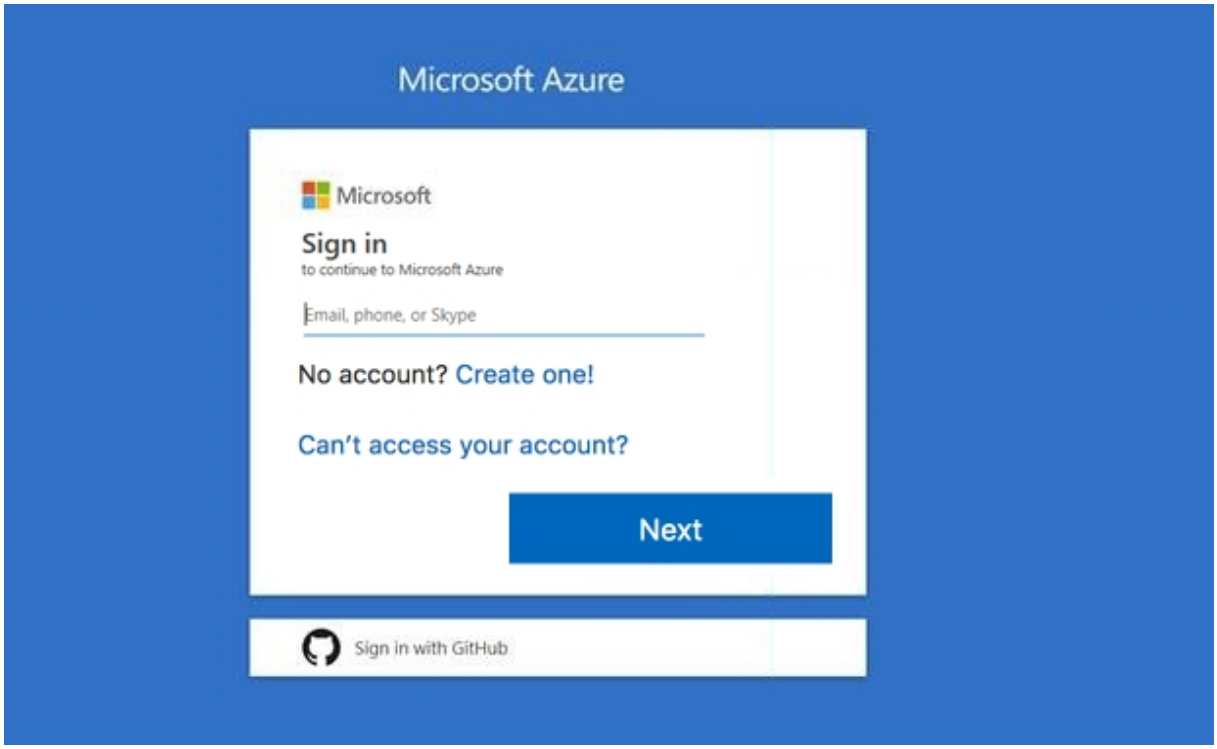
Please note that once you submit your work by clicking the Next button within a lab, you will NOT be able to return to the lab.

You may now click next to proceed to the lab.

Use the following login credentials as needed:

Azure Username: XXXXXXX
Azure Password: XXXXXXX
The following information is for technical support purposes only:
Lab Instance: 9172796

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Task 5

You plan to configure VM1 to be accessible from the Internet.

You need to add a public IP address to the network interface used by VM1.

What should you do from the Azure portal?

Explanation:

