



- Expert Verified, Online, **Free**.

Custom View Settings

## Topic 1 - Question Set 1

Question #1

Topic 1

You have an Azure subscription that contains a custom application named Application1. Application1 was developed by an external company named Fabrikam, Ltd. Developers at Fabrikam were assigned role-based access control (RBAC) permissions to the Application1 components. All users are licensed for the Microsoft 365 E5 plan.

You need to recommend a solution to verify whether the Fabrikam developers still require permissions to Application1. The solution must meet the following requirements:

- ⇒ To the manager of the developers, send a monthly email message that lists the access permissions to Application1.
- ⇒ If the manager does not verify an access permission, automatically revoke that permission.
- ⇒ Minimize development effort.

What should you recommend?

- A. In Azure Active Directory (Azure AD), create an access review of Application1.
- B. Create an Azure Automation runbook that runs the Get-AzRoleAssignment cmdlet.
- C. In Azure Active Directory (Azure AD) Privileged Identity Management, create a custom role assignment for the Application1 resources.
- D. Create an Azure Automation runbook that runs the Get-AzureADUserAppRoleAssignment cmdlet.

### Correct Answer: A

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/governance/manage-user-access-with-access-reviews>

*Community vote distribution*

A (100%)

✉  **Eltooth** Highly Voted 1 year, 6 months ago

Correct answer - A. Access review

upvoted 42 times

✉  **Usman007** 1 year, 6 months ago

How long it takes to get the AZ 305 (Beta) exam Score? Any Idea?

upvoted 2 times

✉  **sri2816** 1 year, 5 months ago

Hi

Same question I have

But I came across that it takes around 3 months as it is beta, but I'm not sure

I'm waiting for the exact answer

upvoted 1 times

✉  **Schalom** 1 year, 5 months ago

Richtige Antwort --> 3 Monate :-)

upvoted 2 times

✉  **HetalMehta24** 11 months, 2 weeks ago

Correct

upvoted 2 times

✉  **aleksandarivanov** Highly Voted 11 months, 1 week ago

Who is mlantonis and LazyLinux for AZ-305 questions ?

upvoted 34 times

✉  **lvz** 1 month ago

Ok, I think, I will try to be one, once I clear the exam :D

upvoted 1 times

✉  **lombri** Most Recent 1 month, 3 weeks ago

I've noticed that people that grant the certification solely based on these dumps are not fully qualified.

To master all the information honestly, follow the Microsoft learning path and the video from youtube.

upvoted 1 times

 **Batner** 2 months ago

**Selected Answer: A**

A is correct

upvoted 1 times

 **yonie** 2 months ago

**Selected Answer: A**

Correct answer - A

upvoted 1 times

 **eli117** 2 months, 2 weeks ago

**Selected Answer: A**

A. In Azure Active Directory (Azure AD), create an access review of Application1.

upvoted 1 times

 **rocroberto** 3 months ago

Hi guys, I had the exam today. I got 875/1000 :-) I would say at least 80% of the questions were from here :-(). Keep up the good work. Bye now  
upvoted 1 times

 **ZUMY** 3 months, 1 week ago

A is correct

upvoted 1 times

 **NotMeAnyWay** 3 months, 2 weeks ago

**Selected Answer: A**

Here's why:

An access review is a feature in Azure AD that enables an administrator to review the membership of a group or application role to ensure that only the right people have continued access. This aligns with the requirement to verify access permissions to Application1.

Access reviews can be scheduled to run on a regular basis and can be configured to send email notifications to reviewers. This satisfies the requirement to send a monthly email message to the manager of the developers listing the access permissions to Application1.

Access reviews also provide the option to automatically revoke access if the reviewer does not verify an access permission, which fulfills the requirement to automatically revoke permissions if the manager does not verify them.

Implementing an access review in Azure AD requires minimal development effort and can be set up through the Azure portal with a few simple clicks.

upvoted 7 times

 **jj22222** 4 months ago

**Selected Answer: A**

a because its right

upvoted 1 times

 **zellck** 4 months, 1 week ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/governance/access-reviews-overview>

Access reviews in Azure Active Directory (Azure AD), part of Microsoft Entra, enable organizations to efficiently manage group memberships, access to enterprise applications, and role assignments. User's access can be reviewed regularly to make sure only the right people have continued access

upvoted 3 times

 **zellck** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/training/modules/design-authentication-authorization-solutions/8-design-for-access-reviews>

To ensure employees and users always have the correct access, you can perform an access review. An Azure Active Directory access review is a planned review of the access needs, rights, and history of user access.

upvoted 2 times

 **Kamal4u85** 4 months, 3 weeks ago

A is correct

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: A**

A. Access review

upvoted 1 times

 **jj22222** 5 months ago

A is right

upvoted 1 times

 **Bummer\_boy** 5 months, 2 weeks ago

**Selected Answer: A**

A. no doubts  
upvoted 1 times

 **janvandermerwer** 5 months, 2 weeks ago

**Selected Answer: A**  
A makes the most sense.  
upvoted 1 times

 **singhaj** 6 months ago  
Dumps are valid... Pass exam with 970/1000

All questions from these dumps.  
upvoted 3 times

You have an Azure subscription. The subscription has a blob container that contains multiple blobs. Ten users in the finance department of your company plan to access the blobs during the month of April. You need to recommend a solution to enable access to the blobs during the month of April only. Which security solution should you include in the recommendation?

- A. shared access signatures (SAS)
- B. Conditional Access policies
- C. certificates
- D. access keys

**Correct Answer: A**

Shared Access Signatures (SAS) allows for limited-time fine grained access control to resources. So you can generate URL, specify duration (for month of April) and disseminate URL to 10 team members. On May 1, the SAS token is automatically invalidated, denying team members continued access.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-sas-overview>

*Community vote distribution*

A (100%)

✉️ **Eltooth** Highly Voted 1 year, 6 months ago

A- Correct answer.  
upvoted 31 times

✉️ **eli117** Most Recent 2 months, 2 weeks ago

**Selected Answer: A**  
A. Shared Access Signatures (SAS).

Shared Access Signatures (SAS) allow you to provide time-limited access to specific resources in your storage account.  
upvoted 2 times

✉️ **TJ001** 2 months, 3 weeks ago

Shared Access Signature is right ...  
upvoted 1 times

✉️ **kyawtlearning** 3 months ago

Got this on Mar 25, 2023. Answered A.  
upvoted 1 times

✉️ **ZUMY** 3 months, 1 week ago

A is correct  
upvoted 1 times

✉️ **NotMeAnyWay** 3 months, 2 weeks ago

**Selected Answer: A**  
Here's why:

To enable access to blobs in a container during the month of April only, use shared access signatures (SAS). SAS tokens can be generated with an expiration time and can be scoped to provide granular access control. SAS tokens can easily be generated and distributed to the ten finance department users who need access to the blobs during the month of April. SAS tokens will no longer be valid once they expire, fulfilling the requirement to restrict access to the blobs during the month of April only. Conditional Access policies and certificates/access keys are not suitable for this task.

upvoted 4 times

✉️ **ShingMing** 3 months, 3 weeks ago

Got this on Feb. 12, 2023  
upvoted 2 times

✉️ **EngAbood** 3 months, 3 weeks ago

Just Passed the exam today , all questions are from here , except 3 new qu.  
Thanks examtopics , you are the best ❤  
upvoted 1 times

 **jj22222** 4 months ago

**Selected Answer: A**

A- because its right

upvoted 1 times

 **zellck** 4 months, 1 week ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/storage/common/authorize-data-access#understand-authorization-for-data-operations>

Shared access signatures for blobs, files, queues, and tables. Shared access signatures (SAS) provide limited delegated access to resources in a storage account via a signed URL. The signed URL specifies the permissions granted to the resource and the interval over which the signature is valid. A service SAS or account SAS is signed with the account key, while the user delegation SAS is signed with Azure AD credentials and applies to blobs only.

upvoted 3 times

 **OPT\_001122** 5 months ago

**Selected Answer: A**

A. shared access signatures (SAS)

upvoted 2 times

 **Oung** 5 months ago

Are these questions still valid for 2023?

upvoted 1 times

 **jj22222** 5 months ago

SAS is right

upvoted 1 times

 **Bummer\_boy** 5 months, 2 weeks ago

**Selected Answer: A**

A is correct

upvoted 1 times

 **janvandermerwer** 5 months, 2 weeks ago

**Selected Answer: A**

Time sensitive key that can automatically expire.

upvoted 1 times

 **mo14** 6 months ago

Got this on 27/12/2022

upvoted 2 times

 **singhaj** 6 months ago

Dumps are valid... Pass exam with 970/1000

All questions from these dumps.

upvoted 1 times

You have an Azure Active Directory (Azure AD) tenant that syncs with an on-premises Active Directory domain.  
 You have an internal web app named WebApp1 that is hosted on-premises. WebApp1 uses Integrated Windows authentication.  
 Some users work remotely and do NOT have VPN access to the on-premises network.  
 You need to provide the remote users with single sign-on (SSO) access to WebApp1.  
 Which two features should you include in the solution? Each correct answer presents part of the solution.  
 NOTE: Each correct selection is worth one point.

- A. Azure AD Application Proxy
- B. Azure AD Privileged Identity Management (PIM)
- C. Conditional Access policies
- D. Azure Arc
- E. Azure AD enterprise applications
- F. Azure Application Gateway

**Correct Answer: AE**

A: Application Proxy is a feature of Azure AD that enables users to access on-premises web applications from a remote client. Application Proxy includes both the Application Proxy service which runs in the cloud, and the Application Proxy connector which runs on an on-premises server.

You can configure single sign-on to an Application Proxy application.

E: Add an on-premises app to Azure AD

Now that you've prepared your environment and installed a connector, you're ready to add on-premises applications to Azure AD.

1. Sign in as an administrator in the Azure portal.

2. In the left navigation panel, select Azure Active Directory.

3. Select Enterprise applications, and then select New application.

4. Select Add an on-premises application button which appears about halfway down the page in the On-premises applications section.

Alternatively, you can select Create your own application at the top of the page and then select Configure Application Proxy for secure remote access to an on-premise application.

5. In the Add your own on-premises application section, provide the following information about your application.

6. Etc.

Incorrect:

Not C: Conditional Access policies are not required.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/app-proxy/application-proxy-add-on-premises-application>

*Community vote distribution*

AE (95%)	3%
----------	----

  **trap84**  1 year, 6 months ago

A&E is the correct answer. Azure App proxy for connecting without vpn and Enterprise App for SSO  
 upvoted 52 times

  **itmaster**  1 year, 4 months ago

It's required to download connector under (Application Proxy) and create a new application under (Enterprise Application), however for (Pre Authentication) option, you can choose "Passthrough" or "Azure Active Directory", and both will work, but it's recommended to use "Azure Active Directory" so you can take advantage of using conditional access and MFA. Answer is (A) & (E) as they're both required as part of the solution to work, whereas (C) is just an optional feature. Reference: <https://docs.microsoft.com/en-us/azure/active-directory/app-proxy/application-proxy-add-on-premises-application>

upvoted 27 times

  **FrancisFerreira** 1 year, 3 months ago

You reasoning looks flawless to me. We need to pay attention to the question's wording:

"Which two features SHOULD you include in the solution? EACH CORRECT ANSWER PRESENTS PART OF THE SOLUTION."

To do (A) you need (E). So they are both PART of the solution. (C) is an extra step that's recommended by MS. (C) is not PART of the solution, given you don't actually need it to fulfill the requirements, therefore it is also not something you SHOULD do.

upvoted 5 times

✉️ **sapien45** 1 year ago

Your are the IT master  
upvoted 1 times

✉️ **sw1000** Most Recent 1 month ago

Selected Answer: AE  
A and E are the correct answers  
upvoted 1 times

✉️ **sankuro** 1 month, 2 weeks ago

On exam 5/7/2023  
upvoted 1 times

✉️ **zzreflexzz** 1 month, 3 weeks ago

on exam 5/2/23  
upvoted 2 times

✉️ **eli117** 2 months, 2 weeks ago

Selected Answer: AE  
A. Azure AD Application Proxy  
E. Azure AD enterprise applications.  
upvoted 1 times

✉️ **akr1503** 3 months ago

This was on 3/27/23 exam  
upvoted 1 times

✉️ **ZUMY** 3 months, 1 week ago

A & E are correct  
upvoted 1 times

✉️ **mrjeet** 3 months, 1 week ago

This was on 3/17/23 exam - answer is correct  
upvoted 2 times

✉️ **NotMeAnyWay** 3 months, 2 weeks ago

Selected Answer: AE  
To provide remote SSO access to an on-premises web app named WebApp1 with Integrated Windows authentication:

- Use Azure AD Application Proxy to securely publish on-premises web apps to the internet without the need for a VPN.
- Add WebApp1 as an Azure AD enterprise application to enable Azure AD to provide authentication and authorization for the app.
- Conditional Access policies, Azure AD PIM, Azure Arc, and Azure Application Gateway are not suitable for this task.
- Conditional Access policies allow defining conditions for access to Azure AD-connected apps, but do not provide a solution for remote SSO access to an on-premises web app.
- Azure AD PIM is used for managing access to Azure resources, but not for remote SSO access to an on-premises web app.
- Azure Arc is a hybrid cloud management solution, and Azure Application Gateway is a web traffic load balancer, neither are relevant to providing remote SSO access to an on-premises web app.

upvoted 2 times

✉️ **Skilled\_Hawkeye** 3 months, 2 weeks ago

Selected Answer: AE  
A & E are right  
upvoted 1 times

✉️ **kakcnh2431** 3 months, 4 weeks ago

correct  
upvoted 1 times

✉️ **zellck** 4 months ago

Selected Answer: AE  
AE is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/app-proxy/application-proxy>  
Azure Active Directory's Application Proxy provides secure remote access to on-premises web applications. After a single sign-on to Azure AD, users can access both cloud and on-premises applications through an external URL or an internal application portal.

<https://learn.microsoft.com/en-us/azure/active-directory/manage-apps/add-application-portal>  
upvoted 1 times

✉️ **jj22222** 4 months ago

Selected Answer: AE  
AE are right answers  
upvoted 1 times

 **globby118** 4 months, 1 week ago

Exam Question 02/15/2023

upvoted 2 times

 **OPT\_001122** 5 months ago

A. Azure AD Application Proxy - connection without vpn - onprem scenario

E. Azure AD enterprise applications

upvoted 1 times

 **Alessandro365** 5 months ago

**Selected Answer: AE**

A & E is the correct answer

upvoted 1 times

You have an Azure Active Directory (Azure AD) tenant named contoso.com that has a security group named Group1. Group1 is configured for assigned membership. Group1 has 50 members, including 20 guest users.

You need to recommend a solution for evaluating the membership of Group1. The solution must meet the following requirements:

- ⇒ The evaluation must be repeated automatically every three months.
- ⇒ Every member must be able to report whether they need to be in Group1.
- ⇒ Users who report that they do not need to be in Group1 must be removed from Group1 automatically.
- ⇒ Users who do not report whether they need to be in Group1 must be removed from Group1 automatically.

What should you include in the recommendation?

- A. Implement Azure AD Identity Protection.
- B. Change the Membership type of Group1 to Dynamic User.
- C. Create an access review.
- D. Implement Azure AD Privileged Identity Management (PIM).

**Correct Answer: C**

Azure Active Directory (Azure AD) access reviews enable organizations to efficiently manage group memberships, access to enterprise applications, and role assignments. User's access can be reviewed on a regular basis to make sure only the right people have continued access.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/governance/access-reviews-overview>

*Community vote distribution*

C (97%)

✉  **Eltooth**  1 year, 6 months ago

Correct answer - C

upvoted 36 times

✉  **singhaj**  6 months ago

Dumps are valid... Pass exam with 970/1000

All questions from these dumps. I am posting comments to motivate others.

upvoted 12 times

✉  **sankuro**  1 month, 2 weeks ago

Got this on 5/7/2023 exam.

upvoted 1 times

✉  **yonie** 2 months ago

**Selected Answer: C**

Correct answer - C

upvoted 1 times

✉  **eli117** 2 months, 2 weeks ago

**Selected Answer: C**

C. Create an access review.

upvoted 1 times

✉  **akr1503** 3 months ago

This was on 3/27/23 exam

upvoted 1 times

✉  **kyawtlearning** 3 months ago

Got this on Mar 25, 2023. Answered C.

upvoted 1 times

✉  **ZUMY** 3 months, 1 week ago

C is correct

upvoted 1 times

✉  **NotMeAnyWay** 3 months, 2 weeks ago

**Selected Answer: C**

Here's why:

- An access review is an Azure AD feature that enables administrators to review group memberships and application assignments, and allows group members to confirm whether they still require access. This enables every member to report whether they need to be in Group1, and if they do not, the access review can be configured to remove them automatically.
- An access review can be set up to repeat automatically every three months, as required by the scenario.
- Changing the Membership type of Group1 to Dynamic User is not a suitable solution for evaluating the membership of a security group with assigned membership. Dynamic user groups are based on rules and criteria, and do not include manually assigned members.
- Implementing Azure AD Identity Protection is not relevant to evaluating the membership of a security group.
- Implementing Azure AD Privileged Identity Management (PIM) is used for managing access to privileged roles in Azure AD, and is not relevant to the scenario.

upvoted 3 times

 **swetha\_2022** 3 months, 3 weeks ago

What is the correct answer B or C? what is the difference between these two options pls?

upvoted 1 times

 **memyself2** 4 months ago

This was a question was on my exam today (2/26/23) - Scored 844

I agree with this answer

upvoted 3 times

 **jj22222** 4 months ago

**Selected Answer: C**

c is right answer

upvoted 1 times

 **zellck** 4 months, 1 week ago

Same as Question 42.

<https://www.examtopics.com/discussions/microsoft/view/95520-exam-az-305-topic-1-question-42-discussion>

upvoted 1 times

 **zellck** 4 months, 1 week ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/governance/access-reviews-overview>

Access reviews in Azure Active Directory (Azure AD), part of Microsoft Entra, enable organizations to efficiently manage group memberships, access to enterprise applications, and role assignments. User's access can be reviewed regularly to make sure only the right people have continued access

upvoted 3 times

 **zellck** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/training/modules/design-authentication-authorization-solutions/8-design-for-access-reviews>

To ensure employees and users always have the correct access, you can perform an access review. An Azure Active Directory access review is a planned review of the access needs, rights, and history of user access.

upvoted 2 times

 **Sarvy** 4 months, 1 week ago

In exam 2/12/2023

upvoted 2 times

 **OPT\_001122** 5 months ago

**Selected Answer: C**

C. Create an access review.

upvoted 1 times

 **jj22222** 5 months ago

C looks right

upvoted 1 times

**HOTSPOT -**

You plan to deploy Azure Databricks to support a machine learning application. Data engineers will mount an Azure Data Lake Storage account to the Databricks file system. Permissions to folders are granted directly to the data engineers.

You need to recommend a design for the planned Databrick deployment. The solution must meet the following requirements:

- ⇒ Ensure that the data engineers can only access folders to which they have permissions.
- ⇒ Minimize development effort.
- ⇒ Minimize costs.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Databricks SKU:

Premium
Standard

Cluster configuration:

Credential passthrough
Managed identities
MLflow
A runtime that contains Photon
Secret scope

**Answer Area**

Databricks SKU:

Premium
Standard

Correct Answer:

Cluster configuration:

Credential passthrough
Managed identities
MLflow
A runtime that contains Photon
Secret scope

Box 1: Premium -

Premium Databricks SKU is required for credential passthrough.

Box 2: Credential passthrough -

Authenticate automatically to Azure Data Lake Storage Gen1 (ADLS Gen1) and Azure Data Lake Storage Gen2 (ADLS Gen2) from Azure Databricks clusters using the same Azure Active Directory (Azure AD) identity that you use to log into Azure Databricks. When you enable Azure Data Lake Storage credential passthrough for your cluster, commands that you run on that cluster can read and write data in Azure Data Lake

Storage without requiring you to configure service principal credentials for access to storage.

Reference:

<https://docs.microsoft.com/en-us/azure/databricks/security/credential-passthrough/adls-passthrough>

✉️ **Tyler2021** Highly Voted 1 year, 6 months ago

Databricks SKU should be a Premium plan. As the doc states both cloud storage access and credential passthrough features will need a Premium plan.

<https://docs.microsoft.com/en-us/azure/databricks/sql/user/security/cloud-storage-access>

<https://docs.microsoft.com/en-us/azure/databricks/security/credential-passthrough/adls-passthrough#adls-aad-credentials>

upvoted 66 times

✉️ **Shadoken** 11 months, 1 week ago

«Standard clusters with credential passthrough are limited to a single user. Standard clusters support Python, SQL, Scala, and R. On Databricks Runtime 6.0 and above, SparkR is supported; on Databricks Runtime 10.1 and above, sparklyr is supported.»

- <https://docs.microsoft.com/en-us/azure/databricks/security/credential-passthrough/adls-passthrough#enable-azure-data-lake-storage-credential-passthrough-for-a-standard-cluster>

Yes, we need premium SKU

upvoted 5 times

✉️ **sadako** 1 year, 3 months ago

Premium

Credential Passthrough

upvoted 14 times

✉️ **410ns0** 1 year, 1 month ago

no es necesario el sku premium, acabo de hacer la prueba con un databricks standard y si puedo habilitar passthrough

upvoted 3 times

✉️ **Shadow983** 1 year, 6 months ago

Agree.

The SKU should be Premium.

upvoted 12 times

✉️ **HGD545** Highly Voted 1 year, 4 months ago

On the AZ-305 2/22/22

upvoted 9 times

✉️ **PatA** Most Recent 1 week, 3 days ago

on exam 6/15/2023

upvoted 3 times

✉️ **KrisDeb** 1 month, 1 week ago

Just a heads up, will be probably removed after the exam update:

'Credential passthrough is a legacy data governance model. Databricks recommends that you upgrade to Unity Catalog.'

<https://learn.microsoft.com/en-us/azure/databricks/data-governance/credential-passthrough/adls-passthrough>

upvoted 4 times

✉️ **sankuro** 1 month, 2 weeks ago

This was on exam 5/7/2023

upvoted 1 times

✉️ **akr1503** 3 months ago

This was on 3/27/23 exam

upvoted 3 times

✉️ **NotMeAnyWay** 3 months, 2 weeks ago

Recommended design for the planned Databricks deployment that meets the given requirements:

- Databricks SKU: Premium

- Premium SKU provides access control for DBFS root and FUSE mount points. This will ensure that the data engineers can only access folders to which they have permissions.

- Cluster Configuration: Credentials passthrough

- Credentials passthrough allows users to authenticate with Azure Data Lake Storage using their own Azure AD credentials. This minimizes development effort and costs, as it does not require additional Azure AD application registration and service principal management.

Therefore, the recommended design for the planned Databricks deployment is to use Premium SKU for access control of DBFS root and FUSE mount points, and to configure credentials passthrough for authentication with Azure Data Lake Storage. This design meets the requirements of ensuring data engineers can only access folders to which they have permissions, minimizing development effort and costs.

upvoted 8 times

✉ **zellck** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 2 times

✉ **jj22222** 4 months ago

Premium

Credential Passthrough

upvoted 1 times

✉ **Sarvy** 4 months, 1 week ago

In exam 2/12/2023

upvoted 2 times

✉ **jameslee** 4 months, 2 weeks ago

<https://learn.microsoft.com/en-us/azure/databricks/data-governance/credential-passthrough/adls-passthrough#adls-aad-credentials>

"Azure Data Lake Storage credential passthrough is supported with Azure Data Lake Storage Gen1 and Gen2 only. Azure Blob storage does not support credential passthrough."

upvoted 1 times

✉ **totalz** 4 months, 3 weeks ago

How does credential passthrough helps to "Ensure that the data engineers can only access folders to which they have permissions"???

upvoted 1 times

✉ **OPT\_001122** 5 months ago

1 Premium

2 Credential Passthrough

upvoted 2 times

✉ **Bummer\_boy** 5 months, 2 weeks ago

Didn't know it should have been premium SKU for the cluster. Never used this feature in practice

upvoted 1 times

✉ **Ghoshy** 6 months ago

It is Standard and Credentials Passthrough considering the fact that we need to minimize costs. You do not need to use the Premium SKU of Azure Data Lake Storage to enable credential passthrough or to support multiple users. Both of these features are available in both the Standard and Premium SKUs of Azure Data Lake Storage.

The Premium SKU of Azure Data Lake Storage offers additional features and performance improvements, such as higher throughput and lower latencies, but it is not required to enable credential passthrough or to support multiple users.

upvoted 3 times

✉ **SpurdoSparde** 5 months, 3 weeks ago

Could you provide any reference though? A link to documentation would be valuable

upvoted 2 times

✉ **Vishal59** 6 months, 1 week ago

I got this question on the 19-Dec-2022 exam.

upvoted 5 times

✉ **OPT\_001122** 6 months ago

Thanks for mentioning the date

upvoted 3 times

✉ **JohnPhan** 10 months, 2 weeks ago

<https://www.linkedin.com/pulse/azure-databricks-standard-vs-premium-ashish-kumar>

Base on this article, I think Databricks SKU is Standard to minimize cost.

upvoted 1 times

**HOTSPOT -**

You plan to deploy an Azure web app named App1 that will use Azure Active Directory (Azure AD) authentication.

App1 will be accessed from the internet by the users at your company. All the users have computers that run Windows 10 and are joined to Azure AD.

You need to recommend a solution to ensure that the users can connect to App1 without being prompted for authentication and can access App1 only from company-owned computers.

What should you recommend for each requirement? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

The users can connect to App1 without being prompted for authentication:

	▼
An Azure AD app registration	▼
An Azure AD managed identity	▼
Azure AD Application Proxy	▼

The users can access App1 only from company-owned computers:

	▼
A Conditional Access policy	▼
An Azure AD administrative unit	▼
Azure Application Gateway	▼
Azure Blueprints	▼
Azure Policy	▼

**Correct Answer:****Answer Area**

The users can connect to App1 without being prompted for authentication:

	▼
An Azure AD app registration	▼
An Azure AD managed identity	▼
Azure AD Application Proxy	▼

The users can access App1 only from company-owned computers:

	▼
A Conditional Access policy	▼
An Azure AD administrative unit	▼
Azure Application Gateway	▼
Azure Blueprints	▼
Azure Policy	▼

Box 1: An Azure AD app registration

Azure active directory (AD) provides cloud based directory and identity management services. You can use azure AD to manage users of your application and authenticate access to your applications using azure active directory.

You register your application with Azure active directory tenant.

Box 2: A conditional access policy

Conditional Access policies at their simplest are if-then statements, if a user wants to access a resource, then they must complete an action. By using Conditional Access policies, you can apply the right access controls when needed to keep your organization secure and stay out of your user's way when not needed.

Reference:

<https://codingcanvas.com/using-azure-active-directory-authentication-in-your-web-application/> <https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/overview>

✉ **Tyler2021** Highly Voted 1 year, 6 months ago

The given answer is correct.

<https://docs.microsoft.com/en-us/azure/active-directory/manage-apps/what-is-application-management>

upvoted 41 times

✉ **Justin0020** Highly Voted 1 year, 3 months ago

Was in my exam on March. 10 Given answer is correct

upvoted 10 times

✉ **zzreflexzz** Most Recent 1 month, 3 weeks ago

on exam 5/2/23

upvoted 2 times

✉ **sansan2022** 5 days, 23 hours ago

Is the dump from the FREE session enough to pass the AZ-305 exam? Thanks.

upvoted 1 times

✉ **ZUMY** 3 months, 1 week ago

Given answer is correct

upvoted 1 times

✉ **ShingMing** 3 months, 3 weeks ago

Got this on Feb. 12, 2023

upvoted 3 times

✉ **zellick** 4 months ago

1. Azure AD app registration
2. Conditional Access policy

<https://learn.microsoft.com/en-us/azure/active-directory/develop/app-objects-and-service-principals#application-registration>

To delegate identity and access management functions to Azure AD, an application must be registered with an Azure AD tenant. When you register your application with Azure AD, you're creating an identity configuration for your application that allows it to integrate with Azure AD. When you register an app in the Azure portal, you choose whether it's a single tenant, or multi-tenant, and can optionally set a redirect URI.

upvoted 2 times

✉ **jj22222** 4 months ago

AD App Registration  
Conditional access policy

upvoted 1 times

✉ **Sarvy** 4 months, 1 week ago

In exam 2/12/2023

upvoted 2 times

✉ **OPT\_001122** 5 months ago

Box 1: An Azure AD app registration  
Box 2: A conditional access policy

upvoted 2 times

✉ **OPT\_001122** 4 months, 3 weeks ago

Remember that users can only access from company machines

upvoted 1 times

✉ **jj22222** 5 months ago

app registration and conditional access policy

upvoted 2 times

✉ **Bummer\_boy** 5 months, 2 weeks ago

App should be registered with AD and appropriate condition policy should be introduced to allow company-owned devices only

upvoted 1 times

✉ **Ghoshy** 6 months ago

Exam Question 12/28/2022

upvoted 4 times

✉ **Vishal59** 6 months, 1 week ago

This one also comes in AZ-305 exam, on 19-Dec-2022

upvoted 5 times

✉️  **Yazn** 7 months, 4 weeks ago

The problem with app registration choice is the requirement "Without being prompted for authentication". Azure app registration will always prompt you if you are not already logged in and doesn't support integrated windows authentication. On the other hand, the application proxy supports integrated windows authentication, hence you can log in without being prompted. I'm not sure but that is my reasoning.

upvoted 1 times

✉️  **C\_M\_M** 2 months ago

The app1 uses Azure AD authentication  
It will be accessed by users from the company  
These users will access it via computers joined to Azure AD.

Bearing in mind the above points, hence any user attempting to use the app1 already logged on to their work computer using Azure AD. So the main question here is - If they want to proceed to sign into the app1, we do not need another prompt for sign in. The requirement is that they get automatically signed in to the app1, since they are logged into their work computers with their Azure AD account.

To achieve the above, you need to register the app1 with Azure AD to utilize SSO.

In other words, Azure app registration won't prompt these users for authentication because they are logged on from a joined work computer.  
I hope this helps!

upvoted 2 times

✉️  **C\_M\_M** 2 months ago

Application proxy, on the other hand, is when you want users outside your on-premise to access your app using Azure SSO.  
That doesn't fit into this scenario. Here your users are on-premise, they don't need a proxy.

upvoted 1 times

✉️  **r3verse** 7 months, 1 week ago

Nowhere it's saying 'integrated windows authentication', please read <https://learn.microsoft.com/en-us/azure/active-directory/authentication/overview-authentication>.

upvoted 1 times

✉️  **Gor** 1 year, 1 month ago

App registration needed for SSO/identity  
Conditional Access policy needed for only allowing company-owned devices

upvoted 1 times

✉️  **hertino** 1 year, 2 months ago

In my exam, 9 April 22, 817/1000, I chose this answer

upvoted 3 times

✉️  **HGD545** 1 year, 4 months ago

On the AZ-305 2/22/22  
upvoted 4 times

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 deploys several virtual machines on-premises and to Azure. ExpressRoute is deployed and configured for on-premises to Azure connectivity.

Several virtual machines exhibit network connectivity issues.

You need to analyze the network traffic to identify whether packets are being allowed or denied to the virtual machines.

Solution: Use Azure Traffic Analytics in Azure Network Watcher to analyze the network traffic.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: B**

Instead use Azure Network Watcher IP Flow Verify, which allows you to detect traffic filtering issues at a VM level.

Note: 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.

Reference:

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

*Community vote distribution*

B (94%)	6%
---------	----

✉️  **itmaster**  1 year, 4 months ago

**Selected Answer: B**

(Traffic Analytics) under (Network Watcher) gives you statistical data and traffic visualization like total inbound and outbound flows and the number of deployed NSGs. However, it doesn't give you information if packets are allowed or denied. Check screenshot in the following reference: <https://docs.microsoft.com/en-us/azure/network-watcher/traffic-analytics>

(IP Flow Verify) under (Network Watcher) gives you option to verify if traffic is allowed or denied. Check screenshot in the following reference: <https://docs.microsoft.com/en-us/azure/network-watcher/network-watcher-ip-flow-verify-overview>

Correct answer is B.

upvoted 45 times

✉️  **Eltooth**  1 year, 6 months ago

**Selected Answer: B**

Correct answer - B

upvoted 12 times

✉️  **akr1503**  3 months ago

This was on 3/27/23 exam

upvoted 2 times

✉️  **kyawtlearning** 3 months ago

Got this on Mar 25, 2023. Answered No.

upvoted 1 times

✉️  **NotMeAnyWay** 3 months, 2 weeks ago

**Selected Answer: B**

Azure Traffic Analytics is designed to help diagnose performance and connectivity issues in Azure virtual networks. It uses network flow data collected by Azure Network Watcher's flow logs, and provides insights into network activity and patterns. However, it does not provide the ability to identify whether packets are being allowed or denied to specific virtual machines.

upvoted 1 times

✉️  **ShingMing** 3 months, 3 weeks ago

Got this on Feb. 12, 2023

upvoted 2 times

✉️  **jj22222** 4 months ago

**Selected Answer: B**

b because it is ip flow verify

upvoted 1 times

 **zellck** 4 months ago

**Selected Answer: B**

B is the answer.

Will require IP flow verify.

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

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 a 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.

upvoted 2 times

 **OPT\_001122** 5 months ago

**Selected Answer: B**

No

Correct ans - Azure Network Watcher IP Flow

upvoted 1 times

 **jj22222** 5 months ago

No ; its ipflow verify

upvoted 1 times

 **PM\_PM** 5 months, 1 week ago

**Selected Answer: A**

Azure Traffic Analytics is a feature of Azure Network Watcher that allows you to monitor and analyze network traffic to identify connectivity issues. By using Azure Traffic Analytics, you can gain insight into the network traffic and identify whether packets are being allowed or denied to the virtual machines.

upvoted 1 times

 **Bummer.boy** 5 months, 2 weeks ago

**Selected Answer: B**

B is the right one

upvoted 1 times

 **OPT\_001122** 6 months ago

Thanks to all who have mentioned the exam dates

upvoted 2 times

 **Pamban** 8 months, 3 weeks ago

this series of questions appeared on 5th Oct 2022

upvoted 3 times

 **lemoniazure** 9 months, 1 week ago

Appeared in 19Sep2022 exam. My answer is B, 946 pass.

upvoted 3 times

 **sapien45** 1 year ago

Answer:A

Read the damn docuemntation :

<https://docs.microsoft.com/en-us/azure/network-watcher/traffic-analytics>

A key component of traffic analytics is NSG flow logs :

Network security group (NSG) flow logs: Allow you to view information about ingress and egress IP traffic through a network security group. NSG flow logs are written in json format and show outbound and inbound flows on a per rule basis, the NIC the flow applies to, five-tuple information about the flow (source/destination IP address, source/destination port, and protocol), and if the traffic was allowed or denied.

upvoted 3 times

 **bigpeeppee** 1 month, 3 weeks ago

I hear you but the from what I can gather from the question is that vms and a network existed previously and now its expressroute

upvoted 1 times

 **aleksandarivanov** 11 months ago

i don't see an NSG mentioned in the question, tho

upvoted 2 times

 **bigpeeppee** 1 month, 3 weeks ago

but nsg blocks packets or not? It does and it has me second guess it as b is an allowable answer.

upvoted 1 times

 **bigpeeppee** 1 month, 3 weeks ago

I will put my final answer as A.

upvoted 1 times

 **ExStudent** 1 year ago

Correct answer - B (Based on the IP Flow docs  
IP flow verify in Azure Network Watcher

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.

upvoted 2 times

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 deploys several virtual machines on-premises and to Azure. ExpressRoute is deployed and configured for on-premises to Azure connectivity.

Several virtual machines exhibit network connectivity issues.

You need to analyze the network traffic to identify whether packets are being allowed or denied to the virtual machines.

Solution: Use Azure Advisor to analyze the network traffic.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: B**

Instead use Azure Network Watcher IP Flow Verify, which allows you to detect traffic filtering issues at a VM level.

Note: 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.

Reference:

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

*Community vote distribution*

B (100%)

 **Eltooth** Highly Voted  1 year, 6 months ago

Correct answer - B

upvoted 15 times

 **akr1503** Most Recent  3 months ago

This was on 3/27/23 exam

upvoted 1 times

 **ShingMing** 3 months, 3 weeks ago

Got this on Feb. 12, 2023

upvoted 2 times

 **jj22222** 4 months ago

Selected Answer: B

because the solution presented is wrong

upvoted 1 times

 **zellick** 4 months ago

Selected Answer: B

B is the answer.

Will require IP flow verify.

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

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 a 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.

upvoted 2 times

 **OPT\_001122** 5 months ago

Selected Answer: B

Correct answer - B

Azure Network Watcher IP Flow is required

upvoted 1 times

 **Alessandro365** 5 months ago

**Selected Answer: B**

B is the correct answer (NO)  
upvoted 1 times

 **jj22222** 5 months ago

**Selected Answer: B**

B is right; it should be ipflow verify  
upvoted 1 times

 **iwikneerg** 11 months, 3 weeks ago

Definitely B because azure advisor is not going to show you or help you troubleshoot connectivity problems  
upvoted 1 times

 **articleback** 11 months, 4 weeks ago

**Selected Answer: B**

B should be the Answer.  
upvoted 1 times

 **Gor** 1 year, 1 month ago

**Selected Answer: B**

IP Flow Verify in Network Watcher gives you option to verify if traffic is allowed or denied.  
upvoted 2 times

 **datafypk** 1 year, 1 month ago

was in exam 8 May 22  
upvoted 2 times

 **hertino** 1 year, 2 months ago

In my exam, 9 april 22, 817/1000, I chose this answer  
upvoted 2 times

 **Contactfornitish** 1 year, 2 months ago

Came in exam today 04/04/2022 but the correct option IP flow was absent  
upvoted 1 times

 **johnwick420** 1 year, 3 months ago

**Selected Answer: B**

B is correct. Only IP flow check will do that  
upvoted 2 times

 **Rick365** 1 year, 3 months ago

**Selected Answer: B**

Vote B  
upvoted 1 times

 **Pascal1** 1 year, 4 months ago

correct answer is B  
upvoted 1 times

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 deploys several virtual machines on-premises and to Azure. ExpressRoute is deployed and configured for on-premises to Azure connectivity.

Several virtual machines exhibit network connectivity issues.

You need to analyze the network traffic to identify whether packets are being allowed or denied to the virtual machines.

Solution: Use Azure Network Watcher to run IP flow verify to analyze the network traffic.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: A**

Azure Network Watcher IP Flow Verify allows you to detect traffic filtering issues at a VM level.

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.

Reference:

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

*Community vote distribution*

A (100%)

 **Eltooth** Highly Voted 1 year, 6 months ago

Correct answer - A.

IP flow verify checks if a packet is allowed or denied to or from a virtual machine.

upvoted 20 times

 **akr1503** Most Recent 3 months ago

This was on 3/27/23 exam

upvoted 1 times

 **kyawtlearning** 3 months ago

Got this on Mar 25, 2023. Answered A

upvoted 1 times

 **johnD16** 3 months, 1 week ago

Selected Answer: A

Correct. Showed in exam today 18.03.2023

passed 940/1000

upvoted 1 times

 **ShingMing** 3 months, 3 weeks ago

Got this on Feb. 12, 2023

upvoted 1 times

 **jj22222** 4 months ago

Selected Answer: A

A because it is right

upvoted 1 times

 **zellick** 4 months ago

Selected Answer: A

A is the answer.

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

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 a 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.

upvoted 1 times

 **zellck** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: A**

Correct answer - A

upvoted 1 times

 **Alessandro365** 5 months ago

**Selected Answer: A**

A is the correct answer

upvoted 1 times

 **jj22222** 5 months ago

**Selected Answer: A**

answer is A

upvoted 1 times

 **Bummer\_boy** 5 months, 2 weeks ago

**Selected Answer: A**

A is correct

upvoted 1 times

 **janvandermerwer** 5 months, 2 weeks ago

**Selected Answer: A**

Especially compared to previous answers - A "Yes" seems to be the best answer.

upvoted 1 times

 **mo14** 6 months ago

Got this in exam 27/12/2022

upvoted 3 times

 **sapt** 10 months, 3 weeks ago

**Selected Answer: A**

i Agree, answer A

upvoted 1 times

 **Gor** 1 year, 1 month ago

**Selected Answer: A**

Correct answer - A.

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

upvoted 1 times

 **James\_123456** 1 year, 1 month ago

**Selected Answer: A**

Correct

upvoted 1 times

 **datafypk** 1 year, 1 month ago

was in exam 8 May 22

upvoted 2 times

**DRAG DROP -**

You have an Azure subscription. The subscription contains Azure virtual machines that run Windows Server 2016 and Linux.

You need to use Azure Monitor to design an alerting strategy for security-related events.

Which Azure Monitor Logs tables should you query? To answer, drag the appropriate tables to the correct log types. Each table may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

**Tables**

AzureActivity

AzureDiagnostics

Event

Syslog

**Answer Area**

Events from Windows event logs:

Table

Events from Linux system logging:

Table

**Correct Answer:****Tables**

AzureActivity

AzureDiagnostics

Event

Syslog

**Answer Area**

Events from Windows event logs:

Event

Events from Linux system logging:

Syslog

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/platform/data-sources-windows-events> <https://docs.microsoft.com/en-us/azure/azure-monitor/agents/data-sources-syslog>

✉ **Eltooth** Highly Voted 1 year, 6 months ago

Correct answer -

Windows : Event.

Linux : Syslog

upvoted 49 times

✉ **HGD545** Highly Voted 1 year, 4 months ago

On the AZ-305 2/22/22

upvoted 9 times

✉ **wdjonz** Most Recent 1 month, 2 weeks ago

Correct answer -

Windows : Event.

Linux : Syslog

upvoted 1 times

✉ **sankuro** 1 month, 2 weeks ago

Got this on 5/7/2023 exam.

upvoted 1 times

✉ **akr1503** 3 months ago

This was on 3/27/23 exam

upvoted 3 times

✉ **NotMeAnyWay** 3 months, 2 weeks ago

To design an alerting strategy for security-related events in Azure Monitor, you should query the following Azure Monitor Logs tables:

1. SecurityEvent - This table contains security events and other system events that are generated by Windows operating systems. The table includes information about the event, such as the event ID, event source, and severity level.

2. Syslog - This table contains security-related events and other system events that are generated by Linux and other Unix-based operating systems. The table includes information about the event, such as the facility and severity level.

upvoted 7 times

✉ **ShingMing** 3 months, 3 weeks ago

Got this on Feb. 12, 2023

upvoted 2 times

✉ **zellck** 4 months ago

1. Event

2. Syslog

<https://learn.microsoft.com/en-us/azure/azure-monitor/agents/data-sources-windows-events#log-queries-with-windows-events>

<https://learn.microsoft.com/en-us/azure/azure-monitor/agents/data-sources-syslog>

Syslog is an event logging protocol that's common to Linux. Applications send messages that might be stored on the local machine or delivered to a Syslog collector. When the Log Analytics agent for Linux is installed, it configures the local Syslog daemon to forward messages to the agent. The agent then sends the messages to Azure Monitor where a corresponding record is created.

upvoted 2 times

✉ **zellck** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 2 times

✉ **jj22222** 4 months ago

Event and syslog

upvoted 1 times

✉ **Sarvy** 4 months, 1 week ago

In exam 2/12/2023

upvoted 2 times

✉ **OPT\_001122** 5 months ago

correct

Windows : Event.

Linux : Syslog

Thanks all you have mentioned the exam dates

upvoted 4 times

✉ **jj22222** 5 months ago

answer is correct

upvoted 2 times

✉ **Bummer\_boy** 5 months, 2 weeks ago

Event for MS events and Syslog for linux ones

upvoted 1 times

✉ **janvandermerwer** 5 months, 2 weeks ago

Event and Syslog are a go.

- In operating system level logging, rather than interactions with other services logging.

upvoted 1 times

✉ **Vishal59** 6 months, 1 week ago

This one also got and clear the AZ-305 exam by 920/1000.

upvoted 4 times

✉ **scottishstvao** 11 months ago

The given Answer is correct.

upvoted 1 times

 **Gor** 1 year, 1 month ago

Correct -  
Windows : Event.

Linux : Syslog

upvoted 1 times

You are designing a large Azure environment that will contain many subscriptions.

You plan to use Azure Policy as part of a governance solution.

To which three scopes can you assign Azure Policy definitions? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. Azure Active Directory (Azure AD) administrative units
- B. Azure Active Directory (Azure AD) tenants
- C. subscriptions
- D. compute resources
- E. resource groups
- F. management groups

**Correct Answer: CEF**

Azure Policy evaluates resources in Azure by comparing the properties of those resources to business rules. Once your business rules have been formed, the policy definition or initiative is assigned to any scope of resources that Azure supports, such as management groups, subscriptions, resource groups, or individual resources.

Reference:

<https://docs.microsoft.com/en-us/azure/governance/policy/overview>

*Community vote distribution*

CEF (100%)

✉️  **kenobiD**  1 year, 6 months ago

the correct answer is C, E, F.

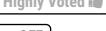
If you go into the portal and look at the scope section when assigning a policy it gives you the options of management group, subscription and resource group

upvoted 70 times

✉️  **bkrich** 1 year, 6 months ago

I think it's C,E,F as well

upvoted 15 times

✉️  **iryngael**  11 months ago

**Selected Answer: CEF**

Correct answers : CEF

This page about policies :

<https://docs.microsoft.com/en-us/azure/governance/policy/overview>

states that "An assignment is a policy definition or initiative that has been assigned to a specific scope. This scope could range from a management group to an individual resource. The term scope refers to all the resources, resource groups, subscriptions, or management groups that the definition is assigned to."

It also send you to this page dedicated to understanding policy scopes :

<https://docs.microsoft.com/en-us/azure/governance/policy/concepts/scope>

which states :

"Scope in Azure Policy is based on how scope works in Azure Resource Manager. For a high-level overview, see Scope in Azure Resource Manager."

leading to this page :

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/overview#understand-scope>

clearly stating the same as the first link :

"Azure provides four levels of scope: management groups, subscriptions, resource groups, and resources."

upvoted 6 times

✉️  **yonie**  2 months ago

**Selected Answer: CEF**

Can be assigned only to a hierarchical resource

upvoted 1 times

✉️  **ZUMY** 3 months ago

C D F are correct  
upvoted 1 times

 **NotMeAnyWay** 3 months, 2 weeks ago

**Selected Answer: CEF**

The three scopes to which Azure Policy definitions can be assigned are:  
C. Subscriptions  
E. Resource groups  
F. Management groups

Azure Policy definitions cannot be assigned to Azure AD administrative units or tenants or to individual compute resources.  
upvoted 1 times

 **jj22222** 4 months ago

subscriptions  
resource groups  
management groups  
upvoted 1 times

 **zellck** 4 months ago

**Selected Answer: CEF**

CEF is the answer.

<https://learn.microsoft.com/en-us/azure/governance/policy/overview#assignments>  
An assignment is a policy definition or initiative that has been assigned to a specific scope. This scope could range from a management group to an individual resource. The term scope refers to all the resources, resource groups, subscriptions, or management groups that the definition is assigned to. Assignments are inherited by all child resources. This design means that a definition applied to a resource group is also applied to resources in that resource group. However, you can exclude a subscope from the assignment.

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: CEF**

C. subscriptions  
E. resource groups  
F. management groups

Correct ans

upvoted 2 times

 **Alessandro365** 5 months ago

**Selected Answer: CEF**

CEF  
C. subscriptions  
E. resource groups  
F. management groups  
upvoted 1 times

 **jj22222** 5 months ago

**Selected Answer: CEF**

management groups, resource groups and subscriptions is correct  
upvoted 1 times

 **Q12346** 5 months, 1 week ago

exam on 1/14/2023  
upvoted 3 times

 **Bummer\_boy** 5 months, 2 weeks ago

**Selected Answer: CEF**

Easy one...  
upvoted 1 times

 **janvandermerwer** 5 months, 2 weeks ago

**Selected Answer: CEF**

Azure AD is a bit of a trick question.  
So i'm going to go with the same answers as everyone else.  
They appear to be the "most" correct.  
C, E, F  
upvoted 1 times

 **Ghoshy** 6 months ago

Exam Question 12/28/2022  
upvoted 4 times

 **Amrx** 6 months, 2 weeks ago

**Selected Answer: CEF**

CEF seems correct  
upvoted 1 times

 **gargaditya** 8 months, 3 weeks ago

**Selected Answer: CEF**

though D may be correct--but should have said Resources(in general,instead of Compute)Other options are more appropriate(C,E,F).

The policy definition or initiative is assigned to any scope of resources that Azure supports, such as  
>management groups  
>subscriptions  
>resource groups, or  
> individual resources  
upvoted 2 times

 **gargaditya** 8 months, 3 weeks ago

though D may be correct--but should have said Resources(in general,instead of Compute)Other options are more appropriate(C,E,F).

The policy definition or initiative is assigned to any scope of resources that Azure supports, such as  
>management groups  
>subscriptions  
>resource groups, or  
> individual resources  
upvoted 1 times

**DRAG DROP -**

Your on-premises network contains a server named Server1 that runs an ASP.NET application named App1.

You have a hybrid deployment of Azure Active Directory (Azure AD).

You need to recommend a solution to ensure that users sign in by using their Azure AD account and Azure Multi-Factor Authentication (MFA) when they connect to App1 from the internet.

Which three features should you recommend be deployed and configured in sequence? To answer, move the appropriate features from the list of features to the answer area and arrange them in the correct order.

Select and Place:

Features	Answer Area
----------	-------------

a public Azure Load Balancer

a managed identity

an internal Azure Load Balancer

a Conditional Access policy

an Azure App Service plan

Azure AD Application Proxy

an Azure AD enterprise application

**Correct Answer:**

Features	Answer Area
----------	-------------

a public Azure Load Balancer

Azure AD Application Proxy

a managed identity

an Azure AD enterprise application

an internal Azure Load Balancer

a Conditional Access policy



an Azure App Service plan

**Step 1: Azure AD Application Proxy**

Start by enabling communication to Azure data centers to prepare your environment for Azure AD Application Proxy.

**Step 2: an Azure AD enterprise application**

Add an on-premises app to Azure AD.

Now that you've prepared your environment and installed a connector, you're ready to add on-premises applications to Azure AD.

1. Sign in as an administrator in the Azure portal.
2. In the left navigation panel, select Azure Active Directory.

3. Select Enterprise applications, and then select New application.

4. Etc.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/app-proxy/application-proxy-add-on-premises-application>

✉️  **Eltooth**  1 year, 6 months ago

Answer is correct.

upvoted 51 times

✉️  **FrancisFerreira**  1 year, 3 months ago

Wait, Application Proxy is a feature of Enterprise Applications, so yeah, you would need to register an Enterprise Application before enabling an Application Proxy for it.

While the items themselves are correct, I believe the order should be:

1. Enterprise Application
2. Application Proxy
3. Conditional Access

upvoted 41 times

✉️  **ninjaTT** 1 year, 2 months ago

If you carefully follow the link provided by @RJM you will notice that first, you need to install and register a connector, later add an on-premises app to Azure AD by selecting Enterprise application --> New application.

So the given answer is correct:

1. Application Proxy
2. Enterprise Application
3. Conditional Access

upvoted 34 times

✉️  **zenithcsa1** 9 months, 2 weeks ago

That's for the connector, not Application Proxy itself. Enterprise Application must be the first.

upvoted 1 times

✉️  **JDKJDKJDK** 9 months, 2 weeks ago

I think ninjaTT is right. according to this page first you install a connector from the Application Proxy blade, and then you add the onprem app via Enterprise Application

<https://docs.microsoft.com/en-us/azure/active-directory/app-proxy/application-proxy-add-on-premises-application>

upvoted 4 times

✉️  **TJ001** 2 months, 3 weeks ago

Absolutely.. create proxy first then only Enterprise can be created for that proxy...correct answers given.

upvoted 1 times

✉️  **eli117**  2 months, 2 weeks ago

Azure AD Enterprise Application

Azure AD Application Proxy

Conditional Access Policy

upvoted 2 times

✉️  **akr1503** 3 months ago

This was on 3/27/23 exam

upvoted 1 times

✉️  **ZUMY** 3 months ago

Given answers are correct

upvoted 1 times

✉️  **zellck** 4 months ago

1. Azure AD App Proxy
2. Azure AD enterprise app
3. Conditional Access policy

<https://learn.microsoft.com/en-us/azure/active-directory/app-proxy/application-proxy-add-on-premises-application>

<https://learn.microsoft.com/en-us/azure/active-directory/app-proxy/application-proxy>

Azure Active Directory's Application Proxy provides secure remote access to on-premises web applications. After a single sign-on to Azure AD, users can access both cloud and on-premises applications through an external URL or an internal application portal.

Azure AD Application Proxy is:

- Secure. On-premises applications can use Azure's authorization controls and security analytics. For example, on-premises applications can use Conditional Access and two-step verification. Application Proxy doesn't require you to open inbound connections through your firewall.

upvoted 3 times

✉  **jj22222** 4 months ago

Ent App  
App Proxy  
Conditional Access  
upvoted 2 times

✉  **Sarvy** 4 months, 1 week ago

In exam 2/12/2023  
upvoted 2 times

✉  **DeBoer** 4 months, 2 weeks ago

that's one of those "it depends" question, I guess. Depends on what they mean by "deploying" a "feature"

Of course you'd first need to set up AADProxy in general (install a connector and create a connector group) before being able to choose using it in an Enterprise App. However, if that's been done already, then you'd create the Enterprise App first and configure the AAD Proxy settings in it (second) ...

Since they're not saying anything I'd assume we're talking about a new environment and needed to set up AADProxy first - and then create the Enterprise app.

Obviously, the Enterprise app would need to exist before being able to secure it using CA Policies, so the third step is not a matter of discussion.  
upvoted 3 times

✉  **orionduo** 4 months, 2 weeks ago

The answer is correct.  
upvoted 1 times

✉  **JoshuaAlkar** 5 months ago

it should be  
1. Enterprise Application  
2. Application Proxy  
3. Conditional Access

see the steps clearly on this Blog <https://thesleepyadmins.com/2019/02/>  
upvoted 2 times

✉  **OPT\_001122** 5 months ago

1. Application Proxy  
2. Enterprise Application  
3. Conditional Access Policy

Given ans is correct (Pro App Pol)  
upvoted 1 times

✉  **OPT\_001122** 5 months ago

Thanks all who have mentioned the exam dates  
upvoted 1 times

✉  **Ghoshy** 6 months ago

Exam Question 12/28/2022  
upvoted 6 times

✉  **ServerBrain** 6 months ago

Given answer is correct, as the url clearly explains the same steps..  
upvoted 2 times

✉  **OrangeSG** 6 months, 2 weeks ago

Answer is correct.

Steps:

1. Opens ports for outbound traffic and allows access to specific URLs
2. Installs the connector on your Windows server, and registers it with Application Proxy
3. Verifies the connector installed and registered correctly
4. Adds an on-premises application to your Azure AD tenant
5. Verifies a test user can sign on to the application by using an Azure AD account

Reference

Tutorial: Add an on-premises application for remote access through Application Proxy in Azure Active Directory  
<https://learn.microsoft.com/en-us/azure/active-directory/app-proxy/application-proxy-add-on-premises-application>

upvoted 1 times

✉  **Gor** 1 year, 1 month ago

Answer is correct.  
1. Application Proxy  
2. Enterprise Application  
3. Conditional Access

<https://docs.microsoft.com/en-us/azure/active-directory/app-proxy/application-proxy-add-on-premises-application>  
upvoted 8 times

You need to recommend a solution to generate a monthly report of all the new Azure Resource Manager (ARM) resource deployments in your Azure subscription.