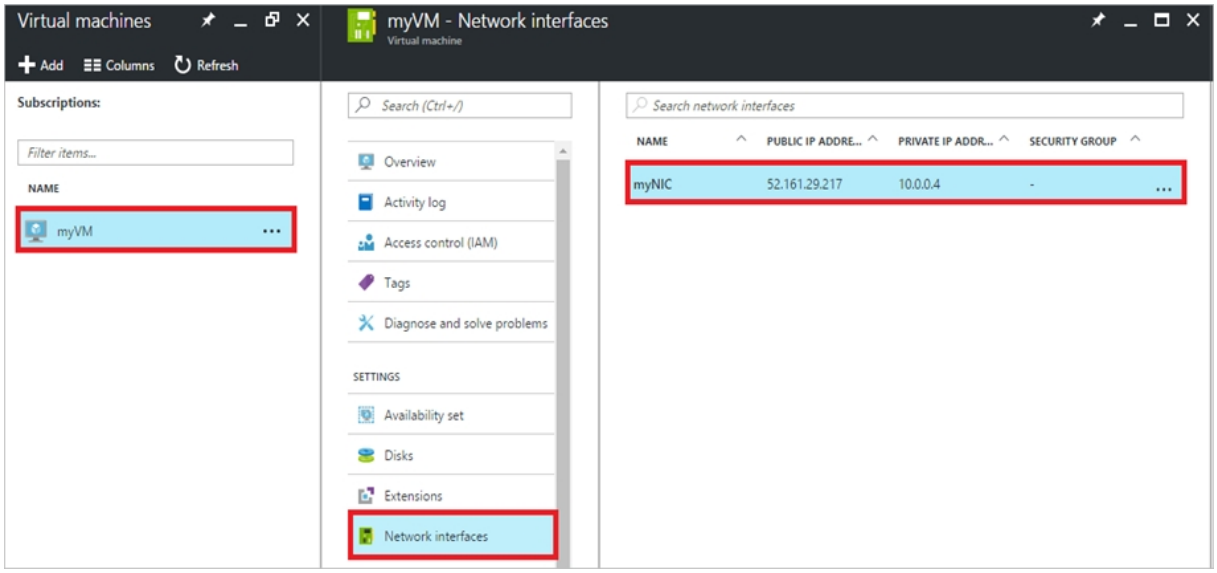
Explanation:

You can add private and public IP addresses to an Azure network interface by completing the steps that follow.

Step 1: In Azure portal, click More services > type virtual machines in the filter box, and then click Virtual machines.

Step 2: In the Virtual machines pane, click the VM you want to add IP addresses to. Click Network interfaces in the virtual machine pane that appears, and then select the network interface you want to add the IP addresses to. In the example shown in the following picture, the NIC named myNIC from the VM named myVM is selected:

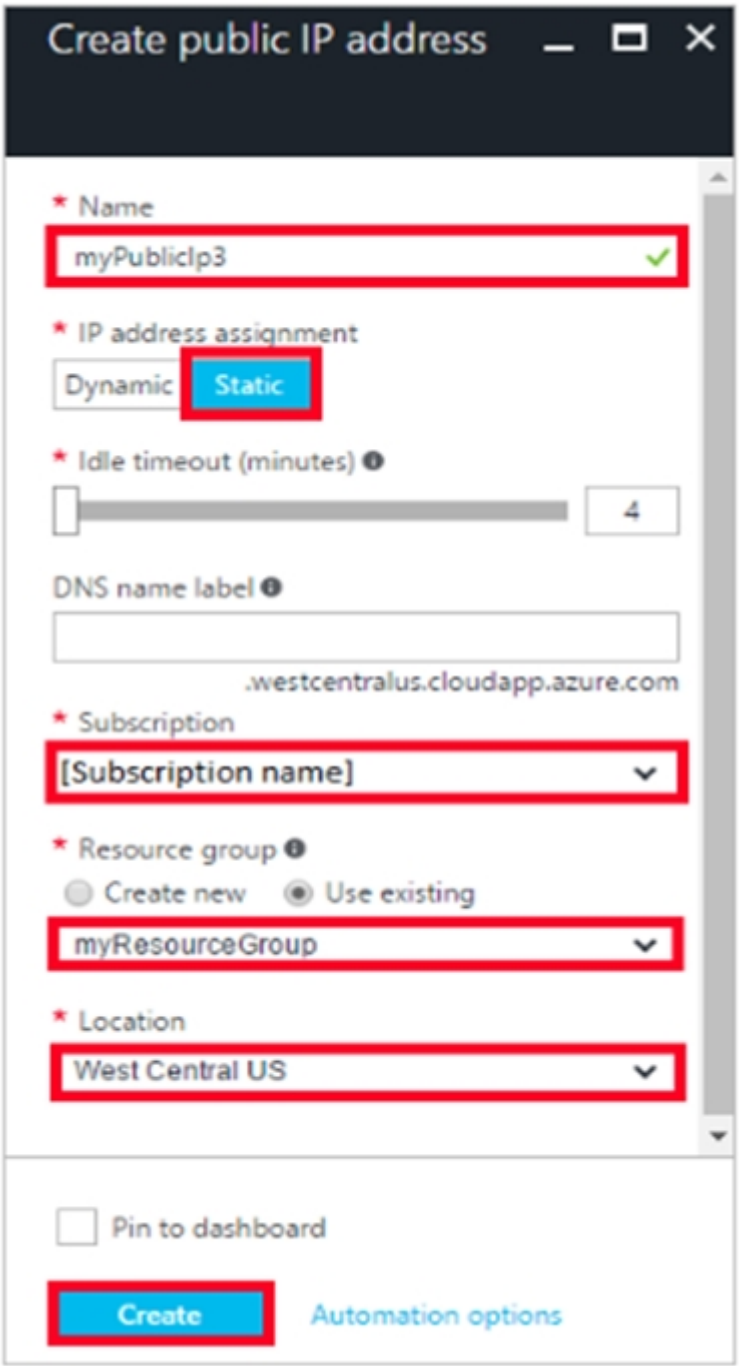
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Step 3: In the pane that appears for the NIC you selected, click IP configurations.

Step 4: Click Create public IP address.

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Step 5: In the Create public IP address pane that appears, enter a Name, select an IP address assignment type, a Subscription, a Resource group, and a Location, then click Create, as shown in the following picture:

References:

https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-multiple-ip-addresses-portal

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Question 48

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 manage a virtual network named VNet1 that is hosted in the West US Azure region.

VNet1 hosts two virtual machines named VM1 and VM2 that run Windows Server.

You need to inspect all the network traffic from VM1 to VM2 for a period of three hours.

Solution: From Performance Monitor, you create a Data Collector Set (DCS).

Does this meet the goal?

- ☐ Yes
- ☒ No

Explanation:

Explanation:

Use the Connection Monitor feature of Azure Network Watcher.

References:

https://docs.microsoft.com/en-us/azure/network-watcher/network-watcher-monitoring-overview

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Question 49

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.

Your company registers a domain name of contoso.com.

You create an Azure DNS zone named contoso.com, and then you add an A record to the zone for a host named www that has an IP address of 131.107.1.10.

You discover that Internet hosts are unable to resolve www.contoso.com to the 131.107.1.10 IP address.

You need to resolve the name resolution issue.

Solution: You modify the SOA record in the contoso.com zone.

Does this meet the goal?

- ☐ Yes
- ☒ No

Explanation:

Explanation:

Modify the NS record, not the SOA record.

Note: The SOA record stores information about the name of the server that supplied the data for the zone; the administrator of the zone; the current version of the data file; the number of seconds a secondary name server should wait before checking for updates; the number of seconds a secondary name server should wait before retrying a failed zone transfer; the maximum number of seconds that a secondary name server can use data before it must either be refreshed or expire; and a default number of seconds for the time-to-live file on resource records.

References:

https://searchnetworking.techtarget.com/definition/start-of-authority-record

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Question 50

You have an Azure subscription named Subscription1 that contains two Azure virtual networks named VNet1 and VNet2. VNet1 contains a VPN gateway named VPNGW1 that uses static routing. There is a site-to-site VPN connection between your on-premises network and VNet1.

On a computer named Client1 that runs Windows 10, you configure a point-to-site VPN connection to VNet1.

You configure virtual network peering between VNet1 and VNet2. You verify that you can connect to VNet2 from the on-premises network. Client1 is unable to connect to VNet2.

You need to ensure that you can connect Client1 to VNet2.

What should you do?

- ☐ Select Allow gateway transit on VNet2.
- ☐ Enable BGP on VPNGW1.
- ☐ Select Allow gateway transit on VNet1.
- ☒ Download and re-install the VPN client configuration package on Client1.

Explanation:

References:

https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-about-point-to-site-routing

Question 51

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 manage a virtual network named VNet1 that is hosted in the West US Azure region.

VNet1 hosts two virtual machines named VM1 and VM2 that run Windows Server.

You need to inspect all the network traffic from VM1 to VM2 for a period of three hours.

Solution: From Azure Network Watcher, you create a packet capture.

Does this meet the goal?

- ☐ Yes
- ☒ No

Explanation:

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Explanation:

Use the Connection Monitor feature of Azure Network Watcher.