What should you include in the recommendation?

- A. Azure Activity Log
- B. Azure Advisor
- C. Azure Analysis Services
- D. Azure Monitor action groups

**Correct Answer: A**

Activity logs are kept for 90 days. You can query for any range of dates, as long as the starting date isn't more than 90 days in the past.

Through activity logs, you can determine:

- ⇒ what operations were taken on the resources in your subscription
- ⇒ who started the operation
- ⇒ when the operation occurred
- ⇒ the status of the operation
- ⇒ the values of other properties that might help you research the operation

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/view-activity-logs>

*Community vote distribution*

A (100%)

✉  **Eltooth** Highly Voted 1 year, 6 months ago

Correct answer - A

upvoted 25 times

✉  **sankuro** Most Recent 1 month, 2 weeks ago

Got this on 5/7/2023 exam.

upvoted 1 times

✉  **NotMeAnyWay** 3 months, 2 weeks ago

Selected Answer: A

A. Azure Activity Log

The Azure Activity Log provides insights into subscription-level events that have occurred in Azure. It can be used to monitor the operations performed on resources in the subscription, including when resources are created or modified. You can create a Log Analytics workspace and configure a log query to retrieve the details of new resource deployments for a given time range. This query can then be scheduled to run monthly and generate a report of new ARM resource deployments.

upvoted 4 times

✉  **jj22222** 4 months ago

Selected Answer: A

a because it is right

upvoted 3 times

✉  **zellck** 4 months ago

Same as Question 39.

<https://www.examtopics.com/discussions/microsoft/view/95913-exam-az-305-topic-1-question-39-discussion>

upvoted 1 times

✉  **zellck** 4 months ago

Selected Answer: A

A is the answer.

<https://learn.microsoft.com/en-us/azure/azure-monitor/essentials/activity-log?tabs=powershell>

The Azure Monitor activity log is a platform log in Azure that provides insight into subscription-level events. The activity log includes information like when a resource is modified or a virtual machine is started.

upvoted 2 times

✉  **MeJkt** 4 months, 1 week ago

A server the requirement

upvoted 1 times

 **jj22222** 5 months ago

**Selected Answer: A**

A is right

upvoted 2 times

 **Bummer\_boy** 5 months, 2 weeks ago

**Selected Answer: A**

A seems to be correct

upvoted 2 times

 **janvandermerwer** 5 months, 2 weeks ago

**Selected Answer: A**

A seems to be the most useful answer in this case.

Report on "activity"

upvoted 2 times

 **Sa08** 5 months, 3 weeks ago

**Selected Answer: A**

A server the requirement

upvoted 2 times

 **NarasimhanMV** 7 months, 3 weeks ago

Yes - A is the right answer

upvoted 2 times

 **angelokexamtopics** 9 months, 1 week ago

Correct answer - A

upvoted 2 times

 **fatwast** 10 months, 4 weeks ago

**Selected Answer: A**

A is correct

upvoted 2 times

 **princessgalz** 11 months, 2 weeks ago

**Selected Answer: A**

Correct answer - A

upvoted 2 times

 **al608** 1 year ago

did my Exam today. This was on there.

upvoted 3 times

 **Gor** 1 year, 1 month ago

**Selected Answer: A**

Correct answer - A.

upvoted 2 times

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 deploys several virtual machines on-premises and to Azure. ExpressRoute is deployed and configured for on-premises to Azure connectivity.

Several virtual machines exhibit network connectivity issues.

You need to analyze the network traffic to identify whether packets are being allowed or denied to the virtual machines.

Solution: Install and configure the Azure Monitoring agent and the Dependency Agent on all the virtual machines. Use VM insights in Azure Monitor to analyze the network traffic.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: B**

Use the Azure Monitor agent if you need to:

Collect guest logs and metrics from any machine in Azure, in other clouds, or on-premises.

Use the Dependency agent if you need to:

Use the Map feature VM insights or the Service Map solution.

Note: Instead use Azure Network Watcher IP Flow Verify allows you to detect traffic filtering issues at a VM level.

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.

Reference:

<https://docs.microsoft.com/en-us/azure/network-watcher/network-watcher-ip-flow-verify-overview> <https://docs.microsoft.com/en-us/azure/azure-monitor/agents/agents-overview#dependency-agent>

*Community vote distribution*

B (100%)

 **adaniel89** Highly Voted 10 months ago

Azure Network Watcher IP Flow Verify, which allows you to detect traffic filtering issues at a VM level.  
<https://docs.microsoft.com/en-us/azure/network-watcher/network-watcher-ip-flow-verify-overview>

upvoted 10 times

 **NotMeAnyWay** Most Recent 3 months, 2 weeks ago

Selected Answer: B

B. No

Installing and configuring the Azure Monitoring agent and the Dependency Agent on virtual machines and using VM insights in Azure Monitor can help in analyzing the performance of the virtual machines, but it does not provide information about packet-level network traffic.

To analyze the network traffic, you should use a network capture tool, such as Network Monitor or Wireshark, to capture the network traffic to and from the virtual machines. You can then use the captured data to analyze the network traffic and identify any issues with packet filtering or connectivity.

upvoted 2 times

 **jj22222** 4 months ago

Selected Answer: B

no it is ip flow verify

upvoted 2 times

 **zellck** 4 months ago

Selected Answer: B

B is the answer.

Will require IP flow verify.

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

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 a 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.

upvoted 2 times

✉ **OPT\_001122** 5 months ago

**Selected Answer: B**  
Azure Network Watcher IP Flow is the correct ans  
upvoted 2 times

✉ **Alessandro365** 5 months ago

**Selected Answer: B**  
B is the correct answer  
upvoted 2 times

✉ **jj22222** 5 months ago

**Selected Answer: B**  
should be ipflow verify  
upvoted 3 times

✉ **Sa08** 5 months, 3 weeks ago

**Selected Answer: B**  
IP flow verify is required  
upvoted 2 times

✉ **gulabjamun** 6 months, 1 week ago

Answer B - IP flow verify.  
upvoted 2 times

✉ **Vince\_M** 7 months, 3 weeks ago

Answer B - IP flow verify. Use to determine whether packets are allowed or denied to a specific IaaS virtual machine. This tool will provide information about which network security group (NSG) is causing the packet to be dropped.  
upvoted 1 times

✉ **NarasimhanMV** 7 months, 3 weeks ago

B - is the right answer.  
upvoted 1 times

✉ **most\_lenyora** 9 months, 3 weeks ago

**Selected Answer: B**  
Azure Network Watcher IP Flow Verify  
upvoted 4 times

**DRAG DROP -**

You need to design an architecture to capture the creation of users and the assignment of roles. The captured data must be stored in Azure Cosmos DB.

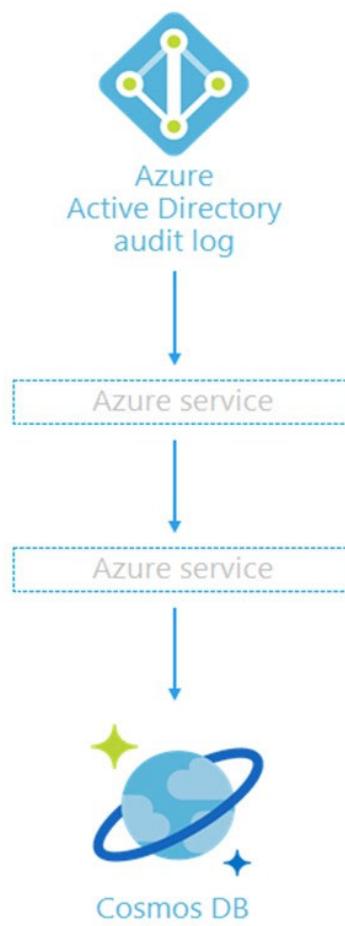
Which services should you include in the design? To answer, drag the appropriate services to the correct targets. Each service may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

**Azure Services**

- Azure Event Grid
- Azure Event Hubs
- Azure Functions
- Azure Monitor Logs
- Azure Notification Hubs

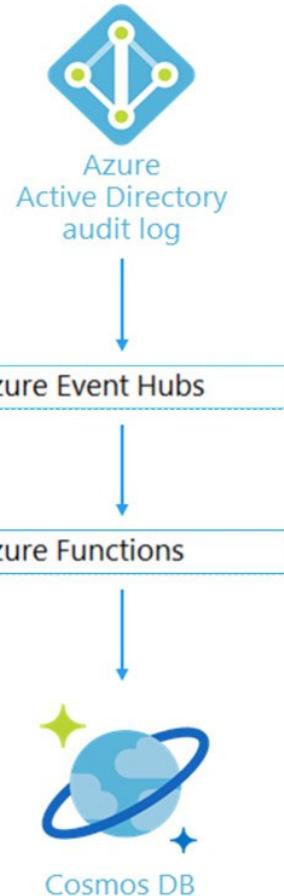
**Answer Area**

Correct Answer:

## Azure Services

- Azure Event Grid
- Azure Event Hubs
- Azure Functions
- Azure Monitor Logs
- Azure Notification Hubs

## Answer Area



Box 1: Azure Event Hubs -

You can route Azure Active Directory (Azure AD) activity logs to several endpoints for long term retention and data insights.  
The Event Hub is used for streaming.

Box 2: Azure Function -

Use an Azure Function along with a cosmos DB change feed, and store the data in Cosmos DB.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/reports-monitoring/concept-activity-logs-azure-monitor>

✉️ **santi1975** Highly Voted 10 months ago

Although may seem a bit surprising, seems correct:

1. Event Hub: You can export AD logs to an Azure Event Hub (even you can cherry picking which ones)  
<https://docs.microsoft.com/en-us/azure/active-directory/reports-monitoring/tutorial-azure-monitor-stream-logs-to-event-hub>
2. Azure Function: You easily create a serverless function to read events from the Event Hub and store them in a CosmosDB.  
<https://docs.microsoft.com/en-us/azure/azure-functions/functions-event-hub-cosmos-db?tabs=bash>

upvoted 32 times

✉️ **nkccorp** Highly Voted 6 months ago

While Azure Event Hubs can be used to capture and process events, it is generally not the best choice for capturing events related to user creation and role assignment. This is because Azure Event Hubs is primarily designed for large-scale, real-time data streaming, and is not well-suited for capturing individual events or triggering downstream actions.

upvoted 9 times

✉️ **azun** Most Recent 1 month ago

Correct Answer Should be

Azure Event Grid and Azure Function,

Event Grid:

- Designed for reactive, event-driven architectures.
- Handles discrete events, such as a file being created or a virtual machine being started.

<https://learn.microsoft.com/en-us/azure/architecture/guide/technology-choices/messaging#azure-event-grid>

upvoted 1 times

👤 **WhiteHawk** 1 month ago

Event Grid could consume Graph API events for Azure AD, which would work, but the answer section requires Audit Logs as the first step. Hence we need an Event Hub here.

upvoted 1 times

👤 **C\_M\_M** 1 month, 1 week ago

Feels like it should be Event grid + Function, but according to Microsoft learn, its event hub + Function.

<https://learn.microsoft.com/en-us/azure/architecture/reference-architectures/serverless/event-processing>

I usually associate event hub to real-time large data ingestion, like sensors etc. But on a second thought, logs are also real-time.

upvoted 1 times

👤 **sankuro** 1 month, 2 weeks ago

Got this on 5/7/2023 exam.

upvoted 1 times

👤 **yonie** 2 months ago

Azure Event Hubs

Azure Functions

"Integrate Azure AD activity logs with your own custom log solutions by streaming them to an event hub."

<https://learn.microsoft.com/en-us/azure/active-directory/reports-monitoring/concept-activity-logs-azure-monitor>

upvoted 1 times

👤 **C\_M\_M** 2 months ago

Answer is wrong.

Event grid and Functions are more appropriate.

Event hub is for real time data streaming. eg - you have a factory with thousands of sensors sending in real-time data that you need to process - use event hub.

But say you just need to detect log in activities, account creation, removal etc - you need event grid. It will just detect the event and send it to Function for further processing.

upvoted 1 times

👤 **eli117** 2 months, 2 weeks ago

Azure Event Grid

Azure Functions

upvoted 1 times

👤 **akr1503** 3 months ago

This was on 3/27/23 exam

upvoted 2 times

👤 **Bur\_Han** 3 months ago

To capture the creation of users and the assignment of roles and store the captured data in Azure Cosmos DB, the following services should be included in the design:

Target: User and Role Creation

Azure Functions

Azure Event Grid

Target: Storing Captured Data

Azure Cosmos DB

Explanation:

Azure Functions can be used to handle the user and role creation events and trigger the necessary actions to store the data in Azure Cosmos DB.

Azure Event Grid can be used to capture user and role creation events and send them to Azure Functions for processing.

Azure Cosmos DB can be used to store the captured data.

Azure Event Hubs and Azure Notification Hubs are not required for this scenario.

Azure Monitor Logs may be used for monitoring and troubleshooting purposes, but it is not necessary for the primary task of capturing user and role creation events and storing the data in Azure Cosmos DB.

upvoted 2 times

👤 **ShingMing** 3 months, 3 weeks ago

Got this on Feb. 12, 2023

upvoted 2 times

👤 **jj22222** 4 months ago

Azure Event Hub --> Azure Functions

upvoted 1 times

👤 **zelleck** 4 months ago

1. Azure Event Grid

2. Azure Functions

<https://learn.microsoft.com/en-us/azure/event-grid/azure-active-directory-events>

upvoted 4 times

✉  **zellck** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 3 times

✉  **Savy** 4 months, 1 week ago

In exam 2/12/2023

upvoted 1 times

✉  **66xxx66** 4 months, 2 weeks ago

here is shown how to do the same with Event Grid <https://samlearnsazure.blog/2020/08/18/audit-streaming-with-event-grid/>

upvoted 3 times

✉  **sp2022** 4 months, 4 weeks ago

Event hubs seems overkill. Why not event grid.

upvoted 6 times

Your company, named Contoso, Ltd., implements several Azure logic apps that have HTTP triggers. The logic apps provide access to an on-premises web service.

Contoso establishes a partnership with another company named Fabrikam, Inc.

Fabrikam does not have an existing Azure Active Directory (Azure AD) tenant and uses third-party OAuth 2.0 identity management to authenticate its users.

Developers at Fabrikam plan to use a subset of the logic apps to build applications that will integrate with the on-premises web service of Contoso.

You need to design a solution to provide the Fabrikam developers with access to the logic apps. The solution must meet the following requirements:

- ⇒ Requests to the logic apps from the developers must be limited to lower rates than the requests from the users at Contoso.
- ⇒ The developers must be able to rely on their existing OAuth 2.0 provider to gain access to the logic apps.
- ⇒ The solution must NOT require changes to the logic apps.
- ⇒ The solution must NOT use Azure AD guest accounts.

What should you include in the solution?

- A. Azure Front Door
- B. Azure AD Application Proxy
- C. Azure AD business-to-business (B2B)
- D. Azure API Management

**Correct Answer: D**

Many APIs support OAuth 2.0 to secure the API and ensure that only valid users have access, and they can only access resources to which they're entitled. To use Azure API Management's interactive developer console with such APIs, the service allows you to configure your service instance to work with your OAuth 2.0 enabled API.

Incorrect:

Azure AD business-to-business (B2B) uses guest accounts.

Azure AD Application Proxy is for on-premises scenarios.

Reference:

<https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-oauth2>

*Community vote distribution*

D (100%)

✉️  **Snownoodles** Highly Voted 9 months, 3 weeks ago

The given answer is correct. API management can use Oauth2 for authorization:

<https://docs.microsoft.com/en-us/azure/api-management/authorizations-overview>

upvoted 20 times

✉️  **Tightbot** Highly Voted 5 months, 4 weeks ago

"Requests to the logic apps from the developers must be limited to lower rates than the requests from the users at Contoso." - This requirement can be achieved using the 'Limit call rate by key' feature of the API management.

<https://learn.microsoft.com/en-us/azure/api-management/api-management-access-restriction-policies#LimitCallRateByKey>

<https://learn.microsoft.com/en-us/azure/api-management/api-management-sample-flexible-throttling#user-identity-throttling>

upvoted 9 times

✉️  **imjoel** Most Recent 2 days, 8 hours ago

answer is api mgt

upvoted 1 times

✉️  **yonie** 2 months ago

Selected Answer: D

Correct is D

Not C: Azure AD business-to-business (B2B) uses guest accounts.

upvoted 1 times

✉️  **cluqueg** 2 months, 3 weeks ago

Agree, API management is the the only option.

upvoted 1 times

 **jj22222** 3 months, 2 weeks ago  
this one was on the test in 2023  
upvoted 2 times

 **NotMeAnyWay** 3 months, 2 weeks ago  
**Selected Answer: D**  
D. Azure API Management

To provide access to the logic apps for Fabrikam developers while limiting their requests to lower rates than the users at Contoso and allowing them to rely on their existing OAuth 2.0 provider, you should use Azure API Management.

You can create an API Management instance and import the logic apps as APIs. Then, you can configure API Management to act as an OAuth 2.0 client to the third-party identity provider used by Fabrikam. This will enable Fabrikam developers to use their existing credentials to authenticate and access the logic apps. Additionally, you can use API Management to apply rate limiting policies to control the number of requests that Fabrikam developers can make.

upvoted 4 times

 **zellick** 4 months ago  
**Selected Answer: D**  
D is the answer.

<https://learn.microsoft.com/en-us/azure/api-management/authorizations-overview>  
API Management authorizations (preview) simplify the process of managing authorization tokens to OAuth 2.0 backend services. By configuring any of the supported identity providers and creating an authorization using the standardized OAuth 2.0 flow, API Management can retrieve and refresh access tokens to be used inside of API management or sent back to a client. This feature enables APIs to be exposed with or without a subscription key, and the authorization to the backend service uses OAuth 2.0.

upvoted 1 times

 **lanntt** 4 months, 1 week ago  
API Management is correct  
upvoted 2 times

 **rikininetysix** 4 months, 2 weeks ago  
**Selected Answer: D**

Azure Front Door is a CDN service.  
Azure AD business-to-business (B2B) uses guest accounts.  
Azure AD Application Proxy is for secure remote access to on-premises web applications.

So, the correct answer seems to be 'D'.  
upvoted 3 times

 **OPT\_001122** 5 months ago  
**Selected Answer: D**  
API management can use Oauth2 for authorization  
D - correct ans  
upvoted 1 times

 **Alessandro365** 5 months ago  
**Selected Answer: D**  
D is the correct answer  
upvoted 1 times

 **jj22222** 5 months ago  
**Selected Answer: D**  
API Management is correct  
upvoted 1 times

 **JYKL88** 6 months, 1 week ago  
**Selected Answer: D**  
Answer is correct  
upvoted 2 times

 **ShaheedM** 7 months ago  
**Selected Answer: D**  
D is correct  
upvoted 2 times

 **manikatech** 7 months, 1 week ago  
The Correct Answer is API Management only  
upvoted 1 times

 **AlMargoi** 7 months, 1 week ago  
Seems legit

upvoted 1 times

**HOTSPOT -**

You have an Azure subscription that contains 300 virtual machines that run Windows Server 2019.

You need to centrally monitor all warning events in the System logs of the virtual machines.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Resource to create in Azure:

An event hub
A Log Analytics workspace
A search service
A storage account

Configuration to perform on the virtual machines:

Create event subscriptions
Configure Continuous delivery
Install the Azure Monitor agent
Modify the membership of the Event Log Readers group

**Correct Answer:****Answer Area**

Resource to create in Azure:

An event hub
<b>A Log Analytics workspace</b>
A search service
A storage account

Configuration to perform on the virtual machines:

Create event subscriptions
Configure Continuous delivery
<b>Install the Azure Monitor agent</b>
Modify the membership of the Event Log Readers group

Box 1: A Log Analytics workspace

Send resource logs to a Log Analytics workspace to enable the features of Azure Monitor Logs.

You must create a diagnostic setting for each Azure resource to send its resource logs to a Log Analytics workspace to use with Azure Monitor Logs.

Box 2: Install the Azure Monitor agent

Use the Azure Monitor agent if you need to:

Collect guest logs and metrics from any machine in Azure, in other clouds, or on-premises.

Manage data collection configuration centrally

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/essentials/resource-logs> <https://docs.microsoft.com/en-us/azure/azure-monitor/agents-overview#azure-monitor-agent>

 **most\_lenyora** Highly Voted 9 months, 3 weeks ago

Correct!

upvoted 24 times

 **cluqueg** Most Recent 2 months, 3 weeks ago

Also vote for Log Analytics + installing the Azure Monitor Agent.

upvoted 4 times

 **winy** 2 months, 3 weeks ago

In exam 4/1/2023

upvoted 2 times

 **zellck** 4 months ago

1. Log Analytics workspace
2. Install Azure Monitor agent

<https://learn.microsoft.com/en-us/azure/azure-monitor/logs/log-analytics-workspace-overview>

A Log Analytics workspace is a unique environment for log data from Azure Monitor and other Azure services, such as Microsoft Sentinel and Microsoft Defender for Cloud. Each workspace has its own data repository and configuration but might combine data from multiple services.

<https://learn.microsoft.com/en-us/azure/azure-monitor/agents/agents-overview>

Azure Monitor Agent (AMA) collects monitoring data from the guest operating system of Azure and hybrid virtual machines and delivers it to Azure Monitor for use by features, insights, and other services, such as Microsoft Sentinel and Microsoft Defender for Cloud. Azure Monitor Agent replaces all of Azure Monitor's legacy monitoring agents.

upvoted 4 times

✉ **jj22222** 4 months ago

Log analytics workspace  
Install Azure monitor agent

upvoted 1 times

✉ **lanntt** 4 months, 1 week ago

in my exam 14/2/2023  
upvoted 2 times

✉ **Sarvy** 4 months, 1 week ago

In exam 2/12/2023  
upvoted 2 times

✉ **certd** 5 months ago

Resource to create in Azure:

A Log Analytics workspace: To collect and analyze log data from the virtual machines.

A storage account: To store the collected logs.

Configuration to perform on the virtual machines:

Install the Azure Monitor agent: To collect the logs from the virtual machines and send them to the Log Analytics workspace.

Modify the membership of the Event log readers group: To allow the Azure Monitor agent to read the System logs of the virtual machines.

Create event subscriptions: To forward the warning events from the System logs of the virtual machines to Log Analytics workspace.

Configure Continuous delivery: To ensure that the logs are delivered to Log Analytics workspace in real-time.

upvoted 3 times

✉ **OPT\_001122** 5 months ago

Thanks to all who have mentioned the exam dates.

The given ans is correct

Box 1: A Log Analytics workspace

Box 2: Install the Azure Monitor agent

upvoted 1 times

✉ **jj22222** 5 months ago

Analytics Workspace and monitor agent, is right

upvoted 1 times

✉ **armpro** 5 months, 1 week ago

Correct

Capture events into log analytics workspace with Azure Monitor Agent on VM

<https://learn.microsoft.com/en-us/azure/azure-monitor/vm/monitor-virtual-machine-agent>

upvoted 1 times

✉ **Bummer\_boy** 5 months, 2 weeks ago

No doubts here - agent needs to be installed and logs are to be captured by workspace for centralized analysis

upvoted 1 times

✉ **techmaster1507** 6 months, 4 weeks ago

Correct

upvoted 2 times

✉ **ahmed13** 7 months, 2 weeks ago

Correct

upvoted 3 times

✉ **Teab91** 8 months, 3 weeks ago

Seems correct and logical

upvoted 3 times

✉ **Pamban** 8 months, 3 weeks ago

appeared on 5th Oct 2022

upvoted 3 times

✉ **sanju123kumar** 9 months ago

Correct. But not getting this questions in exam  
upvoted 2 times

**HOTSPOT -**

You have several Azure App Service web apps that use Azure Key Vault to store data encryption keys.

Several departments have the following requests to support the web app:

Department	Request
Security	<ul style="list-style-type: none"> <li>Review the membership of administrative roles and require users to provide a justification for continued membership.</li> <li>Get alerts about changes in administrator assignments.</li> <li>See a history of administrator activation, including which changes administrators made to Azure resources.</li> </ul>
Development	<ul style="list-style-type: none"> <li>Enable the applications to access Key Vault and retrieve keys for use in code.</li> </ul>
Quality Assurance	<ul style="list-style-type: none"> <li>Receive temporary administrator access to create and configure additional web apps in the test environment.</li> </ul>

Which service should you recommend for each department's request? To answer, configure the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Security:

- Azure AD Privileged Identity Management
- Azure Managed Identity
- Azure AD Connect
- Azure AD Identity Protection

Development:

- Azure AD Privileged Identity Management
- Azure Managed Identity
- Azure AD Connect
- Azure AD Identity Protection

Quality Assurance:

- Azure AD Privileged Identity Management
- Azure Managed Identity
- Azure AD Connect
- Azure AD Identity Protection

**Answer Area**

Security:

- Azure AD Privileged Identity Management
- Azure Managed Identity
- Azure AD Connect
- Azure AD Identity Protection

Development:

- Azure AD Privileged Identity Management
- Azure Managed Identity
- Azure AD Connect
- Azure AD Identity Protection

Quality Assurance:

- Azure AD Privileged Identity Management
- Azure Managed Identity
- Azure AD Connect
- Azure AD Identity Protection

**Correct Answer:**

Box 1: Azure AD Privileged Identity Management

Privileged Identity Management provides time-based and approval-based role activation to mitigate the risks of excessive, unnecessary, or misused access permissions on resources that you care about. Here are some of the key features of Privileged Identity Management:

Provide just-in-time privileged access to Azure AD and Azure resources  
Assign time-bound access to resources using start and end dates  
Require approval to activate privileged roles  
Enforce multi-factor authentication to activate any role  
Use justification to understand why users activate  
Get notifications when privileged roles are activated  
Conduct access reviews to ensure users still need roles  
Download audit history for internal or external audit  
Prevents removal of the last active Global Administrator role assignment

Box 2: Azure Managed Identity -

Managed identities provide an identity for applications to use when connecting to resources that support Azure Active Directory (Azure AD) authentication.

Applications may use the managed identity to obtain Azure AD tokens. With Azure Key Vault, developers can use managed identities to access resources. Key

Vault stores credentials in a secure manner and gives access to storage accounts.

Box 3: Azure AD Privileged Identity Management

Privileged Identity Management provides time-based and approval-based role activation to mitigate the risks of excessive, unnecessary, or misused access permissions on resources that you care about. Here are some of the key features of Privileged Identity Management:

Provide just-in-time privileged access to Azure AD and Azure resources

Assign time-bound access to resources using start and end dates

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-configure> <https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/overview>

✉️  **mse89**  9 months, 4 weeks ago

PIM

MI

PIM

answer is correct

upvoted 36 times

✉️  **One111** 9 months ago

Non of security requirements can be accomplished by PIM. That's definitely not the right answer.

upvoted 2 times

✉️  **Ayboum** 8 months, 1 week ago

Access review is included on PIM

upvoted 10 times

✉️  **SilverFox22** 6 months ago

To confirm: "You can use Azure Active Directory (Azure AD) Privileged Identity Management (PIM) to create access reviews for privileged access to Azure resource and Azure AD roles." <https://learn.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-create-azure-ad-roles-and-resource-roles-review>

upvoted 5 times

✉️  **One111**  9 months ago

It should be

1 Identity Governance / Access Review - access based on groups and review periods.

2 Managed Identity - access with passwordless and no additional administration footprints.

3 Privileged Identity Management - temporary role activation.

Answers are probably messed and lack option in first list.

upvoted 10 times

✉️  **FabrityDev** 5 months, 2 weeks ago

From documentation:

Privileged Identity Management provides time-based and approval-based role activation to mitigate the risks of excessive, unnecessary, or misused access permissions on resources that you care about. Here are some of the key features of Privileged Identity Management:

Provide just-in-time privileged access to Azure AD and Azure resources

Assign time-bound access to resources using start and end dates

Require approval to activate privileged roles

Enforce multi-factor authentication to activate any role

Use justification to understand why users activate

Get notifications when privileged roles are activated

Conduct access reviews to ensure users still need roles  
Download audit history for internal or external audit  
Prevents removal of the last active Global Administrator and Privileged Role Administrator role assignments

So PIM, MI, PIM

<https://learn.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-configure>  
upvoted 7 times

✉️ **ExamTopicsTST** 7 months, 2 weeks ago

@One111, since the option is not there, it is NOT an option as an answer. Under 'Identity Governance' is where PIM exists, and all the requirements can be met by what PIM provides. Answers provided ARE 100% correct: PIM, MI, PIM.  
upvoted 11 times

✉️ **sexyt** 5 months, 2 weeks ago

look at examtopics reply to you and realize this is an architect test not an engineering test  
upvoted 1 times

✉️ **seedati** [Most Recent] 4 weeks ago

if each division has two subscriptions each, the minimum number of objects required to deploy the application using Azure Blueprints would be:

1 management group per division: You would need two management groups, one for each division. Each management group would act as a container for the respective division's subscriptions.

2 blueprint definitions: You would need one blueprint definition for each division's subscriptions. Each blueprint definition would specify the resource group, Azure web app, custom role assignments, and Azure Cosmos DB account required for the application.

4 blueprint assignments: You would need four blueprint assignments, two for each division's subscriptions. Each division's blueprint definition would be assigned to both of their respective subscriptions.

In summary, the minimum number of objects required now would be:

2 management groups  
2 blueprint definitions  
4 blueprint assignments (2 assignments per division)  
upvoted 1 times

✉️ **sankuro** 1 month, 2 weeks ago

Got this on 5/7/2023 exam.  
upvoted 1 times

✉️ **winy** 2 months, 3 weeks ago

this was on 4/1/23 exam  
upvoted 2 times

✉️ **ZUMY** 2 months, 4 weeks ago

Given answers are correct  
upvoted 1 times

✉️ **akr1503** 3 months ago

This was on 3/27/23 exam  
upvoted 1 times

✉️ **gdamascenom** 4 months ago

It should be:  
Azure AD Identity Protection to get the access reviews  
Azure Managed Identity  
Azure AD PIM  
upvoted 3 times

✉️ **jj22222** 4 months ago

AD PIM  
Azure Managed Identity  
AD PIM  
upvoted 1 times

✉️ **zelick** 4 months, 1 week ago

1. Azure AD PIM  
2. Azure Managed ID  
3. Azure AD PIM

<https://learn.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-create-azure-ad-roles-and-resource-roles-review>  
The need for access to privileged Azure resource and Azure AD roles by employees changes over time. To reduce the risk associated with stale role assignments, you should regularly review access. You can use Azure Active Directory (Azure AD) Privileged Identity Management (PIM) to create access reviews for privileged access to Azure resource and Azure AD roles. You can also configure recurring access reviews that occur automatically.

<https://learn.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/overview>

While developers can securely store the secrets in Azure Key Vault, services need a way to access Azure Key Vault. Managed identities provide an automatically managed identity in Azure Active Directory (Azure AD) for applications to use when connecting to resources that support Azure AD authentication. Applications can use managed identities to obtain Azure AD tokens without having to manage any credentials.

upvoted 4 times

✉️ **zellck** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 1 times

✉️ **zellck** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-configure#terminology>  
just-in-time (JIT) access

- A model in which users receive temporary permissions to perform privileged tasks, which prevents malicious or unauthorized users from gaining access after the permissions have expired. Access is granted only when users need it.

upvoted 1 times

✉️ **zellck** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/training/modules/design-authentication-authorization-solutions/9-one-design-managed-identities>

Managed identities provide an identity for apps to use when connecting to resources that support Azure AD authentication. Apps can use the managed identity to obtain Azure AD tokens. An app might use a managed identity to access resources like Azure Key Vault where developers can store credentials in a secure manner or to access storage accounts.

upvoted 1 times

✉️ **Sarvy** 4 months, 1 week ago

In exam 2/12/2023

upvoted 1 times

✉️ **OPT\_001122** 5 months ago

1 PIM

2 MI

3 PIM

correct ans

upvoted 1 times

✉️ **jj22222** 5 months ago

answer is right

upvoted 2 times

✉️ **ssgg100** 5 months, 3 weeks ago

Correct

upvoted 2 times

✉️ **Vishal59** 6 months, 1 week ago

I got this question on the 19-Dec-2022 exam

upvoted 2 times

✉️ **Samko635** 8 months, 2 weeks ago

It should be IT governance(Not an option) / MI / PIM

"Review access" on PIM is a completely different thing to what security team is asking.

upvoted 2 times

✉️ **Jay\_2pt0** 8 months ago

Access Reviews are included with PIM. See <https://learn.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-configure>

upvoted 1 times

✉️ **meet\_satish** 9 months ago

Answer is correct - PIM, MI, PIM

PIM:

- Assign time-bound access to resources using start and end dates
- Use justification to understand why users activate
- Get notifications when privileged roles are activated
- Download audit history for internal or external audit

upvoted 5 times

**HOTSPOT -**

Your company has the divisions shown in the following table.

Division	Azure subscription	Azure Active Directory (Azure AD) tenant
East	Sub1, Sub2	East.contoso.com
West	Sub3, Sub4	West.contoso.com

You plan to deploy a custom application to each subscription. The application will contain the following:

- A resource group
- An Azure web app
- Custom role assignments
- An Azure Cosmos DB account

You need to use Azure Blueprints to deploy the application to each subscription.

What is the minimum number of objects required to deploy the application? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Management groups:

▼  
1  
2  
3  
4

Blueprint definitions:

▼  
1  
2  
3  
4

Blueprint assignments:

▼  
1  
2  
3  
4

## Answer Area

Management groups:

1
2
3
4

Blueprint definitions:

Correct Answer:

1
2
3
4

Blueprint assignments:

1
2
3
4

Box 1: 2 -

One management group for each Azure AD tenant

Azure management groups provide a level of scope above subscriptions.

All subscriptions within a management group automatically inherit the conditions applied to the management group.

All subscriptions within a single management group must trust the same Azure Active Directory tenant.

Box 2: 1 -

One single blueprint definition can be assigned to different existing management groups or subscriptions.

When creating a blueprint definition, you'll define where the blueprint is saved. Blueprints can be saved to a management group or subscription that you have

Contributor access to. If the location is a management group, the blueprint is available to assign to any child subscription of that management group.

Box 3: 2 -

Blueprint assignment -

Each Published Version of a blueprint can be assigned (with a max name length of 90 characters) to an existing management group or subscription.

Assigning a blueprint definition to a management group means the assignment object exists at the management group. The deployment of artifacts still targets a subscription.

Reference:

<https://docs.microsoft.com/en-us/azure/governance/management-groups/overview> <https://docs.microsoft.com/en-us/azure/governance/blueprints/overview>

✉️  **manubust** Highly Voted  10 months ago

I dont know why the discussion thread disappeared in this exam. This question is in AZ-304 and the right answer is 2,2,4.

Management groups can't span AAD tenant, so you need 2 management groups. Blueprints definition can be saved within management group which, in turn, means you need 2 blueprint definitions.

Blueprint assignments are at subscription level, therefore you need 4.

upvoted 88 times

✉️  **cluqueg** 2 months, 3 weeks ago

The proposed answer is correct: 212.

Blueprints could be assigned to MG or Subscription, so just save 2 assignments but setting at MG level.

upvoted 2 times

✉️  **C\_M\_M** 2 months ago

If you are setting at MG level, but there are 2 MG, why do you say 1 blueprint then?

upvoted 1 times

👤 C\_M\_M 2 months ago

Remember the 2 MGs are in different tenants.  
upvoted 2 times

👤 JYKL88 6 months, 1 week ago

Agree with 2-2-4  
upvoted 5 times

👤 Snownoodles Highly Voted 9 months, 3 weeks ago

Blueprint can be assigned to MG level although the following statement from Azure docs is confusing:  
"Assigning a blueprint definition to a management group means the assignment object exists at the management group. The deployment of artifacts still targets a subscription"  
<https://docs.microsoft.com/en-us/azure/governance/blueprints/overview>  
so the answer should be 2-2-2  
upvoted 20 times

👤 abxc 4 months ago

I just tried creating blueprint assignment at empty mg and it requires at least one subscription selected under the mg. So it has to be 2-2-4  
upvoted 2 times

👤 cluqueg 2 months, 3 weeks ago

Create the MG first and later add subscriptions to this MG.  
upvoted 1 times

👤 zenithcsa1 9 months, 2 weeks ago

Blueprint assignment to MG is possible and it can be done only by REST API, described in the following link.  
<https://docs.microsoft.com/en-us/rest/api/blueprints/assignments/create-or-update?tabs=HTTP>  
However, properties.scope of assignment object is a single subscription, whch means you have to create an assignment respectively for each subscription.  
<https://docs.microsoft.com/en-us/rest/api/blueprints/assignments/create-or-update?tabs=HTTP#assignment>

So, 4 subscriptions mean 4 assignments.

upvoted 3 times

👤 CJWit 7 months, 1 week ago

but there are 4 subscriptions in this example. if the blueprint definition is assigned on a per sub basis, there would need to be 4. 1 for each sub.  
upvoted 1 times

👤 mufflon 9 months, 2 weeks ago

I agree, i believe that the answer is 2-2-2. as described in the provided link.  
upvoted 4 times

👤 Softeng Most Recent 1 day, 7 hours ago

I think the correct answer may be 2-2-2.

Management groups: You need 2 since there are 2 Azure AD Tenants.

Blueprint definition: You can assign it at management group level, so It's 2 again.

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#blueprint-definition-locations>

Blueprint assignment: Same as the definitions, you can assign it at mg level or subscription, so It's 2.

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#blueprint-assignment>

upvoted 1 times

👤 seedati 4 weeks ago

If each division has two subscriptions each, the minimum number of objects required to deploy the application using Azure Blueprints would be:

1 management group per division: You would need two management groups, one for each division. Each management group would act as a container for the respective division's subscriptions.

2 blueprint definitions: You would need one blueprint definition for each division's subscriptions. Each blueprint definition would specify the resource group, Azure web app, custom role assignments, and Azure Cosmos DB account required for the application.

4 blueprint assignments: You would need four blueprint assignments, two for each division's subscriptions. Each division's blueprint definition would be assigned to both of their respective subscriptions.

In summary, the minimum number of objects required now would be:

2 management groups  
2 blueprint definitions  
4 blueprint assignments (2 assignments per division)  
upvoted 2 times

👤 C\_M\_M 1 month, 1 week ago

I think 222

2 management groups - there are two tenants, so you need at least one management group per tenant.

2 definitions: same reason as above. Although hypothetically (not sure) you could save one blueprint definition in multiple management groups, I

don't see how you can do that when the management groups are in different tenants. So you need 2 blueprint definitions.  
2 Assignments: the question is about minimum objects. So although artifacts of a blueprint can only target subscriptions, blueprint assignment itself can also be done at the management level, in which case the assignment object would remain at the management level even though the artifacts will still target subscriptions. <https://learn.microsoft.com/en-us/azure/governance/blueprints/overview>

upvoted 2 times

✉ **sankuro** 1 month, 2 weeks ago

Got this on 5/7/2023 exam.

upvoted 2 times

✉ **lombri** 1 month, 3 weeks ago

You will need two management groups, one for each set of subscriptions in each region. This is because each management group can only have subscriptions that are located in the same region.

You will need two blueprint definitions, one for East US subscriptions and one for West US subscriptions.

You will need four blueprint assignments, one for each subscription. Each assignment will apply the corresponding blueprint definition to the respective subscription.

Therefore, the minimum number of objects required is:

-->Two management groups (one for east US subscriptions and one for north US subscriptions)

-->Two blueprint definitions (one for each management group)

-->Four blueprint assignments (one for each subscription)

upvoted 2 times

✉ **yonie** 2 months ago

2-2-4

Blueprint definition locations

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#blueprint-definition-locations>

"When creating a blueprint definition, you'll define where the blueprint is saved. Blueprints can be saved to a management group or subscription that you have Contributor access to.

"If the location is a management group, the blueprint is available to assign to any child subscription of that management group."

upvoted 3 times

✉ **kilobaik** 2 months, 2 weeks ago

Answer is 2-2-4.

An Azure Management Group can be associated with only one Azure Active Directory tenant. This means that all the Azure subscriptions within that management group are associated with the same Azure AD tenant. However, it is possible to associate multiple Azure Management Groups with the same Azure AD tenant.

upvoted 1 times

✉ **Tuhaar** 2 months, 2 weeks ago

A blueprint has 2 parts - definition and assignment

Definition scope: Management or Subscription

Answer should be

2,1,4

2 Management groups,

1, Blueprint Definition

4 subscription assignments

Assignment scope: Subscriptions

Link: <https://youtu.be/cQ9D-d6KkMY>

Azure link: <https://learn.microsoft.com/en-us/azure/governance/blueprints/overview>

upvoted 1 times

✉ **TJ001** 2 months, 2 weeks ago

\*Management group are AD specific so 2 Management groups are needed

\* Blueprint definitions can be saved at management group level including root..so required 2 blueprint definitions

\* Blueprint can be assigned at management group level which will targets its assigned subscriptions but it can be assigned each management... note it is not available in portal so need to use REST API...at the end it can be assigned at a management group level so 2 assignments are needed.

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#blueprint-assignment>

2,2,2 for me

upvoted 1 times

✉ **winy** 2 months, 3 weeks ago

This was on 4/1/23 exam

upvoted 2 times

✉ **ZUMY** 2 months, 4 weeks ago

2-2-4 is correct

upvoted 1 times

👤 **kyawtlearning** 3 months ago

Got one similar to this on Mar 25, 2023. 2 Tenants, 1st tenant got 15 subscriptions and 2nd tenant got 5 subscriptions.  
upvoted 1 times

👤 **jj22222** 3 months, 2 weeks ago

2-2-4 is the right answer, this was also on the udemy practice test  
upvoted 3 times

👤 **zellck** 4 months ago

224 is the answer.

<https://learn.microsoft.com/en-us/azure/governance/management-groups/overview>

Management groups give you enterprise-grade management at scale no matter what type of subscriptions you might have. However, all subscriptions within a single management group must trust the same Azure Active Directory (Azure AD) tenant.

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#blueprint-definition-locations>

When creating a blueprint definition, you'll define where the blueprint is saved. Blueprints can be saved to a management group or subscription that you have Contributor access to. If the location is a management group, the blueprint is available to assign to any child subscription of that management group.

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#blueprint-assignment>

Assigning a blueprint definition to a management group means the assignment object exists at the management group. The deployment of artifacts still targets a subscription.

upvoted 4 times

👤 **zellck** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 5 times

👤 **zellck** 4 months ago

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#permissions-in-azure-blueprints>

As blueprint assignments are created on a subscription, the blueprint assign and unassign permissions must be granted on a subscription scope or be inherited onto a subscription scope.

upvoted 2 times

👤 **jj22222** 4 months ago

2 - 2 - 4

upvoted 1 times

**HOTSPOT -**

You need to design an Azure policy that will implement the following functionality:

- ⇒ For new resources, assign tags and values that match the tags and values of the resource group to which the resources are deployed.
- ⇒ For existing resources, identify whether the tags and values match the tags and values of the resource group that contains the resources.
- ⇒ For any non-compliant resources, trigger auto-generated remediation tasks to create missing tags and values.

The solution must use the principle of least privilege.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Azure Policy effect to use:

Append
EnforceOPAConstraint
EnforceRegoPolicy
Modify

Azure Active Directory (Azure AD) object and role-based access control (RBAC) role to use for the remediation tasks:

A managed identity with the Contributor role
A managed identity with the User Access Administrator role
A service principal with the Contributor role
A service principal with the User Access Administrator role

**Correct Answer:****Answer Area**

Azure Policy effect to use:

Append
EnforceOPAConstraint
EnforceRegoPolicy
Modify

Azure Active Directory (Azure AD) object and role-based access control (RBAC) role to use for the remediation tasks:

A managed identity with the Contributor role
A managed identity with the User Access Administrator role
A service principal with the Contributor role
A service principal with the User Access Administrator role

Box 1: Modify -

Modify is used to add, update, or remove properties or tags on a subscription or resource during creation or update. A common example is updating tags on resources such as costCenter. Existing non-compliant resources can be remediated with a remediation task. A single Modify rule can have any number of operations. Policy assignments with effect set as Modify require a managed identity to do remediation.

Incorrect:

- \* The following effects are deprecated: EnforceOPAConstraint EnforceRegoPolicy
- \* Append is used to add additional fields to the requested resource during creation or update. A common example is specifying allowed IPs for a storage resource.

Append is intended for use with non-tag properties. While Append can add tags to a resource during a create or update request, it's recommended to use the

Modify effect for tags instead.

Box 2: A managed identity with the Contributor role

The managed identity needs to be granted the appropriate roles required for remediating resources to grant the managed identity.

Contributor - Can create and manage all types of Azure resources but can't grant access to others.

Incorrect:

User Access Administrator: lets you manage user access to Azure resources.

Reference:

<https://docs.microsoft.com/en-us/azure/governance/policy/concepts/effects> <https://docs.microsoft.com/en-us/azure/governance/policy/how-to/remediate-resources> <https://docs.microsoft.com/en-us/azure/role-based-access-control/built-in-roles>

  **manubust**  10 months ago

Question #33 in AZ-304. Right answer

upvoted 20 times

👤 **zellck** Highly Voted 4 months ago

1. Modify
2. Managed identity with Contributor role

<https://learn.microsoft.com/en-us/azure/governance/policy/concepts/effects#modify>  
Modify is used to add, update, or remove properties or tags on a subscription or resource during creation or update. A common example is updating tags on resources such as costCenter. Existing non-compliant resources can be remediated with a remediation task. A single Modify rule can have any number of operations. Policy assignments with effect set as Modify require a managed identity to do remediation.

upvoted 7 times

👤 **zellck** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 5 times

👤 **zellck** 4 months ago

<https://learn.microsoft.com/en-us/azure/governance/policy/how-to/remediate-resources?tabs=azure-portal#how-remediation-access-control-works>

When Azure Policy starts a template deployment when evaluating deployIfNotExists policies or modifies a resource when evaluating modify policies, it does so using a managed identity that is associated with the policy assignment. Policy assignments use managed identities for Azure resource authorization. You can use either a system-assigned managed identity that is created by the policy service or a user-assigned identity provided by the user. The managed identity needs to be assigned the minimum role-based access control (RBAC) role(s) required to remediate resources. If the managed identity is missing roles, an error is displayed in the portal during the assignment of the policy or an initiative.

upvoted 3 times

👤 **sankuro** Most Recent 1 month, 2 weeks ago

Got this on 5/7/2023 exam.

upvoted 2 times

👤 **ZUMY** 2 months, 4 weeks ago

1. Modify
2. Managed identity with Contributor role

upvoted 1 times

👤 **johnD16** 3 months, 1 week ago

Showed in exam 18.03.2023. correct  
passed 940/1000

upvoted 5 times

👤 **jj22222** 4 months ago

modify  
managed identity with contributor role

upvoted 1 times

👤 **lanntt** 4 months, 1 week ago

In exam 14/2/2023  
upvoted 3 times

👤 **jj22222** 4 months ago

thanks for confirming

upvoted 1 times

👤 **Sarvy** 4 months, 1 week ago

In exam 2/12/2023  
upvoted 1 times

👤 **ITboy8** 4 months, 1 week ago

Modify MIC correct ans  
upvoted 1 times

👤 **OPT\_001122** 5 months ago

Box 1:Modify  
Box 2: A managed identity with the Contributor role  
Correct ans  
upvoted 1 times

👤 **Maxime666** 5 months ago

Not easy. I tough "Append" was to good answer because no modification where done directly on the tags but only ADD - READ - TriggerAction  
But if the last "Trigger" action need the right to modify then it will be the right answer i suppose.

upvoted 1 times

👤 **Parmjeet** 5 months, 3 weeks ago

deprecated options --> EnforceOPAConstraint , EnforceRegoPolicy  
upvoted 3 times

✉️  **mufflon** 9 months, 2 weeks ago

Modify and managed identity with contributor role.

The following effects are deprecated:

EnforceOPAConstraint

EnforceRegoPolicy

<https://docs.microsoft.com/en-us/azure/governance/policy/concepts/effects>

<https://docs.microsoft.com/en-us/azure/governance/policy/how-to/remediate-resources?tabs=azure-portal>

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

upvoted 2 times

✉️  **most\_lenyora** 9 months, 3 weeks ago

Correct

upvoted 1 times

**HOTSPOT -**

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

Name	Type	Account Kind	Location
storage1	Azure Storage account	Storage (general purpose v1)	East US
storage2	Azure Storage account	StorageV2 (general purpose v2)	East US
Workspace1	Azure Log Analytics workspace	<b>Not applicable</b>	East US
Workspace2	Azure Log Analytics workspace	<b>Not applicable</b>	East US
Hub1	Azure event hub	<b>Not applicable</b>	East US

You create an Azure SQL database named DB1 that is hosted in the East US Azure region.

To DB1, you add a diagnostic setting named Settings1. Settings1 archive SQLInsights to storage1 and sends SQLInsights to Workspace1.

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

Hot Area:

**Answer Area**

Statements	Yes	No
You can add a new diagnostic setting that archives SQLInsights logs to storage2.	<input type="radio"/>	<input type="radio"/>
You can add a new diagnostic setting that sends SQLInsights logs to Workspace2.	<input type="radio"/>	<input type="radio"/>
You can add a new diagnostic setting that sends SQLInsights logs to Hub1.	<input type="radio"/>	<input type="radio"/>

**Correct Answer:****Answer Area**

Statements	Yes	No
You can add a new diagnostic setting that archives SQLInsights logs to storage2.	<input checked="" type="radio"/>	<input type="radio"/>
You can add a new diagnostic setting that sends SQLInsights logs to Workspace2.	<input checked="" type="radio"/>	<input type="radio"/>
You can add a new diagnostic setting that sends SQLInsights logs to Hub1.	<input checked="" type="radio"/>	<input type="radio"/>

Box 1: Yes -

A single diagnostic setting can define no more than one of each of the destinations. If you want to send data to more than one of a particular destination type (for example, two different Log Analytics workspaces), then create multiple settings.

Each resource can have up to 5 diagnostic settings.

Note: This diagnostic telemetry can be streamed to one of the following Azure resources for analysis.

- \* Log Analytics workspace
- \* Azure Event Hubs
- \* Azure Storage

Box 2: Yes -

Box 3: Yes -

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/essentials/diagnostic-settings> <https://docs.microsoft.com/en-us/azure/azure-sql/database/metrics-diagnostic-telemetry-streaming-export-configure?tabs=azure-portal>

✉  **most\_lenyora**  9 months, 3 weeks ago

Yes, Yes, Yes  
upvoted 28 times

✉  **zellck**  4 months ago

YYY is the answer.

<https://learn.microsoft.com/en-us/azure/azure-monitor/essentials/diagnostic-settings?tabs=portal#destinations>  
Platform logs and metrics can be sent to the destinations listed in the following table.

- Log Analytics workspace
- Azure Storage account
- Azure Event Hubs
- Azure Monitor partner integrations

upvoted 6 times

✉  **vicolmenares**  3 weeks, 6 days ago

The answer is Y,Y,Y.  
I have tested, I created:  
2 diag settings  
2 SA  
Then send SQLInsights to different SA.  
upvoted 1 times

✉  **zzreflexzz** 1 month, 3 weeks ago

on exam 5/2/23  
upvoted 3 times

✉  **winy** 2 months, 3 weeks ago

This was on 4/1/23 exam  
upvoted 3 times

✉  **ZUMY** 2 months, 4 weeks ago

YYY is correct

Ref  
<https://learn.microsoft.com/en-us/azure/azure-monitor/essentials/diagnostic-settings?tabs=portal>  
upvoted 2 times

✉  **Jayeshp877** 4 months ago

This Is Jayesh Pandey.  
I have tested- N,Y,Y 100%  
1. only one storage, even u create multiple diag settings, u can target to only one storage.  
2. add new diag setting upto 5 times and u can target upto 5 Workspaces  
3. Event hub can be added in this scenario.  
upvoted 1 times

✉  **Ilky** 4 months, 1 week ago

YES-YES-YES  
upvoted 1 times

✉  **jj22222** 5 months ago

answer looks right  
upvoted 2 times

✉  **ckyap** 7 months, 3 weeks ago

Tested with my Azure subscription - Box1 ok, Box2 ok, Box3 not tested yet  
upvoted 4 times

✉  **smartamu** 7 months, 3 weeks ago

No, Yes, Yes

Box 1: No  
You archive logs only to Azure Storage accounts.

Box 2: Yes

Box 3: Yes  
Sending logs to Event Hubs allows you to stream data to external systems such as third-party SIEMs and other log analytics solutions.

Note: A single diagnostic setting can define no more than one of each of the destinations. If you want to send data to more than one of a particular destination type (for example, two different Log Analytics workspaces), then create multiple settings. Each resource can have up to 5 diagnostic settings.

upvoted 2 times

✉  **datchatdude** 7 months, 3 weeks ago

storage2 is an Azure Storage Account, so shouldn't box 1 be Yes?

upvoted 2 times

✉  **VincentMarchal** 7 months, 1 week ago

Yes it is. Box 1 = YES.

upvoted 1 times

✉  **Snownoodles** 9 months, 3 weeks ago

N-N-Y

You can only configure one storage account and one log analytics workspace as destination in diagnostic settings.

upvoted 3 times

✉  **betterthanlife** 2 months ago

Correct, & that's why for each of the 3 new configs a new diagnostic setting is being created, & given this (& the fact that a diagnostic setting can target a storage account, log analytics workspace, or event hub) the correct answer is YES, YES, YES

upvoted 1 times

✉  **Snownoodles** 9 months, 3 weeks ago

Sorry, I just tested it, it should Y-Y-Y.

The given answer is correct

upvoted 27 times

✉  **Fai9911** 8 months, 2 weeks ago

It's still yes even though wsp2 and hub both are NOT applicable. Strange!!!

upvoted 1 times

You plan to deploy an Azure SQL database that will store Personally Identifiable Information (PII).

You need to ensure that only privileged users can view the PII.

What should you include in the solution?

- A. dynamic data masking
- B. role-based access control (RBAC)
- C. Data Discovery & Classification
- D. Transparent Data Encryption (TDE)

**Correct Answer: A**

Dynamic data masking limits sensitive data exposure by masking it to non-privileged users.