References:

https://azure.microsoft.com/en-us/updates/general-availability-azure-network-watcher-connection-monitor-in-all-public-regions/

Question 52

You have an Azure subscription that contains three virtual networks named VNet1, VNet2, and VNet3. VNet2 contains a virtual appliance named VM2 that operates as a router.

You are configuring the virtual networks in a hub and spoke topology that uses VNet2 as the hub network.

You plan to configure peering between VNet1 and Vnet2 and between VNet2 and VNet3.

You need to provide connectivity between VNet1 and VNet3 through VNet2.

Which two configurations should you perform? Each correct answer presents part of the solution.

- ☒ On the peering connections, use remote gateways.
- ☐ On the peering connections, allow forwarded traffic.
- ☒ On the peering connections, allow gateway transit.
- ☐ Create route tables and assign the table to subnets.
- ☐ Create a route filter.

Explanation:

Explanation:

Allow gateway transit: Check this box if you have a virtual network gateway attached to this virtual network and want to allow traffic from the peered virtual network to flow through the gateway.

The peered virtual network must have the Use remote gateways checkbox checked when setting up the peering from the other virtual network to this virtual network.

References:

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

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Question 53

You have five Azure virtual machines that run Windows Server 2016. The virtual machines are configured as web servers.

You have an Azure load balancer named LB1 that provides load balancing services for the virtual machines.

You need to ensure that visitors are serviced by the same web server for each request.

What should you configure?

- ☐ Protocol to UDP
- ☐ Session persistence to None
- ☒ Session persistence to Client IP
- ☐ Idle Time-out (minutes) to 20

Explanation:

Explanation:

You can set the sticky session in load balancer rules with setting the session persistence as the client IP.

References:

https://cloudopszone.com/configure-azure-load-balancer-for-sticky-sessions/

Question 54

You have two subscriptions named Subscription1 and Subscription2. Each subscription is associated to a different Azure AD tenant.

Subscription1 contains a virtual network named VNet1. VNet1 contains an Azure virtual machine named VM1 and has an IP address space of 10.0.0.0/16.

Subscription2 contains a virtual network named VNet2. VNet2 contains an Azure virtual machine named VM2 and has an IP address space of 10.10.0.0/24.

You need to connect VNet1 to VNet2.

What should you do first?

- ☐ Move VM1 to Subscription2.
- ☐ Modify the IP address space of VNet2.
- ☒ Provision virtual network gateways.
- ☐ Move VNet1 to Subscription2.

Explanation:

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Explanation:

The virtual networks can be in the same or different regions, and from the same or different subscriptions. When connecting VNets from different subscriptions, the subscriptions do not need to be associated with the same Active Directory tenant.

Configuring a VNet-to-VNet connection is a good way to easily connect VNets. Connecting a virtual network to another virtual network using the VNet-to-VNet connection type (VNet2VNet) is similar to creating a Site-to-Site IPsec connection to an on-premises location. Both connectivity types use a VPN gateway to provide a secure tunnel using IPsec/IKE, and both function the same way when communicating.

The local network gateway for each VNet treats the other VNet as a local site. This lets you specify additional address space for the local network gateway in order to route traffic.

References:

https://docs.microsoft.com/en-us/azure/vpn-gateway/vpn-gateway-howto-vnet-vnet-resource-manager-portal

Question 55

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

Name	Type	Azure region	Resource group
VNet1	Virtual network	West US	RG2
VNet2	Virtual network	West US	RG1
VNet3	Virtual network	East US	RG1
NSG1	Network security group (NSG)	East US	RG2

To which subnets can you apply NSG1?

- ☐ the subnets on VNet2 only
- ☐ the subnets on VNet2 and VNet3 only
- ☐ the subnets on VNet1, VNet2, and VNet3
- ☐ the subnets on VNet1 only
- ☒ the subnets on VNet3 only

Explanation:

Explanation:

All Azure resources are created in an Azure region and subscription. A resource can only be created in a virtual network that exists in the same region and subscription as the resource.

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References:

https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-vnet-plan-design-arm

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Manage identities

(12 questions)

Question 56

You have two Azure Active Directory (Azure AD) tenants named contoso.com and fabrikam.com.

You have a Microsoft account that you use to sign in to both tenants.

You need to configure the default sign-in tenant for the Azure portal.

What should you do?

- ☐ From Azure Cloud Shell, run Set-AzureRmSubscription.
- ☒ From Azure Cloud Shell, run Set-AzureRmContext.
- ☐ From the Azure portal, configure the portal settings.
- ☐ From the Azure portal, change the directory.

Explanation:

Explanation:

The Set-AzureRmContext cmdlet sets authentication information for cmdlets that you run in the current session. The context includes tenant, subscription, and environment information.

References:

https://docs.microsoft.com/en-us/powershell/module/azurerm.profile/set-azurermcontext

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Question 57

You have an Azure Active Directory (Azure AD) tenant named contoso.onmicrosoft.com.
You hire a temporary vendor. The vendor uses a Microsoft account that has a sign-in of user1@outlook.com.
You need to ensure that the vendor can authenticate to the tenant by using user1@outlook.com.

What should you do?

- ☐ From the Azure portal, add a custom domain name, create a new Azure AD user, and then specify user1@outlook.com as the username.
- ☐ From Azure Cloud Shell, run the New-AzureADUser cmdlet and specify the
- ☐ –UserPrincipalName user1@outlook.com parameter.
- ☐ From the Azure portal, add a new guest user, and then specify user1@outlook.com as the email address.
- ☒ From Windows PowerShell, run the New-AzureADUser cmdlet and specify the
- ☒ –UserPrincipalName user1@outlook.com parameter.

Explanation:

Explanation:

UserPrincipalName - contains the UserPrincipalName (UPN) of this user. The UPN is what the user will use when they sign in into Azure AD. The common structure is @, so for Abby Brown in Contoso.com, the UPN would be AbbyB@contoso.com

Example:

To create the user, call the New-AzureADUser cmdlet with the parameter values:

powershell New-AzureADUser -AccountEnabled $True -DisplayName "Abby Brown" -PasswordProfile $PasswordProfile -MailNickName "AbbyB" -UserPrincipalName "AbbyB@contoso.com"

References:

https://docs.microsoft.com/bs-cyrl-ba/powershell/azure/active-directory/new-user-sample?view=azureadps-2.0

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Question 58

You have an Azure Active Directory (Azure AD) tenant named contosocloud.onmicrosoft.com.
Your company has a public DNS zone for contoso.com.
You add contoso.com as a custom domain name to Azure AD.

You need to ensure that Azure can verify the domain name.

Which type of DNS record should you create?

- ☒ MX
- ☐ SRV
- ☐ DNSKEY
- ☐ NSEC

Explanation:

References:

https://docs.microsoft.com/en-us/azure/dns/dns-web-sites-custom-domain

Question 59

You have an Azure Active Directory (Azure AD) tenant named contoso.onmicrosoft.com.

The User administrator role is assigned to a user named Admin1.

An external partner has a Microsoft account that uses the user1@outlook.com sign in.
Admin1 attempts to invite the external partner to sign in to the Azure AD tenant and receives the following error message: "Unable to invite user user1@outlook.com – Generic authorization exception."

You need to ensure that Admin1 can invite the external partner to sign in to the Azure AD tenant.

What should you do?

- ☐ From the Roles and administrators blade, assign the Security administrator role to Admin1.
- ☐ From the Organizational relationships blade, add an identity provider.
- ☐ From the Custom domain names blade, add a custom domain.
- ☒ From the Users blade, modify the External collaboration settings.

Explanation:

References:

https://techcommunity.microsoft.com/t5/Azure-Active-Directory/Generic-authorization-exception-inviting-Azure-AD-gests/td-p/274742

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Question 60

You have an Azure Active Directory (Azure AD) tenant.

All administrators must enter a verification code to access the Azure portal.

You need to ensure that the administrators can access the Azure portal only from your on-premises network.

What should you configure?

- ☐ an Azure AD Identity Protection user risk policy.
- ☒ the multi-factor authentication service settings.
- ☐ the default for all the roles in Azure AD Privileged Identity Management
- ☐ an Azure AD Identity Protection sign-in risk policy

Question 61

You set the multi-factor authentication status for a user named admin1@contoso.com to Enabled.

Admin1 accesses the Azure portal by using a web browser.

Which additional security verifications can Admin1 use when accessing the Azure portal?