Dynamic data masking helps prevent unauthorized access to sensitive data by enabling customers to designate how much of the sensitive data to reveal with minimal impact on the application layer. It's a policy-based security feature that hides the sensitive data in the result set of a query over designated database fields, while the data in the database is not changed.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/dynamic-data-masking-overview>

*Community vote distribution*

A (100%)

✉️  **ExamTopicsTST** Highly Voted 9 months, 4 weeks ago

**Selected Answer: A**

<https://docs.microsoft.com/en-us/sql/relational-databases/security/dynamic-data-masking?view=sql-server-ver16>

upvoted 10 times

✉️  **DA95** 6 months, 2 weeks ago

The question is about privileged user access, masking data is strategy to hide data behind unprivileged user. See CCSP exam material

upvoted 1 times

✉️  **NotMeAnyWay** Most Recent 3 months, 1 week ago

**Selected Answer: A**

A. dynamic data masking

Dynamic Data Masking (DDM) is a feature in Azure SQL Database that helps you protect sensitive data by obfuscating it from non-privileged users. DDM allows you to define masking rules on specific columns, so that the data in those columns is automatically replaced with a masked value when queried by users without the appropriate permissions. This ensures that only privileged users can view the actual Personally Identifiable Information (PII), while other users will see the masked data.

upvoted 3 times

✉️  **jj22222** 3 months, 2 weeks ago

this one is on the test in 2023

upvoted 2 times

✉️  **jj22222** 4 months ago

**Selected Answer: A**

A because its right

upvoted 2 times

✉️  **zellck** 4 months, 1 week ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/dynamic-data-masking-overview?view=azuresql>

Dynamic data masking helps prevent unauthorized access to sensitive data by enabling customers to designate how much of the sensitive data to reveal with minimal impact on the application layer. It's a policy-based security feature that hides the sensitive data in the result set of a query over designated database fields, while the data in the database is not changed.

upvoted 4 times

✉️  **Airil** 4 months, 1 week ago

**Selected Answer: A**

The answer is correct

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: A**

correct ans

upvoted 1 times

 **Piyal** 5 months ago

Azure SQL Database, Azure SQL Managed Instance, and Azure Synapse Analytics support dynamic data masking. Dynamic data masking limits sensitive data exposure by masking it to non-privileged users.

Answer is : A

upvoted 1 times

 **jj22222** 5 months ago

**Selected Answer: A**

looks right

upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: A**

Agree on A

<https://learn.microsoft.com/en-us/azure/azure-sql/database/dynamic-data-masking-overview?view=azuresql>

SQL users excluded from masking - A set of SQL users or Azure AD identities that get unmasked data in the SQL query results. Users with administrator privileges are always excluded from masking, and see the original data without any mask.

upvoted 1 times

 **mscbslt** 6 months, 1 week ago

keyword here is "view". You are masking the datas, they cannot be view

upvoted 1 times

 **Villa76** 6 months, 2 weeks ago

Based on following link right answer is RBAC :

<https://academy.pega.com/topic/role-based-access-control-rbac/v2#:~:text=To%20satisfy%20the%20requirement%20to%20restrict%20access%20to,and%20assigning%20permissions%20to%20each%20role%20as%20appropriate.>

To satisfy the requirement to restrict access to PII, you can implement role-based access control (RBAC). RBAC is an access-control model based on organizing users into roles and assigning permissions to each role as appropriate

upvoted 3 times

 **Villa76** 6 months, 2 weeks ago

Sorry changed my mind as the question here targets data specifically that is why DDM is more related than RBAC, so data dynamic masking is the the right answer.

A is the right answer.

upvoted 2 times

 **itvinoth83** 7 months ago

On the AZ 305 exam, 28/11/22

Given answer is correct

upvoted 1 times

 **manikatech** 7 months, 1 week ago

No RBAC only the right way

upvoted 1 times

 **Snownoodles** 9 months, 3 weeks ago

**Selected Answer: A**

given answer is correct

upvoted 2 times

You plan to deploy an app that will use an Azure Storage account.

You need to deploy the storage account. The storage account must meet the following requirements:

- ⇒ Store the data for multiple users.
- ⇒ Encrypt each user's data by using a separate key.
- ⇒ Encrypt all the data in the storage account by using customer-managed keys.

What should you deploy?

- A. files in a premium file share storage account
- B. blobs in a general purpose v2 storage account
- C. blobs in an Azure Data Lake Storage Gen2 account
- D. files in a general purpose v2 storage account

**Correct Answer: B**

You can specify a customer-provided key on Blob storage operations. A client making a read or write request against Blob storage can include an encryption key on the request for granular control over how blob data is encrypted and decrypted.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-service-encryption>

*Community vote distribution*

B (93%)	8%
---------	----

✉ **kay000001** Highly Voted 9 months, 2 weeks ago

**Selected Answer: B**

B. blobs in a general purpose v2 storage account  
upvoted 14 times

✉ **NotMeAnyWay** Highly Voted 3 months, 1 week ago

**Selected Answer: B**

B. blobs in a general purpose v2 storage account

A General Purpose v2 (GPv2) storage account can store blobs, files, queues, and tables, making it a versatile option for a wide range of applications. It supports customer-managed keys for encryption, allowing you to maintain control over the encryption keys.

To encrypt each user's data with a separate key, you can use Azure Blob Storage Service Encryption with customer-managed keys, storing each user's data in separate containers, and then configuring separate encryption keys for each container.

upvoted 9 times

✉ **Sandeep1981** Most Recent 1 month, 2 weeks ago

**Selected Answer: B**

B is the answer  
upvoted 1 times

✉ **zellck** 4 months ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/storage/common/storage-service-encryption#about-encryption-key-management>

You can specify a customer-provided key on Blob Storage operations. A client making a read or write request against Blob Storage can include an encryption key on the request for granular control over how blob data is encrypted and decrypted.

upvoted 6 times

✉ **zellck** 4 months ago

<https://learn.microsoft.com/en-us/azure/storage/blobs/encryption-customer-provided-keys>

Clients making requests against Azure Blob storage can provide an AES-256 encryption key to encrypt that blob on a write operation. Subsequent requests to read or write to the blob must include the same key. Including the encryption key on the request provides granular control over encryption settings for Blob storage operations. Customer-provided keys can be stored in Azure Key Vault or in another key store.

upvoted 2 times

✉ **jj22222** 4 months ago

**Selected Answer: B**

blobs in a general purpose v2 storage account

upvoted 1 times

-  **Ilky** 4 months, 1 week ago  
ADLS GEN 2 DOES NOT SUPPORT CMK ON THE FLY, HENCE B  
upvoted 1 times
-  **Joule** 4 months, 1 week ago  
**Selected Answer: C**  
B. Blobs in an Azure Data Lake Storage Gen2 account would be the best option to meet the given requirements. Azure Data Lake Storage Gen2 offers support for object storage and is designed to store and analyze large amounts of unstructured data. It also offers the ability to use customer-managed keys for encryption and supports the use of Azure Key Vault. Additionally, ADLS Gen2 offers a hierarchical namespace, which makes it easy to manage large data sets and access them efficiently.  
upvoted 1 times
-  **sainandam** 4 months, 2 weeks ago  
B - HNS does not support encryption keys on request.  
<https://learn.microsoft.com/en-us/azure/storage/blobs/encryption-customer-provided-keys>  
upvoted 1 times
-  **OPT\_001122** 5 months ago  
**Selected Answer: B**  
B. blobs in a general purpose v2 storage account  
upvoted 2 times
-  **VBK8579** 5 months ago  
Answer C  
upvoted 1 times
-  **armpro** 5 months, 1 week ago  
**Selected Answer: B**  
Ans: B  
Only blobs can use customer provided keys for container level or blob level custom encryption  
<https://learn.microsoft.com/en-us/azure/storage/common/storage-service-encryption#about-encryption-key-management>  
upvoted 1 times
-  **[Removed]** 5 months, 2 weeks ago  
**Selected Answer: B**  
Obviously B  
upvoted 1 times
-  **sporting1** 6 months ago  
I'm a bit confused. What is the difference between B and C?  
upvoted 1 times
-  **Mitytskr** 5 months, 3 weeks ago  
Data Lake on GPv2 means hierarchical namespace (HNS) is enabled, and according to: <https://learn.microsoft.com/en-us/azure/storage/blobs/storage-feature-support-in-storage-accounts>, HNS does not support customer-managed keys so it would have to be B.  
upvoted 7 times
-  **Mitytskr** 5 months, 3 weeks ago  
Sorry, meant customer-provided, not managed, which I think is required because of "Encrypt each user's data by using a separate key."  
Open to correction.  
upvoted 3 times
-  **MadSysadmin** 5 months, 3 weeks ago  
B and C are different, eg. Data Lake Storage supports paths and subdirectories  
upvoted 1 times
-  **Born\_Again** 6 months, 3 weeks ago  
**Selected Answer: B**  
B. blobs in a general purpose v2 storage account  
upvoted 1 times
-  **leoletopic** 6 months, 3 weeks ago  
is "Encrypt each user's data by using a separate key." means "Provide an encryption key on a request to Blob storage"  
reference : <https://learn.microsoft.com/en-us/azure/storage/blobs/encryption-customer-provided-keys>  
if so ,this feature not support Data Lake Storage Gen2, Network File System (NFS) 3.0 protocol, or the SSH File Transfer Protocol (SFTP)  
So, I think it is B  
upvoted 2 times
-  **Backy** 6 months, 3 weeks ago  
This reference does not say such things, it merely states that Data Lake support for encryption scopes is in Preview. However, the actual Azure storage account for Data Lake does not mention any preview and provides full support for encryption scopes. Apparently, the Microsoft docs have not been updated yet. Probably, this is very old question. Today, both B and C are correct answers to this question

upvoted 3 times

 **techmaster1507** 6 months, 4 weeks ago

**Selected Answer: B**

Correct!

upvoted 1 times

 **rjcverar** 7 months ago

**Selected Answer: C**

Seems that Becky is right. Both B or C would work, but the question indeed seems to infer that each blob is assigned to "multiple customers", aka C.

upvoted 1 times

**HOTSPOT -**

You have an Azure App Service web app that uses a system-assigned managed identity.

You need to recommend a solution to store the settings of the web app as secrets in an Azure key vault. The solution must meet the following requirements:

- ⇒ Minimize changes to the app code.
- ⇒ Use the principle of least privilege.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Key Vault integration method:

Key Vault references in Application settings
Key Vault references in Appsettings.json
Key Vault references in Web.config
Key Vault SDK

Key Vault permissions for the managed identity:

Keys: Get
Keys: List and Get
Secrets: Get
Secrets: List and Get

Correct Answer:

**Answer Area**

Key Vault integration method:

Key Vault references in Application settings
Key Vault references in Appsettings.json
Key Vault references in Web.config
Key Vault SDK

Key Vault permissions for the managed identity:

Keys: Get
Keys: List and Get
Secrets: Get
Secrets: List and Get

Box 1: Key Vault references in Application settings

Source Application Settings from Key Vault.

Key Vault references can be used as values for Application Settings, allowing you to keep secrets in Key Vault instead of the site config.

Application Settings are securely encrypted at rest, but if you need secret management capabilities, they should go into Key Vault.

To use a Key Vault reference for an app setting, set the reference as the value of the setting. Your app can reference the secret through its key as normal. No code changes are required.

Box 2: Secrets: Get -

In order to read secrets from Key Vault, you need to have a vault created and give your app permission to access it.

1. Create a key vault by following the Key Vault quickstart.
2. Create a managed identity for your application.
3. Key Vault references will use the app's system assigned identity by default, but you can specify a user-assigned identity.
4. Create an access policy in Key Vault for the application identity you created earlier. Enable the "Get" secret permission on this policy.

Reference:

<https://docs.microsoft.com/en-us/azure/app-service/app-service-key-vault-references> <https://docs.microsoft.com/en-us/azure/app-service/app-service-key-vault-references>

 **zellck** Highly Voted 4 months ago

1. Key Vault references in Application settings.
2. Secrets: Get

<https://learn.microsoft.com/en-us/azure/app-service/app-service-key-vault-references?tabs=azure-cli#source-application-settings-from-key-vault>

Key Vault references can be used as values for Application Settings, allowing you to keep secrets in Key Vault instead of the site config. Application Settings are securely encrypted at rest, but if you need secret management capabilities, they should go into Key Vault.

To use a Key Vault reference for an app setting, set the reference as the value of the setting. Your app can reference the secret through its key as normal. No code changes are required.

<https://learn.microsoft.com/en-us/azure/app-service/app-service-key-vault-references?tabs=azure-cli#granting-your-app-access-to-key-vault>

Create an access policy in Key Vault for the application identity you created earlier. Enable the "Get" secret permission on this policy. Do not configure the "authorized application" or applicationId settings, as this is not compatible with a managed identity.

upvoted 8 times

✉️ **GarryK** Most Recent 4 months, 3 weeks ago

Correct

<https://learn.microsoft.com/en-us/azure/app-service/app-service-key-vault-references?tabs=azure-cli>

Create an access policy in Key Vault for the application identity you created earlier. Enable the "Get" secret permission on this policy.

Key Vault references can be used as values for Application Settings, allowing you to keep secrets in Key Vault instead of the site config. Application Settings are securely encrypted at rest, but if you need secret management capabilities, they should go into Key Vault.

upvoted 4 times

✉️ **OPT\_001122** 5 months ago

Key Vault references in Application settings

Secrets:GET

upvoted 2 times

✉️ **VBK8579** 5 months ago

Key Vault references in Application settings and secrets: List and Get is the best key vault integration method and key vault permissions for managed identity. per ChatGPT

upvoted 1 times

✉️ **adamp54** 8 months ago

Explanation how to configure Application settings:

<https://learn.microsoft.com/en-us/azure/app-service/configure-common?tabs=portal#configure-app-settings>

<https://learn.microsoft.com/en-us/azure/app-service/app-service-key-vault-references?tabs=azure-cli>

"Key Vault references can be used as values for Application Settings, allowing you to keep secrets in Key Vault instead of the site config. Application Settings are securely encrypted at rest, but if you need secret management capabilities, they should go into Key Vault.

To use a Key Vault reference for an app setting, set the reference as the value of the setting."

upvoted 3 times

✉️ **niravkanakhara** 9 months, 1 week ago

.Net core has appsetting.json only to store application settings or configuration data. Not sure what is application setting ?

upvoted 4 times

✉️ **r3verse** 7 months, 1 week ago

Application settings are referred to as app settings here: <https://learn.microsoft.com/en-us/azure/app-service/reference-app-settings?tabs=kudu%2Cdotnet>. They are just the settings you can set for an app, directly in the Azure resource, without going into an actual appsettings.json file.

upvoted 1 times

✉️ **ElectricPants** 9 months ago

Maybe app settings == App Configuration? Then it makes sense because you dont need to redeploy the app to change variables

upvoted 2 times

You plan to deploy an application named App1 that will run on five Azure virtual machines. Additional virtual machines will be deployed later to run App1.

You need to recommend a solution to meet the following requirements for the virtual machines that will run App1:

- ⇒ Ensure that the virtual machines can authenticate to Azure Active Directory (Azure AD) to gain access to an Azure key vault, Azure Logic Apps instances, and an Azure SQL database.
- ⇒ Avoid assigning new roles and permissions for Azure services when you deploy additional virtual machines.
- ⇒ Avoid storing secrets and certificates on the virtual machines.
- ⇒ Minimize administrative effort for managing identities.

Which type of identity should you include in the recommendation?

- A. a system-assigned managed identity
- B. a service principal that is configured to use a certificate
- C. a service principal that is configured to use a client secret
- D. a user-assigned managed identity

**Correct Answer: D**

Managed identities provide an identity for applications to use when connecting to resources that support Azure Active Directory (Azure AD) authentication.

A user-assigned managed identity:

Can be shared.

The same user-assigned managed identity can be associated with more than one Azure resource.

Common usage:

Workloads that run on multiple resources and can share a single identity.

For example, a workload where multiple virtual machines need to access the same resource.

Incorrect:

Not A: A system-assigned managed identity can't be shared. It can only be associated with a single Azure resource.

Typical usage:

Workloads that are contained within a single Azure resource.

Workloads for which you need independent identities.

For example, an application that runs on a single virtual machine.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/overview>

*Community vote distribution*

D (100%)

 **mse89**  9 months, 4 weeks ago

**Selected Answer: D**

Correct, answer is D User-assigned MI

upvoted 10 times

 **mohamed1999**  8 months ago

D is correct because you need to avoid assigning new identities to RBAC, with system assigned to need to have a RBAC for each resource  
upvoted 7 times

 **NotMeAnyWay**  3 months, 1 week ago

**Selected Answer: D**

D. a user-assigned managed identity

A user-assigned managed identity is the best choice for this scenario. User-assigned managed identities are standalone Azure Active Directory (Azure AD) identities that can be assigned to one or more Azure resources, such as virtual machines. They can be used to authenticate to other Azure services like Azure Key Vault, Azure Logic Apps instances, and Azure SQL Database without the need for storing secrets and certificates on the virtual machines.

By using a user-assigned managed identity, you can easily assign the same identity to multiple virtual machines, which avoids assigning new roles and permissions when you deploy additional VMs. This also minimizes administrative effort in managing identities, as the managed identity is automatically managed by Azure AD.

upvoted 1 times

 **jj22222** 4 months ago

**Selected Answer: D**

user assigned is right

upvoted 1 times

 **lanntt** 4 months, 1 week ago

D is Correct,

upvoted 1 times

 **zellick** 4 months, 1 week ago

**Selected Answer: D**

D is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/overview#managed-identity-types>

User-assigned. You may also create a managed identity as a standalone Azure resource. - You can create a user-assigned managed identity and assign it to one or more Azure Resources. When you enable a user-assigned managed identity:

- A service principal of a special type is created in Azure AD for the identity. The service principal is managed separately from the resources that use it.
- User-assigned identities can be used by multiple resources.
- You authorize the managed identity to have access to one or more services.

upvoted 2 times

 **zellick** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/training/modules/design-authentication-authorization-solutions/9-one-design-managed-identities>

User-assigned: You can create a managed identity as a standalone Azure resource. Create a user-assigned managed identity and assign it to one or more instances of an Azure service. A user-assigned identity is managed separately from the resources that use it.

upvoted 2 times

 **zellick** 4 months, 1 week ago

Consider choosing user-assigned managed identities. Choose user-assigned managed identities for workloads that run on multiple resources that can share a single identity. This type of identity is also good for workloads that need pre-authorization to a secure resource as part of a provisioning flow. User-assigned identities are suited for workloads with resources that are recycled frequently, but where permissions should stay consistent.

upvoted 2 times

 **jameslee** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/managed-identity-best-practice-recommendations>

Choosing system or user-assigned managed identities

Using user-assigned identities to reduce administration

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: D**

D. a user-assigned managed identity - correct ans

upvoted 1 times

 **jj22222** 5 months ago

**Selected Answer: D**

user assigned managed identity

upvoted 2 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: D**

Seems to be the most logical answer.

upvoted 2 times

 **yeanlingmedal71** 5 months, 2 weeks ago

**Selected Answer: D**

a workload where multiple virtual machines need to access the same resource should use User Assigned MI.

upvoted 1 times

 **niravkanakhara** 9 months, 1 week ago

**Selected Answer: D**

correct answer

upvoted 2 times

 **savav1** 9 months, 2 weeks ago

**Selected Answer: D**

agree, correct

upvoted 1 times

 **most\_lenyora** 9 months, 3 weeks ago

Correct

upvoted 2 times

You have the resources shown in the following table:

Name	Type
AS1	Azure Synapse Analytics instance
CDB1	Azure Cosmos DB SQL API account

CDB1 hosts a container that stores continuously updated operational data.

You are designing a solution that will use AS1 to analyze the operational data daily.

You need to recommend a solution to analyze the data without affecting the performance of the operational data store.

What should you include in the recommendation?

- A. Azure Cosmos DB change feed
- B. Azure Data Factory with Azure Cosmos DB and Azure Synapse Analytics connectors
- C. Azure Synapse Link for Azure Cosmos DB
- D. Azure Synapse Analytics with PolyBase data loading

**Correct Answer: C**

Azure Synapse Link for Azure Cosmos DB creates a tight integration between Azure Cosmos DB and Azure Synapse Analytics. It enables customers to run near real-time analytics over their operational data with full performance isolation from their transactional workloads and without an ETL pipeline.

Reference:

<https://docs.microsoft.com/en-us/azure/cosmos-db/synapse-link-frequently-asked-questions>

*Community vote distribution*

C (100%)

 **pocky456** Highly Voted 9 months, 3 weeks ago

**Selected Answer: C**

Correct Answer C

Azure Synapse Link for Azure Cosmos DB creates a tight integration between Azure Cosmos DB and Azure Synapse Analytics. It enables customers to run near real-time analytics over their operational data with full performance isolation from their transactional workloads and without an ETL pipeline

upvoted 9 times

 **Ghoshy** Highly Voted 6 months ago

Exam Question 12/28/2022

upvoted 6 times

 **KI383rOC** Most Recent 1 month, 1 week ago

There is a typo on the question, it should be NoSQL API - <https://learn.microsoft.com/en-us/azure/cosmos-db/choose-api#apis-in-azure-cosmos-db> and <https://learn.microsoft.com/en-us/azure/cosmos-db/synapse-link-frequently-asked-questions#is-azure-synapse-link-supported-for-all-azure-cosmos-db-apis>

Correct answer is C

upvoted 1 times

 **zzreflexzz** 1 month, 3 weeks ago

on exam 5/2/23

upvoted 2 times

 **zellck** 4 months, 1 week ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/cosmos-db/synapse-link>

Azure Synapse Link for Azure Cosmos DB is a cloud-native hybrid transactional and analytical processing (HTAP) capability that enables near real time analytics over operational data in Azure Cosmos DB. Azure Synapse Link creates a tight seamless integration between Azure Cosmos DB and Azure Synapse Analytics.

upvoted 3 times

 **jj22222** 4 months, 3 weeks ago

**Selected Answer: C**

Azure Synapse Link for Cosmos DB

upvoted 3 times

 **OPT\_001122** 5 months ago

Thanks to all for mentioning the exam dates.  
C. Azure Synapse Link for Azure Cosmos DB - ans is correct  
upvoted 3 times

 **Darkx** 8 months, 2 weeks ago

appeared on 11th Oct 2022  
upvoted 5 times

 **Pamban** 8 months, 3 weeks ago

appeared on 5th Oct 2022  
upvoted 4 times

 **tiru** 8 months, 4 weeks ago

**Selected Answer: C**  
Azure Synapse Link for Azure Cosmos DB creates a tight integration between Azure Cosmos DB and Azure Synapse Analytics. It enables customers to run near real-time analytics over their operational data with full performance isolation from their transactional workloads and without an ETL pipeline  
upvoted 4 times

 **pocky456** 9 months, 3 weeks ago

Correct Answer C  
Azure Synapse Link for Azure Cosmos DB creates a tight integration between Azure Cosmos DB and Azure Synapse Analytics. It enables customers to run near real-time analytics over their operational data with full performance isolation from their transactional workloads and without an ETL pipeline  
upvoted 1 times

**HOTSPOT -**

You deploy several Azure SQL Database instances.

You plan to configure the Diagnostics settings on the databases as shown in the following exhibit.

**Diagnostics setting**

Save Discard Delete Provide feedback

A diagnostic setting specifies a list of categories of platform logs and/or metrics that you want to collect from a resource, and one or more destinations that you would stream them to. Normal usage charges for the destination will occur. [Learn more about the different log categories and contents of those logs](#)

Diagnostic setting name	Diagnostic1
Category details	
log	
<input checked="" type="checkbox"/> SQLInsights	Retention (days) 90
<input checked="" type="checkbox"/> AutomaticTuning	Retention (days) 30
<input type="checkbox"/> QueryStoreRuntimeStatistics	Retention (days) 0
<input type="checkbox"/> QueryStoreWaitStatistics	Retention (days) 0
<input type="checkbox"/> Errors	Retention (days) 0
<input type="checkbox"/> DatabaseWaitStatistics	Retention (days) 0
<input type="checkbox"/> Timeouts	Retention (days) 0
<input type="checkbox"/> Blocks	Retention (days) 0
<input type="checkbox"/> Deadlocks	Retention (days) 0
metric	
<input type="checkbox"/> Basic	Retention (days) 0
Destination details	
<input checked="" type="checkbox"/> Send to Log Analytics	
Subscription Azure Pass - Sponsorship	
Log Analytics workspace sk200814 ( eastus )	
<input checked="" type="checkbox"/> Archive to a storage account	
<span style="color: blue;">i</span> Showing all storage accounts including classic storage accounts	
Location East US	
Subscription Azure Pass - Sponsorship	
Storage account * contoso20	
<input type="checkbox"/> Stream to an event hub	

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

The amount of time that SQLInsights data will be stored in blob storage is **[answer choice]**.

▼

30 days
90 days
730 days
indefinite

The maximum amount of time that SQLInsights data can be stored in Azure Log Analytics is **[answer choice]**.

▼

30 days
90 days
730 days
indefinite

## Answer Area

The amount of time that SQLInsights data will be stored in blob storage is [answer choice].

30 days
90 days
730 days
indefinite

Correct Answer:

The maximum amount of time that SQLInsights data can be stored in Azure Log Analytics is [answer choice].

30 days
90 days
730 days
indefinite

Box 1: 90 days -

As per exhibit.

Box 2: 730 days -

How long is the data kept?

Raw data points (that is, items that you can query in Analytics and inspect in Search) are kept for up to 730 days.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/app/data-retention-privacy>

✉️ **jellybiscuit** Highly Voted 9 months, 1 week ago

Correct answer is definitely 90 and 730.

To those who say infinite: You may be thinking that the 90 days is how long it's storing the data "somewhere" before archiving to the storage account. This is not correct. The retention time boxes only appear after you select the "archive to storage account" checkbox. This retention period is applying specifically to the data in the storage account.

upvoted 31 times

✉️ **FabirtyDev** 5 months, 2 weeks ago

It appears to be true, judging by what is described in <https://learn.microsoft.com/en-us/azure/active-directory/reports-monitoring/quickstart-azure-monitor-route-logs-to-storage-account>

upvoted 1 times

✉️ **kay000001** Highly Voted 9 months, 2 weeks ago

Please read the question carefully. It asks:

1. The amount of time that SQLInsights data will be stored in blob storage - yes, the 'maximum' is infinite, but 90 days has been selected in the diagram.

2. Second question is asking the 'maximum', so that answer is 730.

upvoted 12 times

✉️ **sw1000** 1 month ago

Yes, agree, it's one of those questions that do not test your knowledge, but your skill to read carefully. Technically, you could store it in Blob storage indefinitely

upvoted 1 times

✉️ **zzreflexzz** Most Recent 1 month, 3 weeks ago

on exam 5/2/23

upvoted 1 times

✉️ **zellck** 4 months ago

1. 90 days

2. 730 days

<https://learn.microsoft.com/en-us/azure/azure-monitor/app/data-retention-privacy#how-long-is-the-data-kept>

Raw data points (that is, items that you can query in Analytics and inspect in Search) are kept for up to 730 days. You can select a retention duration of 30, 60, 90, 120, 180, 270, 365, 550, or 730 days. If you need to keep data longer than 730 days, you can use Continuous Export to copy it to a storage account during data ingestion.

upvoted 4 times

✉️ **lanntt** 4 months, 1 week ago

in 14/2/2023 exam

upvoted 3 times

✉️ **artemis88** 4 months, 2 weeks ago

...if you choose a retention policy that's greater than 0, the expiration date is attached to the logs at the time of storage.

See tip in Step 5c. Storage

<https://learn.microsoft.com/en-us/azure/azure-monitor/essentials/diagnostic-settings?tabs=portal#create-diagnostic-settings>

upvoted 1 times

✉ **totalz** 4 months, 3 weeks ago

SQL InsightsMetrics is stored in Azure Table, so technically the question shouldn't use the word blob!?  
<https://learn.microsoft.com/en-us/azure/sql-database/sql-insights-overview?view=azuresql>

upvoted 1 times

✉ **OPT\_001122** 5 months ago

Thanks to all who mentioned the exam dates  
Ans is correct  
90 and 730.  
upvoted 3 times

✉ **Q12346** 5 months, 1 week ago

shown on 1/14/2023  
upvoted 5 times

✉ **Ghoshy** 6 months ago

Exam Question 12/28/2022  
upvoted 5 times

✉ **amiban** 6 months, 1 week ago

correct answer is 90 and 730 , as Raw data points (that is, items that you can query in Analytics and inspect in Search) are kept for up to 730 days. You can select a retention duration of 30, 60, 90, 120, 180, 270, 365, 550, or 730 days. If you need to keep data longer than 730 days, you can use Continuous Export to copy it to a storage account during data ingestion.

Data kept longer than 90 days incurs extra charges. For more information about Application Insights pricing, see the Azure Monitor pricing page.  
upvoted 2 times

✉ **Pamban** 8 months, 3 weeks ago

appeared on 5th Oct 2022  
upvoted 4 times

✉ **Xinx** 9 months, 1 week ago

This is tricky. The maximum retention period for log analytics workspace is 730 days.  
<https://learn.microsoft.com/en-us/azure/azure-monitor/logs/data-retention-archive?tabs=portal-1%2Cportal-2#configure-the-default-workspace-retention-policy>  
upvoted 1 times

✉ **ike001** 9 months, 2 weeks ago

answer is correct. retention policy is only for storage account, this is set to 90 days. if you pick 0 it would be kept indefinitely.  
upvoted 1 times

✉ **RJMP** 9 months, 2 weeks ago

Correct answers: Indefinite & 730 days  
upvoted 1 times

✉ **RJMP** 9 months, 2 weeks ago

Rectify: 90, 730 days  
upvoted 3 times

✉ **santi1975** 9 months, 2 weeks ago

Nope. Correct answers: Indefinite & 730 days.  
"You can't set a retention policy (in a storage account, when saving diagnostic settings)".

BTW this questions is also in AZ-304 and you can find there more discussion about it.

Please read: <https://docs.microsoft.com/en-us/azure/storage/blobs/monitor-blob-storage?tabs=azure-portal>  
upvoted 3 times

✉ **most\_lenyora** 9 months, 3 weeks ago

Correct answer is 90 and 730 days  
upvoted 4 times

You have an application that is used by 6,000 users to validate their vacation requests. The application manages its own credential store.

Users must enter a username and password to access the application. The application does NOT support identity providers.

You plan to upgrade the application to use single sign-on (SSO) authentication by using an Azure Active Directory (Azure AD) application registration.

Which SSO method should you use?

- A. header-based
- B. SAML
- C. password-based
- D. OpenID Connect

**Correct Answer: C**

Password - On-premises applications can use a password-based method for SSO. This choice works when applications are configured for Application Proxy.

With password-based SSO, users sign in to the application with a username and password the first time they access it. After the first sign-on, Azure AD provides the username and password to the application. Password-based SSO enables secure application password storage and replay using a web browser extension or mobile app. This option uses the existing sign-in process provided by the application, enables an administrator to manage the passwords, and doesn't require the user to know the password.

Incorrect:

Choosing an SSO method depends on how the application is configured for authentication. Cloud applications can use federation-based options, such as OpenID

Connect, OAuth, and SAML.

Federation - When you set up SSO to work between multiple identity providers, it's called federation.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/manage-apps/what-is-single-sign-on>

*Community vote distribution*

C (100%)

 **ExamTopicsTST** Highly Voted 9 months ago

**Selected Answer: C**

Password based. <https://learn.microsoft.com/en-us/azure/active-directory/manage-apps/plan-sso-deployment#single-sign-on-options>  
upvoted 9 times

 **zellck** Most Recent 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/manage-apps/plan-sso-deployment#single-sign-on-options>  
Password-based - Choose password-based when the application has an HTML sign-in page. Password-based SSO is also known as password vaulting. Password-based SSO enables you to manage user access and passwords to web applications that don't support identity federation. It's also useful where several users need to share a single account, such as to your organization's social media app accounts.

Password-based SSO supports applications that require multiple sign-in fields for applications that require more than just username and password fields to sign in. You can customize the labels of the username and password fields your users see on My Apps when they enter their credentials.

upvoted 4 times

 **totalz** 4 months, 3 weeks ago

Confusing, the article stated with application registration, it will set to use OpenID Connect and OAuth by default. Only Application Proxy is used with password-based!!

upvoted 1 times

 **OPT\_001122** 5 months ago

Thanks to all who have mentioned the exam dates

upvoted 3 times

 **OPT\_001122** 5 months ago

**Selected Answer: C**

C. password-based

upvoted 2 times

✉ **janvandermerwer** 5 months, 1 week ago

**Selected Answer: C**

Badly worded question and answers.

I'd lean towards password based authentication as being the "most correct" answer.

However, in the real world, probably use linked mode or similar.

upvoted 1 times

✉ **GhoshY** 6 months ago

Exam Question 12/28/2022

upvoted 4 times

✉ **ShaheedM** 7 months ago

**Selected Answer: C**

Answer is C

upvoted 3 times

✉ **Bobby1977** 8 months, 2 weeks ago

How do we say the application is hosted in on-prem? If so, answer is correct.

upvoted 1 times

✉ **r3verse** 7 months, 1 week ago

See flowchart here: <https://learn.microsoft.com/en-us/azure/active-directory/manage-apps/plan-sso-deployment#single-sign-on-options>

Even if it's cloud based, you will end up at password based

upvoted 3 times

**HOTSPOT -**

You have an Azure subscription that contains a virtual network named VNET1 and 10 virtual machines. The virtual machines are connected to VNET1.

You need to design a solution to manage the virtual machines from the internet. The solution must meet the following requirements:

- ⇒ Incoming connections to the virtual machines must be authenticated by using Azure Multi-Factor Authentication (MFA) before network connectivity is allowed.
- ⇒ Incoming connections must use TLS and connect to TCP port 443.
- ⇒ The solution must support RDP and SSH.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

To provide access to virtual machines on VNET1, use:

Azure Bastion
Just-in-time (JIT) VM access
Azure Web Application Firewall (WAF) in Azure Front Door

To enforce Azure MFA, use:

An Azure Identity Governance access package
A Conditional Access policy that has the Cloud apps assignment set to Azure Windows VM Sign-In
A Conditional Access policy that has the Cloud apps assignment set to Microsoft Azure Management

**Correct Answer:****Answer Area**

To provide access to virtual machines on VNET1, use:

Azure Bastion
Just-in-time (JIT) VM access
Azure Web Application Firewall (WAF) in Azure Front Door

To enforce Azure MFA, use:

An Azure Identity Governance access package
A Conditional Access policy that has the Cloud apps assignment set to Azure Windows VM Sign-In
A Conditional Access policy that has the Cloud apps assignment set to Microsoft Azure Management

**Box 1: Just-in-time (JIT) VN access**

Lock down inbound traffic to your Azure Virtual Machines with Microsoft Defender for Cloud's just-in-time (JIT) virtual machine (VM) access feature. This reduces exposure to attacks while providing easy access when you need to connect to a VM.

Note: Threat actors actively hunt accessible machines with open management ports, like RDP or SSH. Your legitimate users also use these ports, so it's not practical to keep them closed.

When you enable just-in-time VM access, you can select the ports on the VM to which inbound traffic will be blocked.

To solve this dilemma, Microsoft Defender for Cloud offers JIT. With JIT, you can lock down the inbound traffic to your VMs, reducing exposure to attacks while providing easy access to connect to VMs when needed.

**Box 2: A conditional Access policy that has Cloud Apps assignment set to Azure Windows VM Sign-In**

You can enforce Conditional Access policies such as multi-factor authentication or user sign-in risk check before authorizing access to Windows VMs in Azure that are enabled with Azure AD sign in. To apply Conditional Access policy, you must select the "Azure Windows VM Sign-In" app from the cloud apps or actions assignment option and then use Sign-in risk as a condition and/or require multi-factor authentication as a grant access control.

Reference:

<https://docs.microsoft.com/en-us/azure/defender-for-cloud/just-in-time-access-overview> <https://docs.microsoft.com/en-us/azure/active-directory/devices/howto-vm-sign-in-azure-ad-windows>

✉ **Gowind** [Highly Voted] 9 months, 4 weeks ago

1. Answer is Azure Bastion.

<https://docs.microsoft.com/en-us/azure/bastion/bastion-overview>

It provides secure and seamless RDP/SSH connectivity to your virtual machines directly from the Azure portal over TLS.

While JIT access allows access via RDP or SSH, incoming connections is not TLS tcp 443 (but RDP or SSH when the inbound port is temporarily authorized)

<https://docs.microsoft.com/en-us/azure/defender-for-cloud/just-in-time-access-usage?tabs=jit-config-avm%2Cjit-request-asc>

2. Second is correct

<https://docs.microsoft.com/en-us/azure/active-directory/devices/howto-vm-sign-in-azure-ad-windows>

Enforce Conditional Access policies

You can enforce Conditional Access policies, such as multifactor authentication or user sign-in risk check, before you authorize access to Windows VMs in Azure that are enabled with Azure AD login. To apply a Conditional Access policy, you must select the Azure Windows VM Sign-In app from the cloud apps or actions assignment option. Then use sign-in risk as a condition and/or require MFA as a control for granting access.

upvoted 92 times

✉ **jj22222** 3 months, 2 weeks ago

i agree

upvoted 2 times

✉ **abxc** 4 months ago

Azure Bastion is correct

For conditional access policy it should be "cloud apps assignment set to Microsoft Azure management" as the requirement states MFA before network access is allowed. Using this policy users will be prompted for MFA when they access azure portal

upvoted 3 times

✉ **alxm8** [Highly Voted] 6 months, 4 weeks ago

1. Azure Bastion

2. Conditional Access Policy that has the cloud apps assignment set to Microsoft Azure management

Azure bastion client access is authorized and authenticated when trying to log into the Azure portal. You can enable MFA on the Azure portal access by using the Conditional access policy for Microsoft Azure Management. We use this currently at work, it works very well!

Azure bastion proxies the web portal requests via https to the servers running in the VNET.

upvoted 23 times

✉ **darthfodio** 5 months ago

I wouldn't be so sure about your answer for 2.

see this link - <https://learn.microsoft.com/en-us/azure/active-directory/devices/howto-vm-sign-in-azure-ad-windows#enforce-conditional-access-policies>

upvoted 2 times

✉ **lombri** [Most Recent] 1 month, 3 weeks ago

It's generally recommended to apply Conditional Access policies at the management group or subscription level, rather than at the individual virtual machine level. By applying the policy at the management group or subscription level, you can enforce consistent access controls across all the virtual machines in that group or subscription.

Centralized management: Applying the policy at the management group or subscription level allows you to manage access controls for all virtual machines in a single location.

Consistent policies: By applying the same policy to all virtual machines in a group or subscription, you can ensure that access controls are consistent and avoid any accidental or intentional deviations from the policy.

Simplified administration: Applying the policy at a higher level means you don't need to manage policies at the virtual machine level. This can simplify administration and reduce the risk of misconfiguration.

so:

-Bastion

-Conditional access to management group

upvoted 1 times

✉ **C\_M\_M** 2 months ago

For number 2

Enforce Conditional Access policies

You can enforce Conditional Access policies, such as "phishing resistant MFA" using require authentication strength (preview) grant control or multifactor authentication or user sign-in risk check, before you authorize access to Windows VMs in Azure that are enabled with Azure AD login.

To apply a Conditional Access policy, you must select the Azure Windows VM Sign-In app from the cloud apps or actions assignment option.

Then use sign-in risk as a condition and/or "phishing resistant MFA" using require authentication strength (preview) grant control or require MFA as a control for granting access.

<https://learn.microsoft.com/en-us/azure/active-directory/devices/howto-vm-sign-in-azure-ad-windows#log-in-by-using-azure-ad-credentials-to-a-windows-vm>

upvoted 2 times

✉ **C\_M\_M** 2 months ago

For number 1. Bastion host is used mainly when your VM is in a private subnet, and you would like to access the VM over the internet. But since the VM needs users to access it over the internet, creating a Bastion host won't fix the key challenge: how do you leave management ports open for random users and simultaneously protected?

The best solution is JIT - the equivalence of - "we keep the door closed and when you come we check you, and if we know you we open the door for you, otherwise the door remains locked. When you leave, we close the door behind you"  
Nothing beats such a solution in terms of securing management ports.  
So the answer is JIT

<https://learn.microsoft.com/en-us/azure/defender-for-cloud/just-in-time-access-overview?tabs=defender-for-container-arch-aks>  
upvoted 2 times

✉️ **winy** 2 months, 3 weeks ago

This was on 4/1/23 exam  
upvoted 2 times

✉️ **johnD16** 3 months, 1 week ago

Showed in exam 18.03.2023. Answered Bastion.  
passed 940/1000  
upvoted 4 times

✉️ **zellck** 4 months ago

1. Azure Bastion  
2. Conditional Access policy that has Cloud apps assignment set to Microsoft Azure Management

<https://learn.microsoft.com/en-us/azure/bastion/bastion-overview>

Azure Bastion is a service you deploy that lets you connect to a virtual machine using your browser and the Azure portal, or via the native SSH or RDP client already installed on your local computer. The Azure Bastion service is a fully platform-managed PaaS service that you provision inside your virtual network. It provides secure and seamless RDP/SSH connectivity to your virtual machines directly from the Azure portal over TLS. When you connect via Azure Bastion, your virtual machines don't need a public IP address, agent, or special client software.

upvoted 5 times

✉️ **zellck** 4 months ago

<https://learn.microsoft.com/en-us/azure/active-directory/conditional-access/howto-conditional-access-policy-azure-management>  
To protect these privileged resources, Microsoft recommends requiring multifactor authentication for any user accessing these resources. In Azure AD, these tools are grouped together in a suite called Microsoft Azure Management. For Azure Government, this suite should be the Azure Government Cloud Management API app.  
upvoted 4 times

✉️ **zellck** 3 months, 4 weeks ago

Got this in Feb 2023 exam.  
upvoted 5 times

✉️ **Amrx** 4 months, 2 weeks ago

1 has to be Azure Bastion, JIT does not function over 443, it only has 22, 3389, 5985, 5986.  
upvoted 4 times

✉️ **Putra19** 4 months, 2 weeks ago

Azure Bastion supports both Transport Layer Security (TLS) and Remote Desktop Protocol (RDP) as well as Secure Shell (SSH) protocols.

When using Azure Bastion, the client device establishes a secure TLS connection to the Azure Bastion service. This encrypted connection helps prevent eavesdropping or tampering with the communication. Azure Bastion then uses RDP or SSH to access the remote virtual machines (VMs).

By supporting both TLS and RDP/SSH, Azure Bastion provides a secure and seamless way to access remote VMs in the Azure cloud. The use of TLS helps ensure the security of the communication between the client device and the Azure Bastion service, while RDP and SSH provide the means to access the remote VMs.

upvoted 1 times

✉️ **Putra19** 4 months, 2 weeks ago

Bastion or JIT? Please provide your reasoning  
upvoted 1 times

✉️ **Psy3000** 4 months, 2 weeks ago

First answer is indeed Bastion. And about MFA on Bastion: the question asks to use Azure MFA. Bastion supports Azure MFA, just not 3rd party MFA solution  
upvoted 1 times

✉️ **clueless888** 4 months, 2 weeks ago

Not sure the answer is Bastion. Question ends with "before network connectivity is allowed."  
Incoming connections to the virtual machines must be authenticated by using Azure Multi-Factor Authentication (MFA) before network connectivity is allowed.  
JIT access meets this more than Bastion in my opinion  
upvoted 1 times

✉️ **clueless888** 4 months, 2 weeks ago

Sorry, after looking again think it is Bastian and Conditional Access policy using Microsoft Azure Management. Virtual Machine logon is not on this list of cloud apps for Conditional Access Policies.  
<https://learn.microsoft.com/en-us/azure/active-directory/conditional-access/concept-conditional-access-cloud-apps>  
upvoted 1 times

✉️ **VBK8579** 4 months, 4 weeks ago

Use Azure Bastion to provide access to virtual machines on VNET1 and use a conditional access policy with the cloud app assignment set to Azure Windows VM sign-in to enforce Azure MFA.

upvoted 2 times

✉️ **VBK8579** 5 months ago

Azure Bastion and Conditional Access policy that has the Cloud apps assignment set to Azure Windows VM Sign-In.

upvoted 2 times

✉️ **Maurice95000** 5 months ago

Incoming connections must use TLS and connect to TCP port 443. So I also Think for 1. Bastion

upvoted 2 times

✉️ **bd1234** 5 months, 1 week ago

1. Answer is Azure Bastion.
2. The clue is "Login with Azure AD" in VM management. Once been enabled on VMs , MFA or Conditional Access could be setup/controlled at AAD level.

for Windows: <https://learn.microsoft.com/en-us/azure/active-directory/devices/howto-vm-sign-in-azure-ad-windows>  
for Linux:

<https://www.bing.com/ck/a?i&p=0bd962c319247640JmltdHM9MTY3NDA4NjQwMCZpZ3VpZD0wZjZmNTI1NC1jNGEyLTZmMjMtMTJkYy00MGRhYzUwODZIMWlmaW5zaWQ9NTQzOA&ptn=3&hsh=3&fcid=0f6f5254-c4a2-6f23-12dc-40dac5086e1b&psq=azure+linux+vm+use+azure+active+directory&u=a1aHR0cHM6Ly90ZWNoY29tbXVuXR5Lm1pY3Jvc29mdC5jb20vdDUvZWR1Y2F0b3ltZGV2ZWxvcGVyLWJsb2cvYWRkaW5nLWF6dXJILWFjdGI2ZS1kaXJY3RvcnktG8tbGludXgtdmlydHVhbC1tYWNoaW5lc9iYS1wLzYzODA0MyM6fp0ZXh0PRoZSUyMGFiaWxpdHkIMjB0byUyMGxvZyUyMGlujTlwdG8IMjBMaW51eCUyMFZNcyoxZwxJTIwc2VjdXJlJTlwgudXgIMjBWTXMIMjBhcyUyMHdlbGwuJTw9yZSUyMGI0ZW1z&ntb=1>

upvoted 1 times

✉️ **examuser123** 5 months, 2 weeks ago

there's zero mention of the vm's being azure ad joined (requirement for mfa for vm login) so the answer surely must be conditional access to the azure management application

upvoted 2 times

✉️ **darthfodio** 5 months ago

check this link out. you may change that answer afterward.

<https://learn.microsoft.com/en-us/azure/active-directory/devices/howto-vm-sign-in-azure-ad-windows#enforce-conditional-access-policies>

upvoted 1 times

You are designing an Azure governance solution.

All Azure resources must be easily identifiable based on the following operational information: environment, owner, department and cost center.

You need to ensure that you can use the operational information when you generate reports for the Azure resources.

What should you include in the solution?

- A. an Azure data catalog that uses the Azure REST API as a data source
- B. an Azure management group that uses parent groups to create a hierarchy
- C. an Azure policy that enforces tagging rules
- D. Azure Active Directory (Azure AD) administrative units

**Correct Answer: C**

You apply tags to your Azure resources, resource groups, and subscriptions to logically organize them into a taxonomy. Each tag consists of a name and a value pair.

You use Azure Policy to enforce tagging rules and conventions. By creating a policy, you avoid the scenario of resources being deployed to your subscription that don't have the expected tags for your organization. Instead of manually applying tags or searching for resources that aren't compliant, you create a policy that automatically applies the needed tags during deployment.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/tag-policies>

*Community vote distribution*

C (100%)

✉  **fnavigacom** Highly Voted 9 months, 4 weeks ago

**Selected Answer: C**

Correct answer

upvoted 14 times

✉  **mse89** Highly Voted 9 months, 4 weeks ago

**Selected Answer: C**

Correct

upvoted 7 times

✉  **zzreflexz** Most Recent 1 month, 3 weeks ago

on exam 5/2/23

upvoted 2 times

✉  **NotMeAnyWay** 3 months, 1 week ago

**Selected Answer: C**

C. an Azure policy that enforces tagging rules

Tagging is the most appropriate solution for your requirements. Tags are key-value pairs that can be applied to Azure resources, allowing you to categorize and organize them based on your specified criteria. In this case, you can create tags for environment, owner, department, and cost center.

You can use Azure Policy to enforce tagging rules by creating policies that require specific tags to be applied to resources upon creation or update. This ensures that all resources are consistently tagged with the required operational information. You can then use these tags to generate reports and gain insights into your Azure resources.

upvoted 2 times

✉  **zelliick** 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/tag-policies>

You use Azure Policy to enforce tagging rules and conventions. By creating a policy, you avoid the scenario of resources being deployed to your subscription that don't have the expected tags for your organization. Instead of manually applying tags or searching for resources that aren't compliant, you create a policy that automatically applies the needed tags during deployment. Tags can also now be applied to existing resources with the new Modify effect and a remediation task.

upvoted 2 times

✉  **rikininetysix** 4 months, 2 weeks ago

**Selected Answer: C**

All azure resources needs to be identifiable based on the operational information. So it would be 'C'.  
upvoted 1 times

 **jj22222** 4 months, 3 weeks ago

**Selected Answer: C**

c is right  
upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: C**

C. an Azure policy that enforces tagging rules  
upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: C**

Enforced tagging is pretty common.  
upvoted 2 times

 **mscbgslt** 6 months ago

"must" => policy  
"easily identifiable " => tag  
upvoted 6 times

 **Born\_Again** 7 months ago

C 100%  
upvoted 1 times

 **ShaheedM** 7 months, 1 week ago

Selected Answer: C  
Correct answer  
upvoted 1 times

 **Shertster** 7 months, 4 weeks ago

correct  
upvoted 1 times

 **radamelca** 9 months ago

**Selected Answer: C**

Correct  
upvoted 1 times

 **getiwad723** 9 months, 2 weeks ago

Correct answer  
upvoted 1 times

 **kchristian01** 9 months, 4 weeks ago

**Selected Answer: C**

Correct  
upvoted 3 times

A company named Contoso, Ltd. has an Azure Active Directory (Azure AD) tenant that is integrated with Microsoft 365 and an Azure subscription. Contoso has an on-premises identity infrastructure. The infrastructure includes servers that run Active Directory Domain Services (AD DS) and Azure AD Connect.

Contoso has a partnership with a company named Fabrikam, Inc. Fabrikam has an Active Directory forest and a Microsoft 365 tenant. Fabrikam has the same on-premises identity infrastructure components as Contoso.

A team of 10 developers from Fabrikam will work on an Azure solution that will be hosted in the Azure subscription of Contoso. The developers must be added to the Contributor role for a resource group in the Contoso subscription.

You need to recommend a solution to ensure that Contoso can assign the role to the 10 Fabrikam developers. The solution must ensure that the Fabrikam developers use their existing credentials to access resources.

What should you recommend?

- A. In the Azure AD tenant of Contoso, create cloud-only user accounts for the Fabrikam developers.
- B. Configure a forest trust between the on-premises Active Directory forests of Contoso and Fabrikam.
- C. Configure an organization relationship between the Microsoft 365 tenants of Fabrikam and Contoso.
- D. In the Azure AD tenant of Contoso, create guest accounts for the Fabrikam developers.

**Correct Answer: D**

You can use the capabilities in Azure Active Directory B2B to collaborate with external guest users and you can use Azure RBAC to grant just the permissions that guest users need in your environment.

Incorrect:

Not B: Forest trust is used for internal security, not external access.

Reference:

<https://docs.microsoft.com/en-us/azure/role-based-access-control/role-assignments-external-users>

*Community vote distribution*

D (93%) 5%

✉ **Gowind** Highly Voted 9 months, 4 weeks ago

**Selected Answer: D**

Answer is correct: <https://docs.microsoft.com/en-us/azure/active-directory/external-identities/what-is-b2b>

Collaborate with any partner using their identities

With Azure AD B2B, the partner uses their own identity management solution, so there is no external administrative overhead for your organization. Guest users sign in to your apps and services with their own work, school, or social identities.

The partner uses their own identities and credentials, whether or not they have an Azure AD account.

You don't need to manage external accounts or passwords.

You don't need to sync accounts or manage account lifecycles.

upvoted 22 times

✉ **Snownoodles** Highly Voted 9 months, 3 weeks ago

**Selected Answer: D**

B2B, use own password, guest

upvoted 6 times

✉ **lombri** Most Recent 1 month, 3 weeks ago

**Selected Answer: D**

Creating guest accounts, Fabrikam users can use their existing Azure AD credentials to authenticate and access resources in Contoso's subscription. This solution ensures that there is no need for any additional infrastructure, such as a forest trust or organization relationship, between the two companies.

upvoted 1 times

✉ **gwh** 2 months ago

Answer is D

Moderator please verify answer, name is written wrong of the company

upvoted 1 times

✉ **NotMeAnyWay** 3 months, 1 week ago

**Selected Answer: D**

D. In the Azure AD tenant of Contoso, create guest accounts for the Fabrikam developers.

This solution allows Contoso to assign the necessary role to the Fabrikam developers while ensuring they can use their existing credentials to access resources. By creating guest accounts in Contoso's Azure AD tenant, you can establish a collaboration between the two organizations using Azure AD B2B (Business-to-Business). The guest accounts will enable Fabrikam developers to access the Contoso subscription with their existing credentials, providing a seamless and secure experience for cross-organization collaboration.

upvoted 2 times

 **johnD16** 3 months, 1 week ago

Showed in exam 18.03.2023. correct  
passed 940/1000

upvoted 2 times

 **zellck** 4 months ago

**Selected Answer: D**

D is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/external-identities/what-is-b2b>  
Azure Active Directory (Azure AD) B2B collaboration is a feature within External Identities that lets you invite guest users to collaborate with your organization. With B2B collaboration, you can securely share your company's applications and services with external users, while maintaining control over your own corporate data. Work safely and securely with external partners, large or small, even if they don't have Azure AD or an IT department.

upvoted 3 times

 **cp2323** 4 months, 1 week ago

**Selected Answer: D**

Answer is correct

upvoted 1 times

 **jameslee** 4 months, 1 week ago

compare external identities feature set at : <https://learn.microsoft.com/en-us/azure/active-directory/external-identities/external-identities-overview#comparing-external-identities-feature-sets>

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: D**

D. In the Azure AD tenant of Contoso, create guest accounts for the Fabrikam developers.

ans is correct

Thanks to all who have mentioned the exam dates

upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: D**

D -

Devs won't have to change their passwords, using their own user credentials etc

upvoted 1 times

 **Ghoshy** 6 months ago

Exam Question 12/28/2022

upvoted 4 times

 **mellowfella** 6 months, 1 week ago

**Selected Answer: D**

B2B collaboration user objects are typically given a user type of "guest" and can be identified by the #EXT# extension in their user principal name  
- below drawing in <https://docs.microsoft.com/en-us/azure/active-directory/external-identities/what-is-b2b>

upvoted 1 times

 **Born\_Again** 6 months, 3 weeks ago

**Selected Answer: B**

Answer is correct: <https://docs.microsoft.com/en-us/azure/active-directory/external-identities/what-is-b2b>

upvoted 1 times

 **ronsav80** 9 months, 1 week ago

I think the cleanest answer is Tenant to Tenant Sharing in Azure AD External Identities, but that isn't an option

upvoted 1 times

 **Elton\_Bicalho** 9 months, 1 week ago

**Selected Answer: C**

How can Fabrikam and Contoso enable their people and teams to collaborate more effectively across tenants in a secure manner? Azure Active Directory (Azure AD) B2B collaboration

This article describes several key scenarios that Fabrikam and Contoso can consider:

<https://learn.microsoft.com/en-us/microsoft-365/enterprise/microsoft-365-inter-tenant-collaboration?view=o365-worldwide>

upvoted 1 times

 **sarabjeet22** 9 months, 4 weeks ago  
10 users, create guest accounts  
D  
upvoted 4 times

Your company has the divisions shown in the following table.

Division	Azure subscription	Azure Active Directory (Azure AD) tenant
East	Sub1	Contoso.com
West	Sub2	Fabrikam.com

Sub1 contains an Azure App Service web app named App1. App1 uses Azure AD for single-tenant user authentication. Users from contoso.com can authenticate to App1.

You need to recommend a solution to enable users in the fabrikam.com tenant to authenticate to App1.

What should you recommend?

- A. Configure the Azure AD provisioning service.
- B. Enable Azure AD pass-through authentication and update the sign-in endpoint.
- C. Use Azure AD entitlement management to govern external users.
- D. Configure Azure AD join.

**Correct Answer: A**

You can enable automatic user provisioning for your multi-tenant application in Azure Active Directory.

Automatic user provisioning is the process of automating the creation, maintenance, and removal of user identities in target systems like your software-as-a-service applications.