- ☒ a phone call, a text message that contains a verification code, and a notification or a verification code sent from the Microsoft Authenticator app
- ☐ an app password, a text message that contains a verification code, and a notification sent from the Microsoft Authenticator app
- ☐ an app password, a text message that contains a verification code, and a verification code sent from the Microsoft Authenticator app
- ☐ a phone call, an email message that contains a verification code, and a text message that contains an app password

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Question 62

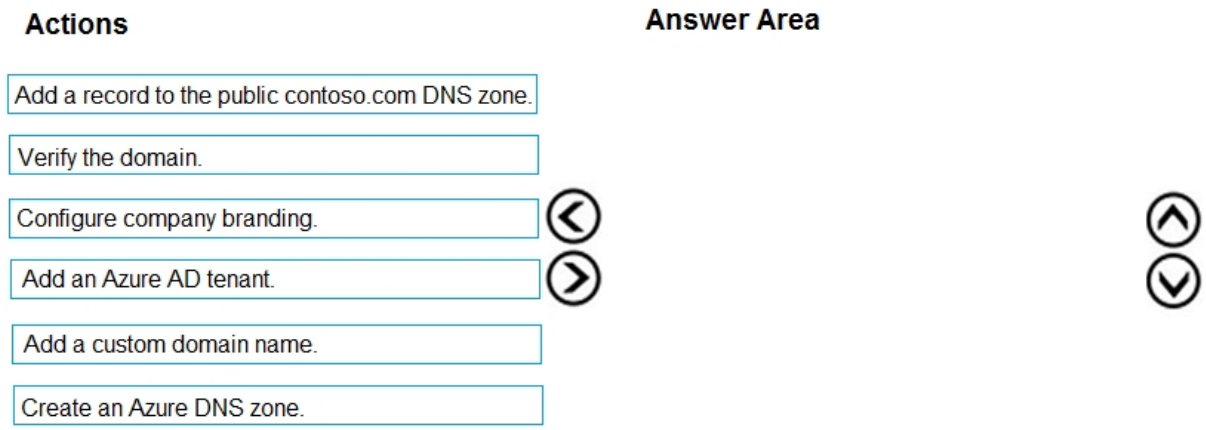
DRAG DROP

You have an Azure Active Directory (Azure AD) tenant that has the initial domain name.

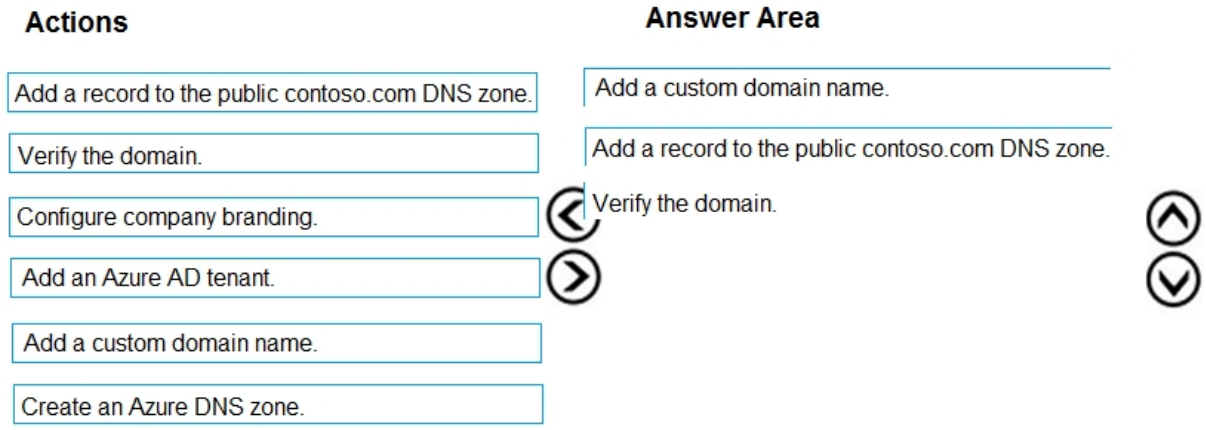
You have a domain name of contoso.com registered at a third-party registrar.

You need to ensure that you can create Azure AD users that have names containing a suffix of @contoso.com.

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



Solution:



Explanation:

References:

https://docs.microsoft.com/en-us/azure/dns/dns-web-sites-custom-domain

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Question 63

You have an Azure Active Directory (Azure AD) tenant named contosocloud.onmicrosoft.com.
Your company has a public DNS zone for contoso.com.
You add contoso.com as a custom domain name to Azure AD.