Azure AD provides several integration paths to enable automatic user provisioning for your application.

\* The Azure AD Provisioning Service manages the provisioning and deprovisioning of users from Azure AD to your application (outbound provisioning) and from your application to Azure AD (inbound provisioning). The service connects to the System for Cross-Domain Identity Management (SCIM) user management API endpoints provided by your application.

\* Microsoft Graph

\* The Security Assertion Markup Language Just in Time (SAML JIT) user provisioning.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/app-provisioning/isv-automatic-provisioning-multi-tenant-apps>

*Community vote distribution*

C (100%)

 **Gowind** (Highly Voted) 9 months, 4 weeks ago

**Selected Answer: C**

Answer is C

The app is single tenant authentication so users must be present in contoso directory.

<https://docs.microsoft.com/en-us/azure/active-directory/develop/single-and-multi-tenant-apps>

With Azure AD B2B, external users authenticate to their home directory, but have a representation in your directory.

<https://docs.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-external-users>

A is wrong because its to automate provisioning to third party SaaS app.

<https://docs.microsoft.com/en-us/azure/active-directory/app-provisioning/how-provisioning-works?source=recommendations>

B. is wrong because the application would need to switch to multi tenant..

<https://docs.microsoft.com/en-us/azure/active-directory/develop/howto-convert-app-to-be-multi-tenant>

upvoted 56 times

 **jj22222** 4 months ago

c is right, i agree

upvoted 2 times

 **Snownoodles** (Highly Voted) 9 months, 3 weeks ago

**Selected Answer: C**

C is correct

<https://docs.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-external-users>

IF App1 is multi-tenant application, A might be correct since you can provision users from other tenant to App1 and configure App1 to SSO with other tenants.

upvoted 11 times

sw1000 Most Recent 1 month ago

**Selected Answer: C**

C is the correct answer. I don't understand why A was proposed and upvoted. We are talking about a single-tenant app and therefore we need to establish B2B collaboration and use entitlements for external users as described here:  
<https://learn.microsoft.com/en-us/azure/active-directory/external-identities/what-is-b2b#customize-the-onboarding-experience-for-b2b-guest-users>

upvoted 1 times

zzreflexzz 1 month, 3 weeks ago

on exam 5/2/23

upvoted 1 times

cluqueg 2 months, 2 weeks ago

**Selected Answer: C**

This question is duplicated with 35 that proposes C.

upvoted 1 times

winy 2 months, 3 weeks ago

This was on 4/1/23 exam

upvoted 2 times

johnD16 3 months, 1 week ago

**Selected Answer: C**

Showed in exam 18.03.2023. correct  
passed 940/1000

upvoted 6 times

ShingMing 3 months, 3 weeks ago

Got this on Feb. 12, 2023

upvoted 3 times

abxc 4 months ago

**Selected Answer: C**

to the moderator, why is A selected as answer as it is clearly wrong answer

upvoted 3 times

zellick 4 months, 1 week ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-overview#what-can-i-do-with-entitlement-management>

Here are some of capabilities of entitlement management:

- Select connected organizations whose users can request access. When a user who isn't yet in your directory requests access, and is approved, they're automatically invited into your directory and assigned access. When their access expires, if they have no other access package assignments, their B2B account in your directory can be automatically removed.

upvoted 3 times

ZHAM 4 months, 2 weeks ago

**Selected Answer: C**

Answer is C

With Azure AD B2B, external users authenticate to their home directory, but have a representation in your directory.

upvoted 2 times

deksi 4 months, 2 weeks ago

**Selected Answer: C**

C is correct

upvoted 1 times

jj22222 4 months, 3 weeks ago

**Selected Answer: C**

c looks right

upvoted 1 times

OPT\_001122 5 months ago

**Selected Answer: C**

C. Use Azure AD entitlement management to govern external users.

upvoted 1 times

VBK8579 5 months ago

C. Use Azure AD entitlement management to govern external users.

upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: C**

C - appears to be the "most" correct answer and i agree with the comments.

upvoted 1 times

 **francescoc** 5 months, 2 weeks ago

**Selected Answer: C**

The Correct answer is C

<https://docs.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-external-users>

upvoted 1 times

**HOTSPOT -**

Your company has 20 web APIs that were developed in-house.

The company is developing 10 web apps that will use the web APIs. The web apps and the APIs are registered in the company's Azure Active Directory (Azure AD) tenant. The web APIs are published by using Azure API Management.

You need to recommend a solution to block unauthorized requests originating from the web apps from reaching the web APIs. The solution must meet the following requirements:

⇒ Use Azure AD-generated claims.

Minimize configuration and management effort.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Grant permissions to allow the web apps to access the web APIs by using:

Azure AD
Azure API Management
The web APIs

Configure a JSON Web Token (JWT) validation policy by using:

Azure AD
Azure API Management
The web APIs

**Correct Answer:****Answer Area**

Grant permissions to allow the web apps to access the web APIs by using:

Azure AD
Azure API Management
The web APIs

Configure a JSON Web Token (JWT) validation policy by using:

Azure AD
Azure API Management
The web APIs

Box 1: Azure AD -

Grant permissions in Azure AD.

Box 2: Azure API Management -

Configure a JWT validation policy to pre-authorize requests.

Pre-authorize requests in API Management with the Validate JWT policy, by validating the access tokens of each incoming request. If a request does not have a valid token, API Management blocks it.

Reference:

<https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-protect-backend-with-aad>

 **Gowind** [Highly Voted] 9 months, 4 weeks ago

Corrects

<https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-protect-backend-with-aad>

Authorization workflow

A user or application acquires a token from Azure AD with permissions that grant access to the backend-app.

The token is added in the Authorization header of API requests to API Management.

API Management validates the token by using the validate-jwt policy.

If a request doesn't have a valid token, API Management blocks it.

If a request is accompanied by a valid token, the gateway can forward the request to the API.

<https://docs.microsoft.com/en-us/azure/api-management/api-management-access-restriction-policies#ValidateJWT>

upvoted 26 times

 **Xinx** Highly Voted 9 months, 1 week ago

This appears in my test at July 30th

upvoted 7 times

 **johnD16** Most Recent 3 months, 1 week ago

Showed in exam 18.03.2023. correct

passed 940/1000

upvoted 3 times

 **zellick** 4 months ago

1. Azure AD
2. Azure API Management

<https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-protect-backend-with-aad>

<https://learn.microsoft.com/en-us/azure/api-management/validate-jwt-policy>

upvoted 3 times

 **OPT\_001122** 5 months ago

the ans is correct

upvoted 1 times

 **OPT\_001122** 4 months, 2 weeks ago

key factor is Your company has 20 web APIs ... so it requires API management for 20 web apis

upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

AzureAD

<https://learn.microsoft.com/en-us/azure/api-management/api-management-howto-protect-backend-with-aad>

Azure API management

<https://learn.microsoft.com/en-us/azure/api-management/api-management-policies>

"Validate JWT - Enforces existence and validity of a JWT extracted from either a specified HTTP Header, query parameter, or token value."

upvoted 1 times

 **NarasimhanMV** 7 months, 3 weeks ago

Ans - correct

upvoted 1 times

You need to recommend a solution to generate a monthly report of all the new Azure Resource Manager (ARM) resource deployments in your Azure subscription.

What should you include in the recommendation?

- A. Azure Log Analytics
- B. Azure Arc
- C. Azure Analysis Services
- D. Application Insights

**Correct Answer: A**

The Activity log is a platform log in Azure that provides insight into subscription-level events. Activity log includes such information as when a resource is modified or when a virtual machine is started.

Activity log events are retained in Azure for 90 days and then deleted.

For more functionality, you should create a diagnostic setting to send the Activity log to one or more of these locations for the following reasons: to Azure Monitor Logs for more complex querying and alerting, and longer retention (up to two years) to Azure Event Hubs to forward outside of Azure to Azure Storage for cheaper, long-term archiving

Note: Azure Monitor builds on top of Log Analytics, the platform service that gathers log and metrics data from all your resources. The easiest way to think about it is that Azure Monitor is the marketing name, whereas Log Analytics is the technology that powers it.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/essentials/activity-log>

*Community vote distribution*

A (100%)

 **Rogercampos** Highly Voted 4 months, 2 weeks ago

Same question as 13 in this topic, different alternatives

upvoted 8 times

 **NotMeAnyWay** Most Recent 3 months, 1 week ago

**Selected Answer: A**

A. Azure Log Analytics

Azure Log Analytics is a powerful tool for collecting, analyzing, and querying log data from various Azure resources, including Azure Resource Manager (ARM) deployments. By creating a custom query in Azure Log Analytics, you can generate a monthly report of all the new ARM resource deployments in your Azure subscription. This will allow you to monitor and analyze resource deployment activities and trends over time.

upvoted 2 times

 **zellck** 4 months ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/azure-monitor/logs/log-analytics-tutorial>

Log Analytics is a tool in the Azure portal to edit and run log queries from data collected by Azure Monitor logs and interactively analyze their results. You can use Log Analytics queries to retrieve records that match particular criteria, identify trends, analyze patterns, and provide various insights into your data.

upvoted 2 times

 **OPT\_001122** 5 months ago

**Selected Answer: A**

A. Azure Log Analytics

Thanks to all who have mentioned the exam dates

upvoted 3 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: A**

A is the "most" accurate solution.

upvoted 1 times

 **Born\_Again** 6 months, 3 weeks ago

**Selected Answer: A**

Activity log->log analytic workspace  
upvoted 1 times

 **Snownoodles** 8 months, 1 week ago

**Selected Answer: A**

Activity log->log analytic workspace  
upvoted 2 times

 **Darkx** 8 months, 2 weeks ago

appeared on 11th Oct 2022

upvoted 2 times

 **most\_lenyora** 9 months, 3 weeks ago

**Selected Answer: A**

A is correct

upvoted 4 times

Your company has the divisions shown in the following table.

Division	Azure subscription	Azure Active Directory (Azure AD) tenant
East	Sub1	Contoso.com
West	Sub2	Fabrikam.com

Sub1 contains an Azure App Service web app named App1. App1 uses Azure AD for single-tenant user authentication. Users from contoso.com can authenticate to App1.

You need to recommend a solution to enable users in the fabrikam.com tenant to authenticate to App1.

What should you recommend?

- A. Configure the Azure AD provisioning service.
- B. Configure assignments for the fabrikam.com users by using Azure AD Privileged Identity Management (PIM).
- C. Use Azure AD entitlement management to govern external users.
- D. Configure Azure AD Identity Protection.

**Correct Answer: C**

Entitlement management is an identity governance capability that enables organizations to manage identity and access lifecycle at scale by automating access request workflows, access assignments, reviews, and expiration. Entitlement management allows delegated non-admins to create access packages that external users from other organizations can request access to. One and multi-stage approval workflows can be configured to evaluate requests, and provision users for time-limited access with recurring reviews. Entitlement management enables policy-based provisioning and deprovisioning of external accounts.

Note: Access Packages -

An access package is the foundation of entitlement management. Access packages are groupings of policy-governed resources a user needs to collaborate on a project or do other tasks. For example, an access package might include: access to specific SharePoint sites, enterprise applications including your custom in-house and SaaS apps like Salesforce.

Microsoft Teams.

Microsoft 365 Groups.

Incorrect:

Not A: Automatic provisioning refers to creating user identities and roles in the cloud applications that users need access to. In addition to creating user identities, automatic provisioning includes the maintenance and removal of user identities as status or roles change.

Not B: Privileged Identity Management provides time-based and approval-based role activation to mitigate the risks of excessive, unnecessary, or misused access permissions on resources that you care about. Here are some of the key features of Privileged Identity Management:

Provide just-in-time privileged access to Azure AD and Azure resources

Assign time-bound access to resources using start and end dates

Etc.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/6-secure-access-entitlement-management>

<https://docs.microsoft.com/en-us/azure/active-directory/app-provisioning/how-provisioning-works> <https://docs.microsoft.com/en-us/azure/active-directory/privileged-identity-management/pim-configure>

*Community vote distribution*

C (100%)

 **santi1975** Highly Voted 9 months, 4 weeks ago

Selected Answer: A

This is exactly question 32, and in the 32 question the answer is A (what makes sense BTW). This is ridiculous.

upvoted 14 times

 **Gowind** Highly Voted 9 months, 4 weeks ago

**Selected Answer: C**

Correct

Application is single tenant so users must be in the same directory as the home tenant  
<https://docs.microsoft.com/en-us/azure/active-directory/develop/single-and-multi-tenant-apps>

<https://docs.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-external-users>

Azure AD entitlement management uses Azure AD business-to-business (B2B) to share access so you can collaborate with people outside your organization. With Azure AD B2B, external users authenticate to their home directory, but have a representation in your directory.

A is for populated users to SaaS applications (third party like Dropbox or Salesforce), but the users must first be in the directory....

upvoted 13 times

 **imjoel** (Most Recent) 2 days, 8 hours ago

**Selected Answer: C**

C is correct

upvoted 1 times

 **zellck** 4 months, 1 week ago

Same as Question 38.

<https://www.examtopics.com/discussions/microsoft/view/93994-exam-az-305-topic-1-question-38-discussion>

upvoted 1 times

 **zellck** 4 months, 1 week ago

**Selected Answer: C**

C is the answer.

C is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-overview#what-can-i-do-with-entitlement-management>

Here are some of capabilities of entitlement management:

- Select connected organizations whose users can request access. When a user who isn't yet in your directory requests access, and is approved, they're automatically invited into your directory and assigned access. When their access expires, if they have no other access package assignments, their B2B account in your directory can be automatically removed.

upvoted 3 times

 **C\_M\_M** 2 months ago

You are describing Access package right?

In Access package you grant access to specific individuals to particular resources for a limited time. And you do it manually.

This question seems to be referring to blanket access to users on the other tenant. Seems more like what user provisioning can do.

user provisioning can provision users from external SaaS application, I don't see why it cannot do that for another tenant in Azure AD.

upvoted 1 times

 **cp2323** 4 months, 2 weeks ago

**Selected Answer: C**

CORRECT ANSWER

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: C**

C. Use Azure AD entitlement management to govern external users.

upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: C**

Correct.

B2B functionality between the Two azure ad tenants.

i.e user logs authenticates to their tenant, which is then provided access to the application tenant.

<https://learn.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-external-users>

upvoted 1 times

 **askumar17** 6 months ago

Option C - Entitlement Management is the right answer.

Refer the Recommendation section on below link for more details. " For projects with one or more business partners, Create and use access packages to onboard and provision those partner's users access to resources."

<https://learn.microsoft.com/en-us/azure/active-directory/fundamentals/6-secure-access-entitlement-management>

Option A - Access provision looks suitable option, but its not right answer to the scenarios. Access provision suitable for apps that maintains its own password store. Refer App provisioning section in below link for the clarity

<https://learn.microsoft.com/en-us/azure/active-directory/governance/what-is-provisioning>

upvoted 1 times

 **Guest** 6 months ago

The answer C is no longer valid. Had this one on my exam today and it had different options

Don't recall what the correct answer was

upvoted 1 times

✉️ **Snownoodles** 9 months, 3 weeks ago

**Selected Answer: C**

"App1 uses Azure AD for single-tenant user authentication" - SINGLE-TENANT

So A is incorrect.

C is the correct answer:

<https://docs.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-external-users>

upvoted 7 times

✉️ **C\_M\_M** 2 months ago

Single tenant simply means that only users in the present tenant can use it by default. It doesn't mean users in other tenants cannot be provisioned into the app via User provisioning.

It also doesn't mean that the app cannot connect with single sign-on from other applications like Google, Facebook etc if configured to do so.

My point being - A single tenant app doesn't mean any other means of connecting to external identities becomes impossible. It simply speaks to default.

upvoted 1 times

✉️ **C\_M\_M** 2 months ago

Correct me if I am wrong, but I don't understand how Access Package (entitlement management) is the solution to this question based on the fact that it is designed to give specific users temporal access to specific resources, and not a blanket solution to grant access to external tenants

upvoted 1 times

✉️ **Snownoodles** 9 months, 3 weeks ago

Please read this link for "single-tenant" and "multi-tenant":

<https://docs.microsoft.com/en-us/azure/active-directory/develop/single-and-multi-tenant-apps>

upvoted 1 times

✉️ **Amalijoonz** 10 months ago

Isn't that supposed to be Azure AD provisioning service?

upvoted 5 times

✉️ **Saffar** 9 months, 4 weeks ago

I think the correct answer is A.

<https://docs.microsoft.com/en-us/azure/active-directory/app-provisioning/isv-automatic-provisioning-multi-tenant-apps>

C is wrong. Entitlement management is an identity governance capability that enables organizations to manage identity and access lifecycle at scale by automating access request workflows, access assignments, reviews, and expiration.

upvoted 5 times

✉️ **Snownoodles** 9 months, 3 weeks ago

C is correct:

"Azure AD entitlement management uses Azure AD business-to-business (B2B) to share access so you can collaborate with people outside your organization. With Azure AD B2B, external users authenticate to their home directory, but have a representation in your directory. The representation in your directory enables the user to be assigned access to your resources"

The link you provided is for "multi-tenant-apps", not for "single-tenant"

upvoted 4 times

✉️ **Babonamaki** 9 months, 4 weeks ago

This one is tricky. The question says the app is single tenant. Thoughts?

upvoted 1 times

You are developing an app that will read activity logs for an Azure subscription by using Azure Functions.

You need to recommend an authentication solution for Azure Functions. The solution must minimize administrative effort.

What should you include in the recommendation?

- A. an enterprise application in Azure AD
- B. system-assigned managed identities
- C. shared access signatures (SAS)
- D. application registration in Azure AD

**Correct Answer: B**

*Community vote distribution*

B (100%)

 **NotMeAnyway** Highly Voted 3 months, 1 week ago

**Selected Answer: B**

B. System-assigned managed identities

System-assigned managed identities provide a way for Azure Functions to authenticate to other Azure services, such as Activity Logs, without the need for storing or managing secrets. This approach minimizes administrative effort because the identity is tied directly to the Azure Functions service and is automatically managed by Azure. When the Azure Functions instance is deleted, the associated managed identity will also be removed. This simplifies the authentication process and helps improve the security posture of your app.

upvoted 6 times

 **ZUMY** Most Recent 2 months, 3 weeks ago

B is correct

upvoted 1 times

 **zellck** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/overview>

A common challenge for developers is the management of secrets, credentials, certificates, and keys used to secure communication between services. Managed identities eliminate the need for developers to manage these credentials.

System-assigned. Some Azure resources, such as virtual machines allow you to enable a managed identity directly on the resource. When you enable a system-assigned managed identity:

- A service principal of a special type is created in Azure AD for the identity. The service principal is tied to the lifecycle of that Azure resource. When the Azure resource is deleted, Azure automatically deletes the service principal for you.
- By design, only that Azure resource can use this identity to request tokens from Azure AD.
- You authorize the managed identity to have access to one or more services.
- The name of the system-assigned service principal is always the same as the name of the Azure resource it is created for.

upvoted 3 times

 **zellck** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/training/modules/design-authentication-authorization-solutions/9-one-design-managed-identities>

System-assigned: Some Azure services allow you to enable a managed identity directly on a service instance. When you enable a system-assigned managed identity, an identity is created in Azure AD that's tied to the lifecycle of that service instance. When the resource is deleted, Azure automatically deletes the identity. By design, only that Azure resource can use that identity to request tokens from Azure AD.

upvoted 1 times

 **Ivanvazov** 4 months, 3 weeks ago

Azure Functions provide a Managed Identity and since the question is about Azure Functions not about the App being developed, the correct answer is B.

upvoted 3 times

 **OPT\_001122** 5 months ago

**Selected Answer: B**

B. system-assigned managed identities

reduce administrative efforts - B makes more sense

upvoted 3 times

✉ **janvandermerwer** 5 months, 1 week ago

**Selected Answer: B**

B makes the most sense.

<https://learn.microsoft.com/en-us/azure/azure-functions/security-concepts?tabs=v4>

<https://learn.microsoft.com/en-us/azure/app-service/overview-authentication-authorization>

upvoted 3 times

✉ **Bummer\_boy** 5 months, 1 week ago

**Selected Answer: B**

No doubts here

upvoted 2 times

✉ **lmy** 5 months, 3 weeks ago

Should be A

upvoted 1 times

✉ **[Removed]** 5 months, 3 weeks ago

Correct

upvoted 1 times

✉ **maku067** 5 months, 3 weeks ago

**Selected Answer: B**

Seems correct.

upvoted 1 times

✉ **Aziza\_Adam** 5 months, 3 weeks ago

A first you need to register the App

upvoted 2 times

✉ **IRISone** 5 months, 2 weeks ago

it doesn't say what needs to be done, but what is to be recommended. It's designing. B is correct

upvoted 1 times

✉ **darthfodio** 5 months, 1 week ago

Right, it also says you need to recommend an "authentication" solution.

upvoted 1 times

✉ **Clarkszw** 5 months, 3 weeks ago

B, tested in the lab! :p

upvoted 2 times

Your company has the divisions shown in the following table.

Division	Azure subscription	Azure AD tenant
East	Sub1	Contoso.com
West	Sub2	Fabrikam.com

Sub1 contains an Azure App Service web app named App1. App1 uses Azure AD for single-tenant user authentication. Users from contoso.com can authenticate to App1.

You need to recommend a solution to enable users in the fabrikam.com tenant to authenticate to App1.

What should you recommend?

- A. Configure Azure AD join.
- B. Use Azure AD entitlement management to govern external users.
- C. Enable Azure AD pass-through authentication and update the sign-in endpoint.
- D. Configure assignments for the fabrikam.com users by using Azure AD Privileged Identity Management (PIM).

**Correct Answer: B**

*Community vote distribution*

B (100%)

 **zzreflexzz** 1 month, 3 weeks ago

on exam 5/2/23

upvoted 2 times

 **zelliCK** 4 months, 1 week ago

Same as Question 38.

<https://www.examtopics.com/discussions/microsoft/view/93994-exam-az-305-topic-1-question-38-discussion>

upvoted 1 times

 **zelliCK** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-overview#what-can-i-do-with-entitlement-management>

Here are some of capabilities of entitlement management:

- Select connected organizations whose users can request access. When a user who isn't yet in your directory requests access, and is approved, they're automatically invited into your directory and assigned access. When their access expires, if they have no other access package assignments, their B2B account in your directory can be automatically removed.

upvoted 3 times

 **OPT\_001122** 5 months ago

**Selected Answer: B**

B. Use Azure AD entitlement management to govern external users.

many times repeated

upvoted 4 times

 **VBK8579** 5 months ago

B. Use Azure AD entitlement management to govern external users.

upvoted 2 times

 **lmy** 5 months, 3 weeks ago

Same as Q32

upvoted 3 times

 **maku067** 5 months, 3 weeks ago

**Selected Answer: B**

Seems correct.

upvoted 2 times

 **Aziza\_Adam** 5 months, 3 weeks ago

Indeed B is correct

upvoted 2 times

 **IRISone** 5 months, 3 weeks ago

B is correct

upvoted 3 times

Your company has the divisions shown in the following table.

Division	Azure subscription	Azure AD tenant
East	Sub1	Contoso.com
West	Sub2	Fabrikam.com

Sub1 contains an Azure App Service web app named App1. App1 uses Azure AD for single-tenant user authentication. Users from contoso.com can authenticate to App1.

You need to recommend a solution to enable users in the fabrikam.com tenant to authenticate to App1.

What should you recommend?

- A. Configure Azure AD join.
- B. Configure Azure AD Identity Protection.
- C. Use Azure AD entitlement management to govern external users.
- D. Configure assignments for the fabrikam.com users by using Azure AD Privileged Identity Management (PIM).

**Correct Answer: C**

*Community vote distribution*

C (100%)

 **IRISone** Highly Voted 5 months, 3 weeks ago

4th time reading this question. What is going on?  
upvoted 33 times

 **Clarkszw** Highly Voted 5 months, 3 weeks ago

**Selected Answer: C**  
When you reach here, this question will no longer be challenging.  
upvoted 21 times

 **zellck** Most Recent 4 months, 1 week ago

**Selected Answer: C**  
C is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-overview#what-can-i-do-with-entitlement-management>

Here are some of capabilities of entitlement management:

- Select connected organizations whose users can request access. When a user who isn't yet in your directory requests access, and is approved, they're automatically invited into your directory and assigned access. When their access expires, if they have no other access package assignments, their B2B account in your directory can be automatically removed.

upvoted 3 times

 **OPT\_001122** 5 months ago

**Selected Answer: C**  
C. Use Azure AD entitlement management to govern external users.  
exact question should be repeated 4 times in exam as well  
upvoted 2 times

 **maku067** 5 months, 3 weeks ago

**Selected Answer: C**  
Seems correct.  
upvoted 2 times

 **Aziza\_Adam** 5 months, 3 weeks ago

C is correct  
upvoted 2 times

You need to recommend a solution to generate a monthly report of all the new Azure Resource Manager (ARM) resource deployments in your Azure subscription.

What should you include in the recommendation?

- A. Azure Activity Log
- B. Azure Arc
- C. Azure Analysis Services
- D. Azure Monitor metrics

**Correct Answer: A**

*Community vote distribution*

A (100%)

 **mleez** Highly Voted 4 months, 3 weeks ago  
repeated question, 3rd time reading.. Answer is A.  
upvoted 8 times

 **NotMeAnyway** Most Recent 3 months, 1 week ago  
**Selected Answer: A**  
A. Azure Activity Log

Azure Activity Log provides insights into subscription-level events that have occurred in your Azure account. It includes information about resource creation, deletion, and modification events, making it an excellent choice for monitoring new ARM resource deployments in your Azure subscription. You can export the Activity Log data to a storage account, Event Hubs, or Log Analytics workspace for further analysis and reporting. By creating a custom query or using the built-in tools for filtering and visualization, you can generate a monthly report of all the new ARM resource deployments in your Azure subscription.

upvoted 2 times

 **zelliCK** 4 months ago  
**Selected Answer: A**  
A is the answer.

<https://learn.microsoft.com/en-us/azure/azure-monitor/essentials/activity-log?tabs=powershell>  
The Azure Monitor activity log is a platform log in Azure that provides insight into subscription-level events. The activity log includes information like when a resource is modified or a virtual machine is started.

upvoted 3 times

 **OPT\_001122** 5 months ago  
**Selected Answer: A**  
A. Azure Activity Log

repeated question  
upvoted 3 times

 **mitya** 5 months, 1 week ago  
**Selected Answer: A**  
Azure activity log contains required data.  
upvoted 2 times

 **janvandermerwer** 5 months, 1 week ago  
**Selected Answer: A**  
Azure activity log is definitely the go to for this one.  
upvoted 2 times

 **janvandermerwer** 5 months, 1 week ago  
<https://learn.microsoft.com/en-us/azure/active-directory/reports-monitoring/concept-audit-logs>  
upvoted 1 times

**HOTSPOT**

You have an Azure subscription that contains an Azure key vault named KV1 and a virtual machine named VM1. VM1 runs Windows Server 2022: Azure Edition.

You plan to deploy an ASP.NET Core-based application named App1 to VM1.

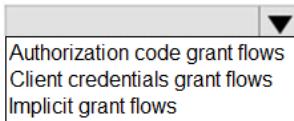
You need to configure App1 to use a system-assigned managed identity to retrieve secrets from KV1. The solution must minimize development effort.

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

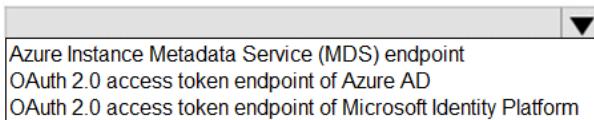
NOTE: Each correct selection is worth one point.

**Answer Area**

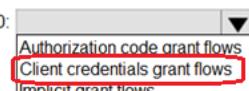
Configure App1 to use OAuth 2.0:



Configure App1 to use a REST API call to retrieve an authentication token from the:

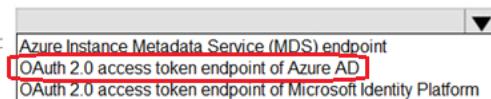
**Answer Area**

Configure App1 to use OAuth 2.0:



**Correct Answer:**

Configure App1 to use a REST API call to retrieve an authentication token from the:



✉️ **GarryK** 4 months, 3 weeks ago

(a.k.a.Gowind)

Answers are corrects.

We need server based authentication so client credentials is to be used.

<https://learn.microsoft.com/en-us/azure/active-directory/develop/v2-oauth2-auth-code-flow>

<https://learn.microsoft.com/en-us/azure/active-directory/develop/v2-oauth2-client-creds-grant-flow>

Also prefer AAD , because Microsoft Identity Platform is user based

<https://learn.microsoft.com/en-us/azure/active-directory/develop/v2-overview>

upvoted 7 times

✉️ **MrAZ105** 1 month, 3 weeks ago

how many questions(what percentage) from ET come in real exam

upvoted 1 times

✉️ **betterthanlife** 1 month, 2 weeks ago

I have no idea as for percentage but for me (& I suspect most), enough.

upvoted 1 times

✉️ **betterthanlife** 1 month, 2 weeks ago

Oh, but you still need to vet for yourself some that have conflicting or incorrect responses, which is < 5% if even 2-3% of them.

upvoted 2 times

✉️  **Bigbluee** 2 months, 2 weeks ago

Access resources within the same Azure AD tenant as the managed identity - IDMS can be simpler and more efficient, as it avoids the need to make an additional request to the AAD OAuth2 token endpoint.

upvoted 1 times

✉️  **4PHL** 4 months, 1 week ago

I think "Authorization flows" and "OAuth 2.0 access token endpoint of Microsoft Identity Platform".

The OAuth 2.0 authorization code flow is described in section 4.1 of the OAuth 2.0 specification. Apps using the OAuth 2.0 authorization code flow acquire an access\_token to include in requests to resources protected by the Microsoft identity platform (typically APIs).

<https://learn.microsoft.com/en-us/azure/active-directory/develop/v2-oauth2-auth-code-flow>

And not "implicit grant flow":

With the plans for removing third party cookies from browsers, the implicit grant flow is no longer a suitable authentication method. The silent single sign-on (SSO) features of the implicit flow do not work without third party cookies, causing applications to break when they attempt to get a new token. We strongly recommend that all new applications use the authorization code flow that now supports single-page apps in place of the implicit flow.

See <https://learn.microsoft.com/en-us/azure/active-directory/develop/v2-oauth2-implicit-grant-flow>

upvoted 1 times

✉️  **zellck** 4 months, 1 week ago

1. Client credentials grant flows
2. OAuth 2.0 access token endpoint of Azure AD

<https://learn.microsoft.com/en-us/azure/active-directory/develop/v2-oauth2-client-creds-grant-flow>

In the client credentials flow, permissions are granted directly to the application itself by an administrator. When the app presents a token to a resource, the resource enforces that the app itself has authorization to perform an action since there is no user involved in the authentication.

upvoted 4 times

✉️  **chessace2000** 4 months, 3 weeks ago

This is a horrible question. The question states 'you need to configure App1 to use a system-assigned managed identity ', which would imply 'use Azure instances metadata service' in box two, but no option in box1 would then match box2

upvoted 3 times

✉️  **karlax123** 4 months, 3 weeks ago

You are right This link confirms it - <https://aztoso.com/security/oauth2-managed-identities/>. Due to no proper corresponding answer in first list box, I guess we need to go with the answers provided as they seem correct too!

upvoted 1 times

✉️  **RelaxingLoki475** 4 months, 3 weeks ago

The authorization code grant flow is used for user-based authentication, while the client credentials grant flow is used for client-based authentication.

upvoted 3 times

✉️  **OPT\_001122** 5 months ago

the given ans looks correct  
upvoted 2 times

✉️  **RandomNickname** 5 months ago

QA Given answer looks right.

As per below;

<https://learn.microsoft.com/en-us/azure/active-directory/develop/active-directory-certificate-credentials>

QB Given answer looks good.

upvoted 3 times

✉️  **janvandermerwer** 5 months, 1 week ago

Question A i'm not entirely sure about - leaning towards client credentials  
Correct (used this at work)- OAuth2 Access Token of AAD

"You can use the OAuth 2.0 client credentials grant specified in RFC 6749, sometimes called two-legged OAuth, to access web-hosted resources by using the identity of an application. This type of grant is commonly used for server-to-server interactions that must run in the background, without immediate interaction with a user. These types of applications are often referred to as daemons or service accounts."

upvoted 2 times

✉️  **LeeVee** 5 months, 1 week ago

Client Credentials and OAuth2 Access Token of AAD  
upvoted 2 times

✉️  **[Removed]** 5 months, 1 week ago

I believe these are correct.

Solution must minimise development effort - client credentials grant flow

upvoted 2 times

Your company has the divisions shown in the following table.

Division	Azure subscription	Azure AD tenant
East	Sub1	Contoso.com
West	Sub2	Fabrikam.com

Sub1 contains an Azure App Service web app named App1. App1 uses Azure AD for single-tenant user authentication. Users from contoso.com can authenticate to App1.

You need to recommend a solution to enable users in the fabrikam.com tenant to authenticate to App1.

What should you recommend?

- A. Configure Azure AD join.
- B. Configure Azure AD Identity Protection.
- C. Configure a Conditional Access policy.
- D. Configure Supported account types in the application registration and update the sign-in endpoint.

**Correct Answer: D**

*Community vote distribution*

D (100%)

OPT\_001122 [Highly Voted] 5 months ago

Selected Answer: D

This question is repeated 5th time but this time the answers are different

D. Configure Supported account types in the application registration and update the sign-in endpoint.  
upvoted 12 times

jimmyym1 [Highly Voted] 4 months, 2 weeks ago

From chatgpt,

D. Configure Supported account types in the application registration and update the sign-in endpoint.

To enable users in the fabrikam.com tenant to authenticate to App1, you need to configure the application registration for App1 in Azure AD to support users from both contoso.com and fabrikam.com. This can be done by updating the "Supported account types" in the application registration to allow users from any organizational directory (Any Azure AD directory - Multitenant). Once this is done, you need to update the sign-in endpoint for the application to include the fabrikam.com tenant.

This will allow users from the fabrikam.com tenant to authenticate to App1 using their Azure AD credentials.

upvoted 5 times

ookook 1 month ago

chatgpt is not reliable. After you got answer from chatgpt just ask are you sure and it will change the answer to another option.

upvoted 4 times

C\_M\_M [Most Recent] 2 months ago

Basically making the app multi-tenant?

upvoted 2 times

zellick 4 months, 1 week ago

Selected Answer: D

D is the answer.

<https://learn.microsoft.com/en-us/security/zero-trust/develop/identity-supported-account-types>

The Microsoft identity platform provides support for specific identity types:

- External identities in Azure AD for partners (users outside of your organization)

upvoted 3 times

VBK8579 5 months ago

D: Configure Supported account types in the application registration and update the sign-in endpoint.

upvoted 1 times

✉️ **RandomNickname** 5 months ago

**Selected Answer: D**

Given answer looks good.

upvoted 1 times

✉️ **janvandermerwer** 5 months, 1 week ago

**Selected Answer: D**

<https://learn.microsoft.com/en-us/security/zero-trust/develop/identity-supported-account-types>

<https://learn.microsoft.com/en-us/azure/active-directory/develop/howto-modify-supported-accounts>

upvoted 3 times

✉️ **[Removed]** 5 months, 1 week ago

**Selected Answer: D**

D, makes sense to me. Looks like an alternative answer to the already existing duplicate of this question.

upvoted 3 times

You have an Azure AD tenant named contoso.com that has a security group named Group1. Group1 is configured for assigned memberships. Group1 has 50 members, including 20 guest users.

You need to recommend a solution for evaluating the membership of Group1. The solution must meet the following requirements:

- The evaluation must be repeated automatically every three months.
- Every member must be able to report whether they need to be in Group1.
- Users who report that they do not need to be in Group1 must be removed from Group1 automatically.
- Users who do not report whether they need to be in Group1 must be removed from Group1 automatically.

What should you include in the recommendation?

- A. Implement Azure AD Identity Protection.
- B. Change the Membership type of Group1 to Dynamic User.
- C. Create an access review.
- D. Implement Azure AD Privileged Identity Management (PIM).

**Correct Answer: D**

*Community vote distribution*

C (97%)

✉️  **darthfodio**  5 months, 1 week ago

**Selected Answer: C**

Based on the requirements below:

The evaluation must be repeated automatically every three months.

- Every member must be able to report whether they need to be in Group1.
- Users who report that they do not need to be in Group1 must be removed from Group1 automatically.
- Users who do not report whether they need to be in Group1 must be removed from Group1 automatically.

The correct answer should be - C. Create an access. review.

<https://learn.microsoft.com/en-us/azure/active-directory/governance/access-reviews-overview>

upvoted 19 times

✉️  **Softeng**  15 hours, 22 minutes ago

**Selected Answer: C**

Since It's talking about reporting... access review.

upvoted 1 times

✉️  **BeastSlayer** 2 weeks, 2 days ago

**Selected Answer: C**

The correct answer should be C. You need to create an access review. PIM is not going to do it on its own.

upvoted 1 times

✉️  **Tr619899** 2 weeks, 4 days ago

One way to achieve this is to "create an access review". Access reviews in Azure AD allow you to evaluate the membership of groups and other resources. With access reviews, you can configure a recurring review that repeats automatically every three months. During the review, members of Group1 can report whether they need to be in the group. Users who report that they do not need to be in Group1 or who do not respond to the review can be automatically removed from the group. This approach allows you to evaluate the membership of Group1 and ensure that it is up-to-date and accurate.

upvoted 1 times

✉️  **Cloudpie** 1 month ago

**Selected Answer: C**

C looks correct, PIM is not repeated automatically,

upvoted 1 times

✉️  **GuyForget** 1 month, 1 week ago

How is this a legit question? The clear answer should be to configure an Access Review, but this is configured through PIM, so would they mark both C & D correct?

upvoted 3 times

 **MartyMcFly79** 1 month, 2 weeks ago

**Selected Answer: C**

I think C is correct.

upvoted 1 times

 **kshum** 1 month, 3 weeks ago

C is the correct one, after the requirement, so no PIM is needed just for this

upvoted 1 times

 **zzreflexzz** 1 month, 3 weeks ago

on exam 5/2/23

upvoted 2 times

 **ArmaQ33** 2 months ago

**Selected Answer: C**

C is the correct answer - Access Review

upvoted 1 times

 **Batner** 2 months ago

**Selected Answer: C**

C Is the right answer according to the requirements

upvoted 1 times

 **pena65** 2 months, 1 week ago

**Selected Answer: C**

C is the right answer

upvoted 1 times

 **JohnPhan** 2 months, 3 weeks ago

**Selected Answer: C**

Same as question 4

<https://www.examtopics.com/discussions/microsoft/view/67505-exam-az-305-topic-1-question-4-discussion/>

upvoted 2 times

 **ZUMY** 2 months, 3 weeks ago

C is correct

upvoted 1 times

 **JohnPhan** 3 months ago

**Selected Answer: C**

C is the answer.

upvoted 1 times

 **NotMeAnyWay** 3 months, 1 week ago

**Selected Answer: C**

C. Create an access review.

Azure AD access reviews provide an efficient way to evaluate the membership of a group and automatically manage user access based on their responses. By creating an access review for Group1, you can set it to repeat every three months, allowing members to report whether they need to be in the group. Users who report that they don't need to be in Group1 or don't respond at all will be removed from the group automatically, meeting all the stated requirements.

upvoted 3 times

 **ShingMing** 3 months, 3 weeks ago

Got this on Feb. 12, 2023

upvoted 2 times

**HOTSPOT**

You have an Azure subscription named Sub1 that is linked to an Azure AD tenant named contoso.com.

You plan to implement two ASP.NET Core apps named App1 and App2 that will be deployed to 100 virtual machines in Sub1. Users will sign in to App1 and App2 by using their contoso.com credentials.

App1 requires read permissions to access the calendar of the signed-in user. App2 requires write permissions to access the calendar of the signed-in user.

You need to recommend an authentication and authorization solution for the apps. The solution must meet the following requirements:

- Use the principle of least privilege.
- Minimize administrative effort.

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

NOTE: Each correct selection is worth one point.

**Answer Area**

Authentication:

- Application registration in Azure AD
- A system-assigned managed identity
- A user-assigned managed identity

Authorization:

- Application permissions
- Azure role-based access control (Azure RBAC)
- Delegated permissions

**Answer Area**

Authentication:

- Application registration in Azure AD
- A system-assigned managed identity
- A user-assigned managed identity

**Correct Answer:**

Authorization:

- Application permissions
- Azure role-based access control (Azure RBAC)
- Delegated permissions

  **pkkalra** (Highly Voted) 4 months, 3 weeks ago

Important point here is that both apps are deployed to the same machines. So Managed identities will violate the principle of least privilege. As a user/system managed identity will have to be assigned both read and write permission to user's calendar.

App registration will provide ability to use the service principal per app to set the correct permission required for the app.  
Use delegated permissions to access user's data as admin allowed/forces users to delegate the permission to the app.

answer:

- App registration
- Delegated permissions

upvoted 34 times

  **Mosti** 3 months, 2 weeks ago

Very good point: "As a user/system managed identity will have to be assigned both read and write permission to user's calendar"

upvoted 3 times

✉ **darthfodio** Highly Voted 5 months, 1 week ago

I believe box 1 should be " A user-assigned managed identity" because the apps will be deployed to 100 VMs. Keeping " Minimized administrative effort" in mind, a user-assigned managed identity can be used re-used.

upvoted 29 times

✉ **malcubierre** 4 months, 2 weeks ago

All are the same App, same identity.... no need user-assigned managed identity, they are identified by Application ID

upvoted 4 times

✉ **dimsok** 5 months ago

Calendar might not be behind Azure AD. Delegated permissions is the correct one

upvoted 3 times

✉ **HaniG** 5 months, 1 week ago

I agree

upvoted 2 times

✉ **techrat** Most Recent 1 month, 4 weeks ago

The given answer is correct. I passed the exam today with 979. and I gave the same answer to this question:

App registration

Delegated permissions

upvoted 6 times

✉ **NotMeAnyWay** 3 months, 1 week ago

Question 1. Authentication type?

Option 1 - Application registration in Azure AD.

For each app (App1 and App2), you should register a separate application in Azure AD. This will allow users to authenticate using their contoso.com credentials and will enable you to request access tokens for accessing protected resources like the calendar.

Question 2. Authorization type?

Option 3 - Delegated permissions.

Delegated permissions allow the apps to perform actions on behalf of the signed-in user, such as reading or writing to their calendar. By configuring delegated permissions for each app, you can ensure that App1 has read access to the calendar while App2 has write access. This approach follows the principle of least privilege and minimizes administrative effort.

upvoted 4 times

✉ **johnD16** 3 months, 1 week ago

Showed in exam 18.03.2023. correct

passed 940/1000

upvoted 2 times

✉ **memyself2** 4 months ago

This was a question was on my exam today (2/26/23) - Scored 844

I agree with this answer

upvoted 3 times

✉ **Jacky\_exam** 4 months, 1 week ago

App1 requires read permissions to access the calendar of the signed-in user. App2 requires write permissions to access the calendar of the signed-in user.

If use App registration, how to meet the requirement of principle of least privilege ?

upvoted 1 times

✉ **zellck** 4 months, 1 week ago

1. Application registration in Azure AD

2. Delegated permissions

<https://learn.microsoft.com/en-us/azure/active-directory/develop/app-objects-and-service-principals#application-registration>

To delegate identity and access management functions to Azure AD, an application must be registered with an Azure AD tenant. When you register your application with Azure AD, you're creating an identity configuration for your application that allows it to integrate with Azure AD.

<https://learn.microsoft.com/en-us/azure/active-directory/develop/permissions-consent-overview#types-of-permissions>

Delegated permissions are used in the delegated access scenario. They're permissions that allow the application to act on a user's behalf. The application will never be able to access anything the signed in user themselves couldn't access.

upvoted 5 times

✉ **OPT\_001122** 4 months, 2 weeks ago

App registration

Delegated permissions

upvoted 3 times

✉ **VBK8579** 4 months, 2 weeks ago

Authentication:  
Application registration in Azure AD

Authorization:  
Delegated permissions  
upvoted 2 times

✉️ **Ivanvazov** 4 months, 3 weeks ago

First we register the App to create a service principal in AAD. Then we Delegate permissions for that App to the Exchange app.  
upvoted 1 times

✉️ **GarryK** 4 months, 3 weeks ago

(a.k.a Gowind)  
We need access Microsoft Graph on behalf of the user to only acces its own data. So we need an app registration (for user signs ins) and delegated permissions  
<https://learn.microsoft.com/en-us/azure/active-directory/develop/multi-service-web-app-access-microsoft-graph-as-user?tabs=azure-resource-explorer%2Cprogramming-language-csharp>  
Select App registrations > Owned applications > View all applications in this directory. Select your web app name, and then select API permissions.  
Select Add a permission, and then select Microsoft APIs and Microsoft Graph.  
Select Delegated permissions, and then select User.Read from the list. Select Add permissions.

If we wanted only access on behalf of the app, then the user assigned managed identity would have made sense:  
<https://learn.microsoft.com/en-us/azure/active-directory/develop/multi-service-web-app-access-microsoft-graph-as-app?tabs=azure-powershell%2Cprogramming-language-csharp>  
upvoted 3 times

✉️ **GarryK** 4 months, 3 weeks ago

also here <https://learn.microsoft.com/en-us/azure/active-directory/develop/scenario-web-app-call-api-overview>

So yes, app registration + delegated permissions

upvoted 1 times

✉️ **chessace2000** 4 months, 3 weeks ago

Answer is correct

1. App registration - managed identity cannot be used here because both App1/App2 are deployed on same set of VMs, hence will get same managed identity, which goes against principle of least privilege.
  2. Delegated permissions: Because its the logged-in user's calendar that needs to be accessed and also helps least privilege
- upvoted 2 times

✉️ **OPT\_001122** 5 months ago

1. A user-assigned managed identity - Minimized administrative efforts
  2. Delegated permissions
- upvoted 2 times

✉️ **FabrityDev** 5 months ago

I believe is should be:

Box 1: A user-assigned managed identity  
Box 2: Delegated permissions

The question states that we have to minimize the administrative effort and managed identities do just that. Additionally we have 100 VMs so user-assigned managed identity can be used as it can be shared unlike system-assigned one. I researched a bit and found one helpful article which contains this sentence:

"Previously, when we did not have managed identities, we created an application registration for the resource. Using a secret or certificate to authenticate with Azure. This created a lot of overhead, as it required secret management, key rotation, etc. With managed identities, Azure takes care of this for us."

So I believe that although app registration could be used, it wouldn't reduce admin effort as much as Managed Identity.

<https://adatum.no/azure/azure-active-directory/azure-application-registrations-enterprise-app-managed-identities>  
upvoted 8 times

✉️ **RandomNickname** 5 months ago

Given answer makes sense after read the URL from Tarni  
upvoted 1 times

✉️ **RandomNickname** 4 months, 4 weeks ago

First question I stand corrected, likely, user-assigned MI, as per article from FabrityDev.

As per the above original post, article state the following;

"Previously, when we did not have managed identities, we created an application registration for the resource. Using a secret or certificate to authenticate with Azure. This created a lot of overhead, as it required secret management, key rotation, etc. With managed identities, Azure takes care of this for us."

upvoted 1 times

✉️ **RandomNickname** 4 months, 4 weeks ago

Also as per the initial MS post for app registration.

"Whenever you configure permissions, users of your app are asked at sign-in for their consent to allow your app to access the resource API on their behalf.

As an admin, you can also grant consent on behalf of all users so they're not prompted to do so. Admin consent is discussed later in the More on API permissions and admin consent section of this article."

This does look like it meets minimize admin effort  
upvoted 1 times

 **GarryK** 4 months, 3 weeks ago

But it doesn't follow principle of least privilege so your answer is incorrect  
upvoted 1 times

 **RandomNickname** 4 months, 3 weeks ago

Thanks for the update.  
Your information and further reading has helped make sense of this.  
upvoted 1 times

 **atulgupta269** 5 months ago

Given answer is correct. The app running on 100 VMs is same, and graph API can be accessed using Azure AD app registration.  
upvoted 1 times

Your company has the divisions shown in the following table.

Division	Azure subscription	Azure AD tenant
East	Sub1	Contoso.com
West	Sub2	Fabrikam.com

Sub1 contains an Azure App Service web app named App1. App1 uses Azure AD for single-tenant user authentication. Users from contoso.com can authenticate to App1.

You need to recommend a solution to enable users in the fabrikam.com tenant to authenticate to App1.

What should you recommend?

- A. Enable Azure AD pass-through authentication and update the sign-in endpoint.
- B. Use Azure AD entitlement management to govern external users.
- C. Configure assignments for the fabrikam.com users by using Azure AD Privileged Identity Management (PIM).
- D. Configure Azure AD Identity Protection.

**Correct Answer: B**

*Community vote distribution*

B (100%)

 **jj22222** [ Highly Voted ] 4 months ago

**Selected Answer: B**

this was repeated several times, maybe its important on the test

upvoted 8 times

 **DaveGrain** [ Most Recent ] 6 days, 7 hours ago

this is the 6th or 7th time this Q has been asked. Can the replicas be removed?

upvoted 1 times

 **sankar07** 2 months, 1 week ago

So many repeats of the same question!

upvoted 2 times

 **zelick** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-overview#what-can-i-do-with-entitlement-management>

Here are some of capabilities of entitlement management:

- Select connected organizations whose users can request access. When a user who isn't yet in your directory requests access, and is approved, they're automatically invited into your directory and assigned access. When their access expires, if they have no other access package assignments, their B2B account in your directory can be automatically removed.

upvoted 4 times

Your company has the divisions shown in the following table.

Division	Azure subscription	Azure AD tenant
East	Sub1	Contoso.com
West	Sub2	Fabrikam.com

Sub1 contains an Azure App Service web app named App1. App1 uses Azure AD for single-tenant user authentication. Users from contoso.com can authenticate to App1.

You need to recommend a solution to enable users in the fabrikam.com tenant to authenticate to App1.

What should you recommend?

- A. Configure the Azure AD provisioning service.
- B. Enable Azure AD pass-through authentication and update the sign-in endpoint.
- C. Configure Supported account types in the application registration and update the sign-in endpoint.
- D. Configure Azure AD join.

**Correct Answer: C**

*Community vote distribution*

C (100%)

 **Softeng** 15 hours, 19 minutes ago

What happens with this answer? It keeps getting repeated.

upvoted 1 times

 **jj22222** 4 months ago

**Selected Answer: C**

c is right

upvoted 3 times

 **zellck** 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/security/zero-trust/develop/identity-supported-account-types>

upvoted 3 times

 **Alessandro365** 4 months, 1 week ago

**Selected Answer: C**

C is correct answer

upvoted 2 times

**HOTSPOT**

You have an Azure AD tenant that contains a management group named MG1.

You have the Azure subscriptions shown in the following table.

Name	Management group
Sub1	MG1
Sub2	MG2
Sub3	Tenant Root Group

The subscriptions contain the resource groups shown in the following table.

Name	Subscription
RG1	Sub1
RG2	Sub2
RG3	Sub3

The subscription contains the Azure AD security groups shown in the following table.

Name	Member of
Group1	Group3
Group2	Group3
Group3	None

The subscription contains the user accounts shown in the following table.

Name	Member of
User1	Group1
User2	Group2
User3	Group1, Group2

You perform the following actions:

Assign User3 the Contributor role for Sub1.

Assign Group1 the Virtual Machine Contributor role for MG1.

Assign Group3 the Contributor role for the Tenant Root Group.

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

NOTE: Each correct selection is worth one point.

**Answer Area**

Statements	Yes	No
User1 can create a new virtual machine in RG1.	<input type="radio"/>	<input type="radio"/>
User2 can grant permissions to Group2.	<input type="radio"/>	<input type="radio"/>
User3 can create a storage account in RG2.	<input type="radio"/>	<input type="radio"/>

Answer Area	
Statements	Yes    No
User1 can create a new virtual machine in RG1.	<input checked="" type="checkbox"/> <input type="radio"/>
User2 can grant permissions to Group2.	<input type="radio"/> <input checked="" type="checkbox"/>
User3 can create a storage account in RG2.	<input checked="" type="checkbox"/> <input type="radio"/>

✉ **JBTC** Highly Voted 2 months, 1 week ago

Answers are correct.

Since Group 1 is assigned VM contributor to MG1, it will be able to create a new VM in RG1.

User 2 is not able to grant permission to Group 2 because it is just a member with contributor role.

Since Group 3 has Contributor role for the Tenant Root Group, User3 can create storage account in RG2  
upvoted 9 times

✉ **[Removed]** Highly Voted 2 months, 1 week ago

A : YES User1 member of Group1 which is Contributor VM to MG1 (Sub1).

B : NO Granting access cannot be done with contributor role

C : NO User3 has Contributor role only for Sub1 and Sub3 (through group1/2 member of group3 which is Contributor of Tenant Root Group (Sub3) )  
upvoted 6 times

✉ **yonie** 2 months ago

But since User3 is a member of Group 3, User 3 has contributor role to everything, since the contributor role is inherited to anything under the Tenant Root Group

upvoted 4 times

✉ **BeastSlayer** 2 weeks, 2 days ago

User 3 is a member of Group 1 and Group 2. And hence the answer is Y,N,N

upvoted 1 times

✉ **betterthanlife** 1 month, 2 weeks ago

I have checked it in my Azure lab & the user I have permissioned at the Tenant Root Group does have the permission propagated down to everything subordinate, and everything is subordinate to the Tenant Root Group so User 3 has Contributor role to everything within the tenant.

Answer is correct:

Y

N

Y

upvoted 1 times

✉ **lombri** Most Recent 1 month, 1 week ago

user1 can create a new virtual machine in rg1: Yes

user2 can grant permissions to group2: No

user3 can create a storage account in rg2: No

user1 can create a new virtual machine in rg1 because they are a member of Group1, which has the Virtual Machine Contributor role for MG1, and rg1 is under sub1.

user2 cannot grant permissions to group2 because they only have the Contributor role and not the necessary administrative role for group2.

user3 cannot create a storage account in rg2 because although Group3 has the Contributor role for the Tenant Root Group, user3 needs to be assigned a specific role that allows them to create storage accounts. Being a member of Group1 and Group2 does not provide the authority to create a storage account in rg2.

upvoted 4 times

✉ **GuyForget** 1 month ago

Group1 and Group2 are each members of Group3, so because Group3 has the Contributor role at the Tenant Root Group, Group1 & Group2 also have Contributor rights at the Tenant Root level. Keep in mind that the Tenant Root Group is the top level, and includes all subscriptions/resource groups.

User3 is a member of both Group1 & Group2, both of which have Contributor rights at the Tenant Root; therefore, User3 has Contributor rights to all subscriptions and resource groups. The Contributor role allows a user to create resources, pretty much across the board. They don't need to be assigned a more specific role (i.e. Storage Account Contributor) on top of that; it would be redundant.

In fact, you could take the VM Contributor role away from User1, and they would still be able to create a new VM, because they already have the Contributor role at the Tenant Root level

upvoted 3 times

✉ **lombri** 3 weeks, 2 days ago

YOU RIGHT

upvoted 1 times

 **zzreflexzz** 1 month, 3 weeks ago  
on exam 5/2/23  
upvoted 4 times

Question #47

Topic 1

Your company has the divisions shown in the following table.

Division	Azure subscription	Azure AD tenant
East	Sub1	Contoso.com
West	Sub2	Fabrikam.com

Sub1 contains an Azure App Service web app named App1. App1 uses Azure AD for single-tenant user authentication. Users from contoso.com can authenticate to App1.

You need to recommend a solution to enable users in the fabrikam.com tenant to authenticate to App1.

What should you recommend?

- A. Configure Azure AD Identity Protection.
- B. Configure assignments for the fabrikam.com users by using Azure AD Privileged Identity Management (PIM).
- C. Configure Supported account types in the application registration and update the sign-in endpoint.
- D. Configure a Conditional Access policy.

**Correct Answer: C**

*Community vote distribution*

C (100%)

 **rshinh** 2 weeks, 6 days ago

Why is this question being shown over and over again?  
upvoted 1 times

 **fred356** 1 month, 4 weeks ago

**Selected Answer: C**  
C. Configure Supported account types in the application registration and update the sign-in endpoint.

Same Question and answer as Question 45.

<https://learn.microsoft.com/en-us/security/zero-trust/develop/identity-supported-account-types>  
upvoted 2 times

 **yogi2020** 1 month, 4 weeks ago

Answer D is correct  
upvoted 1 times

 **yogi2020** 1 month, 4 weeks ago

Sorry Answer C is correct, this questions has been repeated many times, with different answer, Duplicate of Q41 which has the correct answer  
upvoted 1 times

 **mehak2020** 2 months ago

WHICH ONE IS RIGHT?  
upvoted 1 times

Your company has the divisions shown in the following table.

Division	Azure subscription	Azure AD tenant
East	Sub1	Contoso.com
West	Sub2	Fabrikam.com

Sub1 contains an Azure App Service web app named App1. App1 uses Azure AD for single-tenant user authentication. Users from contoso.com can authenticate to App1.

You need to recommend a solution to enable users in the fabrikam.com tenant to authenticate to App1.

What should you recommend?

- A. Use Azure AD entitlement management to govern external users.
- B. Enable Azure AD pass-through authentication and update the sign-in endpoint.
- C. Configure a Conditional Access policy.
- D. Configure assignments for the fabrikam.com users by using Azure AD Privileged Identity Management (PIM).

**Correct Answer: A**

*Community vote distribution*

A (100%)

 **rshinh** 2 weeks, 6 days ago

Same question again and again, this exams topics set of questions is very narrow  
upvoted 1 times

 **yonie** 2 months ago

**Selected Answer: A**  
This has been repeated many times and has two answers based on the provided possibilities:  
Its either  
Use Azure AD entitlement management to govern external users

Or

Configure Supported account types in the application registration and update the sign-in endpoint

Both answers will lead you to the same solution.

upvoted 2 times

 **mehak2020** 2 months ago

Which one is correct answer?  
upvoted 1 times

 **JBTC** 2 months, 1 week ago

Refer to this documentation:<https://learn.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-external-users>  
upvoted 1 times

You have an Azure subscription that contains 1,000 resources.

You need to generate compliance reports for the subscription. The solution must ensure that the resources can be grouped by department.

What should you use to organize the resources?

- A. application groups and quotas
- B. Azure Policy and tags
- C. administrative units and Azure Lighthouse
- D. resource groups and role assignments

**Correct Answer: B**

*Community vote distribution*

B (100%)

 **Petza** 1 week, 1 day ago

**Selected Answer: B**

Answer is B

upvoted 1 times

 **yonie** 2 months ago

**Selected Answer: B**

Answer is B

upvoted 3 times

 **T0bo** 2 months, 1 week ago

**Selected Answer: B**

B is correct.

upvoted 1 times

You need to recommend a solution to generate a monthly report of all the new Azure Resource Manager (ARM) resource deployments in your Azure subscription.

What should you include in the recommendation?

- A. Azure Arc
- B. Azure Monitor metrics
- C. Azure Advisor
- D. Azure Log Analytics

**Correct Answer:** D

*Community vote distribution*

D (100%)

 **Peedikakkandy** 1 month, 2 weeks ago

Log Analytics is a tool in the Azure portal that's used to edit and run log queries against data in the Azure Monitor Logs store. You might write a simple query that returns a set of records and then use features of Log Analytics to sort, filter, and analyze them  
upvoted 1 times

 **T0bo** 2 months, 1 week ago

**Selected Answer: D**

Correct.

upvoted 2 times

You need to recommend a solution to generate a monthly report of all the new Azure Resource Manager (ARM) resource deployments in your Azure subscription.

What should you include in the recommendation?

- A. Azure Monitor action groups
- B. Azure Arc
- C. Azure Monitor metrics
- D. Azure Activity Log

**Correct Answer:** D

*Community vote distribution*

D (100%)

 **JohnPhan** 2 months, 1 week ago

**Selected Answer: D**

Correct Answer: D

upvoted 2 times

## DRAG DROP

You have an Azure AD tenant that contains an administrative unit named MarketingAU. MarketingAU contains 100 users.

You create two users named User1 and User2.

You need to ensure that the users can perform the following actions in MarketingAU:

- User1 must be able to create user accounts.
- User2 must be able to reset user passwords.

Which role should you assign to each user? To answer, drag the appropriate roles to the correct users. Each role may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Roles	Answer Area
Helpdesk Administrator for MarketingAU	User1: <input type="text"/>
Helpdesk Administrator for the tenant	User2: <input type="text"/>
User Administrator for MarketingAU	
User Administrator for the tenant	

Answer Area
Correct Answer:
User1 <input type="text"/> User Administrator for MarketingAU
User2 <input type="text"/> Helpdesk Administrator for Marketing

  **theboywonder** 3 days, 3 hours ago

answer is so obvious here, CloudJordao is right, and ofc users are part of tenant AD level, and AU's are a part of that, simple  
upvoted 1 times

  **CloudJordao** 1 month, 3 weeks ago

Correct answer.

Here's an explanation:

The roles that you need to assign are:

User1: User Administrator for the MarketingAU administrative unit.

User2: Password Administrator or Helpdesk Administrator for the MarketingAU administrative unit.

The User Administrator role provides permissions to manage user accounts, including creating new users. The Password Administrator and Helpdesk Administrator roles provide permissions to reset user passwords.

Therefore, User1 needs the User Administrator role for the MarketingAU administrative unit to be able to create new user accounts. User2 needs either the Password Administrator or Helpdesk Administrator role for the MarketingAU administrative unit to be able to reset user passwords.

Note that assigning Helpdesk Administrator for the tenant role to User2 would provide permissions to reset passwords for all users in the Azure AD tenant, not just in the MarketingAU administrative unit.

<https://learn.microsoft.com/en-us/azure/active-directory/roles/admin-units-assign-roles>

upvoted 4 times

  **betterthanlife** 1 month, 3 weeks ago

User 1 response incorrect (impossible to answer this correctly).

1) You cannot create users in an Administrative unit, you can only create users in Azure AD, so User 1 would require the User Administrator role for the tenant.

2) You can only add/remove users within an Administrative unit, User 1 would require the Privileged Role Administrator role (or GA) to do so.  
<https://learn.microsoft.com/en-us/azure/active-directory/roles/admin-units-members-add#prerequisites>

I would choose "User Administrator for the tenant" for User 1.

upvoted 1 times

 **GuyForget** 2 weeks, 6 days ago

The Tenant is outside of Azure AD; roles assigned at the tenant level are for resource control  
Administrative Units are a part of Azure AD

upvoted 1 times

 **yonie** 2 months ago

Given answer is correct

Though question could have been written better if it had a requirement for least privilege, since User Administrator can create user and reset their passwords. So potentially could be given to both users.

upvoted 2 times

 **Jackdisuin** 2 months ago

correct answer. We have tested this in one of client environment.

upvoted 2 times

 **peeky** 2 months ago

aren't user accounts at the tenant level?

upvoted 1 times

 **[Removed]** 2 months, 1 week ago

Correct answer no need Tenant level role, Admin required to create Users, HelpDesk enough to reset passwords

upvoted 3 times

### Question #53

Topic 1

You need to recommend a solution to generate a monthly report of all the new Azure Resource Manager (ARM) resource deployments in your Azure subscription.

What should you include in the recommendation?

- A. Azure Arc
- B. Azure Log Analytics
- C. Application insights
- D. Azure Monitor action groups

**Correct Answer: B**

 **AP30** Highly Voted 1 month, 3 weeks ago

we saw this question multiple times

upvoted 7 times

 **rshinh** Most Recent 2 weeks, 6 days ago

again and again and again,.....

upvoted 1 times

## Question #1

## Topic 2

You have 100 servers that run Windows Server 2012 R2 and host Microsoft SQL Server 2014 instances. The instances host databases that have the following characteristics:

- ☞ Stored procedures are implemented by using CLR.
- ☞ The largest database is currently 3 TB. None of the databases will ever exceed 4 TB.

You plan to move all the data from SQL Server to Azure.

You need to recommend a service to host the databases. The solution must meet the following requirements:

- ☞ Whenever possible, minimize management overhead for the migrated databases.
- ☞ Ensure that users can authenticate by using Azure Active Directory (Azure AD) credentials.
- ☞ Minimize the number of database changes required to facilitate the migration.

What should you include in the recommendation?

- A. Azure SQL Database elastic pools
- B. Azure SQL Managed Instance
- C. Azure SQL Database single databases
- D. SQL Server 2016 on Azure virtual machines

**Correct Answer: B**

SQL Managed Instance allows existing SQL Server customers to lift and shift their on-premises applications to the cloud with minimal application and database changes. At the same time, SQL Managed Instance preserves all PaaS capabilities (automatic patching and version updates, automated backups, high availability) that drastically reduce management overhead and TCO.

Reference:

<https://docs.microsoft.com/en-us/azure/sql-database/sql-database-managed-instance>

*Community vote distribution*

B (100%)

✉  **Redimido** Highly Voted 1 year, 4 months ago

**Selected Answer: B**

CLR is supported on SQL Managed instance and not on Azure SQL Database.

upvoted 34 times

✉  **magichappens** 10 months, 4 weeks ago

But it is also supported for elastic pools and these are probably easier to manage? SQL Manage Instance is a service to reach nearly 100% compatibility with your on-prem machines but that was not required here.

upvoted 3 times

✉  **rtony69** 5 months, 2 weeks ago

As far as I know, CLR is not supported in AZ SQL database elastic pools. Do you have a doc reference to prove your statement?

upvoted 3 times

✉  **[Removed]** Highly Voted 1 year, 6 months ago

**Selected Answer: B**

B is correct

upvoted 8 times

✉  **NotMeAnyWay** Most Recent 3 months, 1 week ago

**Selected Answer: B**

B. Azure SQL Managed Instance

Azure SQL Managed Instance is a fully managed SQL Server instance hosted in Azure that supports most of the SQL Server features. It provides easier migration from on-premises SQL Server with minimal database changes, while also minimizing management overhead.

Here's how Azure SQL Managed Instance meets your requirements:

Minimizes management overhead: As a fully managed service, Azure SQL Managed Instance handles many administrative tasks like automatic backups, patching, and monitoring.

Azure AD authentication: Azure SQL Managed Instance supports Azure Active Directory (Azure AD) authentication, which allows users to

authenticate using their Azure AD credentials.

Minimizes database changes: Since Azure SQL Managed Instance is highly compatible with SQL Server, migrating to it requires minimal changes to the databases. It supports features like CLR, which are not available in Azure SQL Database.

upvoted 3 times

 **zellick** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql#features-of-sql-database-and-sql-managed-instance>

Azure SQL Managed Instance  
Common language runtime - CLR

- Yes, but without access to file system in CREATE ASSEMBLY statement

upvoted 3 times

 **Eusouzati** 4 months, 2 weeks ago

**Selected Answer: B**

B is correct

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: B**

B. Azure SQL Managed Instance

upvoted 1 times

 **VBK8579** 5 months ago

B. Azure SQL Managed Instance

upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: B**

B was my first guess.

upvoted 1 times

 **Ghoshy** 6 months ago

Exam Question 12/28/2022

upvoted 2 times

 **leoletopic** 6 months, 3 weeks ago

why not D,

<https://learn.microsoft.com/en-us/azure/azure-sql/azure-sql-iaas-vs-paas-what-is-overview?view=azuresql#comparison-table>  
support all feature, up to 256 TB, full control, easiest migration

,requirement only mentioned an easy way to migrate, not maintenance, not high availability,

upvoted 1 times

"Whenever possible, minimize management overhead for the migrated databases"

upvoted 2 times

 **leoletopic** 6 months, 3 weeks ago

why not D

<https://learn.microsoft.com/en-us/azure/active-directory/manage-apps/plan-sso-deployment#single-sign-on-options>

support all feature , up to 256 TB, full control , easiest migration

upvoted 1 times

"Whenever possible, minimize management overhead for the migrated databases"

DB on VMs isn't exactly the easiest to manage, definitely not more than Managed Instance, which by definiton is well... managed.

upvoted 1 times

 **in\_da\_cloud** 7 months, 1 week ago

Gowind seems to be new answer champion here, thank you!

upvoted 2 times

**Dinima** 9 months ago

It's B, managed instance has CLR facility and another clue is DB size never exceeds 4TB. In SQL managed instance, the max db size is 16GB

upvoted 2 times

 **Gowind** 9 months, 4 weeks ago

**Selected Answer: B**

Answer is B.

Azure SQL Database (single or elastic) does not support CLR and we need to minimize management (managed vs no managed)

<https://docs.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql>

Both support 3gb size.

<https://docs.microsoft.com/en-us/azure/azure-sql/database/service-tier-general-purpose?view=azuresql>

upvoted 7 times

 **anupit** 11 months, 3 weeks ago

B. Azure SQL Managed Instance

upvoted 1 times

 **datafypk** 1 year, 1 month ago

was in exam 8 May 22

upvoted 5 times

 **Teringzooi** 1 year, 2 months ago

**Selected Answer: B**

Correct answer: B

upvoted 2 times

You have an Azure subscription that contains an Azure Blob Storage account named store1.

You have an on-premises file server named Server1 that runs Windows Server 2016. Server1 stores 500 GB of company files.

You need to store a copy of the company files from Server1 in store1.

Which two possible Azure services achieve this goal? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. an Azure Logic Apps integration account
- B. an Azure Import/Export job
- C. Azure Data Factory
- D. an Azure Analysis services On-premises data gateway
- E. an Azure Batch account

**Correct Answer: BC**

B: You can use the Azure Import/Export service to securely export large amounts of data from Azure Blob storage. The service requires you to ship empty drives to the Azure datacenter. The service exports data from your storage account to the drives and then ships the drives back.

C: Big data requires a service that can orchestrate and operationalize processes to refine these enormous stores of raw data into actionable business insights.

Azure Data Factory is a managed cloud service that's built for these complex hybrid extract-transform-load (ETL), extract-load-transform (ELT), and data integration projects.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-import-export-data-from-blobs> <https://docs.microsoft.com/en-us/azure/data-factory/introduction>

*Community vote distribution*

BC (98%)

✉ Eltooth Highly Voted 1 year, 6 months ago

**Selected Answer: BC**

B & C are correct

upvoted 30 times

✉ Eltooth 1 year, 6 months ago

<https://docs.microsoft.com/en-gb/azure/storage/blobs/storage-blobs-introduction#move-data-to-blob-storage>  
upvoted 8 times

✉ Shadow983 Highly Voted 1 year, 6 months ago

Correct.

ADF can be used to copy data to blob storage:

<https://docs.microsoft.com/en-us/azure/data-factory/quickstart-create-data-factory-copy-data-tool>

upvoted 7 times

✉ BalderkVeit 1 year, 3 months ago

lol, I thought ADF are your answers.

Agree. Azure Data Factory(ADF) and Import Export - so BC

upvoted 14 times

✉ lvz Most Recent 1 month ago

ok, I will go with ADF, however I dont see question mentioning the connectivity between on-prem and Azure AD. I think ADF can only be used when on-prem is connected with Azure AD.

upvoted 1 times

✉ sw1000 1 month ago

**Selected Answer: BC**

A. an Azure Logic Apps integration account

no, this is an integration service with visual flows with If-Then style logic. It does not support a way to import data from on-premise to blobstorage

B. an Azure Import/Export job  
Agree, with other people here.

C. Azure Data Factory

Agree, is a way of importing data, but looking at 500GB it is a bit of overkill

D. an Azure Analysis services On-premises data gateway  
not a data import option

E. an Azure Batch account

Is part of Azure Batch service and involve HPC job scheduling etc. but is not a way of importing or exporting data from on-premise to Azure

Note:

For 500GB we would probably use AzCopy instead.

If it was a Typo and actually 500TB we would use Azure Data Box Heavy or maybe the Azure Import/Export Service if you provide your own drives.

upvoted 2 times

 **NotMeAnyWay** 3 months, 1 week ago

**Selected Answer: BC**

B. an Azure Import/Export job  
C. Azure Data Factory

B. Azure Import/Export job: This service allows you to securely import or export large amounts of data to or from Azure Blob Storage by shipping hard disk drives to an Azure data center. You can use the Azure Import/Export service to transfer the company files from your on-premises server to the Azure Blob Storage account.

C. Azure Data Factory: It is a cloud-based data integration service that enables you to create, schedule, and manage data pipelines. You can create a pipeline in Azure Data Factory to copy data from your on-premises file server to Azure Blob Storage. You will need to use a Self-hosted Integration Runtime installed on your on-premises server to facilitate the data movement between your on-premises server and Azure Blob Storage.

upvoted 5 times

 **memyself2** 4 months ago

This was a question was on my exam today (2/26/23) - Scored 844

I agree with this answer

upvoted 4 times

 **ukivanlampli** 4 months ago

**Selected Answer: BE**

files is not fit for data factory  
upvoted 1 times

 **zellck** 4 months, 1 week ago

**Selected Answer: BC**

BC is the answer.

<https://learn.microsoft.com/en-gb/azure/storage/blobs/storage-blobs-introduction#move-data-to-blob-storage>

A number of solutions exist for migrating existing data to Blob Storage:

- Azure Data Factory supports copying data to and from Blob Storage by using the account key, a shared access signature, a service principal, or managed identities for Azure resources.
- The Azure Import/Export service provides a way to import or export large amounts of data to and from your storage account using hard drives that you provide.

upvoted 3 times

 **totalz** 4 months, 2 weeks ago

LOL, I see sarcasm in the voted answers. Or may be it's just me seeing the question differently~

upvoted 1 times

 **totalz** 4 months, 2 weeks ago

I mean B is possible, but a really stupid solution unless there's a typo, it's actually 500TB!

My answer are B & E.

My real life choice is Azure File storage.

upvoted 4 times

 **Eusouzati** 4 months, 2 weeks ago

**Selected Answer: BC**

B and C are correct

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: BC**

B. an Azure Import/Export job  
C. Azure Data Factory

upvoted 1 times

 **VBK8579** 5 months ago

C. Azure Data Factory  
B. an Azure Import/Export job.

upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: BC**

B and C are the most correct answers.

Probably not what i'd use in the real world for 500gb of data though...

upvoted 3 times

 **JohnPhan** 8 months, 2 weeks ago

**Selected Answer: BC**

B & C are correct

upvoted 1 times

 **fatwast** 10 months, 4 weeks ago

**Selected Answer: BC**

B&C are correct answers

upvoted 1 times

 **princessgalz** 11 months, 2 weeks ago

**Selected Answer: BC**

Azure data factory can copy the data to blob

upvoted 1 times

 **al608** 1 year ago

did my Exam today. This was on there.

upvoted 3 times

You have an Azure subscription that contains two applications named App1 and App2. App1 is a sales processing application. When a transaction in App1 requires shipping, a message is added to an Azure Storage account queue, and then App2 listens to the queue for relevant transactions. In the future, additional applications will be added that will process some of the shipping requests based on the specific details of the transactions.

You need to recommend a replacement for the storage account queue to ensure that each additional application will be able to read the relevant transactions.

What should you recommend?

- A. one Azure Data Factory pipeline
- B. multiple storage account queues
- C. one Azure Service Bus queue
- D. one Azure Service Bus topic

**Correct Answer: D**

A queue allows processing of a message by a single consumer. In contrast to queues, topics and subscriptions provide a one-to-many form of communication in a publish and subscribe pattern. It's useful for scaling to large numbers of recipients. Each published message is made available to each subscription registered with the topic. Publisher sends a message to a topic and one or more subscribers receive a copy of the message, depending on filter rules set on these subscriptions.

Reference:

<https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-queues-topics-subscriptions>

*Community vote distribution*

D (90%)      10%

 **Eltooth** Highly Voted 1 year, 6 months ago

**Selected Answer: D**

Correct answer - D

upvoted 22 times

 **MicroNoob** Highly Voted 1 year, 5 months ago

**Selected Answer: D**

No doubt, the Service Bus Topic is exactly what you would need if multiple applications want to send messages to consumers.

upvoted 12 times

 **NotMeAnyWay** Most Recent 3 months, 1 week ago

**Selected Answer: D**

D. one Azure Service Bus topic

In this scenario, you should recommend using an Azure Service Bus topic. Topics provide a publish-subscribe messaging pattern that allows multiple subscribers to independently retrieve messages based on their specific needs. As you add more applications to process shipping requests, each application can subscribe to the topic and filter the messages based on the transaction details.

upvoted 3 times

 **zellck** 4 months ago

**Selected Answer: D**

D is the answer.

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-queues-topics-subscriptions#topics-and-subscriptions>

A queue allows processing of a message by a single consumer. In contrast to queues, topics and subscriptions provide a one-to-many form of communication in a publish and subscribe pattern. It's useful for scaling to large numbers of recipients. Each published message is made available to each subscription registered with the topic. Publisher sends a message to a topic and one or more subscribers receive a copy of the message.

upvoted 2 times

 **OPT\_001122** 5 months ago

**Selected Answer: D**

D. one Azure Service Bus topic

Correct answer

Topic is for one to many

upvoted 1 times

 **Snownoodles** 8 months, 1 week ago

**Selected Answer: D**

service bus topic - 1:N

upvoted 2 times

 **Gowind** 9 months, 4 weeks ago

**Selected Answer: C**

Answer is C.

The shipping must be handled by only ONE receiver at a time. If you use D (Topic) several subscribers can receive the message and processes the shipment resulting in several shipments.

Queue does not mean only one receiver but only ONE AT A TIME to process the message.

<https://medium.com/awesome-azure/azure-difference-between-azure-service-bus-queues-and-topics-comparison-azure-servicebus-queue-vs-topic-4cc97770b65>

Queues

Queues offer First In, First Out (FIFO) message delivery to one or more competing consumers. That is, receivers typically receive and process messages in the order in which they were added to the queue. And, only one message consumer receives and processes each message.

<https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-queues-topics-subscriptions>

upvoted 6 times

 **Gowind** 9 months, 4 weeks ago

Sorry answer is D not because of having multiple consumers but because of the need of filtering based on the transaction details. Publisher sends a message to a topic and one or more subscribers receive a copy of the message, depending on filter rules set on these subscriptions.

upvoted 12 times

 **princessgalz** 11 months, 2 weeks ago

**Selected Answer: D**

Azure service bus topic is support many application

upvoted 2 times

 **tictaclu** 1 year ago

A queue allows processing of a message by a single consumer. In contrast to queues, topics and subscriptions provide a one-to-many form of communication in a publish and subscribe pattern.

upvoted 1 times

 **al608** 1 year ago

did my Exam today. This was on there.

upvoted 6 times

 **Gor** 1 year, 1 month ago

**Selected Answer: D**

Correct answer: D

upvoted 1 times

 **Teringzooi** 1 year, 2 months ago

**Selected Answer: D**

Correct answer - D

Service Bus Topic

upvoted 2 times

 **Contactfornitish** 1 year, 2 months ago

Came in exam today 04/04/2022

upvoted 4 times

 **Suwani** 1 year, 3 months ago

Correct answer is D

upvoted 2 times

 **Insanewhip** 1 year, 3 months ago

Appeared in my exam, March 10th, 2022. I chose D.

upvoted 4 times

 **[Removed]** 1 year, 6 months ago

**Selected Answer: D**

D seems right. not sure what is C ? Definitely a broker solution is needed. Like pub/sub

upvoted 5 times

 **default\_wizard** 1 year, 6 months ago

correct answer: service bus topic

upvoted 4 times

**HOTSPOT -**

You need to design a storage solution for an app that will store large amounts of frequently used data. The solution must meet the following requirements:

- ⇒ Maximize data throughput.
- ⇒ Prevent the modification of data for one year.
- ⇒ Minimize latency for read and write operations.

Which Azure Storage account type and storage service should you recommend? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Storage account type:

BlobStorage
BlockBlobStorage
FileStorage
StorageV2 with Premium performance
StorageV2 with Standard performance

Storage service:

Blob
File
Table

Correct Answer:

**Answer Area**

Storage account type:

BlobStorage
BlockBlobStorage
FileStorage
StorageV2 with Premium performance
StorageV2 with Standard performance

Storage service:

Blob
File
Table

Box 1: BlockBlobStorage -

Block Blob is a premium storage account type for block blobs and append blobs. Recommended for scenarios with high transaction rates, or scenarios that use smaller objects or require consistently low storage latency.

Box 2: Blob -

The Archive tier is an offline tier for storing blob data that is rarely accessed. The Archive tier offers the lowest storage costs, but higher data retrieval costs and latency compared to the online tiers (Hot and Cool). Data must remain in the Archive tier for at least 180 days or be subject

to an early deletion charge.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/blobs/archive-blob>

✉  **albertozg**  1 year, 6 months ago

The solution is CORRECT, because BlockBlobStorage provide a very low latency(x40) (Read and Write) and Throughput (x5)

BECAUSE: One big file is splitted in "blobs" that are processed in parallel (for read and write)

<https://azure.microsoft.com/en-us/blog/premium-block-blob-storage-a-new-level-of-performance/>

upvoted 45 times

✉  **Asten** 5 months, 1 week ago

Yes. the key word is maximize data throughput

upvoted 2 times

✉  **FrancisFerreira**  1 year, 3 months ago

Correct answer, but given reasoning for Archive Tier is wrong.

You achieve the immutability requirement through a Time-Based Retention Policy at the container-level. That will prevent write and delete operations for all blobs in the container for a given period (in this case, 1 year).

upvoted 23 times

✉  **zellck**  4 months, 1 week ago

1. BlockBlobStorage

2. Blob

<https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-block-blob-premium>

Premium block blob storage accounts make data available via high-performance hardware. Data is stored on solid-state drives (SSDs) which are optimized for low latency. SSDs provide higher throughput compared to traditional hard drives. File transfer is much faster because data is stored on instantly accessible memory chips. All parts of a drive accessible at once. By contrast, the performance of a hard disk drive (HDD) depends on the proximity of data to the read/write heads.

upvoted 5 times

✉  **zellck** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview#supported-account-configurations>

Immutable storage for Azure Blob Storage enables users to store business-critical data in a WORM (Write Once, Read Many) state. While in a WORM state, data cannot be modified or deleted for a user-specified interval. By configuring immutability policies for blob data, you can protect your data from overwrites and deletes.

upvoted 4 times

✉  **\_fvt** 4 months, 1 week ago

Solution is Correct.

You create a Storage Account (not StorageV2 something), then you chose the performance:

- Standard: type will be General Purpose v2
- Premium: 3 choices of type
- BlockBlob
- FileShares
- PageBlobs

So here we should choice premium block blob type, with blob

<https://learn.microsoft.com/en-us/azure/storage/common/storage-account-overview?toc=%2Fazure%2Fstorage%2Fblobs%2Ftoc.json>

upvoted 6 times

✉  **yonie** 2 months ago

that was helpful thanks

upvoted 1 times

✉  **totalz** 4 months, 2 weeks ago

Was there such a thing called "StorageV2 with Premium performance"? Is this question sort of outdated?

upvoted 3 times

✉  **Ivanvazovv** 4 months, 3 weeks ago

When you try to create a new storage account, there are two options : Standard and Premium. When you click on Premium, there are three options - Block Blobs, Page Blobs and File Shares. We need Block Blobs to satisfy the first and last requirements. For the second requirement we need Blob for the retention ability.

upvoted 3 times

✉  **OPT\_001122** 5 months ago

BlockBlobStorage

Blob

Correct answer

Thanks to all who have mentioned the exam dates

upvoted 2 times

✉ **dimsok** 5 months ago

I am a bit confused because storageV2 premium includes blockblob, isn't it?

upvoted 5 times

✉ **Ghoshy** 6 months ago

Exam Question 12/28/2022

upvoted 6 times

✉ **eduardomoralles** 6 months, 1 week ago

Here answer options makes confusion between account performance and premium account type:

#1- Premium Block Blobs

#2- OK

<https://learn.microsoft.com/en-us/azure/storage/common/storage-account-overview#types-of-storage-accounts>

upvoted 2 times

✉ **Backy** 7 months ago

The first dropdown does not make sense. BlockBlobStorage and FileStorage are examples of "StorageV2 with Premium performance", so if you want to select Blobs then how do you decide between BlockBlobStorage and "StorageV2 with Premium performance". It is like deciding between Ferrari and car.

upvoted 7 times

✉ **rtony69** 5 months, 2 weeks ago

The answer should be "StorageV2 with Premium performance"

I don't think blockblobstorage is an example of "StorageV2 with Premium performance" as it is available in standard as well.

upvoted 2 times

✉ **rtony69** 5 months, 2 weeks ago

ignore the above reply... it's literally called as premium block blob. My bad.

<https://learn.microsoft.com/en-us/azure/storage/common/storage-account-overview#types-of-storage-accounts>

upvoted 1 times

✉ **wwwmmmm** 5 months, 4 weeks ago

I think v2 is only for standard? And premium doesn't refer to v2?

And BlockBlob is only available in premium (premium has blockblob, pageblob or file blob), so even though the options are badly worded, but seems correct.

upvoted 2 times

✉ **marco25** 9 months, 3 weeks ago

confused. how you allow write operation on one hand then dont allow modification on the other hand

upvoted 1 times

✉ **hanosh** 8 months, 1 week ago

<https://docs.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview>

upvoted 2 times

✉ **paulb2b** 10 months, 3 weeks ago

service type : correct

service

: correct

upvoted 1 times

✉ **princessgalz** 11 months, 2 weeks ago

Block blob storage and Blob type

upvoted 1 times

✉ **Gor** 1 year, 1 month ago

Correct Answers:

BlockBlobStorage (Immutable blob policies)

Blob

upvoted 1 times

✉ **hertino** 1 year, 2 months ago

In my exam, 9 april 22, 817/1000, I chose this answer

upvoted 5 times

✉ **Justin0020** 1 year, 3 months ago

Was in my exam om March. 10

upvoted 4 times

**HOTSPOT -**

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

Name	Type	Performance
storage1	StorageV2	Standard
storage2	StorageV2	Premium
storage3	BlobStorage	Standard
storage4	FileStorage	Premium

You plan to implement two new apps that have the requirements shown in the following table.

Name	Requirement
App1	Use lifecycle management to migrate app data between storage tiers
App2	Store app data in an Azure file share

Which storage accounts should you recommend using for each app? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

App1:

Storage1 and storage2 only
Storage1 and storage3 only
Storage1, storage2, and storage3 only
Storage1, storage2, storage3, and storage4

App2:

Storage4 only
Storage1 and storage4 only
Storage1, storage2, and storage4 only
Storage1, storage2, storage3, and storage4

## Answer Area

App1:

Correct Answer:

Storage1 and storage2 only
Storage1 and storage3 only
Storage1, storage2, and storage3 only
Storage1, storage2, storage3, and storage4

App2:

Storage4 only
Storage1 and storage4 only
Storage1, storage2, and storage4 only
Storage1, storage2, storage3, and storage4

Box 1: Storage1 and storage3 only

Need to use Standard accounts.

Data stored in a premium block blob storage account cannot be tiered to hot, cool, or archive using Set Blob Tier or using Azure Blob Storage lifecycle management

Box 2: Storage1 and storage4 only

Azure File shares requires Premium accounts. Only Storage1 and storage4 are premium.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/blobs/access-tiers-overview#feature-support> <https://docs.microsoft.com/en-us/azure/storage/files/storage-how-to-create-file-share?tabs=azure-portal#basics>

 **SANA** Highly Voted 1 year, 6 months ago

I think the proposed answer is correct.

App1: Storage1 and storage3 only

App2: Storage1 and storage4 only

Note: Storage2, StorageV2 with Premium Performance does NOT exist

<https://docs.microsoft.com/en-ca/azure/storage/common/storage-account-overview?toc=/azure/storage/blobs/toc.json#types-of-storage-accounts>

upvoted 50 times

 **itmaster** 1 year, 4 months ago

Storage2, StorageV2 with premium performance is the same as Premium Page Blobs according to this reference: <https://www.ais.com/how-to-choose-the-right-kind-of-azure-storage-account/>

upvoted 4 times

 **SilverFox22** 1 year, 5 months ago

App1: "Lifecycle management policies are supported for block blobs and append blobs in general-purpose v2, premium block blob, and Blob Storage accounts." from <https://docs.microsoft.com/en-us/azure/storage/blobs/lifecycle-management-overview> so answer is 1 and 3 (2 does not exist. go ahead, try to create one :)

upvoted 5 times

 **jkklim** Highly Voted 1 year, 4 months ago

GENERATION V1 ==> CANNOT HAVE LIFECYCLE

GENERATION V2 => CAN HAVE LIFECYCLE

PREMIUM FILE STORAGE ==> CANNOT HAVE LIFECYCLE

PREMIUM BLOB ==> CANNOT HAVE LIFECYCLE (FYI - I TESTED THESE) . MORE OF FYI

I TESTED ALL ABOVE

THEREFORE

STANDARD ==> LIFE CYCLE YES (STORAGE 1 AND STORAGE 3)

APPS DATA - STORAGE 1 AND 4

upvoted 35 times

 **jkklim** 1 year, 4 months ago

STORAGE 2 ==> V2 PREMIUM ==> THIS SERVICE DOES NOT EXIST IN AZURE

STORAGE V1 STANDARD ONLY EXIST (WHICH IS WHY STORAGE 2 IS NEVER AN ANSWER)

upvoted 5 times

✉ **alexander\_panfilenok** [Most Recent] 1 week, 3 days ago

Storage1 (Standard storage v2) can have both blobs with tiers and file shares

Storage2 (Premium storage v2) does not exist. When you select premium you have to select Block blobs, File shares, or page blobs. If you select Block blobs you will find out that there are no tiers. Because premium storage should be fast. Having a Cool access tier does not have any sense here.

Storage3 (Standard BlobStorage) is technically a reference to 1 of the services in Standard Storage v2 (BlobStorage), there are other services like TableService, File Service, and Queue Service. This one can have tiers for blobs as it is the same thing as Standard Storage v2.

Storage4 (Premium FileStorage) is the file storage by definition. It does not have blob storage features like life cycles and tiers.

upvoted 2 times

✉ **betterthanlife** 1 month, 3 weeks ago

Proposed answers are correct.

- Only the Standard type/kind storage accounts support lifecycle management

- Only the StorageV2 Standard offers "File shares" ("File shares" is not an option on a StorageV2 Premium) & of course the FileStorage type/kind.

upvoted 1 times

✉ **betterthanlife** 1 month, 3 weeks ago

It is true, I just created a StorageV2 (general purpose v2) Premium storage account in my lab & it only provides for "Containers". That's it.

upvoted 1 times

✉ **yonie** 2 months ago

Given answer is correct:

App1 can use Storage 1 and 3

App2 can use Storage 1 and 4

\*But\* given explanation for App2 is wrong. Also, question may be outdated, since Azure uses Kind not Type.

Explanation:

According to this (see below), file shares are available via \*both\* Premium/File Shares and Standard general purpose version 2.

Since Storage 1 is Type(Kind) StorageV2 and standard Tier, then App2 can use it for a file share.

Since Storage 2 doesn't exist, (there is no StorageV2 Premium) then answer is not relevant.

Since Storage 3 is Type(Kind) BlobStorage, then it is not suitable (see below)

Since Storage 4 is Type(Kind)File Storage and Premium Tier then App2 can use it for a file share.

upvoted 3 times

✉ **yonie** 2 months ago

<https://learn.microsoft.com/en-us/azure/storage/files/understanding-billing#storage-units>

"Azure Files provides two distinct billing models: provisioned and pay-as-you-go. The provisioned model is only available for \*premium\* file shares, which are file shares deployed in the FileStorage storage account kind. The pay-as-you-go model is only available for standard file shares, which are file shares deployed in the "general purpose version 2" (GPv2) storage account kind."

upvoted 1 times

✉ **Cocouv** 2 months, 2 weeks ago

It said in the comment box 2: Storage1 and storage4 only

Azure File shares requires Premium accounts. Only Storage1 and storage4 are premium. But storage 1 is Standard so I think it should be Storage 4 only for Box 2.

upvoted 2 times

✉ **winy** 2 months, 3 weeks ago

This was in the exam on 04/01/2023 (mm/dd/yyyy)

upvoted 1 times

✉ **zellck** 4 months, 1 week ago

1. Storage1 and storage3 only.

2. Storage1 and storage4 only.

<https://learn.microsoft.com/en-us/azure/storage/blobs/lifecycle-management-overview>

Lifecycle management policies are supported for block blobs and append blobs in general-purpose v2, premium block blob, and Blob Storage accounts. Lifecycle management doesn't affect system containers such as the \$logs or \$web containers.

upvoted 2 times

✉ **zellck** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/storage/files/storage-files-planning#management-concepts>

There are two main types of storage accounts you will use for Azure Files deployments:

- General purpose version 2 (GPv2) storage accounts: GPv2 storage accounts allow you to deploy Azure file shares on standard/hard disk-based (HDD-based) hardware. In addition to storing Azure file shares, GPv2 storage accounts can store other storage resources such as blob containers, queues, or tables.

- FileStorage storage accounts: FileStorage storage accounts allow you to deploy Azure file shares on premium/solid-state disk-based (SSD-based) hardware. FileStorage accounts can only be used to store Azure file shares; no other storage resources (blob containers, queues, tables, etc.) can be deployed in a FileStorage account. Only FileStorage accounts can deploy both SMB and NFS file shares.

upvoted 2 times

✉ **zellck** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 3 times

✉ **gugamotarj** 4 months, 2 weeks ago

So, the right is, App1 can be use 1, 2 and 3, because all of them can have a blob to use lifecycle, and app2 can use storage 1,2, and 4, because we can create Azure Files Share on both!

upvoted 2 times

✉  **gugamotarj** 4 months, 2 weeks ago

I think you guys are wrong.

Look, Azure file Share can be created on Storage Accountv2 Standard and Premium. And lifecycle can be used on a blob , even if he is on a storageV2.

upvoted 1 times

✉  **Ivanvazovv** 4 months, 3 weeks ago

When you create a new storage account, there is no other option than StorageV2. So new storage accounts are all V2. What you can choose is performance - standard or premium. Standard includes all storage object types - blobs, tables, queues and file shares. Premium is only for block blobs, page blobs and file shares. So in this case file shares are supported by Storage 1, storage 2 and storage 4.

The correct answers are :

Storage 1 and storage 3.

Storage 1, storage 2 and storage 4.

upvoted 6 times

✉  **totalz** 4 months, 2 weeks ago

This question is either outdated or confusing because the doc <https://learn.microsoft.com/en-us/azure/storage/common/storage-account-overview> listed just 4 account type. But through your GUI 'test', it seems the question is legit. And if so, the answer for App1 should be Storage1,2&3.

upvoted 2 times

✉  **OPT\_001122** 5 months ago

Answer is correct

App1-

storage 1-StorageV2-Standard

storage 3-BlobStorage-Standard

App2

storage 1-StorageV2-Standard

storage 4-FileStorage-Premium

upvoted 2 times

✉  **Tom85** 5 months, 1 week ago

getting confused -

Agreed on App1: Storage 1 and 3 only

But App2: I'm inclined to say 1,3,4 at the very least but that's not available as an answer.

azure file share can come in general purpose v2 flavor? <https://learn.microsoft.com/en-us/azure/storage/files/storage-how-to-create-file-share?tabs=azure-portal>

upvoted 1 times

✉  **paulb2b** 7 months ago

Lifecycle management policies are supported for block blobs and append blobs in general-purpose v2, premium block blob, and Blob Storage accounts. Lifecycle management doesn't affect system containers such as the \$logs or \$web containers.

upvoted 2 times

✉  **Backy** 10 months ago

storage2 is V2 Premium but which type???

There are 3 types of V2 Premium and one of them could be File shares so it would qualify

upvoted 2 times

✉  **catfood** 10 months, 1 week ago

Just tested this and on a premium account for block blob it has lifecycle mgmt blade. If I click on it, I see "Lifecycle management offers a rich rule based policy for the general purpose v2 and blob storage accounts". So I'd go with storage1 and storage 3 for App1.

upvoted 2 times

✉  **paulb2b** 10 months, 3 weeks ago

1&3

1, 3 & 4

no such thing as V2 premium

upvoted 1 times

✉  **paulb2b** 10 months, 3 weeks ago

sorry second one should be 1,4 only

upvoted 1 times

You are designing an application that will be hosted in Azure.

The application will host video files that range from 50 MB to 12 GB. The application will use certificate-based authentication and will be available to users on the internet.

You need to recommend a storage option for the video files. The solution must provide the fastest read performance and must minimize storage costs.

What should you recommend?

- A. Azure Files
- B. Azure Data Lake Storage Gen2
- C. Azure Blob Storage
- D. Azure SQL Database

**Correct Answer: C**

**Blob Storage:** Stores large amounts of unstructured data, such as text or binary data, that can be accessed from anywhere in the world via HTTP or HTTPS. You can use Blob storage to expose data publicly to the world, or to store application data privately.

Max file in Blob Storage. 4.77 TB.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/solution-ideas/articles/digital-media-video>

*Community vote distribution*

C (100%)

✉️  **Eltooth** Highly Voted 1 year, 6 months ago

**Selected Answer: C**

Correct answer - C

Azure Blob storage is Microsoft's object storage solution for the cloud. Blob storage is optimized for storing massive amounts of unstructured data, such as text or binary data.

Blob storage is ideal for:

Serving images or documents directly to a browser.

Storing files for distributed access.

Streaming video and audio.

Storing data for backup and restore, disaster recovery, and archiving.

Storing data for analysis by an on-premises or Azure-hosted service.

Objects in Blob storage can be accessed from anywhere in the world via HTTP or HTTPS. Users or client applications can access blobs via URLs, the Azure Storage REST API, Azure PowerShell, Azure CLI, or an Azure Storage client library.

<https://docs.microsoft.com/en-gb/azure/storage/common/storage-introduction#blob-storage>

upvoted 30 times

✉️  **[Removed]** Highly Voted 1 year, 6 months ago

**Selected Answer: C**

C is correct, Azure Blob

upvoted 6 times

✉️  **NotMeAnyWay** Most Recent 3 months, 1 week ago

**Selected Answer: C**

C. Azure Blob Storage

In this scenario, I recommend using Azure Blob Storage for hosting the video files. Azure Blob Storage is a cost-effective, scalable, and durable storage service that is suitable for storing large, unstructured data like video files.

Here's why Azure Blob Storage is the right choice:

Fast read performance: Azure Blob Storage provides fast read performance for serving video files to users on the internet.

Cost-effective: Blob Storage offers a competitive pricing model that minimizes storage costs.

Scalability: Azure Blob Storage can scale to store a large number of files, making it suitable for hosting video files of various sizes.

upvoted 2 times

✉️  **zellck** 4 months, 1 week ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blobs-introduction#about-blob-storage>  
Blob Storage is designed for:

- Serving images or documents directly to a browser.
- Storing files for distributed access.
- Streaming video and audio.
- Writing to log files.
- Storing data for backup and restore, disaster recovery, and archiving.
- Storing data for analysis by an on-premises or Azure-hosted service.

upvoted 3 times

 **OPT\_001122** 5 months ago

**Selected Answer: C**

C. Azure Blob Storage

Thanks all who have mentioned the exam dates

upvoted 1 times

 **OPT\_001122** 4 months, 3 weeks ago

remember - Fastest read - C. Azure Blob Storage

upvoted 1 times

 **Bummer\_boy** 5 months, 1 week ago

**Selected Answer: C**

blob storage is the way to store video files in azure

upvoted 1 times

 **pingpongset** 10 months, 1 week ago

Does anyone know why B is not the answer?

upvoted 1 times

 **TRN80** 7 months, 2 weeks ago

And it's expensive

upvoted 3 times

 **Gowind** 9 months, 4 weeks ago

Datalake is design for Big Data analytics, not service videos files to consumers

upvoted 5 times

 **mtc9** 11 months, 2 weeks ago

Why not datalake? Blob (hot tier) is fast in read, but does not optimize storage costs, actually (in hot tier) it optimizes costs read/write transactions, but has higher cost of storage. Onyone can confirm please?

upvoted 1 times

 **magichappens** 10 months, 4 weeks ago

Even if it is cheaper I don't know if it actually supports cert based auth. And it's definitely not made to stream videos to end users.

upvoted 1 times

 **anupit** 11 months, 3 weeks ago

C. Blob Storage

upvoted 1 times

 **mileytores** 12 months ago

Respuesta es la c

upvoted 1 times

 **Gor** 1 year, 1 month ago

**Selected Answer: C**

C is correct, Azure Blob

upvoted 1 times

 **hertino** 1 year, 2 months ago

**Selected Answer: C**

In my exam, 9 april 22, 817/1000, I chose this answer

upvoted 4 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22

upvoted 2 times

 **AKYK** 1 year, 4 months ago

Correct answer - C

upvoted 2 times

✉ **Tyler2021** 1 year, 6 months ago

The given answer is correct.

upvoted 4 times

✉ **kenobiD** 1 year, 6 months ago

the answer needs to be azure files as you need to be able to store video files up to 12GB which blob can't do. Azure files can store individual files of sizes up to 100GB

upvoted 3 times

✉ **Lokulluz** 1 year, 6 months ago

max. File Size is 4,7TB, hence given answer is correct.

<https://azure.microsoft.com/de-de/blog/general-availability-larger-block-blobs-in-azure-storage/>

upvoted 6 times

✉ **default\_wizard** 1 year, 6 months ago

wrong, lokulluz is correct. max blob is 4.7tb

upvoted 3 times

You are designing a SQL database solution. The solution will include 20 databases that will be 20 GB each and have varying usage patterns.

You need to recommend a database platform to host the databases. The solution must meet the following requirements:

- ⇒ The solution must meet a Service Level Agreement (SLA) of 99.99% uptime.
- ⇒ The compute resources allocated to the databases must scale dynamically.
- ⇒ The solution must have reserved capacity.

Compute charges must be minimized.

What should you include in the recommendation?

- A. an elastic pool that contains 20 Azure SQL databases
- B. 20 databases on a Microsoft SQL server that runs on an Azure virtual machine in an availability set
- C. 20 databases on a Microsoft SQL server that runs on an Azure virtual machine
- D. 20 instances of Azure SQL Database serverless

**Correct Answer: A**

The compute and storage redundancy is built in for business critical databases and elastic pools, with a SLA of 99.99%.

Reserved capacity provides you with the flexibility to temporarily move your hot databases in and out of elastic pools (within the same region and performance tier) as part of your normal operations without losing the reserved capacity benefit.

Reference:

<https://azure.microsoft.com/en-us/blog/understanding-and-leveraging-azure-sql-database-sla/>

*Community vote distribution*

A (100%)

 **Eltooth** [Highly Voted] 1 year, 6 months ago

**Selected Answer: A**

Correct answer - A

Databases vary in usage so an elastic pool would fit best.

upvoted 16 times

 **[Removed]** [Highly Voted] 1 year, 6 months ago

**Selected Answer: A**

A is correct. Elastic pool is needed for SLA 99,95 % and auto scale.

upvoted 9 times

 **techrat** [Most Recent] 1 month, 4 weeks ago

**Selected Answer: A**

The answer is correct. I had this question in my exam today, I passed with 979.

upvoted 3 times

 **NotMeAnyWay** 3 months, 1 week ago

**Selected Answer: A**

A. an elastic pool that contains 20 Azure SQL databases

Elastic pools in Azure SQL Database are designed to handle multiple databases with varying usage patterns within a shared resource pool. This option meets the following requirements:

SLA of 99.99% uptime: Azure SQL Database provides an SLA of 99.99% uptime, ensuring high availability for your databases.

Dynamic scaling of compute resources: Elastic pools allow you to allocate resources dynamically, adjusting to the varying usage patterns of your databases.

Reserved capacity: Elastic pools enable you to reserve capacity for multiple databases within the pool, ensuring resources are available when needed.

Minimize compute charges: By sharing resources among the databases within the elastic pool, you can minimize compute charges while still meeting the performance requirements.

upvoted 3 times

 **zellck** 4 months, 1 week ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/elastic-pool-overview?view=azuresql>

Azure SQL Database elastic pools are a simple, cost-effective solution for managing and scaling multiple databases that have varying and unpredictable usage demands. The databases in an elastic pool are on a single server and share a set number of resources at a set price. Elastic pools in SQL Database enable software as a service (SaaS) developers to optimize the price performance for a group of databases within a prescribed budget while delivering performance elasticity for each database.

upvoted 4 times

✉ **omerc061** 4 months, 2 weeks ago

Correct Answer:A

C-Not correct because;

If you want access your database OS level. You can use this option.It main way.

D-Not correct because;

Microsoft quotation;

Serverless option. Use the serverless compute tier for a single SQL database. You're billed only for the amount of compute used.

upvoted 2 times

✉ **OPT\_001122** 5 months ago

**Selected Answer: A**

A. an elastic pool that contains 20 Azure SQL databases

Thanks to all who have mentioned the exam dates

upvoted 2 times

✉ **Bummer\_boy** 5 months, 1 week ago

**Selected Answer: A**

Different usage patterns across dbs is the key thing here

upvoted 1 times

✉ **Q12346** 5 months, 1 week ago

shown on 1/14/23

upvoted 6 times

✉ **mscgbgs1** 5 months, 1 week ago

**Selected Answer: A**

"varying usage patterns" => Elastic pool

upvoted 1 times

✉ **Ghoshy** 6 months ago

Exam Question 12/28/2022

upvoted 4 times

✉ **mufflon** 9 months, 1 week ago

SQL Database Reserved Capacity, Reservation can be assigned to either a single Azure Subscription or shared, and there's vCore Size Flexibility as well where the Reservation can be applied dynamically to any databases and elastic pools within a performance tier and region. Dynamic scalability is different from autoscale. Autoscale is when a service scales automatically based on criteria, whereas dynamic scalability allows for manual scaling with a minimal downtime. Single databases in Azure SQL Database can be scaled manually, or in the case of the Serverless tier, set to automatically scale the compute resources. Elastic pools, which allow databases to share resources in a pool, can currently only be scaled manually.

upvoted 1 times

✉ **mileytores** 12 months ago

Elastic pool es la respuesta

upvoted 1 times

✉ **tictaclu** 1 year ago

Serverless is price-performance optimized for single databases with intermittent, unpredictable usage patterns that can afford some delay in compute warm-up after idle usage periods. In contrast, the provisioned compute tier is price-performance optimized for single databases or multiple databases in elastic pools with higher average usage that cannot afford any delay in compute warm-up.

upvoted 4 times

✉ **al608** 1 year ago

did my Exam today. This was on there.

upvoted 4 times

✉ **Gor** 1 year, 1 month ago

**Selected Answer: A**

A is correct. Elastic pool has SLA 99,95 % and auto scale.

upvoted 1 times

✉ **sairaj9396** 1 year, 1 month ago

A: Elastic Pool is the perfect answer!

upvoted 1 times



**HOTSPOT -**

You have an on-premises database that you plan to migrate to Azure.

You need to design the database architecture to meet the following requirements:

- ⇒ Support scaling up and down.
- ⇒ Support geo-redundant backups.
- ⇒ Support a database of up to 75 TB.
- ⇒ Be optimized for online transaction processing (OLTP).

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Service:

Azure SQL Database
Azure SQL Managed Instance
Azure Synapse Analytics
SQL Server on Azure Virtual Machines

Service tier:

Basic
Business Critical
General Purpose
Hyperscale
Premium
Standard

**Answer Area**

Service:

Azure SQL Database
Azure SQL Managed Instance
Azure Synapse Analytics
SQL Server on Azure Virtual Machines

Correct Answer:

Service tier:

Basic
Business Critical
General Purpose
Hyperscale
Premium
Standard

Box 1: Azure SQL Database -

Azure SQL Database:

Database size always depends on the underlying service tiers (e.g. Basic, Business Critical, Hyperscale).

It supports databases of up to 100 TB with Hyperscale service tier model.

Active geo-replication is a feature that lets you to create a continuously synchronized readable secondary database for a primary database. The readable secondary database may be in the same Azure region as the primary, or, more commonly, in a different region. This kind of readable secondary databases are also known as geo-secondaries, or geo-replicas.

Azure SQL Database and SQL Managed Instance enable you to dynamically add more resources to your database with minimal downtime.

Box 2: Hyperscale -

Incorrect Answers:

- ⇒ SQL Server on Azure VM: geo-replication not supported.

- ⇒ Azure Synapse Analytics is not optimized for online transaction processing (OLTP).

⇒ Azure SQL Managed Instance max database size is up to currently available instance size (depending on the number of vCores).

Max instance storage size (reserved) - 2 TB for 4 vCores

- 8 TB for 8 vCores

- 16 TB for other sizes

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/active-geo-replication-overview> <https://medium.com/awesome-azure/azure-difference-between-azure-sql-database-and-sql-server-on-vm-comparison-azure-sql-vs-sql-server-vm-cf02578a1188>

✉️ **Syd** Highly Voted 1 year, 5 months ago

Answer is correct. -Azure SQL Database with Hyperscale(support up to 100TB).

<https://docs.microsoft.com/en-us/azure/azure-sql/database/service-tier-hyperscale#:~:text=Up%20to%2020280%2C%20unless%20the%20instance%20storage%20size,TB%29%20and%20Azure%20Premium%20Disk%20storage%20allocation%20space.>

Managed Instance is incorrect because the database limit is 2-8TB max.  
<https://docs.microsoft.com/en-us/azure/azure-sql/managed-instance/resource-limits#:~:text=Up%20to%2020280%2C%20unless%20the%20instance%20storage%20size,TB%29%20and%20Azure%20Premium%20Disk%20storage%20allocation%20space.>

upvoted 37 times

✉️ **Amrx** 4 months, 2 weeks ago

Azure SQL MI also does not support active geo replication.

upvoted 3 times

✉️ **Snownoodles** Highly Voted 1 year, 2 months ago

75T can only be supported by hyperscale.

upvoted 9 times

✉️ **NotMeAnyWay** Most Recent 3 months, 1 week ago

Azure SQL Database Hyperscale:

Support scaling up and down: The Hyperscale service tier supports scaling compute resources up and down based on your workload requirements.

Support geo-redundant backups: It offers automatic backups with the ability to enable geo-redundant backups to ensure data durability in case of regional disasters.

Support a database of up to 75 TB: Hyperscale supports databases up to 100 TB in size, which meets the requirement of 75 TB.

Be optimized for online transaction processing (OLTP): Azure SQL Database Hyperscale is designed to handle OLTP workloads with high performance and low latency.