You need to ensure that Azure can verify the domain name.

Which type of DNS record should you create?

- ☐ SRV
- ☐ PTR
- ☐ RRSIG
- ☒ TXT

Explanation:

References:

https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/add-custom-domain

Question 64

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 other users can join their devices to Azure AD.

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

What should you do?

- ☐ From the Device settings blade, modify the Users may join devices to Azure AD setting.
- ☒ 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.
- ☐ Assign the User administrator role to User1.

Explanation:

Explanation:

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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.

Incorrect Answers:

A: 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.

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

References:

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

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

Question 65

Your company has an Azure Active Directory (Azure AD) tenant named contoso.com that is configured for hybrid coexistence with the on-premises Active Directory domain. The tenant contains the users shown in the following table.

Name	User Type	Source	Sign-in
User1	Member	Azure AD	User1@contoso.com
User2	Member	Windows Server Active Directory	User2@contoso.com
User3	Guest	Multiple	User3@outlook.com
User4	Guest	Multiple	User4@gmail.com

Whenever possible, you need to enable Azure Multi-Factor Authentication (MFA) for the users in contoso.com.

Which users should you enable for Azure MFA?

- ☐ User1 only
- ☐ User1, User2, and User3 only
- ☐ User1 and User2 only
- ☒ User1, User2, User3, and User4
- ☐ User2 only

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Question 66

You have an Active Directory forest named contoso.com.

You install and configure Azure AD Connect to use password hash synchronization as the single sign-on (SSO) method. Staging mode is enabled.

You review the synchronization results and discover that the Synchronization Service Manager does not display any sync jobs.

You need to ensure that the synchronization completes successfully.

What should you do?

- ☐ Run Azure AD Connect and set the SSO method to Pass-through Authentication.
- ☐ From Synchronization Service Manager, run a full import.
- ☐ From Azure PowerShell, run Start-AdSyncSyncCycle –PolicyType Initial.
- ☒ Run Azure AD Connect and disable staging mode.

Explanation:

Explanation:

Staging mode must be disabled. If the Azure AD Connect server is in staging mode, password hash synchronization is temporarily disabled.

References:

https://docs.microsoft.com/en-us/azure/active-directory/connect/active-directory-aadconnectsync-troubleshoot-password-hash-synchronization#no-passwords-are-synchronized-troubleshoot-by-using-the-troubleshooting-task

Question 67

You have an Azure DNS zone named adatum.com.
You need to delegate a subdomain named research.adatum.com to a different DNS server in Azure.

What should you do?

- ☐ Create an A record named *.research in the adatum.com zone.
- ☐ Create a PTR record named research in the adatum.com zone.
- ☐ Modify the SOA record of adatum.com.
- ☒ Create an NS record named research in the adatum.com zone.

Explanation:

Explanation:

You need to create a name server (NS) record for the zone.

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References:

https://docs.microsoft.com/en-us/azure/dns/delegate-subdomain

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Case Study (1 questions)

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 AllInformation 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

Contoso, Ltd. 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 Contoso are hosted on-premises.

Contoso creates a new Azure subscription. The Azure Active Directory (Azure AD) tenant uses a domain named contoso.onmicrosoft.com. The tenant uses the P1 pricing tier.

Existing Environment

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

Contoso 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.

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Contoso.com contains a user named User1.

All the offices connect by using private links.

Contoso has data centers in the Montreal and Seattle offices. Each data center 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

Contoso uses two web applications named App1 and App2. Each instance on each web application requires 1GB 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).

Planned Changes

Contoso 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

Contoso 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.
Ensure 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.contoso.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.

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Minimize costs whenever possible.

Question 68

You need to recommend a solution to automate the configuration for the finance department users. The solution must meet the technical requirements.

What should you include in the recommendation?

- ☐ Azure AD B2C
- ☐ Azure AD Identity Protection
- ☐ an Azure logic app and the Microsoft Identity Management (MIM) client
- ☒ dynamic groups and conditional access policies

Explanation:

Explanation:

Scenario: Ensure Azure Multi-Factor Authentication (MFA) for the users in the finance department only.

The recommendation is to use conditional access policies that can then be targeted to groups of users, specific applications, or other conditions.