In summary, you should include Azure SQL Database with the Hyperscale service tier in your database architecture design to meet all the listed requirements.

upvoted 2 times

✉️ **zellck** 4 months, 1 week ago

1. Azure SQL DB
2. Hyperscale

<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tier-hyperscale?view=azuresql#what-are-the-hyperscale-capabilities>

The Hyperscale service tier in Azure SQL Database provides the following additional capabilities:

- Support for up to 100 TB of database size.
- Higher overall performance due to higher transaction log throughput and faster transaction commit times regardless of data volumes.
- Rapid Scale up - you can, in constant time, scale up your compute resources to accommodate heavy workloads when needed, and then scale the compute resources back down when not needed.

upvoted 3 times

✉️ **omerc061** 4 months, 2 weeks ago

Answer is correct;

let me compare with explain on microsoft official site;

<https://learn.microsoft.com/en-us/training/modules/design-data-storage-solution-for-relational-data/4-design-for-sql-server-azure#:~:text=SQL%20Server%20licenses.,Compare%20Azure%20SQL%20deployment%20options,-You%27ve%20reviewed%20the>

upvoted 1 times

✉️ **OPT\_001122** 5 months ago

Answer is correct

Box 1: Azure SQL Database

Box 2: Hyperscale - key point 75TB

Azure SQL Database with Hyperscale

Thanks all who have mentioned the exam dates

upvoted 3 times

✉️ **Ghoshy** 6 months ago

Exam Question 12/28/2022

upvoted 6 times

 **NarasimhanMV** 7 months, 3 weeks ago

Ans - Correct

upvoted 2 times

 **jellybiscuit** 9 months, 1 week ago

Correct.

Resource limits for SQL Database tiers

<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tier-hyperscale?view=azuresqldb#compare-resource-limits>

upvoted 1 times

 **catfood** 10 months, 1 week ago

"Support geo-redundant backups". - this is not the same as geo replication as the answer states.... Both MI and SQL variants have auto backup that is stored as geo redundant blobs replicated to a paired region. But yes, hyperscale is correct due to DB size.

upvoted 1 times

 **tictaclu** 11 months, 3 weeks ago

The reason to choose Hyperscale, since its the design of db migration:

The Hyperscale service tier in Azure SQL Database provides the following additional capabilities:

Support for up to 100 TB of database size.

Fast database backups (based on file snapshots stored in Azure Blob storage) regardless of size with no IO impact on compute resources.

Fast database restores (based on file snapshots) in minutes rather than hours or days (not a size of data operation).

Higher overall performance due to higher transaction log throughput and faster transaction commit times regardless of data volumes.

Rapid scale out - you can provision one or more read-only replicas for offloading your read workload and for use as hot-standbys.

Rapid Scale up - you can, in constant time, scale up your compute resources to accommodate heavy workloads when needed, and then scale the compute resources back down when not needed.

upvoted 4 times

 **Gor** 1 year, 1 month ago

Answers are correct - Azure SAL Database with Hyperscale.

upvoted 1 times

 **datafypk** 1 year, 1 month ago

was in exam 8 May 22

upvoted 4 times

 **hertino** 1 year, 2 months ago

In my exam, 9 april 22, 817/1000, I chose this answer : Database/Hyperscale

upvoted 5 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22

upvoted 1 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22

upvoted 1 times

 **akkrishna22** 1 year, 2 months ago

appeared in exam on 03-31-2022

upvoted 1 times

You are planning an Azure IoT Hub solution that will include 50,000 IoT devices.

Each device will stream data, including temperature, device ID, and time data. Approximately 50,000 records will be written every second. The data will be visualized in near real time.

You need to recommend a service to store and query the data.

Which two services can you recommend? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. Azure Table Storage
- B. Azure Event Grid
- C. Azure Cosmos DB SQL API
- D. Azure Time Series Insights

**Correct Answer: CD**

D: Time Series Insights is a fully managed service for time series data. In this architecture, Time Series Insights performs the roles of stream processing, data store, and analytics and reporting. It accepts streaming data from either IoT Hub or Event Hubs and stores, processes, analyzes, and displays the data in near real time.

C: The processed data is stored in an analytical data store, such as Azure Data Explorer, HBase, Azure Cosmos DB, Azure Data Lake, or Blob Storage.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/data-guide/scenarios/time-series>

*Community vote distribution*

CD (85%)	BD (15%)
----------	----------

 **manojchavan** Highly Voted 1 year, 2 months ago

C and D are correct:

Need to find a service to store and query the data.

- A. Azure Table Storage: You can't query data.
- B. Azure Event Grid: You can't store or query data.
- C. Azure Cosmos DB SQL API: You can store and query data.
- D. Azure Time Series Insights: You can store and query data.

upvoted 35 times

 **Eltooth** Highly Voted 1 year, 6 months ago

C & D appear to be correct.

Cosmos dB SQL API is somewhat confusing as an accurate answer though:

<https://docs.microsoft.com/en-gb/azure/cosmos-db/introduction#solutions-that-benefit-from-azure-cosmos-db>

upvoted 18 times

 **Eltooth** 1 year, 6 months ago

<https://docs.microsoft.com/en-gb/azure/cosmos-db/use-cases#iot-and-telematics>

upvoted 6 times

 **NotMeAnyWay** Most Recent 3 months, 1 week ago

**Selected Answer: CD**

- C. Azure Cosmos DB SQL API
- D. Azure Time Series Insights

C. Azure Cosmos DB SQL API: Azure Cosmos DB is a globally distributed, multi-model database service that is designed for high throughput and low-latency scenarios. The SQL API for Cosmos DB provides a JSON-based, document-oriented database that can be used to store and query the IoT data. It can handle large volumes of data and scale horizontally, making it suitable for the high volume of records generated by the IoT devices.

D. Azure Time Series Insights: This is an Azure service specifically designed for analyzing time-series data in near real-time. It can ingest, store, and query large amounts of time-series data generated by IoT devices. It also provides visualization capabilities to monitor and explore the data, which makes it suitable for the described scenario.

upvoted 2 times

 **zellck** 4 months ago

Same as Question 20.

<https://www.examtopics.com/discussions/microsoft/view/94045-exam-az-305-topic-2-question-20-discussion>

upvoted 2 times

zellck 4 months ago

Selected Answer: CD

CD is the answer.

<https://learn.microsoft.com/en-us/azure/architecture/solution-ideas/articles/iot-using-cosmos-db>

Azure Cosmos DB is ideal for IoT workloads because it's capable of:

- Ingesting device telemetry data at high rates, and return indexed queries with low latency and high availability.
- Storing JSON format from different device vendors, which provides flexibility in payload schema.
- By using wire protocol-compatible API endpoints for Cassandra, MongoDB, SQL, Gremlin, etcd, and table databases, and built-in support for Jupyter Notebook files.

upvoted 3 times

zellck 4 months ago

<https://learn.microsoft.com/en-us/azure/time-series-insights/overview-what-is-tsi>

Azure Time Series Insights Gen2 is an open and scalable end-to-end IoT analytics service featuring best-in-class user experiences and rich APIs to integrate its powerful capabilities into your existing workflow or application.

You can use it to collect, process, store, query and visualize data at Internet of Things (IoT) scale--data that's highly contextualized and optimized for time series.

Azure Time Series Insights Gen2 is designed for ad hoc data exploration and operational analysis allowing you to uncover hidden trends, spotting anomalies, and conduct root-cause analysis. It's an open and flexible offering that meets the broad needs of industrial IoT deployments.

upvoted 3 times

artemis88 4 months, 2 weeks ago

The Time Series Insights (TSI) service is being deprecated.

We will likely see Azure Data Explorer as a replacement for a real time ("hot path") data store option.

<https://learn.microsoft.com/en-us/azure/time-series-insights/migration-to-adx>

<https://learn.microsoft.com/en-us/azure/architecture/data-guide/scenarios/time-series#dataflow>

upvoted 2 times

OPT\_001122 5 months ago

Selected Answer: CD

C. Azure Cosmos DB SQL API

D. Azure Time Series Insights

upvoted 1 times

tfulanchan 5 months ago

MongoDB API is the right answer...

upvoted 1 times

VBK8579 5 months ago

C. Azure Cosmos DB SQL API

D. Azure Time Series Insights

upvoted 1 times

jmay 5 months, 3 weeks ago

Selected Answer: CD

For those who picked B as a correct option, you may have confused Azure Event Grid with Azure Event Hub.

upvoted 2 times

diego\_alejandro 7 months, 2 weeks ago

C & D correct answers

upvoted 1 times

Samko635 8 months, 2 weeks ago

Selected Answer: CD

CD is the correct answer.

upvoted 1 times

Sam928 10 months, 2 weeks ago

Ans. C,D

\*Solutions that benefit from Azure Cosmos DB

Any web, mobile, gaming, and IoT application that needs to handle massive amounts of data, reads, and writes at a global scale with near-real response times for a variety of data will benefit from Cosmos DB's guaranteed high availability, high throughput, low latency, and tunable consistency. Learn about how Azure Cosmos DB can be used to build IoT and telematics, retail and marketing, gaming and web and mobile applications.

\*Many time series-based systems, such as Internet of things (IoT) scenarios, capture data in real time by using a real-time processing architecture.

Azure IoT Hub, Azure Event Hubs, or Kafka on HDInsight ingest data from one or more data sources into the stream processing layer.

The stream processing layer processes the data, and can hand off the processed data to a machine learning service for predictive analytics.

An analytical data store like Azure Data Explorer, HBase, Azure Cosmos DB, or Azure Data Lake stores the processed data.

An analytics and reporting application or service like Power BI or OpenTSDB for HBase can display the time series data for analysis.

upvoted 2 times

✉ **al608** 1 year ago

did my Exam today. This was on there.

upvoted 4 times

✉ **Gor** 1 year, 1 month ago

**Selected Answer: CD**

C and D are correct!

<https://docs.microsoft.com/en-gb/azure/cosmos-db/introduction#solutions-that-benefit-from-azure-cosmos-db>

upvoted 2 times

✉ **Gor** 1 year, 1 month ago

C and D are correct!

<https://docs.microsoft.com/en-gb/azure/cosmos-db/introduction#solutions-that-benefit-from-azure-cosmos-db>

upvoted 1 times

✉ **datafypk** 1 year, 1 month ago

was in exam 8 May 22

upvoted 3 times

✉ **moonknight** 1 year, 1 month ago

What answer did you choose and did what score did you get on the exam?

upvoted 1 times

You are designing an application that will aggregate content for users.

You need to recommend a database solution for the application. The solution must meet the following requirements:

- ⇒ Support SQL commands.
- ⇒ Support multi-master writes.
- ⇒ Guarantee low latency read operations.

What should you include in the recommendation?

- A. Azure Cosmos DB SQL API
- B. Azure SQL Database that uses active geo-replication
- C. Azure SQL Database Hyperscale
- D. Azure Database for PostgreSQL

**Correct Answer: A**

With Cosmos DB's novel multi-region (multi-master) writes replication protocol, every region supports both writes and reads. The multi-region writes capability also enables:

Unlimited elastic write and read scalability.

99.999% read and write availability all around the world.

Guaranteed reads and writes served in less than 10 milliseconds at the 99th percentile.

Reference:

<https://docs.microsoft.com/en-us/azure/cosmos-db/distribute-data-globally>

*Community vote distribution*

A (100%)

✉  **Eltooth** [Highly Voted] 1 year, 6 months ago

**Selected Answer: A**

Correct answer - A

upvoted 21 times

✉  **Ghoshy** [Highly Voted] 6 months ago

Exam Question 12/28/2022. Instead of the Cosmos DB SQL, the option was Cosmos DB NoSQL

upvoted 10 times

✉  **zellck** [Most Recent] 4 months, 1 week ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/cosmos-db/introduction#key-benefits>

- Gain unparalleled SLA-backed speed and throughput, fast global access, and instant elasticity. Real-time access with fast read and write latencies globally, and throughput and consistency all backed by SLAs

- Multi-region writes and data distribution to any Azure region with just a button.

upvoted 3 times

✉  **omerc061** 4 months, 2 weeks ago

Correct;

<https://learn.microsoft.com/en-us/azure/cosmos-db/nosql/how-to-multi-master?tabs=api-async#:~:text=data%20globally%20pane.-,Under%20the%20Multi%2Dregion%20writes%20option%2C%20choose%20enable.%20It%20automatically%20adds%20the%20existing%20regions%20to%20read%20and%20write%20regions.,-You%20can%20add>

upvoted 1 times

✉  **OPT\_001122** 5 months ago

**Selected Answer: A**

A. Azure Cosmos DB SQL API

As Ghoshy mentioned, the option could have been Cosmos DB NoSQL also

upvoted 1 times

✉  **AzureJobsTillRetire** 5 months, 1 week ago

In the exam I had in Jan 2023, I got the same question with different answering items.

There was no "Azure Cosmos DB SQL API ", and the answering items presented were

Azure Cosmos DB for NoSQL  
Azure Cosmos DB for PostgreSQL  
upvoted 4 times

✉ Gor 1 year, 1 month ago

**Selected Answer: A**

Correct answer - A  
<https://docs.microsoft.com/en-us/azure/cosmos-db/sql/how-to-multi-master?tabs=api-async>  
upvoted 1 times

✉ Teringzooi 1 year, 2 months ago

Correct answer - A  
<https://docs.microsoft.com/en-us/azure/cosmos-db/sql/how-to-multi-master?tabs=api-async>  
upvoted 1 times

✉ hertino 1 year, 2 months ago

**Selected Answer: A**

In my exam, 9 april 22, 817/1000, I chose this answer  
upvoted 4 times

✉ vandergun 1 year, 2 months ago

**Selected Answer: A**

A is the good choice  
upvoted 2 times

✉ PeterHu 1 year, 3 months ago

only A is correct  
upvoted 3 times

✉ HGD545 1 year, 4 months ago

On the AZ-305 2/22/22  
upvoted 4 times

✉ Redimido 1 year, 4 months ago

**Selected Answer: A**

Only Cosmos DB supports multi-master writes:  
<https://docs.microsoft.com/en-us/azure/cosmos-db/sql/how-to-multi-master?tabs=api-async>  
upvoted 8 times

✉ AKYK 1 year, 4 months ago

**Selected Answer: A**

Correct Answer: A  
upvoted 3 times

HOTSPOT -

You have an Azure subscription that contains the SQL servers on Azure shown in the following table.

Name	Resource group	Location
SQLsvr1	RG1	East US
SQLsvr2	RG2	West US

The subscription contains the storage accounts shown in the following table.

Name	Resource group	Location	Account kind
storage1	RG1	East US	StorageV2 (general purposev2)
storage2	RG2	Central US	BlobStorage

You create the Azure SQL databases shown in the following table.

Name	Resource group	Server	Pricing tier
SQLdb1	RG1	SQLsvr1	Standard
SQLdb2	RG1	SQLsvr1	Standard
SQLdb3	RG2	SQLsvr2	Premium

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

NOTE: Each correct selection is worth one point.

Hot Area:

### Answer Area

Statements	Yes	No
When you enable auditing for SQLdb1, you can store the audit information to storage1.	<input type="radio"/>	<input type="radio"/>
When you enable auditing for SQLdb2, you can store the audit information to storage2.	<input type="radio"/>	<input type="radio"/>
When you enable auditing for SQLdb3, you can store the audit information to storage2.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

### Answer Area

Statements	Yes	No
When you enable auditing for SQLdb1, you can store the audit information to storage1.	<input checked="" type="radio"/>	<input type="radio"/>
When you enable auditing for SQLdb2, you can store the audit information to storage2.	<input type="radio"/>	<input checked="" type="radio"/>
When you enable auditing for SQLdb3, you can store the audit information to storage2.	<input type="radio"/>	<input checked="" type="radio"/>

Box 1: Yes -

Auditing works fine for a Standard account.

Box 2: No -

Auditing limitations: Premium storage is currently not supported.

Box 3: No -

Auditing limitations: Premium storage is currently not supported.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/auditing-overview#auditing-limitations>

YNN

CONCEPT TO REMEMBER

1. TO WRITE INTO STORAGE, MUST BE IN SAME REGION
2. TO WIRTE IN LOG ANALYTICS SPACE - CAN BE IN DIFFERENT REGION

SINCE WE ARE USING CONCEPT 1, CAN ONLY WRITE INTO SAME REGION

IT HAS NOTHING TO DO WITH PRICING TIER

upvoted 113 times

✉️ **Rayane** 5 months, 3 weeks ago

Why are you writing in capital, LOL ?

upvoted 11 times

✉️ **nigw** 5 months, 1 week ago

because it's SQL :)

upvoted 34 times

✉️ **annabelbm** 5 months ago

According to MS documentation: If you are deploying from the Azure portal, be sure that the storage account is in the same region as your database and server. If you are deploying through other methods, the storage account can be in any region.

upvoted 4 times

✉️ **moshos** 4 months, 3 weeks ago

Yes and that statement comes from:

<https://learn.microsoft.com/en-us/azure/azure-sql/database/auditing-overview?view=azuresql#auditing-limitations>

upvoted 2 times

✉️ **default\_wizard** Highly Voted 1 year, 6 months ago

answer could be Yes, No, No

Auditing limitations

Premium storage is currently not supported.

<https://docs.microsoft.com/en-us/azure/azure-sql/database/auditing-overview>

upvoted 63 times

✉️ **sonoksmy** 9 months ago

Storage 2 can be standard BlobStorage, therefore this explanation is not correct

upvoted 3 times

✉️ **Shadow983** 1 year, 6 months ago

I saw this in document, but I am not sure that is mean sql database or storage account.

upvoted 4 times

✉️ **Shadow983** 1 year, 6 months ago

BTW, the region is not the same.

Y, N, N should be correct.

upvoted 14 times

✉️ **makkros** 1 year, 3 months ago

Who said that? Storage have indicated the Resource group only not the region

upvoted 1 times

✉️ **epomatti** 1 year ago

Makkros yes it DOES indicate the location.

upvoted 2 times

✉️ **Eltooth** 1 year, 6 months ago

<https://docs.microsoft.com/en-us/azure/azure-sql/database/auditing-overview#auditing-limitations>

upvoted 4 times

✉️ **morito** Most Recent 4 weeks ago

This article (<https://learn.microsoft.com/en-us/azure/azure-sql/database/auditing-setup?source=recommendations&view=azuresql>) states:

"If you are deploying from the Azure portal, make sure that the storage account is in the same region as your database and server. If you are deploying through other methods, the storage account can be in any region." Therefore the region limitations only apply when using the portal, but not using the Azure CLI. So 3x Y

upvoted 2 times

✉️ **gauravitz43** 3 months, 1 week ago

YNN

Premium storage with BlockBlobStorage is supported. Standard storage is supported. However, for audit to write to a storage account behind a VNet or firewall, you must have a general-purpose v2 storage account. If you have a general-purpose v1 or blob storage account, upgrade to a general-purpose v2 storage account. For specific instructions see, Write audit to a storage account behind VNet and firewall. For more information, see Types of storage accounts.

By this comment we can't audit on storage2 because it is on blocstorage. So we must need to change it to GPv2  
upvoted 2 times

✉ **litsarda** 3 months, 2 weeks ago

- The auditing information for a SQL database can be stored in a storage account within the same region as the SQL server. Since SQLSRV1 is located in RG1 in East US and STORAGE1 is also located in RG1 in East US, we can store the audit information of sqldb1 to storage1.
- Although STORAGE2 is located in RG2, which is the same resource group as SQLSRV2, it is located in a different region (Central US) than the SQL server's location (West US). Therefore, we cannot store the audit information of sqldb2 to storage2.
- Since SQLSRV2 and STORAGE2 are located in the same resource group (RG2) and in the same region (Central US), we can store the audit information of sqldb3 to storage2.

upvoted 1 times

✉ **litsarda** 3 months, 2 weeks ago

Chat.gpt says Y-N-Y - comment?  
upvoted 1 times

✉ **GuyForget** 2 weeks, 6 days ago

Chat GPT says a lot of things that aren't always correct. Provide any kind of argument against one of those answers, and it's almost guaranteed to apologize and give you the opposite answer.  
upvoted 1 times

✉ **zellck** 4 months ago

YYY is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/auditing-overview?view=azuresql#audit-storage-destination>

If you are deploying from the Azure portal, be sure that the storage account is in the same region as your database and server. If you are deploying through other methods, the storage account can be in any region.

upvoted 3 times

✉ **abxc** 4 months ago

YNN  
bcz: <https://learn.microsoft.com/en-us/azure/azure-sql/database/audit-write-storage-account-behind-vnet-firewall?view=azuresql#prerequisites>  
" If you have a general-purpose v1 or blob storage account, upgrade to a general-purpose v2 storage account."  
upvoted 1 times

✉ **omero61** 4 months, 2 weeks ago

Correct Answer

SQLDB1 on the SQLsvr1 > EastUS | Storage1 > East US = Same Region OK  
SQLDB2 on the SQLsvr1 > EastUS | Storage2 > Central US = Different Region NOT  
SQLDB3 on the SQLsvr2 > WestUS| Storage2 > Central US = Different Region NOT  
upvoted 5 times

✉ **gugamotarj** 4 months, 2 weeks ago

Y, Y, Y  
Go study documentation guys!  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/auditing-overview?view=azuresql>  
upvoted 1 times

✉ **Psy3000** 4 months, 2 weeks ago

I think Y Y Y  
Region only seems to matter if using the portal, not other methods like Azure CLI  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/auditing-overview?view=azuresql#audit-storage-destination>  
upvoted 1 times

✉ **sainandam** 4 months, 2 weeks ago

YYY  
Blob storage is not available as a premium.  
BlockBlob Storage, V1, V2, and File Storage are available as premium.  
Premium logic does not apply in this case.  
Audit logs can be sent to other regions' storage accounts.  
upvoted 1 times

✉ **totalz** 4 months, 2 weeks ago

My answer is Yx3, just read the Statements of the question and the NOTE in the article!

off-topic: I'm actually having issue with this limitation:

"When you configure the auditing for your logical server in Azure or Azure SQL Database with log destination as the storage account, the target storage account must be enabled with access to (by?) storage account keys. If the storage account is configured to use Azure AD authentication only and not configured for access key usage, the auditing cannot be configured." Bloody M\$

upvoted 1 times

✉ **orionduo** 4 months, 2 weeks ago

YNY  
Both SQLsvr1 and Storage1 are in same location East US  
SQLsvr2 and Storage2 are in different locations

Both SQLsvr2 and Storage2 are in same location West US

There has been some talk about whether the Premium refers to the storage type, but BlobStorage (specified in the question) can ONLY be Standard, so the mention of Premium must relate to SQL only. From the link specified in the answer, under "Audit to storage destination" it states in the Remarks sub-section "Audit logs are written to Append Blobs in an Azure Blob storage on your Azure subscription". So It must be YES.

upvoted 2 times

✉ **meonyahoo** 5 months, 3 weeks ago

Answer should be Y Y Y

Hierarchical namespace for all types of standard storage account and premium storage account with BlockBlobStorage is supported.  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/auditing-overview?view=azuresql>

upvoted 1 times

✉ **FabriyDev** 5 months, 2 weeks ago

You're wrong. It should be Y N N because location of the storage has to be the same as location of the DB. You completely omitted the location aspect.

upvoted 1 times

✉ **KPVP** 5 months ago

There is a note given as "If you are deploying from the Azure portal, be sure that the storage account is in the same region as your database and server. If you are deploying through other methods, the storage account can be in any region."

<https://learn.microsoft.com/en-us/azure/azure-sql/database/auditing-overview?view=azuresql>

upvoted 4 times

✉ **m2L** 7 months, 1 week ago

Y N N for me the only reason is that blob storage is not supported according to this link <https://learn.microsoft.com/en-us/azure/azure-sql/database/auditing-overview?view=azuresql#auditing-limitations>:~:text=If%20you%20have%20a%20general%2Dpurpose%20v1%20or%20blob%20storage%20account%2C%20upgrade%20to%20a%20general%2Dpurpose%20v2%20storage%20account.%20For%20specific%20instructions%20see%2C%20Write%20audit%20to%20a%20storage%20account%20behind%20VNet%20and%20firewall.%20For%20more%20information%2C%20see%20Types%20of

upvoted 1 times

✉ **moshos** 4 months, 3 weeks ago

It says "...However, for audit to write to a storage account behind a VNet or firewall, you must have a general-purpose v2 storage account." The question doesn't say that storage2 is behind a VNet or firewall. So it should be supported: YYY

upvoted 1 times

✉ **NarasimhanMV** 7 months, 3 weeks ago

Ans: Yes, No, NO

upvoted 1 times

DRAG DROP -

You plan to import data from your on-premises environment to Azure. The data is shown in the following table.

On-premises source	Azure target
A Microsoft SQL Server 2012 database	An Azure SQL database
A table in a Microsoft SQL Server 2014 database	An Azure Cosmos DB account that uses the SQL API

What should you recommend using to migrate the data? To answer, drag the appropriate tools to the correct data sources. Each tool may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

**Tools**

- AzCopy
- Azure Cosmos DB Data Migration Tool
- Data Management Gateway
- Data Migration Assistant

**Answer Area**

From the SQL Server 2012 database: Tool

From the table in the SQL Server 2014 database: Tool

**Correct Answer:**

**Tools**

- AzCopy
- Azure Cosmos DB Data Migration Tool
- Data Management Gateway
- Data Migration Assistant

**Answer Area**

From the SQL Server 2012 database: Data Migration Assistant

From the table in the SQL Server 2014 database: Azure Cosmos DB Data Migration Tool

Box 1: Data Migration Assistant -

The Data Migration Assistant (DMA) helps you upgrade to a modern data platform by detecting compatibility issues that can impact database functionality in your new version of SQL Server or Azure SQL Database. DMA recommends performance and reliability improvements for your target environment and allows you to move your schema, data, and uncontained objects from your source server to your target server.

Incorrect:

AzCopy is a command-line utility that you can use to copy blobs or files to or from a storage account.

Box 2: Azure Cosmos DB Data Migration Tool

Azure Cosmos DB Data Migration Tool can be used to migrate a SQL Server Database table to Azure Cosmos.

Reference:

<https://docs.microsoft.com/en-us/sql/dma/dma-overview>

<https://docs.microsoft.com/en-us/azure/cosmos-db/cosmosdb-migrationchoices>

✉  **Gowind** (Highly Voted) 9 months, 4 weeks ago

Correct.

1. <https://docs.microsoft.com/en-us/azure/azure-sql/migration-guides/database/sql-server-to-sql-database-overview?view=azuresql>
2. <https://docs.microsoft.com/en-us/azure/cosmos-db/cosmosdb-migrationchoices>

upvoted 14 times

✉  **Darkx** (Highly Voted) 8 months, 2 weeks ago

appeared on 11th Oct 2022

upvoted 5 times

✉  **au95\_aznierto** (Most Recent) 3 months, 1 week ago

If helps I found github project from Azure about cosmos db data migration tool, it seems to be active <https://github.com/Azure/azure-documentdb-datamigrationtool>

upvoted 1 times

✉  **OPT\_001122** 5 months ago

Answer is correct

Box 1: Data Migration Assistant

Box 2: Azure Cosmos DB Data Migration Tool

upvoted 2 times

✉  **OPT\_001122** 5 months ago

Thanks all who have mentioned the exam dates  
upvoted 2 times

✉ **ssgg100** 5 months, 2 weeks ago

I think there is a mistake in this question - there is no Azure Cosmos DB for SQL API. The supported APIs are:  
Azure Cosmos DB for NoSQL  
Azure Cosmos DB for MongoDB  
Azure Cosmos DB for PostgreSQL  
Azure Cosmos DB for Cassandra  
Azure Cosmos DB for Gremlin  
Azure Cosmos DB for Table

If question means Azure Cosmos DB for NoSQL API, then if we look in the table in <https://docs.microsoft.com/en-us/azure/cosmos-db/cosmosdb-migrationchoices> the tool should be Azure Data Factory.

Azure Cosmos DB Data Migration tool is not mentioned in related article. I found other article about this tool <https://azure.microsoft.com/en-us/updates/documentdb-data-migration-tool/> but it is old and I think that tool is obsolete, as well as the question.

upvoted 3 times

✉ **sw1000** 1 month ago

It's mentioned here that SQL Servers are supported with the Desktop Migration Tool:  
<https://learn.microsoft.com/en-gb/azure/cosmos-db/how-to-migrate-desktop-tool?tabs=azure-cli>  
upvoted 1 times

✉ **rvnz45** 5 months, 1 week ago

PostgreSQL is one kind of SQL  
upvoted 1 times

✉ **Racinely** 9 months, 1 week ago

The Data management gateway is a client agent that you must install in your on-premises environment to copy data between cloud and on-premises data stores  
upvoted 1 times

✉ **most\_lenyora** 9 months, 3 weeks ago

Correct  
upvoted 1 times

You store web access logs data in Azure Blob Storage.  
You plan to generate monthly reports from the access logs.  
You need to recommend an automated process to upload the data to Azure SQL Database every month.  
What should you include in the recommendation?

- A. Microsoft SQL Server Migration Assistant (SSMA)
- B. Data Migration Assistant (DMA)
- C. AzCopy
- D. Azure Data Factory

**Correct Answer: D**

You can create Data Factory pipelines that copies data from Azure Blob Storage to Azure SQL Database. The configuration pattern applies to copying from a file-based data store to a relational data store.

Required steps:

Create a data factory.

Create Azure Storage and Azure SQL Database linked services.

Create Azure Blob and Azure SQL Database datasets.

Create a pipeline contains a Copy activity.

Start a pipeline run.

Monitor the pipeline and activity runs.

Reference:

<https://docs.microsoft.com/en-us/azure/data-factory/tutorial-copy-data-dot-net>

*Community vote distribution*

D (100%)

 **Gowind** (Highly Voted) 9 months, 4 weeks ago

**Selected Answer: D**

Correct

<https://docs.microsoft.com/en-us/azure/data-factory/tutorial-copy-data-tool>

upvoted 13 times

 **au95\_aznierto** (Most Recent) 3 months, 1 week ago

If helps I found github project from Azure about cosmos db data migration tool, it seems to be active <https://github.com/Azure/azure-documentdb-datamigrationtool>

upvoted 1 times

 **NotMeAnyWay** 3 months, 1 week ago

**Selected Answer: D**

D. Azure Data Factory

You should recommend using Azure Data Factory for this scenario. Azure Data Factory is a cloud-based data integration service that allows you to create, schedule, and manage data pipelines. In this case, you can create a pipeline to automatically extract data from the Azure Blob Storage, transform the data if needed, and load it into the Azure SQL Database on a monthly basis. This will help you generate the required monthly reports from the access logs.

upvoted 4 times

 **zellck** 4 months, 1 week ago

**Selected Answer: D**

D is the answer.

<https://learn.microsoft.com/en-us/azure/data-factory/introduction>

Big data requires a service that can orchestrate and operationalize processes to refine these enormous stores of raw data into actionable business insights. Azure Data Factory is a managed cloud service that's built for these complex hybrid extract-transform-load (ETL), extract-load-transform (ELT), and data integration projects.

upvoted 2 times

 **totalz** 4 months, 2 weeks ago

None of the answers are an automated process...

upvoted 1 times

 **totalz** 4 months, 2 weeks ago

my bad, it says "include in the recommendation"  
upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: D**  
D. Azure Data Factory  
upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: D**  
D. Azure Data Factory  
upvoted 1 times

 **libran** 9 months, 2 weeks ago

**Selected Answer: D**  
Given is correct  
upvoted 4 times

 **most\_lenyora** 9 months, 3 weeks ago

Correct  
upvoted 2 times

You have an Azure subscription.

Your on-premises network contains a file server named Server1. Server1 stores 5 TB of company files that are accessed rarely.

You plan to copy the files to Azure Storage.

You need to implement a storage solution for the files that meets the following requirements:

- ⇒ The files must be available within 24 hours of being requested.
- ⇒ Storage costs must be minimized.

Which two possible storage solutions achieve this goal? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. Create an Azure Blob Storage account that is configured for the Cool default access tier. Create a blob container, copy the files to the blob container, and set each file to the Archive access tier.
- B. Create a general-purpose v1 storage account. Create a blob container and copy the files to the blob container.
- C. Create a general-purpose v2 storage account that is configured for the Cool default access tier. Create a file share in the storage account and copy the files to the file share.
- D. Create a general-purpose v2 storage account that is configured for the Hot default access tier. Create a blob container, copy the files to the blob container, and set each file to the Archive access tier.
- E. Create a general-purpose v1 storage account. Create a file share in the storage account and copy the files to the file share.

**Correct Answer: AD**

To minimize costs: The Archive tier is optimized for storing data that is rarely accessed and stored for at least 180 days with flexible latency requirements (on the order of hours).

Reference:

<https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-storage-tiers>

*Community vote distribution*

AD (89%) 11%

✉  mse89  9 months, 4 weeks ago

**Selected Answer: AD**

I believe the correct answers are A and D, since the archive tier is the cheapest for storing data.

In addition, a maximum of 15 hours may be required to rehydrate the data from an archive tier; the requirements are met.

upvoted 14 times

✉  Gowind  9 months, 4 weeks ago

**Selected Answer: AD**

<https://docs.microsoft.com/en-us/azure/storage/blobs/access-tiers-overview>

While a blob is in the Archive tier, it can't be read or modified. To read or download a blob in the Archive tier, you must first rehydrate it to an online tier, either Hot or Cool. Data in the Archive tier can take up to 15 hours to rehydrate, depending on the priority you specify for the rehydration operation. For more information about blob rehydration, see Overview of blob rehydration from the Archive tier.

upvoted 7 times

✉  ZUMY  1 month, 4 weeks ago

A & D are correct

upvoted 1 times

✉  malcubierre 3 months, 1 week ago

**Selected Answer: AD**

B and E cannot have access tier because are v1 storage accounts

C is a File share, that cannot have access tier

Then: A, D

upvoted 2 times

✉  yonie 2 months ago

Thanks

upvoted 1 times

✉  zellick 4 months, 1 week ago

**Selected Answer: AD**

AD is the answer.

- <https://learn.microsoft.com/en-us/azure/storage/blobs/access-tiers-overview>  
Archive tier - An offline tier optimized for storing data that is rarely accessed, and that has flexible latency requirements, on the order of hours.  
Data in the archive tier should be stored for a minimum of 180 days.  
upvoted 4 times
- ✉ **totalz** 4 months, 2 weeks ago  
What's the size in the question? All I see is "5 ICI"!!  
  
What's the min blob size? Like if I store a 1Kb file, what size does it end up in cost?  
upvoted 1 times
- ✉ **OPT\_001122** 5 months ago  
**Selected Answer: AD**  
Keyword is archive tier for cost minimization  
upvoted 1 times
- ✉ **Bummer\_boy** 5 months, 1 week ago  
**Selected Answer: AD**  
Archiving tier is a must in this scenario for cost optimization  
upvoted 1 times
- ✉ **lmy** 5 months, 3 weeks ago  
A and C  
upvoted 3 times
- ✉ **jellybiscuit** 9 months, 1 week ago  
**Selected Answer: AD**  
Archive tier rehydration time is a claimed 15 hours. This meets their needs at the lowest cost.  
  
<https://learn.microsoft.com/en-us/azure/storage/blobs/access-tiers-overview>  
upvoted 2 times
- ✉ **maarten4119** 9 months, 2 weeks ago  
What is meant by 'set each file to the Archive access tier' in answer A and D? It says in A the storage account is Cool and in D it is Hot. You can only set one access tier, no? Why do they refer at the end to Archive?  
upvoted 1 times
- ✉ **jellybiscuit** 9 months, 1 week ago  
You can only create the storage account as hot or cool.  
Once you get them there, you're sending the files to archive.  
  
In this case, it doesn't really matter which tier you create the account as... the end result is the same.  
upvoted 5 times
- ✉ **Balaji\_c\_s** 9 months, 3 weeks ago  
**Selected Answer: AD**  
A and D is correct, C is not correct, AFAIK only blobs can be changed to archive access tier.  
upvoted 3 times
- ✉ **codingdown** 9 months, 3 weeks ago  
**Selected Answer: AC**  
only A and C allow to choose a cold tier which is the correct one for this scenario  
upvoted 4 times
- ✉ **most\_lenyora** 9 months, 3 weeks ago  
Answer is correct  
upvoted 2 times
- ✉ **VMUN** 10 months ago  
Answer is A & C  
upvoted 3 times
- ✉ **DeBoer** 4 months, 1 week ago  
Question says to minimize storage costs. Blobs in archive are cheaper than fileshare data in cool tier.  
upvoted 1 times

You have an app named App1 that uses two on-premises Microsoft SQL Server databases named DB1 and DB2.

You plan to migrate DB1 and DB2 to Azure

You need to recommend an Azure solution to host DB1 and DB2. The solution must meet the following requirements:

- ⇒ Support server-side transactions across DB1 and DB2.
- ⇒ Minimize administrative effort to update the solution.

What should you recommend?

- A. two Azure SQL databases in an elastic pool
- B. two databases on the same Azure SQL managed instance
- C. two databases on the same SQL Server instance on an Azure virtual machine
- D. two Azure SQL databases on different Azure SQL Database servers

**Correct Answer: B**

Elastic database transactions for Azure SQL Database and Azure SQL Managed Instance allow you to run transactions that span several databases.

SQL Managed Instance enables system administrators to spend less time on administrative tasks because the service either performs them for you or greatly simplifies those tasks.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/elastic-transactions-overview?view=azuresql>

*Community vote distribution*

B (100%)

✉  **Gowind** [Highly Voted] 9 months, 4 weeks ago

**Selected Answer: B**

<https://docs.microsoft.com/en-us/azure/azure-sql/database/elastic-transactions-overview?view=azuresql>

A server-side distributed transactions using Transact-SQL are available only for Azure SQL Managed Instance. Distributed transaction can be executed only between Managed Instances that belong to the same Server trust group. In this scenario, Managed Instances need to use linked server to reference each other.

upvoted 13 times

✉  **mscbsl1t** [Highly Voted] 5 months, 4 weeks ago

12/29/2022 -> This article describes using elastic database transactions which allow you to run distributed transactions across cloud databases for Azure SQL Database and Azure SQL Managed Instance.

upvoted 6 times

✉  **OPT\_001122** 5 months ago

Thanks for mentioning the date

upvoted 1 times

✉  **NotMeAnyWay** [Most Recent] 3 months, 1 week ago

**Selected Answer: B**

B. two databases on the same Azure SQL managed instance

An Azure SQL Managed Instance is a fully managed SQL Server Database Engine hosted in Azure that provides most of the SQL Server capabilities. It supports features like cross-database queries and transactions, which is crucial for your requirement of supporting server-side transactions across DB1 and DB2. Additionally, since it's a fully managed solution, it minimizes the administrative effort needed to update and maintain the system.

upvoted 2 times

✉  **zellck** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/elastic-transactions-overview?view=azuresql#transact-sql-development-experience>

A server-side distributed transactions using Transact-SQL are available only for Azure SQL Managed Instance. Distributed transaction can be executed only between instances that belong to the same Server trust group. In this scenario, managed instances need to use linked server to reference each other.

upvoted 3 times

✉  **totalz** 4 months, 2 weeks ago

B is the best answer no doubt, but D is also a correct answer according to the doc. See limitations 1st point! This doc is missing a lot of things...

upvoted 1 times

✉ **OPT\_001122** 5 months ago

**Selected Answer: B**

B. two databases on the same Azure SQL managed instance

upvoted 1 times

✉ **Bummer\_boy** 5 months, 1 week ago

**Selected Answer: B**

The thing is server-side transaction execution across multiple dbs. it's one of the key features of SQL managed instance.

upvoted 1 times

✉ **Samko635** 8 months, 2 weeks ago

**Selected Answer: B**

Azure SQL DB does NOT support server-side transaction, only client-side.

Ref: <https://learn.microsoft.com/en-us/azure/azure-sql/database/elastic-transactions-overview?view=azuresql#common-scenarios>

upvoted 3 times

✉ **jellybiscuit** 9 months, 1 week ago

**Selected Answer: B**

Elastic query for Azure SQL Databases is currently in preview mode, which would allow this.

For now, SQL MI is the right answer though.

upvoted 2 times

✉ **Samko635** 8 months, 2 weeks ago

Azure SQL DB does NOT support server-side transaction, only client-side.

Ref: <https://learn.microsoft.com/en-us/azure/azure-sql/database/elastic-transactions-overview?view=azuresql#common-scenarios>

upvoted 1 times

✉ **most\_lenyora** 9 months, 3 weeks ago

Correct

upvoted 2 times

✉ **Snownoodles** 9 months, 3 weeks ago

**Selected Answer: B**

Given answer is correct.

Keywords: instance to instance/minimal management

upvoted 3 times

You need to design a highly available Azure SQL database that meets the following requirements:

- ⇒ Failover between replicas of the database must occur without any data loss.
- ⇒ The database must remain available in the event of a zone outage.
- ⇒ Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Database Hyperscale
- B. Azure SQL Database Premium
- C. Azure SQL Database Basic
- D. Azure SQL Managed Instance General Purpose

**Correct Answer: B**

Azure SQL Database Premium tier supports multiple redundant replicas for each database that are automatically provisioned in the same datacenter within a region. This design leverages the SQL Server AlwaysON technology and provides resilience to server failures with 99.99% availability SLA and RPO=0.

With the introduction of Azure Availability Zones, we are happy to announce that SQL Database now offers built-in support of Availability Zones in its Premium service tier.

Incorrect:

Not A: Hyperscale is more expensive than Premium.

Not C: Need Premium for Availability Zones.

Not D: Zone redundant configuration that is free on Azure SQL Premium is not available on Azure SQL Managed Instance.

Reference:

<https://azure.microsoft.com/en-us/blog/azure-sql-database-now-offers-zone-redundant-premium-databases-and-elastic-pools/>

*Community vote distribution*

B (100%)

✉  **Gowind**  9 months, 4 weeks ago

**Selected Answer: B**

Answer is correct but explanation is wrong for C. You need General Purpose level as a minimum, not premium.

<https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

NB: Zone-redundant configuration is not available in SQL Managed Instance. In SQL Database this feature is only available when the Gen5 hardware is selected.

upvoted 11 times

✉  **jellybiscuit**  9 months, 1 week ago

**Selected Answer: B**

I had a near-impossible time finding documentation for this, so I just went to my own portal and checked.

SQL Database options that support Geo Redundancy

vCore model

- General Purpose (at additional cost)
- Business Critical

DTU model

- Premium

SQL MI does not support geo-redundancy at all.

upvoted 8 times

✉  **ZUMY**  1 month, 4 weeks ago

Answer is correct

Azure SQL Managed Instance also offers high availability and disaster recovery capabilities, but it does not support zone redundant configuration. Instead, it uses a different approach called instance failover groups to provide high availability across different regions. Instance failover groups enable you to create and manage groups of managed instances that fail over together during a regional outage, allowing you to maintain availability of your database workloads.

upvoted 1 times

✉  **winy** 2 months, 3 weeks ago

this was in the exam on 01/04/2023

upvoted 2 times

 **NotMeAnyway** 3 months, 1 week ago

**Selected Answer: B**

B. Azure SQL Database Premium

To meet the requirements of a highly available Azure SQL database with no data loss during failover and availability during a zone outage, you should use Azure SQL Database Premium. The Premium tier provides built-in support for active geo-replication, which allows you to create readable secondary replicas in different regions, ensuring the database remains available in the event of a zone outage. Additionally, the Premium tier offers better performance and more resources compared to the Basic and General Purpose tiers, while Hyperscale, although highly scalable, can be more costly than the Premium tier.

upvoted 1 times

 **zelliCK** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql#service-tiers>

The Premium service tier is designed for OLTP applications with high transaction rates and low latency I/O requirements. It offers the highest resilience to failures by using several isolated replicas.

upvoted 3 times

 **OPT\_001122** 5 months ago

**Selected Answer: B**

B. Azure SQL Database Premium

upvoted 1 times

 **annabelbm** 5 months ago

Zone-redundant configuration is currently in preview for SQL Managed Instance, and only available for the Business Critical service tier.  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

upvoted 1 times

 **Snownoodles** 9 months, 3 weeks ago

B is correct

If D is "Azure SQL DATABASE General Purpose", then D is correct.

Azure SQL database general purpose support Zone but Azure MI general purpose doesn't support zone redundancy.

upvoted 3 times

**HOTSPOT -**

You are planning an Azure Storage solution for sensitive data. The data will be accessed daily. The dataset is less than 10 GB.

You need to recommend a storage solution that meets the following requirements:

- ⇒ All the data written to storage must be retained for five years.
- ⇒ Once the data is written, the data can only be read. Modifications and deletion must be prevented.
- ⇒ After five years, the data can be deleted, but never modified.
- ⇒ Data access charges must be minimized.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Storage account type:

General purpose v2 with Archive access tier for blobs
General purpose v2 with Cool access tier for blobs
General purpose v2 with Hot access tier for blobs

Configuration to prevent modifications and deletions:

Container access level
Container access policy
Storage account resource lock

Correct Answer:

**Answer Area**

Storage account type:

General purpose v2 with Archive access tier for blobs
General purpose v2 with Cool access tier for blobs
General purpose v2 with Hot access tier for blobs

Configuration to prevent modifications and deletions:

Container access level
Container access policy
Storage account resource lock

Box 1: General purpose v2 with Hot access tier for blobs

Note:

- \* All the data written to storage must be retained for five years.
- \* Data access charges must be minimized

Hot tier has higher storage costs, but lower access and transaction costs.

Incorrect:

Not Archive: Lowest storage costs, but highest access, and transaction costs.

Not Cool: Lower storage costs, but higher access and transaction costs.

Box 2: Storage account resource lock

As an administrator, you can lock a subscription, resource group, or resource to prevent other users in your organization from accidentally deleting or modifying critical resources. The lock overrides any permissions the user might have.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/blobs/access-tiers-overview> <https://docs.microsoft.com/en-us/azure/resource-manager/management/lock-resources>

- ✉️  **mse89** [Highly Voted] 9 months, 4 weeks ago  
gpv2 hot tier, container access policy to configure a time-based retention policy for immutable storage.  
Storage account resource lock does not prevent data editing or deletion, but only the storage account deletion.  
upvoted 84 times
- ✉️  **webbies** 8 months, 3 weeks ago  
You can set the storage resource lock to CannotDelete and ReadOnly isn't?  
<https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/lock-resources?tabs=json>  
upvoted 1 times
- ✉️  **kJigneshk** 8 months, 2 weeks ago  
yes you set the resources lock as read-only and delete prevention but can to for data, that is only for resources change not for in the data.  
upvoted 6 times
- ✉️  **ike001** 9 months, 4 weeks ago  
agree 100%  
upvoted 5 times
- ✉️  **kJigneshk** 8 months, 2 weeks ago  
yes you set the resources lock as read-only and delete prevention but can to for data, that is only for resources change not for in the data.  
upvoted 1 times
- ✉️  **Gowind** [Highly Voted] 9 months, 4 weeks ago  
Answer is GPv2 HOT to have frequent access :  
<https://docs.microsoft.com/en-us/azure/storage/blobs/access-tiers-overview>
- Answer is container access (immutable) policy at least at the container scope.  
<https://docs.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview>  
upvoted 20 times
- ✉️  **sw1000** [Most Recent] 1 month ago  
Moderator/Admins: could you please update the answer. We have a lot of consense here that the answers are General Purpose v2 Blobs + hot tier AND Container Access Policy are needed to get the desired outcome.  
upvoted 3 times
- ✉️  **ZUMY** 1 month, 4 weeks ago  
General Purpose V2 Hot tier  
Container access policy
- I would recommend using Azure hot Blob Storage with a WORM (Write Once Read Many) policy. WORM policies prevent data from being modified or deleted after it has been written, and they can be applied to individual blobs or entire containers.  
upvoted 5 times
- ✉️  **ZUMY** 1 month, 4 weeks ago  
To implement this solution, you can follow these steps:
- Create an Azure Blob Storage account and enable the WORM feature. This can be done through the Azure Portal or via Azure CLI or PowerShell.
- Create a new blob container for your sensitive data.
- Set the WORM policy for the container to enforce write-once-read-many access for all blobs in the container.
- Upload your sensitive data to the blob container.
- Configure a retention period of five years for the data in the container.
- upvoted 1 times
- ✉️  **malcubierre** 3 months, 1 week ago  
General Purpose V2 Hot tier  
Container access policy  
upvoted 3 times
- ✉️  **Stone82** 3 months, 3 weeks ago  
Second is Container Access Policy  
upvoted 3 times
- ✉️  **MadPanda** 4 months ago  
It should be Hot Tier with Container Access Policy. Storage Account Resource Lock does not prevent the data from being modified/deleted inside the container.  
<https://learn.microsoft.com/en-us/azure/storage/blobs/data-protection-overview#overview-of-data-protection-options>  
upvoted 2 times
- ✉️  **zellck** 4 months, 1 week ago  
Same as Question 21.  
<https://www.examtopics.com/discussions/microsoft/view/95594-exam-az-305-topic-2-question-21-discussion>

upvoted 1 times

- ✉ **zellck** 4 months, 1 week ago
1. GPv2 with hot access tier for blobs
  2. Container access policy

<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview>

Immutable storage for Azure Blob Storage enables users to store business-critical data in a WORM (Write Once, Read Many) state. While in a WORM state, data cannot be modified or deleted for a user-specified interval. By configuring immutability policies for blob data, you can protect your data from overwrites and deletes.

upvoted 3 times

- ✉ **artemis88** 4 months, 2 weeks ago

-Gen2 Hot Access

-Container access policy (immutable storage time-based retention policy)

<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview>

<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-time-based-retention-policy-overview#container-level-policy-scope>

<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-policy-configure-container-scope?tabs=azure-portal>

Note:

A storage account resource lock will apply restrictions to the control plane only (i.e. no changes to the storage resource properties/settings). It would not prevent changes to the data plane.

<https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/lock-resources#understand-scope-of-locks>

<https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/lock-resources#considerations-before-applying-your-locks>

upvoted 1 times

- ✉ **orionduo** 4 months, 2 weeks ago

Answer should be: Hot&Container access policy

Requirement: The data will be accessed daily

Hot access tier is optimized for storing data that is accessed frequently

Immutable storage for Azure Blob Storage enables users to store business-critical data in a WORM (Write Once, Read Many) state. While in a WORM state, data cannot be modified or deleted for a user-specified interval. By configuring immutability policies for blob data, you can protect your data from overwrites and deletes.

upvoted 1 times

- ✉ **OPT\_001122** 5 months ago

Box 1: General purpose v2 with Hot access tier for blobs

Box 2: container access policy

upvoted 6 times

- ✉ **vacanillo** 5 months, 1 week ago

Container access level and container access policy can be used to control access to the container but they don't prevent modification and deletion of the data itself.

Storage account resource lock provides a way to prevent accidental deletion of resources at the subscription level and it's the best way to prevent modifications and deletions on the data once it's written to storage.

upvoted 2 times

- ✉ **CineZorro824** 6 months, 3 weeks ago

Data lock should be Container Access policy, which is the scope of the Immutable Policy on a Storage Account.

Storage Account resource lock is wrong, this only prevents the Storage Account from being deleted, it says nothing about data modification.

upvoted 1 times

- ✉ **CineZorro824** 6 months, 3 weeks ago

<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-policy-configure-container-scope?tabs=azure-portal>

upvoted 1 times

- ✉ **RandomNickname** 7 months, 1 week ago

Agree with C & B

C: Hot due to request in question.

B: See url and extraction from URL;

<https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/lock-resources?tabs=json>

A cannot-delete lock on a storage account doesn't protect account data from deletion or modification. It only protects the storage account from deletion. If a request uses data plane operations, the lock on the storage account doesn't protect blob, queue, table, or file data within that storage account. If the request uses control plane operations, however, the lock protects those resources.

If a request uses File Shares - Delete, for example, which is a control plane operation, the deletion fails. If the request uses Delete Share, which is a data plane operation, the deletion succeeds. We recommend that you use a control plane operation.

A read-only lock on a storage account doesn't prevent its data from deletion or modification. It also doesn't protect its blob, queue, table, or file data.

upvoted 3 times

- ✉ **A\_GEE** 7 months, 2 weeks ago

The second should be Container Access policy

Should use immutable storage for Azure Blob Storage. Time-based retention Policy

<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview>

upvoted 2 times

✉️ **M\_r\_Cloud** 8 months, 3 weeks ago

Both C&C and C&B are suitable for this

upvoted 1 times

✉️ **kJigneshk** 8 months, 2 weeks ago

yes you set the resources lock as read-only and delete prevention but can to for data, that is only for resources change not for in the data.

upvoted 2 times

**HOTSPOT -**

You are designing a data storage solution to support reporting.

The solution will ingest high volumes of data in the JSON format by using Azure Event Hubs. As the data arrives, Event Hubs will write the data to storage. The solution must meet the following requirements:

- ⇒ Organize data in directories by date and time.
- ⇒ Allow stored data to be queried directly, transformed into summarized tables, and then stored in a data warehouse.
- ⇒ Ensure that the data warehouse can store 50 TB of relational data and support between 200 and 300 concurrent read operations.

Which service should you recommend for each type of data store? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Data store for the ingested data:

Azure Blob Storage  
Azure Data Lake Storage Gen2  
Azure Files  
Azure NetApp Files

Data store for the data warehouse:

Azure Cosmos DB Cassandra API  
Azure Cosmos DB SQL API  
Azure SQL Database Hyperscale  
Azure Synapse Analytics dedicated SQL pools

Correct Answer:

**Answer Area**

Data store for the ingested data:

Azure Blob Storage  
Azure Data Lake Storage Gen2  
Azure Files  
Azure NetApp Files

Data store for the data warehouse:

Azure Cosmos DB Cassandra API  
Azure Cosmos DB SQL API  
Azure SQL Database Hyperscale  
Azure Synapse Analytics dedicated SQL pools

Box 1: Azure Data Lake Storage Gen2

Azure Data Explorer integrates with Azure Blob Storage and Azure Data Lake Storage (Gen1 and Gen2), providing fast, cached, and indexed access to data stored in external storage. You can analyze and query data without prior ingestion into Azure Data Explorer. You can also query across ingested and uningested external data simultaneously.

Azure Data Lake Storage is optimized storage for big data analytics workloads.

Use cases: Batch, interactive, streaming analytics and machine learning data such as log files, IoT data, click streams, large datasets

Box 2: Azure SQL Database Hyperscale

Azure SQL Database Hyperscale is optimized for OLTP and high throughput analytics workloads with storage up to 100TB.

A Hyperscale database supports up to 100 TB of data and provides high throughput and performance, as well as rapid scaling to adapt to the workload requirements. Connectivity, query processing, database engine features, etc. work like any other database in Azure SQL Database. Hyperscale is a multi-tiered architecture with caching at multiple levels. Effective IOPS will depend on the workload.

Compare to:

General purpose: 500 IOPS per vCore with 7,000 maximum IOPS

Business critical: 5,000 IOPS with 200,000 maximum IOPS

Incorrect:

\* Azure Synapse Analytics Dedicated SQL pool.

Max database size: 240 TB -

A maximum of 128 concurrent queries will execute and remaining queries will be queued.

Reference:

<https://docs.microsoft.com/en-us/azure/data-explorer/data-lake-query-data> <https://docs.microsoft.com/en-us/azure/azure-sql/database/service-tier-hyperscale> <https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-service-capacity-limits>

✉️ **Snownoodles** Highly Voted 9 months, 3 weeks ago

Azure Synapse Analytics SQL pool only support 128 concurrent queries:

"A maximum of 128 concurrent queries will execute and remaining queries will be queued"

<https://docs.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-service-capacity-limits>

Azure Sql hyperscale have read replica... and supports up to 100TB data size.

So I think the correct answer should be Hyperscale

upvoted 30 times

✉️ **OrangeSG** Highly Voted 6 months, 1 week ago

Box 2 shall be 'Azure SQL Database Hyperscale'

Keyword are 'data warehouse', '50 TB of relational data', '200 and 300 concurrent read'

Azure SQL Database Hyperscale FAQ

<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tier-hyperscale-frequently-asked-questions-faq>

How can I choose between Azure Synapse Analytics and Azure SQL Database Hyperscale?

If you are currently running interactive analytics queries using SQL Server as a data warehouse, Hyperscale is a great option because you can host small and mid-size data warehouses (such as a few TB up to 100 TB) at a lower cost, and you can migrate your SQL Server data warehouse workloads to Hyperscale with minimal T-SQL code changes.

If you are running data analytics on a large scale with complex queries and sustained ingestion rates higher than 100 MB/s, or using Parallel Data Warehouse (PDW), Teradata, or other Massively Parallel Processing (MPP) data warehouses, Azure Synapse Analytics may be the best choice.

upvoted 8 times

✉️ **Bigbluee** Most Recent 2 months, 3 weeks ago

If You dont know what to choose, choose cheapest one or "more cost safe" so IMO, Azure SQL Database Hyperscale is the answer even if Synapse meets requirements.

upvoted 1 times

✉️ **NotMeAnyWay** 3 months, 1 week ago

1. Data store for the ingested data: B. Azure Data Lake Storage Gen2

Azure Data Lake Storage Gen2 is designed for big data analytics workloads and supports organizing data in directories by date and time, as well as hierarchical namespace. It also allows stored data to be queried directly and is well-integrated with Azure Event Hubs.

2. Data store for the data warehouse: C. Azure SQL Database Hyperscale is an alternative option for the data store for the data warehouse. It is a highly scalable service tier for single databases within Azure SQL Database that can auto-scale up to 100 TB. It supports a large number of concurrent connections and offers rapid scaling capabilities.

upvoted 2 times

✉️ **Helice** 3 months, 1 week ago

The second is hyperscale: <https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tier-hyperscale-frequently-asked-questions-faq?view=azuresql#how-can-i-choose-between-azure-synapse-analytics-and-azure-sql-database-hyperscale-> based on Microsoft docs. For this type of scenarios, Hyperscale works

upvoted 1 times

✉️ **Helice** 3 months, 1 week ago

Hyperscale is OLTP not OLAP (Data warehouse). Synapse is a DW

upvoted 1 times

✉️ **zellck** 4 months ago

1. Azure Data Lake Storage Gen2

2. Azure SQL DB Hyperscale

<https://learn.microsoft.com/en-us/azure/storage/blobs/data-lake-storage-introduction>

Azure Data Lake Storage Gen2 is a set of capabilities dedicated to big data analytics, built on Azure Blob Storage.

Data Lake Storage Gen2 converges the capabilities of Azure Data Lake Storage Gen1 with Azure Blob Storage. For example, Data Lake Storage Gen2 provides file system semantics, file-level security, and scale. Because these capabilities are built on Blob storage, you'll also get low-cost, tiered storage, with high availability/disaster recovery capabilities.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tier-hyperscale?view=azuresql#what-are-the-hyperscale-capabilities>  
The Hyperscale service tier in Azure SQL Database provides the following additional capabilities:

- Support for up to 100 TB of database size.

upvoted 3 times

✉ abxc 4 months ago

I think the answer should be Azure Synapse Analytics SQLPool  
bcz: once data is stored in ADLS in directories, data needs to be queried directly and transformed and stored in tables.  
Synapse has that capability. ???

upvoted 1 times

✉ Putra19 4 months, 2 weeks ago

synapse vs hyperscale which is the better answer?  
upvoted 1 times

✉ OPT\_001122 4 months, 2 weeks ago

Box 1: Azure Data Lake Storage Gen2  
Box 2: Azure SQL Database Hyperscale  
upvoted 5 times

✉ Lu5ck 4 months, 3 weeks ago

According to chatgpt,  
Both Azure Data Lake Storage Gen2 and Azure Blob storage can store json but Azure Data Lake Storage Gen2 does a better job at it for this scenario where analytics is involve.

Azure Synapse Analytics dedicated SQL pools is a better answer because the concurrent read limit is not established for Azure SQL Database Hyperscale. Furthermore, Azure Synapse Analytics dedicated SQL pools is optimized to for this purpose. 50TB is below the 100TB limit as well.

Thus the answer is

Azure Data Lake Storage Gen2  
Azure Synapse Analytics dedicated SQL pools  
upvoted 1 times

✉ jecawi9630 4 months, 3 weeks ago

Please stop with your chatgpt answers. It's not as smart as you think when it comes to questions like this. If you ask a follow up question saying "bit isn't this the correct answer" it will immediately say "oh yeah you're right" instead of defending why the answer it chose was correct.

upvoted 6 times

✉ Lu5ck 4 months, 3 weeks ago

Ah, in case you asked. There is a difference between concurrent queries and concurrent session. The scenario require concurrent read aka concurrent query aka concurrent session. The queues will only kick in after the session is filled. Azure Synapse Analytics can do up to 1000 concurrent session and can do rowstore up to 60 TB. It actually fit all requirements at first glance. So I am unsure why nobody make that comparisons and why they think SQL Database Hyperscale is better fit.

upvoted 1 times

✉ Lu5ck 4 months, 3 weeks ago

I forgot to add that Azure Stream Analytics is also in preview state for Event Hub to Azure SQL Database. So yea, I think Azure Synapse Analytics is the better answer.  
upvoted 1 times

✉ Lu5ck 4 months, 3 weeks ago

I am sorry, I copied the wrong explanation. The reality is both solutions are viable at first glance but there is indeed a key difference. The solution must ingest the data DIRECTLY. We cannot ingest the data and transform it directly into Azure SQL Database, that will require the use of a medium like Azure Stream Analytics. However, we can indeed do it directly with Azure Synapse Analytics.

upvoted 2 times

✉ np2021 4 months, 1 week ago

I agree chatgpt answers need to stop. It is not as smart, or comprehensive at researching a relevant answer as people make out.  
upvoted 3 times

✉ infimagine 7 months, 2 weeks ago

why not comes DB SQL API?  
upvoted 5 times

✉ jp\_mcgee 7 months, 2 weeks ago

WRONG!!  
Box 2 only has one option which is a data warehouse that can read unstructured data like JSON....Synapse is a data warehouse that can read JSON.  
upvoted 1 times

✉ FabrityDev 5 months, 2 weeks ago

You kinda miss the point. Read carefully:

"Allow stored data to be queried directly, transformed into summarized tables, and then stored in a data warehouse."

It basically means that the first solution should read JSON data and transform it into tables. The second solution is a data warehouse which is supposed to store already transformed data in table format. Therefore SQL is an optimal solution.

upvoted 2 times

✉  **jp\_mcgee** 7 months, 2 weeks ago

Correction, SQL Server can also process JSON:

<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-load-from-azure-data-lake-store#create-the-copy-statement>

upvoted 1 times

✉  **azuredemo2022three** 7 months, 2 weeks ago

The given answer is correct

upvoted 3 times

✉  **Akandeopo** 9 months, 3 weeks ago

I think B should be Azure Synapse Analytics SQL pool and not SQL Database Hyperscale

upvoted 7 times

You have an app named App1 that uses an on-premises Microsoft SQL Server database named DB1.

You plan to migrate DB1 to an Azure SQL managed instance.

You need to enable customer managed Transparent Data Encryption (TDE) for the instance. The solution must maximize encryption strength.

Which type of encryption algorithm and key length should you use for the TDE protector?

- A. RSA 3072
- B. AES 256
- C. RSA 4096
- D. RSA 2048

**Correct Answer: A**

*Community vote distribution*

A (83%)      B (17%)

✉️  **NotMeAnyway**  3 months, 1 week ago

**Selected Answer: A**

A. RSA 3072

RSA 3072 provides a higher level of encryption strength compared to RSA 2048. While RSA 4096 offers even stronger encryption, it is not supported by Azure SQL Database and Azure SQL Managed Instance for TDE protectors.

By choosing RSA 3072 for the TDE protector, you ensure strong encryption for your Azure SQL Managed Instance while complying with the platform's requirements. This will help protect sensitive data and maintain compliance with relevant security standards and regulations.

upvoted 5 times

✉️  **sw1000**  4 weeks, 1 day ago

**Selected Answer: A**

There are a lot of confusing elements in this question.

At first it mentions on-premise SQL Server, which would allow AES or RSA ...

However, the system is to be migrated over to Azure.

And here the requirements for customer managed TDE are pretty clear and are listed here:

<https://learn.microsoft.com/en-us/azure/azure-sql/database/transparent-data-encryption-byok-overview?view=azuresql#requirements-for-configuring-tde-protector>

AES can be enabled as an additional Infrastructure encryption to have two layers, but that was not the question here.

upvoted 1 times

✉️  **wdjonz** 1 month, 2 weeks ago

The Answer is A and here is why...

Per <https://learn.microsoft.com/en-us/azure/azure-sql/database/transparent-data-encryption-tde-overview?view=azuresql&tabs=azure-portal>,

if the TDE uses the system managed key, it uses a built in certificate for encryption, hence AES 256

if the TDE uses a customer managed key, then it uses an asymmetric RSA key at 2048 or 3072

And since the question says TDE is using the customer managed key... the answer is A Viola!

upvoted 1 times

✉️  **Tr619899** 1 month, 2 weeks ago

<https://learn.microsoft.com/en-us/azure/azure-sql/database/transparent-data-encryption-byok-overview?view=azuresql&source=recommendations&tab=azuresql#requirements-for-configuring-tde-protector>

A. 3072

upvoted 2 times

✉️  **zellck** 4 months, 1 week ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/transparent-data-encryption-byok-overview?view=azuresql&source=recommendations&tab=azuresql#requirements-for-configuring-tde-protector>

TDE protector can only be an asymmetric, RSA, or RSA HSM key. The supported key lengths are 2048 bytes and 3072 bytes.

upvoted 4 times

✉ **dagomo** 4 months, 3 weeks ago

**Selected Answer: A**

<https://learn.microsoft.com/en-us/azure/azure-sql/database/transparent-data-encryption-byok-overview?view=azuresql#requirements-for-configuring-tde-protector>

upvoted 4 times

✉ **VBK8579** 4 months, 3 weeks ago

**Selected Answer: A**

Answer A because Azure SQL Database and Azure Synapse Analytics support RSA 3072-bit key length for customer managed TDE with Bring Your Own Key (BYOK) configurations

upvoted 2 times

✉ **bigz2021** 4 months, 3 weeks ago

A. RSA 3072

(TDE protector can only be an asymmetric, RSA, or RSA HSM key. The supported key lengths are 2048 bytes and 3072 bytes.)

upvoted 3 times

✉ **OPT\_001122** 5 months ago

**Selected Answer: A**

A. RSA 3072

upvoted 3 times

✉ **OPT\_001122** 5 months ago

A. RSA 3072

upvoted 2 times

✉ **Liveroso** 5 months ago

**Selected Answer: B**

The answer is AES 256

Transparent Data Encryption (TDE) in Azure SQL Managed Instance uses the Advanced Encryption Standard (AES) algorithm to encrypt the data stored in the database and its backups. The AES algorithm is a symmetric encryption algorithm and it supports key lengths of 128, 192, and 256 bits. Among these, AES 256 provides the highest encryption strength and is considered the most secure option for TDE. Therefore, you should use AES 256 for the TDE protector.

Check MS docs: <https://learn.microsoft.com/en-us/azure/azure-sql/database/transparent-data-encryption-tde-overview?view=azuresql&tabs=azure-portal>

upvoted 3 times

✉ **study\_for\_azure** 4 months, 2 weeks ago

Per following contents in

<https://learn.microsoft.com/en-us/azure/azure-sql/database/transparent-data-encryption-byok-overview?view=azuresql#requirements-for-configuring-tde-protector>

To provide Azure SQL customers with two layers of encryption of data at rest, infrastructure encryption (using AES-256 encryption algorithm) with platform managed keys is being rolled out. This provides an addition layer of encryption at rest along with TDE with customer-managed keys, which is already available.

ASE is platform managed key, this question is asking for customer managed keys, for now only RSA is qualified.

upvoted 5 times

✉ **armpro** 5 months ago

**Selected Answer: A**

Only RSA 3072 and RSA 2048 are supported for TDE protector

maximum encryption possible is RSA 3072

<https://learn.microsoft.com/en-us/azure/azure-sql/database/transparent-data-encryption-byok-overview?view=azuresql#requirements-for-configuring-tde-protector>

upvoted 1 times

✉ **Liveroso** 5 months ago

The information provided is not accurate. Transparent Data Encryption (TDE) in Azure SQL Managed Instance uses the Advanced Encryption Standard (AES) algorithm to encrypt the data stored in the database and its backups. AES algorithm is a symmetric encryption algorithm, it supports key lengths of 128, 192, and 256 bits. Among these, AES 256 provides the highest encryption strength and is considered the most secure option for TDE.

RSA is not used for TDE. RSA is an asymmetric encryption algorithm, it is used in many different encryption scenarios, not just for TDE. Therefore, you should use AES 256 for the TDE protector.

upvoted 1 times

✉ **RandomNickname** 5 months, 2 weeks ago

From what I can find, I agree with A, RSA 3072 maximum encryption.

AES256 for built-in cert.

As per below URL, with SQL MI customer managed key

<https://learn.microsoft.com/en-us/azure/azure-sql/database/transparent-data-encryption-byok-overview?view=azuresql>

It's not RSA4096 since that's for storage encryption as per below;  
<https://learn.microsoft.com/en-us/azure/storage/common/customer-managed-keys-overview>  
&  
<https://learn.microsoft.com/en-us/azure/data-factory/enable-customer-managed-key>  
&  
<https://learn.microsoft.com/en-us/azure/virtual-machines/disk-encryption>

upvoted 2 times

 **mVic** 5 months, 3 weeks ago

**Selected Answer: A**

agree with A

upvoted 3 times

 **[Removed]** 5 months, 3 weeks ago

**Selected Answer: B**

AES 256

upvoted 2 times

 **maku067** 5 months, 3 weeks ago

AES 256 + RSA 4096 rather.

upvoted 1 times

 **maku067** 5 months, 3 weeks ago

only RSA3072

upvoted 1 times

 **jage01** 5 months, 3 weeks ago

**Selected Answer: A**

Requirements for configuring TDE protector

TDE protector can only be an asymmetric, RSA, or RSA HSM key. The supported key lengths are 2048 bytes and 3072 bytes.

<https://learn.microsoft.com/en-us/azure/sql-database/transparent-data-encryption-byok-overview?view=azuresql>

upvoted 3 times

You are planning an Azure IoT Hub solution that will include 50,000 IoT devices.

Each device will stream data, including temperature, device ID, and time data. Approximately 50,000 records will be written every second. The data will be visualized in near real time.

You need to recommend a service to store and query the data.

Which two services can you recommend? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. Azure Table Storage
- B. Azure Event Grid
- C. Azure Cosmos DB for NoSQL
- D. Azure Time Series Insights

**Correct Answer: CD**

*Community vote distribution*

CD (100%)

✉  **rgargar78**  5 months, 2 weeks ago

A. Azure Table Storage -> Throughput: scalability limit of 20,000 operations/s. -> Not enough for this question  
B. Azure Event Grid -> It is only a broker, not a storage solution  
Therefore, C and D are right

Refs:

<https://learn.microsoft.com/en-us/azure/cosmos-db/table/>  
<https://learn.microsoft.com/en-us/azure/event-grid/overview>  
upvoted 8 times

✉  **Sammy1989**  5 months, 3 weeks ago

Cleared the exam on 01/05/23 with 871 / 1000. Chose CD. There is a similar question on ET where the option was SQL DB API  
upvoted 8 times

✉  **OPT\_001122** 5 months ago

Thanks for mentioning the exam date  
upvoted 1 times

✉  **NagaByrd**  2 months, 2 weeks ago

**Selected Answer: CD**  
Same as Question #9  
upvoted 2 times

✉  **NotMeAnyWay** 3 months, 1 week ago

**Selected Answer: CD**  
C. Azure Cosmos DB for NoSQL  
D. Azure Time Series Insights

Both Azure Cosmos DB and Azure Time Series Insights are suitable services for storing and querying the data in this scenario.

C. Azure Cosmos DB for NoSQL is a globally distributed, multi-model database service that can handle large amounts of data with low-latency and high throughput. Its support for various consistency levels and partitioning strategies makes it suitable for handling IoT data at scale.

D. Azure Time Series Insights is a fully managed, real-time analytics service specifically designed for time-series data generated by IoT devices. It provides storage, visualization, and advanced querying capabilities for time-series data, making it an ideal choice for handling data from a large number of IoT devices and visualizing it in near real-time.

upvoted 4 times

✉  **NotMeAnyWay** 3 months, 1 week ago

**Selected Answer: CD**  
C. Azure Cosmos DB for NoSQL  
D. Azure Time Series Insights

Both Azure Cosmos DB and Azure Time Series Insights are suitable services for storing and querying the data in this scenario.

C. Azure Cosmos DB is a globally distributed, multi-model database service that can handle large amounts of data with low-latency and high throughput. Its support for various consistency levels and partitioning strategies makes it suitable for handling IoT data at scale.

D. Azure Time Series Insights is a fully managed, real-time analytics service specifically designed for time-series data generated by IoT devices. It provides storage, visualization, and advanced querying capabilities for time-series data, making it an ideal choice for handling data from a large number of IoT devices and visualizing it in near real-time.

upvoted 1 times

 **zellick** 4 months ago

**Selected Answer: CD**

CD is the answer.

<https://learn.microsoft.com/en-us/azure/architecture/solution-ideas/articles/iot-using-cosmos-db>

Azure Cosmos DB is ideal for IoT workloads because it's capable of:

- Ingesting device telemetry data at high rates, and return indexed queries with low latency and high availability.
- Storing JSON format from different device vendors, which provides flexibility in payload schema.
- By using wire protocol-compatible API endpoints for Cassandra, MongoDB, SQL, Gremlin, etcd, and table databases, and built-in support for Jupyter Notebook files.

upvoted 3 times

 **zellick** 4 months ago

<https://learn.microsoft.com/en-us/azure/time-series-insights/overview-what-is-tsi>

Azure Time Series Insights Gen2 is an open and scalable end-to-end IoT analytics service featuring best-in-class user experiences and rich APIs to integrate its powerful capabilities into your existing workflow or application.

You can use it to collect, process, store, query and visualize data at Internet of Things (IoT) scale--data that's highly contextualized and optimized for time series.

Azure Time Series Insights Gen2 is designed for ad hoc data exploration and operational analysis allowing you to uncover hidden trends, spotting anomalies, and conduct root-cause analysis. It's an open and flexible offering that meets the broad needs of industrial IoT deployments.

upvoted 2 times

 **OPT\_001122** 5 months ago

**Selected Answer: CD**

C. Azure Cosmos DB for NoSQL

D. Azure Time Series Insights

upvoted 2 times

 **tfulanchan** 5 months ago

MongoDB...

upvoted 1 times

 **Beng\_ali** 5 months, 1 week ago

**Selected Answer: CD**

CD is correct.

upvoted 2 times

 **Liveroso** 5 months ago

C. Azure Cosmos DB for NoSQL

D. Azure Time Series Insights

Azure Cosmos DB is a globally distributed, multi-model database service that can be used to store and query large amounts of data with low latency. Cosmos DB supports various data models, including NoSQL, and is designed for high throughput and low latency. It can be used to store the data from the IoT devices and can handle the high write and read throughput required for the solution.

Azure Time Series Insights is a time-series data platform that is designed for analyzing time-stamped data. It can be used to visualize the data from the IoT devices in near real-time, providing a way to monitor and analyze the device data in real-time. It also has built-in support for IoT data, making it a good choice for this scenario.

upvoted 2 times

 **maku067** 5 months, 3 weeks ago

**Selected Answer: CD**

Seems correct.

upvoted 4 times

 **jage01** 5 months, 3 weeks ago

**Selected Answer: CD**

CD

Real-time access with fast read and write latencies globally, and throughput and consistency all backed by SLAs

<https://learn.microsoft.com/en-us/azure/cosmos-db/introduction>

Azure Time Series Insights is a fully managed analytics, storage, and visualization service that makes it simple to explore and analyze billions of IoT events simultaneously.

<https://learn.microsoft.com/en-us/azure/time-series-insights/time-series-insights-explorer>

upvoted 3 times

**HOTSPOT**

You are planning an Azure Storage solution for sensitive data. The data will be accessed daily. The dataset is less than 10 GB.

You need to recommend a storage solution that meets the following requirements:

- All the data written to storage must be retained for five years.
- Once the data is written, the data can only be read. Modifications and deletion must be prevented.
- After five years, the data can be deleted, but never modified.
- Data access charges must be minimized.

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

NOTE: Each correct selection is worth one point.

**Answer Area**

Storage account type:

Premium block blobs
General purpose v2 with Cool access tier for blobs
General purpose v2 with Hot access tier for blobs

Configuration to prevent modifications and deletions:

Container access level
Container access policy
Storage account resource lock

**Answer Area**

Storage account type:

Premium block blobs
General purpose v2 with Cool access tier for blobs
General purpose v2 with Hot access tier for blobs

Correct Answer:

Configuration to prevent modifications and deletions:

Container access level
Container access policy
Storage account resource lock

IRISone Highly Voted 5 months, 1 week ago

1. correct
2. Should be Container Policy for immutable storage. A resource lock does not prevent removal of files and folders. Prevents deleting resource inside the resource group

upvoted 39 times

OPT\_001122 Highly Voted 5 months ago

- 1 is correct
- 2 - Container access policy

upvoted 14 times

NagaByrd Most Recent 2 months, 2 weeks ago

Same as Question #17

1. GPv2 with hot access tier for blobs
2. Container access policy

upvoted 4 times

NotMeAnyWay 3 months, 1 week ago

1. Storage account type:
- C. General purpose v2 with hot access tier for blobs

The hot access tier provides lower data access costs compared to the cool access tier, making it more suitable for minimizing charges when data is accessed daily. Although the cool tier has lower storage costs, the data access charges are higher, which would not be ideal for your scenario. Premium block blobs are meant for high-performance scenarios and are not necessary for a small dataset of less than 10 GB.

2. Configuration to prevent modifications and deletions:

B. Container access policy

You can create a container access policy with specific permissions (in this case, read-only) and set an expiry time of five years. This policy prevents modifications and deletions, while still allowing the data to be read. After five years, the policy will expire, and the data can be deleted but not modified. Storage account resource locks and container access level settings don't offer the same granularity of control over the data as the container access policy.

upvoted 4 times

✉ **Rams\_84z06n** 4 months ago

1. Premium block blobs

2. Container Policy

<https://azure.microsoft.com/en-us/pricing/details/storage/blobs/>

Operations and data transfer

upvoted 2 times

✉ **AzureMasterChamp** 3 months ago

This is correct answer!!!

<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview>

upvoted 1 times

✉ **Rams\_84z06n** 4 months ago

premium block blob, container access policy

We only need to minimize access charge, not storage cost.

<https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-block-blob-premium>

In other words, to access same amount of data within a given time - 500 million reads /second. That is much faster than GPv2 hot tier milisecond access time

upvoted 1 times

✉ **zellick** 4 months, 1 week ago

1. GPv2 with hot access tier for blobs

2. Container access policy

<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview>

Immutable storage for Azure Blob Storage enables users to store business-critical data in a WORM (Write Once, Read Many) state. While in a WORM state, data cannot be modified or deleted for a user-specified interval. By configuring immutability policies for blob data, you can protect your data from overwrites and deletes.

upvoted 2 times

✉ **Amrx** 4 months, 1 week ago

For Data Storage and Access, Premium will be the cheapest. <https://azure.microsoft.com/en-us/pricing/details/storage/blobs/>

upvoted 1 times

✉ **PatFFM** 4 months, 2 weeks ago

The second answer is wrong. A resource lock does exactly what the name suggests - it locks the resource itself. To prevent modification of the files, a container access policy is needed.

upvoted 1 times

✉ **ed79** 4 months, 3 weeks ago

Why not Premium block blobs and the storage amount is small. Access charges are cheapest in the scenario

upvoted 1 times

✉ **CallmeZdzisiek** 4 months, 3 weeks ago

Imho - GPV2 will be cheaper than Premium Block Blobs. You can check with Azure pricing calculator.

upvoted 1 times

✉ **ed79** 4 months, 3 weeks ago

Check it out Premium is cheaper for data access

<https://azure.microsoft.com/en-us/pricing/details/storage/blobs/?cdn=disable>

upvoted 1 times

✉ **LeeVee** 5 months ago

GPv2 and Container Policy

upvoted 5 times

**HOTSPOT**

You are designing a data analytics solution that will use Azure Synapse and Azure Data Lake Storage Gen2.

You need to recommend Azure Synapse pools to meet the following requirements:

- Ingest data from Data Lake Storage into hash-distributed tables.
- Implement query, and update data in Delta Lake.

What should you recommend for each requirement? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

**Answer Area**

Ingest data from Data Lake Storage into hash-distributed tables:

- A dedicated SQL pool
- A serverless Apache Spark pool
- A serverless SQL pool

Implement, query, and update data in Delta Lake:

- A dedicated SQL pool
- A serverless Apache Spark pool
- A serverless SQL pool

**Answer Area**

Ingest data from Data Lake Storage into hash-distributed tables:

- A dedicated SQL pool
- A serverless Apache Spark pool
- A serverless SQL pool

**Correct Answer:**

Implement, query, and update data in Delta Lake:

- A dedicated SQL pool
- A serverless Apache Spark pool
- A serverless SQL pool

  **Liveroso** Highly Voted 5 months ago

The answer is correct.

Azure Synapse Analytics (also named SQL Data Warehouse) is a cloud-based analytics service that allows you to analyze large amounts of data using a combination of on-demand and provisioned resources. It offers several different options for working with data, including:

- Dedicated SQL pool: It's best for big and complex tasks.
- Serverless Apache Spark pool: It's best for big data analysis and machine learning tasks using Spark SQL and Spark DataFrames.
- Serverless SQL pool: This is a service that automatically adjusts the amount of resources you use based on your needs. You only pay for what you use. It's best for small to medium-sized tasks and tasks that change often.

upvoted 15 times

  **saiyandjinn** Highly Voted 4 months, 3 weeks ago

The second question is confusing, and I am not sure what the answer is

- Can query delta lake with Serverless SQL pool but won't be able to update it.
- Only Apache Spark pools support updates to Delta Lakes files. It can also be used to query long-time series as well if I understand the doc correctly...

I think the answer to 2 is Apache Spark tools on that basis...

upvoted 12 times

  **RandomNickname** 4 months, 2 weeks ago

Agree.

From what I can find SQL pool can't update delta lake files only Apache Spark can do that, assuming article is accurate below;

<https://www.jamesserra.com/archive/2022/03/azure-synapse-and-delta-lake/#:~:text=Serverless%20SQL%20pools%20do%20not%20support%20updating%20delta,in%20Azure%20Synapse%20Analytics%20to%20update%20Delta%20Lake>.

upvoted 1 times

✉ **Tr619899** Most Recent 1 month, 2 weeks ago

To meet the requirements of ingesting data from Data Lake Storage into hash-distributed tables and implementing query and update operations in Delta Lake, the recommended Azure Synapse pool options are as follows:

Ingest Data from Data Lake Storage into Hash-Distributable Tables:

A dedicated SQL pool: This option allows you to leverage the power of the dedicated SQL pool (formerly SQL Data Warehouse) in Azure Synapse to perform high-performance ingest operations into hash-distributed tables. The dedicated SQL pool is optimized for large-scale data warehousing scenarios.

Implement Query and Update Data in Delta Lake:

A serverless Apache Spark pool: This option allows you to use Apache Spark as a serverless processing engine within Azure Synapse. Spark provides robust support for querying and updating data in Delta Lake, which is an open-source storage layer for reliable big data processing.

upvoted 1 times

✉ **Bigbluee** 2 months, 3 weeks ago

From the Delta Lake:

"Delta Lake is fully compatible with Apache Spark APIs, and was developed for tight integration with Structured Streaming, allowing you to easily use a single copy of data for both batch and streaming operations and providing incremental processing at scale."

So Delta Lake points to Apache Spark. In this case 2nd is Apache Spark Pool

upvoted 1 times

✉ **NotMeAnyway** 3 months, 1 week ago

1. Ingest data from Data Lake Storage into hash-distributed tables:

A. A dedicated SQL pool

A dedicated SQL pool in Azure Synapse provides the ability to create hash-distributed tables, which help distribute data evenly across multiple nodes and improve query performance. This option is well-suited for ingesting data from Data Lake Storage into hash-distributed tables.

2. Implement query, and update data in Delta Lake:

B. A serverless Apache Spark pool

A serverless Apache Spark pool in Azure Synapse allows you to run Apache Spark jobs on-demand without having to manage the underlying infrastructure. This option is ideal for working with Delta Lake, as it provides native support for querying and updating data stored in Delta Lake format.

upvoted 3 times

✉ **Helice** 3 months, 1 week ago

Second looks to be Apache spark pools as Serverless pool cannot update delta.

<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/resources-self-help-sql-on-demand?tabs=x80070002#delta-lake>

upvoted 2 times

✉ **betterthanlife** 1 month, 2 weeks ago

Says it plain as do (what a shock!)

"Serverless SQL pools don't support updating Delta Lake files. You can use serverless SQL pool to query the latest version of Delta Lake. Use Apache Spark pools in Synapse Analytics to update Delta Lake."

upvoted 1 times

✉ **SD\_Coordinator** 3 months, 2 weeks ago

For each requirement, I recommend the following Azure Synapse pools:

Ingest data from Data Lake Storage into hash-distributed tables: Use a "Dedicated SQL Pool" (formerly known as Azure Synapse Analytics SQL Data Warehouse). This pool provides the necessary performance and scaling capabilities to handle large-scale data ingestion and transformation. It also supports hash-distributed tables for better performance and query parallelism.

Implement query and update data in Delta Lake: Use a "Serverless Apache Spark Pool". Apache Spark provides native support for Delta Lake, allowing you to query and update data efficiently. The serverless pool allows you to only pay for the resources you consume during job execution, offering cost efficiency for varying workloads.

upvoted 3 times

✉ **latia6** 4 months ago

1- Dedicated SQL pools

2- Serverless spark pools

<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/resources-self-help-sql-on-demand?tabs=x80070002#delta-lake>

"Serverless SQL pools don't support updating Delta Lake files. You can use serverless SQL pool to query the latest version of Delta Lake. Use Apache Spark pools in Synapse Analytics to update Delta Lake."

Sql serverless cannot update (using MERGE) delta tables

upvoted 2 times

zellck 4 months ago

1. Dedicated SQL pool
2. Serverless SQL pool

<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-tables-distribute>

<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/on-demand-workspace-overview>

Every Azure Synapse Analytics workspace comes with serverless SQL pool endpoints that you can use to query data in the Azure Data Lake (Parquet, Delta Lake, delimited text formats), Azure Cosmos DB, or Dataverse.

Serverless SQL pool is a distributed data processing system, built for large-scale data and computational functions. Serverless SQL pool enables you to analyze your Big Data in seconds to minutes, depending on the workload. Thanks to built-in query execution fault-tolerance, the system provides high reliability and success rates even for long-running queries involving large data sets.

Serverless SQL pool is serverless, hence there's no infrastructure to setup or clusters to maintain. A default endpoint for this service is provided within every Azure Synapse workspace, so you can start querying data as soon as the workspace is created.

upvoted 2 times

fahrulnizam 1 month ago

2. A Serverless Apache Spark pool

<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/resources-self-help-sql-on-demand?tabs=x80070002#delta-lake>

"Serverless SQL pools don't support updating Delta Lake files. You can use serverless SQL pool to query the latest version of Delta Lake. Use Apache Spark pools in Synapse Analytics to update Delta Lake."

upvoted 1 times

4PHL 4 months, 2 weeks ago

Answers are correct.

- Dedicated SQL pool (To shard data into a hash-distributed table, dedicated SQL pool uses a hash function to deterministically assign each row to one distribution).
- Serverless (Serverless SQL pool allows you to query your data lake files, while dedicated SQL pool allows you to query and ingest data from your data lake files).

See <https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/overview-architecture>

upvoted 1 times

fahrulnizam 1 month ago

2. A Serverless Apache Spark pool

<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/resources-self-help-sql-on-demand?tabs=x80070002#delta-lake>

"Serverless SQL pools don't support updating Delta Lake files. You can use serverless SQL pool to query the latest version of Delta Lake. Use Apache Spark pools in Synapse Analytics to update Delta Lake."

upvoted 1 times

np2021 4 months, 1 week ago

The difference is the "update" delta lake requirement - serverless wont do that. So your assertion doesn't seem right? See robmac17.

upvoted 2 times

Putra19 4 months, 2 weeks ago

why not apache spark?

upvoted 1 times

JBorne 4 months, 2 weeks ago

Second Question refers to Delta lake and Serverless can't update delta lake - <https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/resources-self-help-sql-on-demand?tabs=x80070002#delta-lake>

upvoted 3 times

ed79 4 months, 3 weeks ago

Box 2 says Delta Lake which is specific to Spark. This would be Spark

upvoted 3 times

robmac17 4 months, 3 weeks ago

Serverless SQL pools do not support updating delta lake files. Use Azure Databricks or Apache Spark pools in Azure Synapse Analytics to update Delta Lake.

upvoted 3 times

KPVP 5 months ago

Serverless SQL pool allows you to query your data lake files, while dedicated SQL pool allows you to query and ingest data from your data lake files.

upvoted 2 times

yeanlingmedal71 5 months ago

Box1: Dedicated  
Box2: Serverless

Every Azure Synapse Analytics workspace comes with serverless SQL pool endpoints that you can use to query data in the Azure Data Lake (Parquet, Delta Lake, delimited text formats), Azure Cosmos DB, or Dataverse.

Serverless SQL pool is a query service over the data in your data lake.

Serverless SQL pool enables you to analyze your Big Data in seconds to minutes, depending on the workload. Thanks to built-in query execution fault-tolerance, the system provides high reliability and success rates even for long-running queries involving large data sets.

<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/on-demand-workspace-overview>

<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-overview-what-is?context=%2Fazure%2Fsynapse-analytics%2Fcontext%2Fcontext>

upvoted 1 times

✉️ **Asten** 5 months, 1 week ago

Serverless SQL pool can be used to query data in Azure data Lake.

<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/on-demand-workspace-overview>

upvoted 2 times

✉️ **fahrulnizam** 1 month ago

can be used to query but cannot update..

so anwer for

2. A Serverless Apache Spark pool

<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql/resources-self-help-sql-on-demand?tabs=x80070002#delta-lake>  
"Serverless SQL pools don't support updating Delta Lake files. You can use serverless SQL pool to query the latest version of Delta Lake. Use Apache Spark pools in Synapse Analytics to update Delta Lake."

upvoted 1 times

✉️ **Asten** 5 months, 1 week ago

Given answer ist correct.

Dedicated SQL pool refers to the data warehousing features that are available in Azure Synapse Analytics. ASA is the data analytics service for data warehousing and big data.<https://learn.microsoft.com/en-us/azure/synapse-analytics/sql-data-warehouse/sql-data-warehouse-overview-what-is>

upvoted 1 times

You have an on-premises storage solution.

You need to migrate the solution to Azure. The solution must support Hadoop Distributed File System (HDFS).

What should you use?

- A. Azure Data Lake Storage Gen2
- B. Azure NetApp Files
- C. Azure Data Share
- D. Azure Table storage

**Correct Answer: A**

*Community vote distribution*

A (100%)

 [Removed]  5 months, 1 week ago

**Selected Answer: A**  
Azure Data Lake Storage Gen2: This is a fully managed, cloud-native data lake that supports the HDFS protocol. It allows you to store and analyze large amounts of data in its native format, without the need to move or transform the data.

upvoted 5 times

 NotMeAnyway  3 months, 1 week ago

**Selected Answer: A**  
A. Azure Data Lake Storage Gen2

Azure Data Lake Storage Gen2 is the best choice for migrating your on-premises storage solution to Azure with support for Hadoop Distributed File System (HDFS). It is a highly scalable and cost-effective storage service designed for big data analytics, providing integration with Azure HDInsight, Azure Databricks, and other Azure services. It is built on Azure Blob Storage and combines the advantages of HDFS with Blob Storage, offering a hierarchical file system, fine-grained security, and high-performance analytics.

upvoted 2 times

 zellick 4 months, 1 week ago

**Selected Answer: A**  
A is the answer.

<https://learn.microsoft.com/en-us/azure/storage/blobs/data-lake-storage-introduction#key-features-of-data-lake-storage-gen2>  
Hadoop compatible access: Data Lake Storage Gen2 allows you to manage and access data just as you would with a Hadoop Distributed File System (HDFS). The new ABFS driver (used to access data) is available within all Apache Hadoop environments. These environments include Azure HDInsight, Azure Databricks, and Azure Synapse Analytics.

upvoted 3 times

 RandomNickname 4 months, 3 weeks ago

**Selected Answer: A**  
Correct

<https://learn.microsoft.com/en-us/azure/architecture/guide/hadoop/apache-hdfs-migration>  
upvoted 3 times

 OPT\_001122 5 months ago

**Selected Answer: A**  
A. Azure Data Lake Storage Gen2  
upvoted 1 times

 OPT\_001122 4 months, 3 weeks ago  
remember HDFS  
upvoted 2 times

 armpro 5 months ago

**Selected Answer: A**  
Azure Data Lake Gen 2  
upvoted 2 times

 **francescoc** 5 months, 1 week ago

Data Lake Storage Gen2 allows you to manage and access data just as you would with a Hadoop Distributed File System (HDFS)  
<https://learn.microsoft.com/en-us/azure/storage/blobs/data-lake-storage-introduction>

upvoted 2 times

**DRAG DROP**

You have an on-premises app named App1.

Customers use App1 to manage digital images.

You plan to migrate App1 to Azure.

You need to recommend a data storage solution for App1. The solution must meet the following image storage requirements:

- Encrypt images at rest.
- Allow files up to 50 MB.
- Manage access to the images by using Azure Web Application Firewall (WAF) on Azure Front Door.

The solution must meet the following customer account requirements:

- Support automatic scale out of the storage.
- Maintain the availability of App1 if a datacenter fails.
- Support reading and writing data from multiple Azure regions.

Which service should you include in the recommendation for each type of data? To answer, drag the appropriate services to the correct type of data. Each service may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct answer is worth one point.

<b>Services</b>	<b>Answer Area</b>
Azure Blob storage	Image storage: <input type="text"/>
Azure Cosmos DB	Customer accounts: <input type="text"/>
Azure SQL Database	
Azure Table storage	

<b>Answer Area</b>	
Correct Answer:	Image storage: <input type="text" value="Azure Blob storage"/>
	Customer accounts: <input type="text" value="Azure Cosmos DB"/>

  **zellick** Highly Voted 4 months ago

1. Azure Blob storage
2. Azure Cosmos DB

<https://learn.microsoft.com/en-us/azure/frontdoor/scenario-storage-blobs>

Azure Front Door accelerates the delivery of static content from Azure Storage blobs, and enables a secure and scalable architecture. Static content delivery is useful for many different use cases, including website hosting and file delivery

<https://learn.microsoft.com/en-us/azure/cosmos-db/introduction#guaranteed-speed-at-any-scale>

- Multi-region writes and data distribution to any Azure region with just a button

upvoted 5 times

  **rex303** Most Recent 2 months, 3 weeks ago

Box 1 - Azure blob storage

The requirement to be accessible through a WAF limit the options to the Blob storage.

Box 2 - Cosmos DB

Concurrent writes from multiple regions make this the only option.

upvoted 4 times

 **NotMeAnyWay** 3 months, 1 week ago

Box 1 - Image storage: A. Azure Blob Storage

Azure Blob Storage is a suitable choice for storing digital images, as it supports encryption at rest, handles large file sizes (up to 50 MB or even larger), and can be used in conjunction with Azure Web Application Firewall (WAF) on Azure Front Door.

Box 2 - Customer accounts: B. Azure Cosmos DB

Azure Cosmos DB is a highly scalable, globally distributed, multi-model database service that supports automatic scale-out, ensures high availability even in the event of a datacenter failure, and allows for reading and writing data from multiple Azure regions. This makes it an ideal choice for storing customer account data in your scenario.

upvoted 4 times

 **SH\_22** 4 months ago

correct

upvoted 2 times

You are designing an application that will aggregate content for users.

You need to recommend a database solution for the application. The solution must meet the following requirements:

- Support SQL commands.
- Support multi-master writes.
- Guarantee low latency read operations.

What should you include in the recommendation?

- A. Azure Cosmos DB for NoSQL
- B. Azure SQL Database that uses active geo-replication
- C. Azure SQL Database Hyperscale
- D. Azure Cosmos DB for PostgreSQL

**Correct Answer: A**

*Community vote distribution*

A (100%)

✉️  **NotMeAnyWay** 3 months, 1 week ago

**Selected Answer: A**

2 / 2

A. Azure Cosmos DB for NoSQL

Azure Cosmos DB is a globally distributed, multi-model database service that supports SQL commands, multi-master writes, and guarantees low latency read operations. It supports a variety of NoSQL data models including document, key-value, graph, and column-family. Azure Cosmos DB provides automatic and instant scalability, high availability, and low latency globally by replicating and synchronizing data across multiple Azure regions.

On the other hand, Azure SQL Database and Azure SQL Database Hyperscale are traditional relational database services that do not natively support multi-master writes.

upvoted 3 times

✉️  **zellck** 4 months, 1 week ago

Same as Question 10.

<https://www.examtopics.com/discussions/microsoft/view/67751-exam-az-305-topic-2-question-10-discussion>

upvoted 4 times

✉️  **Debosree** 3 months ago

nope . Here it is Cosmos DB for NoSQL earlier question had right option Azure Cosmos DB for SQL API.

upvoted 4 times

✉️  **zellck** 4 months, 1 week ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/cosmos-db/introduction#key-benefits>

- Gain unparalleled SLA-backed speed and throughput, fast global access, and instant elasticity. Real-time access with fast read and write latencies globally, and throughput and consistency all backed by SLAs
- Multi-region writes and data distribution to any Azure region with just a button.

upvoted 3 times

✉️  **Alessandro365** 4 months, 1 week ago

**Selected Answer: A**

correct answer

upvoted 1 times

✉️  **Cooffrenesie** 4 months, 1 week ago

**Selected Answer: A**

cosmos for the multi writer  
postgre is not good at reading

upvoted 4 times

✉  **Debosree** 3 months ago

No SQL supports SQLquery ?

upvoted 2 times

✉  **jozir8** 2 months, 1 week ago

Yes, it does.

<https://learn.microsoft.com/en-us/azure/cosmos-db/nosql/how-to-dotnet-query-items>

- The Azure Cosmos DB for NoSQL supports the use of Structured Query Language (SQL) to perform queries on items in containers.

upvoted 2 times

✉  **GS300** 2 months ago

microsoft is weird

upvoted 1 times

You plan to migrate on-premises MySQL databases to Azure Database for MySQL Flexible Server.

You need to recommend a solution for the Azure Database for MySQL Flexible Server configuration. The solution must meet the following requirements:

- The databases must be accessible if a datacenter fails.
- Costs must be minimized.

Which compute tier should you recommend?

- A. Burstable
- B. General Purpose
- C. Memory Optimized

**Correct Answer: A**

*Community vote distribution*

B (91%) 9%

 **zellick** Highly Voted 4 months ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/mysql/flexible-server/concepts-high-availability#limitations>

Here are some considerations to keep in mind when you use high availability:

- High availability isn't supported in the burstable compute tier.

upvoted 8 times

 **zellick** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 6 times

 **study\_for\_azure** 3 months, 4 weeks ago

But the question did not ask for high availability

upvoted 1 times

 **study\_for\_azure** 3 months, 4 weeks ago

sry, my bad, it is Zone Redundant High Availability. It should be B

upvoted 1 times

 **sk2022** (Most Recent) 2 weeks, 2 days ago

Burstable is not zone redundant - so B is correct

upvoted 2 times

 **Tr619899** 1 month, 1 week ago

B. General Purpose

The General Purpose compute tier provides a balance between performance and cost. It is suitable for most common workloads and offers a good combination of CPU and memory resources. It provides high availability and fault tolerance by utilizing Azure's infrastructure across multiple datacenters. This ensures that the databases remain accessible even if a datacenter fails.

The Burstable compute tier (option A) is designed for workloads with variable or unpredictable usage patterns. It provides burstable CPU performance but may not be the optimal choice for ensuring availability during a datacenter failure.

The Memory Optimized compute tier (option C) is designed for memory-intensive workloads that require high memory capacity. While it provides excellent performance for memory-bound workloads, it may not be necessary for minimizing costs or meeting the specified requirements.

upvoted 3 times

 **yonie** 2 months ago

**Selected Answer: B**

High availability isn't supported in the burstable compute tier.

<https://learn.microsoft.com/en-us/azure/mysql/flexible-server/concepts-high-availability#limitations>

upvoted 1 times

 **MeerKatZA** 2 months, 3 weeks ago

**Selected Answer: B**

Has to be B, if the requirement states "The databases must be accessible if a datacenter fails.".

Checked in portal, could not set up high availability unless I switched from burstable to Gen-Purpose.

upvoted 1 times

 **Exzw** 3 months ago

**Selected Answer: B**

Only general-purpose tier supports Zone Redundant. tested in portal.

upvoted 1 times

 **NotMeAnyWay** 3 months ago

**Selected Answer: B**

B. General Purpose

The General Purpose compute tier provides a balance between performance and cost. While it may not be as cost-effective as the Burstable tier, it supports high availability, which is essential for meeting the requirement of database accessibility if a datacenter fails. In addition, the General Purpose tier will generally have lower costs compared to the Memory Optimized tier. To ensure high availability, you will need to configure zone-redundant backups and enable the geo-redundant backup option.

upvoted 2 times

 **VBK8579** 3 months, 4 weeks ago

**Selected Answer: B**

B. General Purpose is recommended as it balances performance and cost, and provides options for automatic failover to ensure high availability in case of datacenter failure.

upvoted 3 times

 **abxc** 4 months ago

**Selected Answer: B**

High availability is not supported with the compute tier choice (Burstable). If you would like to configure high availability, the compute tier will be upgraded to the General Purpose compute tier or higher

upvoted 4 times

 **4PHL** 4 months, 1 week ago

A correct.

Burstable compute: Optimize your compute costs with low-cost burstable compute SKUs that let you pay for performance only when you need it. Scale compute or storage on demand dynamically as your workload needs change.

<https://techcommunity.microsoft.com/t5/azure-database-for-mysql-blog/announcing-flexible-server-for-azure-database-for-mysql/ba-p/1686617#:~:text=Flexible%20Server%20is%20a%20new%20deployment%20option%20for,new%20ways%20to%20optimize%20cost%20with%20stop%2Fstart%20capabilities>.

upvoted 2 times

 **Cooffrenesie** 4 months, 1 week ago

**Selected Answer: A**

<https://learn.microsoft.com/en-us/azure/mysql/flexible-server/overview>

upvoted 2 times

You are designing an app that will use Azure Cosmos DB to collate sales from multiple countries.

You need to recommend an API for the app. The solution must meet the following requirements:

- Support SQL queries.
- Support geo-replication.
- Store and access data relationally.

Which API should you recommend?

- A. Apache Cassandra
- B. PostgreSQL
- C. MongoDB
- D. NoSQL

**Correct Answer: B**

*Community vote distribution*

B (100%)

✉️  **jozir8** Highly Voted 2 months, 1 week ago

Correct answer: B

<https://learn.microsoft.com/en-us/azure/cosmos-db/choose-api>

Store data relationally:

- NoSQL stores data in document format
- MongoDB stores data in a document structure (BSON format)

Support SQL Queries:

- Apache Cassandra uses Cassandra Query Language (CQL)

If you're looking for a managed open source relational database with high performance and geo-replication, Azure Cosmos DB for PostgreSQL is the recommended choice.

upvoted 5 times

✉️  **Tr619899** Most Recent 1 month, 1 week ago

B. PostgreSQL

Azure Cosmos DB provides support for multiple APIs, each tailored to different data models and query languages. The PostgreSQL API is well-suited for applications that require relational data storage and the ability to execute SQL queries. It offers compatibility with the PostgreSQL wire protocol and supports standard SQL syntax, allowing you to leverage your existing SQL skills and tools.

Additionally, the PostgreSQL API in Azure Cosmos DB provides built-in support for geo-replication, allowing you to replicate your data across multiple regions for high availability and disaster recovery purposes. This ensures that your data is accessible and resilient even in the event of a regional outage or failure.

Therefore, the recommended API for Azure Cosmos DB in this scenario is the PostgreSQL API.

upvoted 3 times

✉️  **yonie** 2 months ago

**Selected Answer: B**

If you're looking for a managed open source relational database with high performance and geo-replication, Azure Cosmos DB for PostgreSQL is the recommended choice. To learn more, see the

<https://learn.microsoft.com/en-us/azure/cosmos-db/choose-api#api-for-postgresql>

upvoted 1 times

✉️  **Bigbluee** 2 months, 1 week ago

**Selected Answer: B**

B: PostgreSQL

But finding proper info in one place.....

I am not DB guy at all.

<https://learn.microsoft.com/en-us/azure/cosmos-db/choose-api#api-for-postgresql>

upvoted 1 times

 **stdevops** 2 months, 1 week ago  
API for NoSQL is native to Azure Cosmos DB.  
upvoted 2 times

**HOTSPOT**

You have an app that generates 50,000 events daily.

You plan to stream the events to an Azure event hub and use Event Hubs Capture to implement cold path processing of the events. The output of Event Hubs Capture will be consumed by a reporting system.

You need to identify which type of Azure storage must be provisioned to support Event Hubs Capture, and which inbound data format the reporting system must support.

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

NOTE: Each correct selection is worth one point.

**Answer Area**

Storage type:

Azure Data Lake Storage Gen2  
Premium block blobs  
Premium file shares

Data format:

Apache Parquet  
Avro  
JSON

**Answer Area**

Storage type:

Azure Data Lake Storage Gen2  
Premium block blobs  
Premium file shares

Data format:

Apache Parquet  
Avro  
JSON

**jspisak** Highly Voted 4 weeks, 1 day ago

Man sometimes I think I know what I'm talking about with Azure, and then I see a question like this and I question my sanity.  
upvoted 17 times

**Tr619899** Most Recent 3 weeks, 6 days ago

To support Event Hubs Capture, the appropriate Azure storage type is Azure Data Lake Storage Gen2. Event Hubs Capture is specifically designed to write captured events directly to Azure Data Lake Storage Gen2, providing a durable and scalable storage solution.

Regarding the inbound data format that the reporting system must support, the data format supported by Event Hubs Capture is Apache Avro. Event Hubs Capture writes the captured events in Avro format by default. Therefore, the reporting system should be able to consume and process data in the Apache Avro format.

So the correct selections would be:

Storage Type: Azure Data Lake Storage Gen2

Data Format: Apache Avro

upvoted 3 times

✉️  **sw1000** 4 weeks, 1 day ago

Answer is not correct I side and agree with the explanation by Sanaie.  
Azure Data Lake Storage Gen2, as premium storage options are not supported by Event Hubs Capture.

Apache Parquet is better suited for data analytics compared to Avro and JSON.  
Avro and Parquet are the only supported formats I have seen in the documentation.  
As we have an analytics case here I would suggest Parquet.  
Avro, however, is the default option and doesn't need any specific configurations.

upvoted 1 times

✉️  **C\_M\_M** 2 months ago

Event hub writes only in Avro format

<https://learn.microsoft.com/en-us/azure/event-hubs/event-hubs-capture-overview>

upvoted 2 times

✉️  **KMartin** 1 month, 2 weeks ago

That's not true, it can also write in Parquet if you use the no code editor.

<https://learn.microsoft.com/en-us/azure/event-hubs/event-hubs-capture-overview#how-event-hubs-capture-works>

upvoted 1 times

✉️  **Bigbluee** 2 months, 1 week ago

Correct answers.

<https://learn.microsoft.com/en-us/azure/event-hubs/event-hubs-capture-overview#how-event-hubs-capture-works>

Also:

The destination storage (Azure Storage or Azure Data Lake Storage) account must be in the same subscription as the event hub.  
Event Hubs doesn't support capturing events in a premium storage account.

upvoted 3 times

✉️  **Sanaie** 2 months, 1 week ago

The storage type that must be provisioned to support Event Hubs Capture is Azure Data Lake Storage Gen2.

Event Hubs Capture stores the data it captures in Azure Blob storage or Azure Data Lake Storage Gen2. While Premium Block Blobs and Premium file shares are both Azure Blob storage options, they are not specifically required for this scenario. Therefore, Azure Data Lake Storage Gen2 is the best choice because it is optimized for big data analytics workloads, supports high-volume, low-latency workloads, and has built-in security and compliance features.

The inbound data format that the reporting system must support is Apache parquet.

Event Hubs Capture can store captured data in either Avro or JSON format, but Apache parquet is the most efficient format for big data analytics. Parquet is columnar, which means that it is optimized for reading only the columns that are needed, rather than reading entire rows of data. This makes it faster and more efficient for processing large amounts of data. Therefore, the reporting system should support Apache parquet as the inbound data format.

upvoted 1 times

Question #1

Topic 3

You have SQL Server on an Azure virtual machine. The databases are written to nightly as part of a batch process.

You need to recommend a disaster recovery solution for the data. The solution must meet the following requirements:

- ⇒ Provide the ability to recover in the event of a regional outage.
- ⇒ Support a recovery time objective (RTO) of 15 minutes.
- ⇒ Support a recovery point objective (RPO) of 24 hours.
- ⇒ Support automated recovery.
- ⇒ Minimize costs.

What should you include in the recommendation?

- A. Azure virtual machine availability sets
- B. Azure Disk Backup
- C. an Always On availability group
- D. Azure Site Recovery

**Correct Answer: D**

Replication with Azure Site Recover:

- ⇒ RTO is typically less than 15 minutes.
- ⇒ RPO: One hour for application consistency and five minutes for crash consistency.

Incorrect Answers:

B: Too slow.

C: Always On availability group RPO: Because replication to the secondary replica is asynchronous, there's some data loss.

Reference:

<https://docs.microsoft.com/en-us/azure/site-recovery/site-recovery-sql>

*Community vote distribution*

D (81%)      C (19%)

✉️ [Removed] 1 year, 6 months ago

**Selected Answer: D**

D is correct. Automatic Site Recovery needed.  
upvoted 17 times

✉️ Gowind 9 months, 4 weeks ago

**Selected Answer: C**

Answer is C Automated failover is needed. Azure site recovery does not support it  
<https://docs.microsoft.com/en-us/azure/site-recovery/site-recovery-faq>  
 Is failover automatic?  
 Failover isn't automatic. You initiate failovers with single click in the portal, or you can use Site Recovery PowerShell to trigger a failover. Failing back is a simple action in the Site Recovery portal.  
 upvoted 6 times

✉️ GarryK 4 months, 3 weeks ago

Hi (a.k.a Gowind) correcting me, Answer is D. The requirement is to support an automated recovery. We can automate the recovery with Azure Automation: <https://learn.microsoft.com/en-us/azure/site-recovery/site-recovery-runbook-automation>  
<https://learn.microsoft.com/en-us/azure/site-recovery/site-recovery-create-recovery-plans>

Runbooks in recovery plans

You add an Azure Automation account and runbooks to a recovery plan. The runbook is invoked when the recovery plan runs.

upvoted 3 times

✉️ Vad133 5 months, 2 weeks ago

The requirements state "Support automated recovery", not "Automatic failover" thus we can automate the recovery process by a script and fulfil the requirement with low cost.  
 upvoted 2 times

✉️ GarryK 4 months, 3 weeks ago

You are right. Just checked the learning document, there is a whole section about Automating the recovery using Azure Automation Runbooks.

upvoted 1 times

✉️ **maku067** 6 months ago

I think the same C. (Synchronous-commit mode with automatic failover)

<https://learn.microsoft.com/en-us/sql/database-engine/availability-groups/windows/availability-modes-always-on-availability-groups?view=sql-server-ver16>

upvoted 1 times

✉️ **VijayMS** [Most Recent ⓘ] 2 weeks, 4 days ago

Always-On supports both Sync & Async replication and "C" should be the correct answer

upvoted 1 times

✉️ **sw1000** 4 weeks, 1 day ago

**Selected Answer: D**

The only solutions making sense in this context are C and D:

As we are talking about an SQL DB on an Azure VM (IaaS), there are NO cross-regional disaster recovery capabilities.