References:

https://docs.microsoft.com/en-us/azure/active-directory/authentication/howto-mfa-userstates

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Case Study (1 questions)

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Overview

Humongous Insurance is an insurance company that has three offices in Miami, Tokyo and Bangkok. Each office has 5.000 users.

Existing Environment
Active Directory Environment

Humongous Insurance has a single-domain Active Directory forest named humongousinsurance.com. The functional level of the forest is Windows Server 2012.

You recently provisioned an Azure Active Directory (Azure AD) tenant.

Network Infrastructure

Each office has a local data center that contains all the servers for that office. Each office has a dedicated connection to the Internet.

Each office has several link load balancers that provide access to the servers.

Active Directory Issue

Several users in humongousinsurance.com have UPNs that contain special characters.

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You suspect that some of the characters are unsupported in Azure AD.

Licensing Issue

You attempt to assign a license in Azure to several users and receive the following error message: "Licenses not assigned. License assignment failed for one user."

You verify that the Azure subscription has the available licenses.

Requirements
Planned Changes

Humongous Insurance plans to open a new office in Paris. The Paris office will contain 1,000 users who will be hired during the next 12 months. All the resources used by the Paris office users will be hosted in Azure.

Planned Azure AD Infrastructure

The on-premises Active Directory domain will be synchronized to Azure AD.

All client computers in the Paris office will be joined to an Azure AD domain.

Planned Azure Networking Infrastructure

You plan to create the following networking resources in a resource group named All_Resources:

Default Azure system routes that will be the only routes used to route traffic
A virtual network named Paris-VNet that will contain two subnets named Subnet1 and Subnet2
A virtual network named ClientResources-VNet that will contain one subnet named ClientSubnet
A virtual network named AllOffices-VNet that will contain two subnets named Subnet3 and Subnet4

You plan to enable peering between Paris-VNet and AllOffices-VNet. You will enable the Use remote gateways setting for the Paris-VNet peerings.

You plan to create a private DNS zone named humongousinsurance.local and set the registration network to the ClientResources-VNet virtual network.

Planned Azure Computer Infrastructure

Each subnet will contain several virtual machines that will run either Windows Server 2012 R2, Windows Server 2016, or Red Hat Linux.

Department Requirements

Humongous Insurance identifies the following requirements for the company's departments:

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Web administrators will deploy Azure web apps for the marketing department. Each web app will be added to a separate resource group. The initial configuration of the web apps will be identical. The web administrators have permission to deploy web apps to resource groups.
During the testing phase, auditors in the finance department must be able to review all Azure costs from the past week.
Authentication Requirements

Users in the Miami office must use Azure Active Directory Seamless Single Sign-on (Azure AD Seamless SSO) when accessing resources in Azure.

Question 69

You need to prepare the environment to meet the authentication requirements.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- ☐ Install the Active Directory Federation Services (AD FS) role on a domain controller in the Miami office.
- ☐ Allow inbound TCP port 8080 to the domain controllers in the Miami office.
- ☐ Join the client computers in the Miami office to Azure AD.
- ☒ Add http://autologon.microsoftazuread-sso.com to the intranet zone of each client computer in the Miami office.
- ☒ Install Azure AD Connect on a server in the Miami office and enable Pass-through Authentication.

Explanation:

Explanation:

D: You can gradually roll out Seamless SSO to your users. You start by adding the following Azure AD URL to all or selected users' Intranet zone settings by using Group Policy in Active Directory:
https://autologon.microsoftazuread-sso.com

E: Seamless SSO works with any method of cloud authentication - Password Hash Synchronization or Pass-through Authentication, and can be enabled via Azure AD Connect.

Incorrect Answers:

A: Seamless SSO is not applicable to Active Directory Federation Services (ADFS).

B: Azure AD connect does not port 8080. It uses port 443.

C: Seamless SSO needs the user's device to be domain-joined, but doesn't need for the device to be Azure AD Joined.

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Scenario: Users in the Miami office must use Azure Active Directory Seamless Single Sign-on (Azure AD Seamless SSO) when accessing resources in Azure.

Planned Azure AD Infrastructure include: The on-premises Active Directory domain will be synchronized to Azure AD.

References:

https://docs.microsoft.com/en-us/azure/active-directory/connect/active-directory-aadconnect-sso-quick-start

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