<https://learn.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/availability-group-overview?view=azuresql#deployment-options~:text>All-,DR%20with%20multiple%20regions,Yes,-Multisubnet%20support>

As we need to cover the scenario for a regional outage (which means all 3 data centers of an Azure region), the only option available to achieve this is Azure Site Recovery (with the help of runbooks if you must)

upvoted 1 times

✉️ **sw1000** 4 weeks, 1 day ago

D is the correct answer

upvoted 1 times

✉️ **lvz** 1 month ago

Very interesting insight

why it can't be Azure backup? I was wondering because RPO of 24 hrs is supported by Azure backup, however after some research realized that RTO of 15 mins will not be supported by Azure Backup, so my second option was automatically Azure Site Recovery.

upvoted 1 times

✉️ **NotMeAnyWay** 3 months ago

**Selected Answer: D**

D. Azure Site Recovery

Azure Site Recovery is a disaster recovery service that allows you to protect your Azure virtual machines by orchestrating replication, failover, and recovery. It helps you meet the RTO and RPO requirements, automates recovery, and provides protection against regional outages. While it may not be the lowest cost solution, it meets all the other requirements, including automated recovery and support for the specified RTO and RPO.

upvoted 2 times

✉️ **zellick** 4 months ago

**Selected Answer: D**

D is the answer.

<https://learn.microsoft.com/en-us/azure/site-recovery/azure-to-azure-enable-global-disaster-recovery#disaster-recovery-for-global-azure-regions>  
Azure Site Recovery now supports global disaster recovery. You can now replicate and fail over your applications from any Azure region, across continents.

upvoted 2 times

✉️ **abxc** 4 months ago

**Selected Answer: D**

<https://learn.microsoft.com/en-us/azure/site-recovery/site-recovery-sql#combining-bcdr-technologies-with-site-recovery>.  
Check last option in the table

upvoted 1 times

✉️ **totalz** 4 months, 1 week ago

If I look at RPO, it's D. But I wouldn't call using the SDK for automation = support automated recovery. And if comparing the workload for cross regions, then the answer is def. D!!

upvoted 1 times

✉️ **totalz** 4 months, 1 week ago

However, with the super speedy Azure, RTO of 15 minutes could be "fatal"!

upvoted 1 times

✉️ **Putra19** 4 months, 2 weeks ago

D because regional outage

upvoted 1 times

✉️ **omerc061** 4 months, 2 weeks ago

Correct Answer: D

"minimize cost" please notice here. Key point.

C not correct because "Always On" that options expensive way.

upvoted 1 times

 **Ivanvazov** 4 months, 3 weeks ago

We have SQL server installed on a VM. How an availability group can be replicated to another region in this case?

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: D**  
The recommended solution for disaster recovery should be Azure Site Recovery (Option D: Azure Site Recovery) as it meets the requirements of providing the ability to recover in the event of a regional outage, supporting a RTO of 15 minutes, supporting an RPO of 24 hours, supporting automated recovery and minimizing costs.

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: D**  
D is correct. Automatic Site Recovery needed.  
Replication with Azure Site Recover:

- ⇒ RTO is typically less than 15 minutes.
- ⇒ RPO: One hour for application consistency and five minutes for crash consistency.

upvoted 1 times

 **VBK8579** 5 months ago

D. Azure Site Recovery  
upvoted 1 times

 **gentos** 5 months, 1 week ago

**Selected Answer: D**  
regional outage. Availability group is not possible. so D. Site recovery  
upvoted 1 times

 **maku067** 6 months ago

**Selected Answer: C**  
I think the same C. (Synchronous-commit mode with automatic failover)  
<https://learn.microsoft.com/en-us/sql/database-engine/availability-groups/windows/availability-modes-always-on-availability-groups?view=sql-server-ver16>  
upvoted 1 times

**HOTSPOT -**

You plan to deploy the backup policy shown in the following exhibit.

## Policy 1

Associated items   Delete   Save   Discard

---

### Backup schedule

\*Frequency   \*Time   \*Timezone

Daily   6:00 PM   (UTC) Coordinated Univers...

---

### Instant Restore

Retain instant recovery snapshot(s) for

3 Day(s)

---

### Retention range

Retention of daily backup point.

\*At   For

6:00 PM   90 Day(s)

---

Retention of weekly backup point.

\*On   \*At   For

Sunday   6:00 PM   26 Week(s)

---

Retention of monthly backup point.

\*On   \*Day   \*At   For

First   Sunday   6:00 PM   36 Month(s)

---

Retention of yearly backup point.

### Not Configured

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

NOTE: Each correct selection is worth one point.

Hot Area:

### Answer Area

Virtual machines that are backed up by using the policy can be recovered for up to a maximum of [answer choice]:

90 days
26 weeks
36 months
45 months

The minimum recovery point objective (RPO) for virtual machines that are backed up by using the policy is [answer choice]:

1 hour
1 day
1 week
1 month
1 year

### Answer Area

Virtual machines that are backed up by using the policy can be recovered for up to a maximum of [answer choice]:

90 days
26 weeks
36 months
45 months

Correct Answer:

The minimum recovery point objective (RPO) for virtual machines that are backed up by using the policy is [answer choice]:

1 hour
1 day
1 week
1 month
1 year

✉ **default\_wizard** Highly Voted 1 year, 6 months ago

answer is correct

upvoted 34 times

✉ **yeanlingmedal71** 5 months ago

<https://docs.microsoft.com/en-us/azure/backup/backup-azure-vm-backup-faq#what-s-the-minimum-rpo-and-rto-for-vm-backups-in-azure-backup>

RPO: The minimum RPO is 1 day or 24 hours.

upvoted 3 times

✉ **Eltooth** Highly Voted 1 year, 6 months ago

Answer is correct - 36 weeks and 1 day

upvoted 18 times

✉ **Eltooth** 1 year, 6 months ago

\*months

upvoted 6 times

✉ **komoyek** 1 year ago

not 36 weeks but 36 month and 1 day

upvoted 4 times

✉ **zellick** Most Recent 4 months ago

1. 36 months

2. 1 day (backup daily)

upvoted 2 times

✉ **totalz** 4 months, 1 week ago

The term "instant" is misleading, m\$ style as usual.

upvoted 3 times

✉️ **DeBoer** 4 months, 1 week ago

the "instant" refers to the restore operation: the snapshot is kept local as well as in the vault so during a restore it can be mounted straight away instead of having to be restored from the vault first. <https://learn.microsoft.com/en-us/azure/backup/backup-instant-restore-capability#whats-new-in-this-feature>

upvoted 2 times

✉️ **OPT\_001122** 5 months ago

given answer is correct

upvoted 1 times

✉️ **SirGizha** 10 months ago

Its 36 months and 1 day

upvoted 2 times

✉️ **al608** 1 year ago

did my Exam today. This was on there.

upvoted 3 times

✉️ **Gor** 1 year, 1 month ago

36 months and 1 hour.

upvoted 2 times

✉️ **DeBoer** 4 months, 1 week ago

the backups are taken daily, not hourly. Instant recovery refers to the backup snapshot being available straight away instead of having to go to the vault first. So this has nothing to do with backup frequency

upvoted 2 times

✉️ **Teringzooi** 1 year, 2 months ago

36 weeks and 1 day

Answer is correct!

upvoted 1 times

✉️ **FabioVi** 1 year, 2 months ago

Agree that "minimum" here is confusing... If machine breaks at 7PM, then I could get back the 6PM backup (and quickly, as there is Instant Restore Capability) so the RPO would be 1 hour... Isn't it?

upvoted 5 times

✉️ **jellybiscuit** 9 months, 1 week ago

RPO is the administrative policy; what you're going to tell the business.

In your example, the recovery point is one-hour, but the objective did not change.

upvoted 2 times

✉️ **certgetter101** 1 year, 1 month ago

These types of questions being worded this way always is a bit frustrating, but you have to extrapolate the most correct answer from it and hope for the best :|

upvoted 1 times

✉️ **WANNABEE** 1 year, 2 months ago

1hr RPO - Outage occurs post 6am e.g. at 7am, 1 hr data loss results.

upvoted 2 times

✉️ **Contactfornitish** 1 year, 2 months ago

Came in exam today 04/04/2022

upvoted 2 times

✉️ **FrancisFerreira** 1 year, 3 months ago

Answer is correct... But what's with "minimum RPO"?

When the talk RPO, doesn't make sense working with 'minimum'...

Yeah, we could talk in terms of 'maximum acceptable RPO', but not 'minimum'...

That's there just to confuse us and throw us off.

upvoted 6 times

✉️ **p\_t\_2\_0\_2\_1** 1 year, 3 months ago

36 months and 1 day

upvoted 1 times

✉️ **Preeto18** 1 year, 3 months ago

Retention on 36 month is not checked so Answer is 26 Weeks and 1 day !!!!

upvoted 1 times

✉️ **Preeto18** 1 year, 3 months ago

Ignore my previous comment ....Answer is 36 months and 1 day !

upvoted 3 times

✉️ **Justin0020** 1 year, 3 months ago

Was in my exam om March. 10  
upvoted 1 times

 **Insanewhip** 1 year, 3 months ago  
Appeared on my exam today, March 10th, 2022. I selected 36 weeks and 1 day.  
upvoted 2 times

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 need to deploy resources to host a stateless web app in an Azure subscription. The solution must meet the following requirements:

⇒ Provide access to the full .NET framework.

Provide redundancy if an Azure region fails.

▪

⇒ Grant administrators access to the operating system to install custom application dependencies.

Solution: You deploy two Azure virtual machines to two Azure regions, and you create an Azure Traffic Manager profile.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: A**

Azure Traffic Manager is a DNS-based traffic load balancer that enables you to distribute traffic optimally to services across global Azure regions, while providing high availability and responsiveness.

*Community vote distribution*

A (100%)

✉  **Eltooth**  1 year, 6 months ago

**Selected Answer: A**

Correct answer - Traffic manager is global i.e. multi region - layer 7 traffic balancer option.

upvoted 16 times

✉  **Shadow983** 1 year, 6 months ago

Answer is A, but Traffic Manager is not layer 7 load balancer.

<https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/load-balancing-overview>

upvoted 8 times

✉  **KrisDeb** 5 months, 2 weeks ago

I agree, only Traffic Manager + Application Gateway or Front Door alone is layer 7 solution.

[https://portal.azure.com/#view/Microsoft\\_Azure\\_Network/LoadBalancingHubMenuBlade/~/overview](https://portal.azure.com/#view/Microsoft_Azure_Network/LoadBalancingHubMenuBlade/~/overview)

upvoted 2 times

✉  **Eltooth** 1 year, 6 months ago

Yes it is.

<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview>

Azure Traffic Manager is a DNS-based traffic load balancer. This service allows you to distribute traffic to your public facing applications across the global Azure regions.

upvoted 2 times

✉  **FrancisFerreira** 1 year, 3 months ago

typo: [...] why they DONT refer to it as a L7 appliance [...]

upvoted 2 times

✉  **FrancisFerreira** 1 year, 3 months ago

Layer 7 is application... If TM was a L7 appliance it would be able to do SSL offload, TLS termination, cookie-based session affinity, etc. That's why they refer to it as a L7 appliance, but only as DNS-based.

upvoted 4 times

✉  **Eltooth** 1 year, 6 months ago

The most important point to understand is that Traffic Manager works at the DNS level which is at the Application layer (Layer-7).

<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-how-it-works>

upvoted 3 times

✉  **JayBee65** 11 months ago

Nope DNS returns an IP address, which is layer 3, see <https://www.cohesive.net/blog/4-things-everyone-should-know-about-network-layers/>. Layer 7, the application layer refers to the http or https app protocol.

upvoted 3 times

 **HGD545**  1 year, 4 months ago

On the AZ-305 2/22/22  
upvoted 7 times

 **azkumar305**  2 months, 2 weeks ago

Got this on 14-Apr-2023  
upvoted 4 times

 **NotMeAnyWay** 3 months ago

**Selected Answer: A**

A. Yes. This solution meets the goal. By deploying two Azure virtual machines in two separate Azure regions, you provide redundancy if one of the regions fails. Azure Traffic Manager can be used to distribute traffic between the virtual machines in different regions, ensuring high availability.

Additionally, deploying Azure virtual machines allows you to have access to the full .NET Framework and grants administrators the ability to access the operating system to install custom application dependencies.

upvoted 3 times

 **zellck** 4 months, 1 week ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview>

Azure Traffic Manager is a DNS-based traffic load balancer. This service allows you to distribute traffic to your public facing applications across the global Azure regions. Traffic Manager also provides your public endpoints with high availability and quick responsiveness.

upvoted 4 times

 **totalz** 4 months, 1 week ago

Should we consider the 1st and last requirements utterly pointless?

upvoted 1 times

 **Putra19** 4 months, 2 weeks ago

DNS-based load balancing operates at the network layer (layer 3), while layer 7 load balancing operates at the application layer

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: A**

You deploy two Azure virtual machines to two Azure regions, and you create an Azure Traffic Manager profile.

Thanks to all who mentioned the exam dates because they came here to mention after their exam which is really incredible

upvoted 4 times

 **iyerbh** 8 months, 1 week ago

Traffic manager is layer 3 and Azur front door is layer 7. Both support globally (across region).

upvoted 4 times

 **Gor** 1 year, 1 month ago

**Selected Answer: A**

A is correct

upvoted 1 times

 **dasEnder** 1 year, 1 month ago

The traffic manager is DNS-based; and has health checks with HTTP(S) but is not level 7. I find the question rather ambiguous because it doesn't mention that you need to configure the health check and give access to the user.

upvoted 1 times

 **Teringzooi** 1 year, 2 months ago

**Selected Answer: A**

Correct answer - Traffic manager is global i.e. multi region - layer 7 traffic balancer option.

<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview>

upvoted 1 times

 **hertino** 1 year, 2 months ago

**Selected Answer: A**

In my exam, 9 april 22, 817/1000, I chose this answer

upvoted 3 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22

upvoted 3 times

 **Justin0020** 1 year, 3 months ago

Was in my exam om March. 10

upvoted 2 times

 **Insanewhip** 1 year, 3 months ago

Appeared on my exam today, March 10th, 2022. I selected Yes.

upvoted 3 times

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 need to deploy resources to host a stateless web app in an Azure subscription. The solution must meet the following requirements:

- Provide access to the full .NET framework.
- Provide redundancy if an Azure region fails.
- Grant administrators access to the operating system to install custom application dependencies.

Solution: You deploy two Azure virtual machines to two Azure regions, and you deploy an Azure Application Gateway.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: B**

App Gateway will balance the traffic between VMs deployed in the same region. Create an Azure Traffic Manager profile instead.

*Community vote distribution*

B (100%)

 **Eltooth** Highly Voted 1 year, 6 months ago

Selected Answer: B

Correct answer - B. App gateway cannot span regions.

upvoted 20 times

 **HGD545** Highly Voted 1 year, 4 months ago

On the AZ-305 2/22/22

upvoted 5 times

 **totalz** Most Recent 4 months, 1 week ago

If Q3 is Yes, then this one should be Yes. Application Gateway can use VNet peering.

upvoted 1 times

 **totalz** 4 months, 1 week ago

My bad, finally find the doc on its being regional!

upvoted 1 times

 **OPT\_001122** 5 months ago

Selected Answer: B

No - Azure Traffic Manager is correct

Thanks to all who mentioned the exam dates

upvoted 1 times

 **Gor** 1 year, 1 month ago

Selected Answer: B

No. AAG is regional

upvoted 1 times

 **Teringzooi** 1 year, 2 months ago

Selected Answer: B

Correct answer - B. App gateway cannot span regions.

<https://docs.microsoft.com/en-us/azure/application-gateway/overview>

upvoted 1 times

 **hertino** 1 year, 2 months ago

Selected Answer: B

In my exam, 9 april 22, 817/1000, I chose this answer

upvoted 2 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22

upvoted 1 times

 **Justin0020** 1 year, 3 months ago

Was in my exam om March. 10  
upvoted 3 times

 **Insanewhip** 1 year, 3 months ago

Appeared on my exam today, March 10th, 2022. I selected No.  
upvoted 3 times

 **[Removed]** 1 year, 6 months ago

Selected Answer: B

No is right.  
upvoted 3 times

**HOTSPOT -**

You plan to create an Azure Storage account that will host file shares. The shares will be accessed from on-premises applications that are transaction intensive.

You need to recommend a solution to minimize latency when accessing the file shares. The solution must provide the highest-level of resiliency for the selected storage tier.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

**Storage tier:**

Hot	
Premium	
Transaction optimized	

**Redundancy:**

Geo-redundant storage (GRS)	
Zone-redundant storage (ZRS)	
Locally-redundant storage (LRS)	

**Answer Area**

**Storage tier:**

Hot	
Premium	
Transaction optimized	

**Correct Answer:**

**Redundancy:**

Geo-redundant storage (GRS)	
Zone-redundant storage (ZRS)	
Locally-redundant storage (LRS)	

Box 1: Premium -

Premium: Premium file shares are backed by solid-state drives (SSDs) and provide consistent high performance and low latency, within single-digit milliseconds for most IO operations, for IO-intensive workloads.

Incorrect Answers:

⇒ Hot: Hot file shares offer storage optimized for general purpose file sharing scenarios such as team shares. Hot file shares are offered on the standard storage hardware backed by HDDs.

⇒ Transaction optimized: Transaction optimized file shares enable transaction heavy workloads that don't need the latency offered by premium file shares.

Transaction optimized file shares are offered on the standard storage hardware backed by hard disk drives (HDDs). Transaction optimized has historically been called "standard", however this refers to the storage media type rather than the tier itself (the hot and cool are also "standard" tiers, because they are on standard storage hardware).

Box 2: Zone-redundant storage (ZRS):

Premium Azure file shares only support LRS and ZRS.

Zone-redundant storage (ZRS): With ZRS, three copies of each file stored, however these copies are physically isolated in three distinct storage

clusters in different Azure availability zones.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/files/storage-files-planning>

Eltooth [Highly Voted] 1 year, 6 months ago

Correct answer - Premium and ZRS  
<https://docs.microsoft.com/en-us/azure/storage/files/storage-files-planning#storage-tiers>  
upvoted 42 times

Shadow983 1 year, 6 months ago

Correct.  
Azure Files only support LRS and ZRS.  
upvoted 7 times

Shadow983 1 year, 6 months ago

Standard support 4 types (LRS/ZRS/GRS/GZRS)  
Premium only support 2 types  
upvoted 11 times

datafypk [Highly Voted] 1 year, 1 month ago

was in exam 8 May 22  
upvoted 6 times

NotMeAnyway [Most Recent] 3 months ago

1. Storage Tier: For transaction-intensive applications, it is recommended to use the "Premium" tier, which provides the highest performance and lowest latency.  
2. Redundancy: Zone Redundant Storage (ZRS) replicates data across multiple zones within a single region, providing high availability and resiliency in case of a zone failure. It also offers low latency access to the file shares, which is essential for transaction-intensive applications.  
Premium Azure file shares only support LRS and ZRS.  
upvoted 3 times

zellck 4 months, 1 week ago

1. Premium  
2. ZRS

<https://learn.microsoft.com/en-us/azure/storage/common/storage-account-overview#types-of-storage-accounts>  
Premium performance storage accounts use solid-state drives (SSDs) for low latency and high throughput.

<https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy#zone-redundant-storage>

Zone-redundant storage (ZRS) replicates your storage account synchronously across three Azure availability zones in the primary region. Each availability zone is a separate physical location with independent power, cooling, and networking. ZRS offers durability for storage resources of at least 99.999999999% (12 9's) over a given year.  
upvoted 2 times

totalz 4 months, 1 week ago

Not a very good question, according to doc, some regions in standard tier has better egress speed than premium!!  
upvoted 2 times

totalz 4 months, 1 week ago

But then not all regions support ZRS for premium file shares!!  
upvoted 1 times

OPT\_001122 5 months ago

Box 1: Premium -  
Premium: Premium file shares are backed by solid-state drives (SSDs) and provide consistent high performance and low latency, within single-digit milliseconds for most IO operations, for IO-intensive workloads.

Box 2: Zone-redundant storage (ZRS):

Premium Azure file shares only support LRS and ZRS.

Zone-redundant storage (ZRS): With ZRS, three copies of each file stored, however these copies are physically isolated in three distinct storage clusters in different Azure availability zones.

Thanks to all who have mentioned the exam dates

Answer is correct

upvoted 4 times

PankajKataria 6 months ago

Premium storage only supports LRS and ZRS  
upvoted 1 times

AubinBakana 11 months, 1 week ago

I would have gone for Transaction Optimized & GRS to save cost simply because it is always smart to put cost in perspectives but on second thought, sometimes cost doesn't matter and Premium & ZRS seem to be a good answer here.

upvoted 2 times

 **randomGame** 7 months, 1 week ago

Yes, and "You need to recommend a solution to minimize latency when accessing the file shares".

That means Premium is needed.

upvoted 1 times

 **ajayasa** 11 months, 1 week ago

Correct Answer : Premium and ZRS

the key point in the question is low latency. premium storage supports low latency where as the transaction optimized provide consistent latency. hence tier is => Premium

Premium File Storage supports only 2 that is LRS and ZRS as we need the high resiliency  
Answer is => ZRS.

see link below:

<https://azure.microsoft.com/en-in/pricing/details/storage/files/>

upvoted 2 times

 **Gor** 1 year, 1 month ago

Premium, ZRS.

upvoted 2 times

 **Teringzooi** 1 year, 2 months ago

Correct answer - Premium and ZRS

<https://docs.microsoft.com/en-us/azure/storage/files/storage-files-planning#storage-tiers>

upvoted 1 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22

upvoted 4 times

 **crawfish** 1 year, 3 months ago

Premium is correct because of the low latency requirement. and, Premium offers LRS and ZRS only, hence ZRS is the best answer

upvoted 5 times

 **Az** 1 year, 3 months ago

yes correct

upvoted 1 times

 **bananapeel** 1 year, 3 months ago

On 2/27/2022

upvoted 6 times

 **HGD545** 1 year, 4 months ago

On the AZ-305 2/22/22

upvoted 5 times

 **AKYK** 1 year, 4 months ago

Premium + ZRS are correct

upvoted 3 times

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 need to deploy resources to host a stateless web app in an Azure subscription. The solution must meet the following requirements:

- Provide access to the full .NET framework.
- Provide redundancy if an Azure region fails.
- Grant administrators access to the operating system to install custom application dependencies.

Solution: You deploy an Azure virtual machine scale set that uses autoscaling.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: B**

Instead, you should deploy two Azure virtual machines to two Azure regions, and you create a Traffic Manager profile.

Note: Azure Traffic Manager is a DNS-based traffic load balancer that enables you to distribute traffic optimally to services across global Azure regions, while providing high availability and responsiveness.

Reference:

<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview>

*Community vote distribution*

B (100%)

✉ **Eltooth** [Highly Voted] 1 year, 6 months ago

Correct answer - B

upvoted 8 times

✉ **NotMeAnyWay** [Most Recent] 3 months ago

**Selected Answer: B**

A virtual machine scale set with autoscaling can meet the requirement of providing access to the full .NET framework and granting administrators access to the operating system to install custom application dependencies. However, it may not be the best solution for providing redundancy if an Azure region fails.

To provide redundancy if an Azure region fails, it is recommended to deploy the stateless web app across multiple regions using Azure App Service. Azure App Service provides built-in redundancy and failover support across regions. Additionally, Azure App Service can also provide access to the full .NET framework and grant administrators access to the operating system.

Therefore, the recommended solution would be to deploy the stateless web app using Azure App Service to provide redundancy and meet all the specified requirements.

upvoted 3 times

✉ **jj22222** 3 months, 3 weeks ago

**Selected Answer: B**

no, use traffic mgr instead

upvoted 1 times

✉ **zellick** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

VMSS only supports deployment within single region.

upvoted 1 times

✉ **OPT\_001122** 5 months ago

**Selected Answer: B**

Traffic Manager is the correct option

upvoted 1 times

✉ **PankajKataria** 6 months ago

B is the correct answer as VMSS supports only availability zone, it can not be used in regional failures.

upvoted 3 times

 **Xinx** 9 months, 1 week ago

Scale sets does not provide redundancy if an Azure region fails.  
upvoted 3 times

 **Gor** 1 year, 1 month ago

**Selected Answer: B**  
Correct answer - B  
upvoted 1 times

 **datafypk** 1 year, 1 month ago

was in exam 8 May 22  
upvoted 2 times

 **Teringzooi** 1 year, 2 months ago

**Selected Answer: B**  
Correct answer - B  
upvoted 1 times

 **hertino** 1 year, 2 months ago

**Selected Answer: B**  
In my exam, 9 april 22, 817/1000, I chose this answer  
upvoted 2 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22  
upvoted 1 times

 **ougullamaija** 1 year, 3 months ago

**Selected Answer: B**  
Correct. Autoscaling doesn't support redundancy.  
upvoted 3 times

 **Justin0020** 1 year, 3 months ago

Was in my exam on March. 10  
upvoted 1 times

 **bananapeel** 1 year, 3 months ago

On 2/27/2022  
upvoted 2 times

 **HGD545** 1 year, 4 months ago

On the AZ-305 2/22/22  
upvoted 2 times

 **makovec25** 1 year, 4 months ago

**Selected Answer: B**  
correct  
upvoted 2 times

**HOTSPOT -**

You need to recommend an Azure Storage account configuration for two applications named Application1 and Application2. The configuration must meet the following requirements:

- ⇒ Storage for Application1 must provide the highest possible transaction rates and the lowest possible latency.
- ⇒ Storage for Application2 must provide the lowest possible storage costs per GB.
- ⇒ Storage for both applications must be available in an event of datacenter failure.
- ⇒ Storage for both applications must be optimized for uploads and downloads.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

**Application1:**

- |  |
|--|
| BlobStorage with Standard performance, Hot access tier, and Read-access geo-redundant storage (RA-GRS) replication |
| BlockBlobStorage with Premium performance and Zone-redundant storage (ZRS) replication                             |
| General purpose v1 with Premium performance and Locally-redundant storage (LRS) replication                        |
| General purpose v2 with Standard performance, Hot access tier, and Locally-redundant storage (LRS) replication     |

**Application2:**

- |  |
|--|
| BlobStorage with Standard performance, Cool access tier, and Geo-redundant storage (GRS) replication                       |
| BlockBlobStorage with Premium performance and Zone-redundant storage (ZRS) replication                                     |
| General purpose v1 with Standard performance and Read-access geo-redundant storage (RA-GRS) replication                    |
| General purpose v2 with Standard performance, Cool access tier, and Read-access geo-redundant storage (RA-GRS) replication |

**Correct Answer:**

**Answer Area**

**Application1:**

- |  |
|--|
| BlobStorage with Standard performance, Hot access tier, and Read-access geo-redundant storage (RA-GRS) replication |
| <b>BlockBlobStorage with Premium performance and Zone-redundant storage (ZRS) replication</b>                      |
| General purpose v1 with Premium performance and Locally-redundant storage (LRS) replication                        |
| General purpose v2 with Standard performance, Hot access tier, and Locally-redundant storage (LRS) replication     |

**Application2:**

- |   |
|---|
| BlobStorage with Standard performance, Cool access tier, and Geo-redundant storage (GRS) replication                              |
| BlockBlobStorage with Premium performance and Zone-redundant storage (ZRS) replication  |
| General purpose v1 with Standard performance and Read-access geo-redundant storage (RA-GRS) replication                           |
| <b>General purpose v2 with Standard performance, Cool access tier, and Read-access geo-redundant storage (RA-GRS) replication</b> |

Application1 requires high transaction rates and the lowest possible latency. We need to use Premium, not Standard.

Box 2: General purpose v2 with Standard Performance,..

General Purpose v2 provides access to the latest Azure storage features, including Cool and Archive storage, with pricing optimized for the lowest GB storage prices. These accounts provide access to Block Blobs, Page Blobs, Files, and Queues. Recommended for most scenarios using Azure Storage.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-account-upgrade>

✉️  **Snownoodles**  9 months, 3 weeks ago

Application 2: Blobstorage with standard performance VS General purpose V2 with standard performance - General purpose V2 is always recommended since Blobstorage with a legacy so the given answer is correct

upvoted 21 times

✉️  **Galron** 8 months ago

RA-GRS is more expensive than GRS.

upvoted 3 times

✉️  **GarryK** 4 months, 3 weeks ago

Yes, but legacy storage account are no longer recommended, so you can't recommend these solutions even if it may cost less.  
<https://docs.microsoft.com/en-us/azure/storage/common/storage-account-overview#legacy-storage-account-types>

upvoted 1 times

✉️  **betterthanlife** 1 month, 3 weeks ago

Blob Storage is still available and supported and less expensive per GB than GPv2 (according to the pricing calculator).

"Legacy storage accounts are also supported. For more information, see Legacy storage account types."

<https://learn.microsoft.com/en-us/azure/storage/common/storage-account-overview>

<https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy#supported-storage-account-types>

"The following table describes the legacy storage account types. These account types aren't recommended by Microsoft, but may be used in certain scenarios:" (like because it's cheaper & offers GRS)

<https://learn.microsoft.com/en-us/azure/storage/common/storage-account-overview#legacy-storage-account-types>

upvoted 1 times

✉️  **Galron** 8 months ago

But App2 must be accessible, so unless regional failover occurs, you'll need RA access?

upvoted 1 times

✉️  **betterthanlife** 1 month, 3 weeks ago

The blob option for App 2 also meets the following 2 requirements:

- optimized for uploads and downloads (blob is over GPv2)
- must be available in an event of datacenter failure (I'm going to assume "upload" would still be required in the event of failover, eliminating GPv2 with only RA-GRS)

upvoted 1 times

✉️  **jrv116psu**  9 months, 3 weeks ago

Pretty sure it's app 1 block blob (answer as listed) but for App 2 I think it's A : because #1 there is no hot and cool blobs in V1. and there's no option to pick GRS/RA-GRS etc. (go look at azure pricing calculator.) ... so by having cool and GRS it IS v2 storage. and therefore GRS is cheaper than RA-GRS.. so it's A ... Blob with GRS.

upvoted 12 times

✉️  **firedog2023**  1 week, 1 day ago

I think D is correct for App2. 'BlobStorage' doesn't exist as an option, its general purpose v2 as a BLOB. Also, RA-GRS does allow Write but only on failover. The purpose of RA is that you can also READ the secondary while the primary is still active. If there is a failover, it just becomes the writeable storage account as per normal GRS functionality. The READ is helpful if you are testing an app and you want to check it will connect to the secondary even though it's in READ only mode. So think of it as everything GRS does but with a READ also for that specific scenario.

upvoted 1 times

✉️  **sw1000** 4 weeks, 1 day ago

App 1:

BlockBlobStorage with Premium performance and zone redundant storage (ZRS) replication

Storage for Application1 must provide the highest possible transaction rates and the lowest possible latency. - Yes

Storage for both applications must be available in an event of datacenter failure. - Yes

Storage for both applications must be optimized for uploads and downloads. - Yes

App2:

BlobStorage with Standard Performance, cool access tier and GRS replication

Fulfills the requirements?

Storage for Application2 must provide the lowest possible storage costs per GB. - Yes

Storage for both applications must be available in an event of datacenter failure. - Yes

Storage for both applications must be optimized for uploads and downloads. - Yes

upvoted 2 times

SD\_Coordinator 3 months, 2 weeks ago

I recommend the following Azure Storage account configurations for Application1 and Application2:

Application1: "BlockBlobStorage with Premium performance and Zone-redundant storage (ZRS) replication." This configuration offers the highest possible transaction rates and the lowest possible latency due to its Premium performance tier. ZRS replication ensures availability in the event of a datacenter failure.

Application2: "General purpose v2 with Standard performance, Hot access tier, and Read-access geo-redundant storage replication." This configuration provides lower storage costs per GB due to its Standard performance tier and Hot access tier. Read-access geo-redundant storage replication ensures data availability in the event of a datacenter failure and allows for optimized uploads and downloads.

upvoted 2 times

betterthanlife 1 month, 2 weeks ago

Not at all optimized for uploads if the target is read-only.

upvoted 1 times

SD\_Coordinator 3 months, 2 weeks ago

I meant cool access tier. \*

upvoted 2 times

zelick 4 months ago

1. BlockBlobStorage with Premium performance and ZRS replication
2. GPV2 with Standard performance, Cool access tier, and RA-GRS replication

<https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-block-blob-premium>

Premium block blob storage accounts make data available via high-performance hardware. Data is stored on solid-state drives (SSDs) which are optimized for low latency. SSDs provide higher throughput compared to traditional hard drives. File transfer is much faster because data is stored on instantly accessible memory chips. All parts of a drive accessible at once. By contrast, the performance of a hard disk drive (HDD) depends on the proximity of data to the read/write heads.

upvoted 7 times

zelick 4 months ago

<https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy#supported-storage-account-types>

BlobStorage is legacy and not recommended.

upvoted 2 times

betterthanlife 1 month, 2 weeks ago

The question asks nothing about what MS recommends to make you do what they want you to do so they can consolidate control... Blob storage is still a service offering & is still supported.

"The following table describes the legacy storage account types. These account types aren't recommended by Microsoft, but may be used in certain scenarios:" (like because it's cheaper & offers GRS)

<https://learn.microsoft.com/en-us/azure/storage/common/storage-account-overview#legacy-storage-account-types>

upvoted 1 times

sG9 4 months ago

gents, for app2 it requires capabilities for UPLOAD and DOWNLOAD. RA-GRS will not suffice here as it is READ ONLY (cannot UPLOAD). answer is A in my opinion.

upvoted 3 times

zelick 4 months ago

For RA-GRS, you can of course still read and write to primary region. Read-only applies only to secondary region.

upvoted 1 times

betterthanlife 1 month, 2 weeks ago

Yes, & if there is a fail-over you do not meet the requirement "Storage for both applications must be optimized for uploads and downloads".

upvoted 1 times

Putra19 4 months, 2 weeks ago

answer is correct. General Purpose v2 storage is designed to be a more cost-effective alternative to Blob storage for use cases that do not require the high-performance, low-latency access of Blob storage.

upvoted 1 times

VBK8579 4 months, 3 weeks ago

Application1:

BlockBlobStorage with Premium performance and Zone-redundant storage (ZRS) replication

Application2:

General purpose v2 with Standard performance, Cool access tier, and Read-access geo-redundant storage (RA-GRS) replication

upvoted 7 times

FabrytDev 5 months, 2 weeks ago

I would say the answer is correct. First one is obvious and explained by others. As for Application2 it is specifically said that cost has to be lowest "per GB", not lowest in general. So even tho RA-GRS is more expensive than GRS, general purpose V2 still provides better price per gigabyte as said in documentation.

<https://learn.microsoft.com/en-us/azure/storage/common/storage-account-upgrade?tabs=azure-portal>

upvoted 2 times

✉ [Removed] 5 months, 1 week ago

The Azure storage type that provides the lowest cost per GB is Azure Blob Storage

upvoted 2 times

✉ zellck 4 months ago

<https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy#supported-storage-account-types>  
BlobStorage is legacy and not recommended.

upvoted 1 times

✉ betterthanlife 1 month, 2 weeks ago

Thumbs down... still an Azure offering, supported, & let's not drink the coolaid.

upvoted 1 times

✉ gramotei 5 months, 2 weeks ago

This is very strange because BOTH uploads and downloads will be only possible with ZRS. if it would be downloads only we could use RA-GRS, GZRS would work but it's not present as an option. maybe typo in question. I would go with Premium ZRS because with one option it's cheapest

upvoted 1 times

✉ wwwmmmm 5 months, 4 weeks ago

My answer is

App1: option 2 Blockblob premium with ZRS

App2: option 1 standard genV2 with GRS

Have tried this in my portal as well,

For app1, it focuses on performance, so it needs to be use premium, premium storage account supports LRS and ZRS, since it mentioned datacenter fail, meaning zone redundant, so I would go for 2, block blob premium with ZRS.

For App2, note all the options fulfill the redundancy requirement, and App2 focuses on cost, so we should go for Standard plan, and option 1 GRS is cheaper than RA-GRS, so option 1.

upvoted 5 times

✉ PankajKataria 6 months ago

First 1 is pretty clear option 3, second would be the last option as zone redundant storage and Geo zone redundant storage are only available for standard general-purpose V2 accounts

upvoted 1 times

✉ CloudNov 7 months, 1 week ago

"Storage for both applications must be available in an event of datacenter failure."

App1: ZRS not support that.

Ans: App1: D App2: A

Correct me if I am wrong

upvoted 2 times

✉ CloudNov 7 months, 1 week ago

Sorry I placed ZRS in place of LRS

ANS: APP1: B, APP2: A

upvoted 3 times

✉ jellybiscuit 9 months, 1 week ago

There's no way a cool tier is the answer for Application 2.

It has to be General v1. That answer makes sense if you assume this is now an outdated question. Rule out the cool tiers, rule out the premium account and it's the only one left.

upvoted 2 times

✉ Rohan21 9 months ago

v1 is no longer recommended and may not give you a minimal cost per GB. that's why v2 with cool tier is the answer.

upvoted 4 times

✉ Gowind2 9 months, 3 weeks ago

BlobStorage and Generalv1 are no longer recommended

<https://docs.microsoft.com/en-us/azure/storage/common/storage-account-overview#legacy-storage-account-types>

upvoted 5 times

✉ betterthanlife 1 month, 2 weeks ago

Blob storage is still an Azure offering & still supported & ... "may be used in certain scenarios:" (like because it's cheaper & offers GRS)  
<https://learn.microsoft.com/en-us/azure/storage/common/storage-account-overview#legacy-storage-account-types>

upvoted 1 times

✉ most\_lenyora 9 months, 3 weeks ago

App 1: BlockBlobStorage

App 2: BlobStorage

upvoted 7 times

✉ zellck 4 months ago

<https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy#supported-storage-account-types>  
BlobStorage is legacy and not recommended.

upvoted 1 times

 **betterthanlife** 1 month, 2 weeks ago

Blob storage is still an Azure offering & still supported & ... "may be used in certain scenarios:" (like because it's cheaper & offers GRS)  
<https://learn.microsoft.com/en-us/azure/storage/common/storage-account-overview#legacy-storage-account-types>

If you answer Blob for App2 & it dings you for a wrong response then what are you going to do, continue to believe the lie?

upvoted 1 times

**HOTSPOT -**

You plan to develop a new app that will store business critical data. The app must meet the following requirements:

- ⇒ Prevent new data from being modified for one year.
- ⇒ Maximize data resiliency.
- ⇒ Minimize read latency.

What storage solution should you recommend for the app? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Storage Account type:

Premium block blobs
Standard general-purpose v1
Standard general-purpose v2

Redundancy:

Zone-redundant storage (ZRS)
Locally-redundant storage (LRS)

Correct Answer:

**Answer Area**

Storage Account type:

Premium block blobs
Standard general-purpose v1
Standard general-purpose v2

Redundancy:

Zone-redundant storage (ZRS)
Locally-redundant storage (LRS)

Box 1: Standard general-purpose v2

Standard general-purpose v2 supports immutable storage.

In general Standard general-purpose v2 is the preferred Microsoft recommendation.

Box 2: Zone-redundant storage (ZRS)

ZRS is more resilient compared to LRS.

Note: RA-GRS is even more resilient, but it is not an option here.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-immutable-storage>

 **mse89**  9 months, 4 weeks ago

To minimize read latency premium block blobs is the right answer, the immutable storage is also supported on premium tier.  
<https://docs.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview#supported-account-configurations>

upvoted 79 times

 **ServerBrain** 5 months, 3 weeks ago

The buzz words in this scenario are maximum and minimum, so I'm thinking minimum cost, ---->>> Standard v2..

upvoted 1 times

 **morito** 3 weeks ago

True, there are maximum and minimum requirements, but neither mention cost?

upvoted 1 times

 **santi1975**  9 months, 3 weeks ago

Agreed, no cost limits are mentioned. Correct Answer: Premium + ZRS

upvoted 43 times

✉️ **ServerBrain** 5 months, 3 weeks ago

Even if there are no cost limits mentioned, why recommend an higher cost option when you can do it for less??? Given answers are correct..  
upvoted 1 times

✉️ **Ivanvazovv** 4 months, 3 weeks ago

Because one of the requirements is to minimize read latency which requires premium tier.  
upvoted 7 times

✉️ **FabrityDev** 5 months, 2 weeks ago

Because we have to minimize latency and Premium is better in that regard.  
upvoted 5 times

✉️ **morito** [Most Recent] 3 weeks, 1 day ago

Premium Block Blob and ZRS. Use this link <https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview#supported-account-configurations> as a reference.  
upvoted 1 times

✉️ **NotMeAnyWay** 3 months ago

Storage Account Type: Premium Block Blobs provide high-performance, low-latency storage for unstructured data such as images, videos, and documents. However, it does not provide a built-in feature to prevent data modification. Standard General Purpose v1 or v2 can be used with the help of additional features such as Azure Blob Versioning to meet the requirement of preventing new data from being modified for one year. Since the requirement is to minimize read latency, I would recommend using the Standard General Purpose v2 storage account type which offers a higher level of performance and scalability.

Redundancy: To maximize data resiliency, I would recommend using Zone-Redundant Storage (ZRS) replication. This replicates data across multiple zones within a single region, providing high availability and resiliency in case of a zone failure.

Therefore, the recommended storage solution for the given scenario would be to use Standard General Purpose v2 storage account type with ZRS redundancy and additional features such as Azure Blob Versioning to prevent new data from being modified for one year while minimizing read latency.

upvoted 3 times

✉️ **C\_M\_M** 2 months ago

Blob storage offers data lock irrespective of which account- premium or V2. So I don't see how this V2 immutability means much here. You can apply readONLY lock on the containers for both account types.

Besides immutability (time-based retention and legal hold) are supported in V2 & premium blob - <https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview>

So latency should be the main deciding factor here.

upvoted 2 times

✉️ **jj22222** 3 months, 3 weeks ago

Box 1: Premium Block blobs  
Box 2: ZRS  
upvoted 2 times

✉️ **RamChagol** 4 months ago

Correct Answer is Premium + ZRS. Premium supports immutable policy  
upvoted 3 times

✉️ **Rams\_84z06n** 4 months ago

Topic 2 Q21 - The answer should be premium block blobs, container access policy. (data access charges - not storage cost- must be minimized)  
- agree?  
upvoted 2 times

✉️ **zellck** 4 months, 1 week ago

1. Premium block blobs  
2. ZRS

<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview#supported-account-configurations>

<https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy#supported-storage-account-types>  
ZRS  
- Premium block blobs

<https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy#zone-redundant-storage>

Zone-redundant storage (ZRS) replicates your storage account synchronously across three Azure availability zones in the primary region. Each availability zone is a separate physical location with independent power, cooling, and networking. ZRS offers durability for storage resources of at least 99.999999999% (12 9's) over a given year.

upvoted 1 times

✉️ **VBK8579** 4 months, 3 weeks ago

Storage Account type: Premium block blobs  
Redundancy: Zone-redundant storage (ZRS)  
upvoted 5 times

✉️ **OPT\_001122** 5 months ago

1. premium block blobs

2. ZRS

upvoted 4 times

 **mercuryit** 5 months, 2 weeks ago

First is Premium Block blobs, it is not write to minimize costs like in question 10

upvoted 1 times

 **francescoc** 5 months, 2 weeks ago

Premium + ZRS

upvoted 2 times

 **CineZorro824** 6 months, 3 weeks ago

First answer should be Premium Block Blobs instead of General Purpose v2. Immutable data policy is also possible for Premium Block Blobs, see: <https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview>

upvoted 3 times

 **rjverar** 6 months, 3 weeks ago

Agree with everyone here:

Premium

ZRS

upvoted 6 times

 **A\_GEE** 6 months, 3 weeks ago

There is cost and requirements include minimize read latency. So

The answer should be : Premium BlockBlobs + ZRS

upvoted 5 times

 **ryanzou** 7 months ago

Premium + ZRS

upvoted 3 times

 **hmz** 7 months, 1 week ago

Premium + ZRS

upvoted 3 times

You plan to deploy 10 applications to Azure. The applications will be deployed to two Azure Kubernetes Service (AKS) clusters. Each cluster will be deployed to a separate Azure region.

The application deployment must meet the following requirements:

- ⇒ Ensure that the applications remain available if a single AKS cluster fails.
- ⇒ Ensure that the connection traffic over the internet is encrypted by using SSL without having to configure SSL on each container.

Which service should you include in the recommendation?

- A. Azure Front Door
- B. Azure Traffic Manager
- C. AKS ingress controller
- D. Azure Load Balancer

**Correct Answer: A**

Azure Front Door supports SSL.

Azure Front Door, which focuses on global load-balancing and site acceleration, and Azure CDN Standard, which offers static content caching and acceleration.

The new Azure Front Door brings together security with CDN technology for a cloud-based CDN with threat protection and additional capabilities.

Reference:

<https://docs.microsoft.com/en-us/azure/frontdoor/front-door-overview>

*Community vote distribution*

A (89%) 8%

 **Gowind2** Highly Voted 9 months, 3 weeks ago

**Selected Answer: A**

Correct answer A

<https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/load-balancing-overview>

Front Door is an application delivery network that provides global load balancing and site acceleration service for web applications. It offers Layer 7 capabilities for your application like SSL offload, path-based routing, fast failover, caching, etc. to improve performance and high-availability of your applications.

Traffic Manager does not provide SSL Offloading.

And the other options are not global options (multi-region)

upvoted 19 times

 **betterthanlife** 1 month, 3 weeks ago

Agreed, & in fact when you look at AKS baseline for multiregion clusters you'll see Azure Front Door is the, well, um, front door.  
<https://learn.microsoft.com/en-us/azure/architecture/reference-architectures/containers/aks-multi-region/aks-multi-cluster>

upvoted 1 times

 **taer** Highly Voted 9 months, 3 weeks ago

**Selected Answer: A**

Correct answer A

upvoted 5 times

 **GS300** Most Recent 2 months ago

A is correct, see blueprint:

<https://learn.microsoft.com/en-us/azure/architecture/reference-architectures/containers/aks-multi-region/aks-multi-cluster>

upvoted 1 times

 **sherwindaniel** 2 months, 1 week ago

An AKS Ingress controller is a Kubernetes resource that allows the management of external access to the services in an AKS cluster. It provides traffic routing and load balancing for inbound traffic to the applications running in the cluster.

By using an AKS Ingress controller, you can ensure that the applications remain available if a single AKS cluster fails. The controller can route traffic to the remaining available AKS cluster(s), ensuring that the application remains available to users.

Additionally, an AKS Ingress controller supports SSL/TLS encryption of internet traffic, which ensures that the connection traffic over the internet is encrypted by using SSL without having to configure SSL on each container.

upvoted 1 times

 **sherwindaniel** 2 months, 1 week ago

Therefore, an AKS Ingress controller would be a suitable service to include in the recommendation to meet the requirements of ensuring high availability of the applications and encrypted internet traffic. Azure Front Door and Azure Traffic Manager are also services that can be used for traffic routing, but they do not provide SSL encryption natively. Azure Load Balancer can provide traffic routing and load balancing for inbound traffic, but it does not support SSL encryption natively.

upvoted 1 times

 **NotMeAnyway** 3 months ago

**Selected Answer: C**

Azure Front Door is also a viable option for providing traffic routing, load balancing, and failover across multiple regions. It can provide SSL termination and caching for faster performance.

However, compared to the AKS ingress controller, Azure Front Door is a higher-level service that operates at the HTTP/HTTPS layer and is optimized for HTTP traffic. It is typically used for web applications that require advanced routing, traffic management, and SSL offloading.

On the other hand, the AKS ingress controller is a Kubernetes-native solution that operates at the layer 7 (HTTP) and layer 4 (TCP) level, and can provide more granular control over traffic routing and application-level routing rules.

Therefore, the choice between Azure Front Door and AKS ingress controller ultimately depends on the specific requirements and characteristics of the applications being deployed. For applications running on Kubernetes, using the AKS ingress controller is often the most straightforward and cost-effective option.

upvoted 3 times

 **malcubierre** 3 months, 1 week ago

**Selected Answer: A**

Azure Traffic Manager is at DNS level so you have to configure SSL on every container.... -> Azure Front Door is the choice

upvoted 1 times

 **jj22222** 3 months, 3 weeks ago

**Selected Answer: A**

azure front door

upvoted 1 times

 **zellck** 4 months ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/architecture/guide/technology-choices/load-balancing-overview#azure-load-balancing-services>  
Front Door is an application delivery network that provides global load balancing and site acceleration service for web applications. It offers Layer 7 capabilities for your application like SSL offload, path-based routing, fast failover, caching, etc. to improve performance and high-availability of your applications.

upvoted 2 times

 **totalz** 4 months, 1 week ago

I was surprised to find out that Traffic Manager doesn't support https. Can someone provide some good example of its usage?

upvoted 1 times

 **totalz** 4 months, 1 week ago

Please delete the this one and above, that statement is incorrect.

upvoted 1 times

 **dagomo** 4 months, 3 weeks ago

**Selected Answer: A**

<https://github.com/phillipgibson/Cloud-Azure-AKS-Using-AFD-with-AKS#using-azure-front-door-service-afd-with-azure-kubernetes-service-aks-walkthrough>

upvoted 2 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: A**

A. Azure Front Door

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: A**

A. Azure Front Door

upvoted 1 times

 **Galron** 8 months, 1 week ago

AKS Ingress Controller is part of App GW which is not Global.

upvoted 1 times

 **simonseztech** 8 months, 1 week ago

**Selected Answer: A**

Front Door support SSL offloading.

upvoted 1 times

 **Xinx** 9 months, 1 week ago

AKS ingress controller seems like not support multi region

upvoted 2 times

 **theboywonder** 2 days, 11 hours ago

ingress controller is for each cluster only, if you have 2 clusters in different region, then you support different regions, however the answer here seems to be front door, because we don't want to set this for each container

upvoted 1 times

 **most\_lenyora** 9 months, 3 weeks ago

**Selected Answer: D**

D. Azure Front Door

upvoted 1 times

 **most\_lenyora** 9 months, 3 weeks ago

My bad, meant A guys! A. Azure Front Door

upvoted 5 times

**HOTSPOT -**

You have an on-premises file server that stores 2 TB of data files.

You plan to move the data files to Azure Blob Storage in the West Europe Azure region.

You need to recommend a storage account type to store the data files and a replication solution for the storage account. The solution must meet the following requirements:

- ⇒ Be available if a single Azure datacenter fails.
- ⇒ Support storage tiers.
- ⇒ Minimize cost.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Storage Account type:

Premium block blobs
Standard general-purpose v1
Standard general-purpose v2

Redundancy:

Geo-redundant storage (GRS)
Zone-redundant storage (ZRS)
Locally-redundant storage (LRS)
Read-access geo-redundant storage (RA-GRS)

Correct Answer:

**Answer Area**

Storage Account type:

Premium block blobs
Standard general-purpose v1
Standard general-purpose v2

Redundancy:

Geo-redundant storage (GRS)
Zone-redundant storage (ZRS)
Locally-redundant storage (LRS)
Read-access geo-redundant storage (RA-GRS)

Box 1: Standard general-purpose v2

Standard general-purpose v2 meets the requirements and minimizes the costs.

Box 2: Zone-redundant storage (ZRS)

ZRS protects against a Datacenter failure, while minimizing the costs.

Reference:

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

 **KarthikSiva3535**  8 months, 2 weeks ago

v2+ ZRS

upvoted 12 times

 **Intecs**  8 months, 3 weeks ago

Guys, there are more datacenters in one Zone, Locally redundant means that there are more rooms with servers in datacenter. Zone redundant means that there are more datacenters (buildings) within one city/street -> ZR is enough.

upvoted 7 times

 **AHUI**  1 month ago

Ans: GPV2 and ZRS

Premium Block Blob does not offer storage tier, always hot

upvoted 1 times

✉ **zellck** 4 months, 1 week ago

1. Standard GPv2
2. ZRS

<https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy#zone-redundant-storage>

Zone-redundant storage (ZRS) replicates your storage account synchronously across three Azure availability zones in the primary region. Each availability zone is a separate physical location with independent power, cooling, and networking. ZRS offers durability for storage resources of at least 99.999999999% (12 9's) over a given year.

With ZRS, your data is still accessible for both read and write operations even if a zone becomes unavailable. If a zone becomes unavailable, Azure undertakes networking updates, such as DNS repointing. These updates may affect your application if you access data before the updates have completed. When designing applications for ZRS, follow practices for transient fault handling, including implementing retry policies with exponential back-off.

upvoted 4 times

✉ **A\_GEE** 6 months, 3 weeks ago

Answers are correct. Gv2 + ZRS

upvoted 5 times

✉ **tiru** 8 months, 3 weeks ago

zone redundant storage doesn't help if single Azure datacenter fails it should be geo redundant storage

upvoted 3 times

✉ **Pamban** 8 months, 3 weeks ago

it does.. in ZRS, your data will be replicated across multiple availability zones and your data will be available if a datacenter fails see:  
<https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy>

upvoted 7 times

✉ **most\_lenyora** 9 months, 3 weeks ago

Correct!

upvoted 4 times

**HOTSPOT -**

You have an Azure web app named App1 and an Azure key vault named KV1.

App1 stores database connection strings in KV1.

App1 performs the following types of requests to KV1:

- Get
- List
- Wrap
- Delete

Unwrap -

- 
- Backup
- Decrypt
- Encrypt

You are evaluating the continuity of service for App1.

You need to identify the following if the Azure region that hosts KV1 becomes unavailable:

- To where will KV1 fail over?
- During the failover, which request type will be unavailable?

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

To where will KV1 fail over?

A server in the same availability set
A server in the same fault domain
A server in the paired region
A virtual machine in a scale set

During the failover, which request type will be unavailable?

Get
List
Wrap
Delete
Unwrap
Backup
Decrypt
Encrypt

Correct Answer:

### Answer Area

To where will KV1 fail over?

A server in the same availability set
A server in the same fault domain
<b>A server in the paired region</b>
A virtual machine in a scale set

During the failover, which request type will be unavailable?

Get
List
Wrap
<b>Delete</b>
Unwrap
Backup
Decrypt
Encrypt

Box 1: A server in the paired region

The contents of your key vault are replicated within the region and to a secondary region at least 150 miles away, but within the same geography to maintain high durability of your keys and secrets.

Regions are paired for cross-region replication based on proximity and other factors.

Box 2: Delete -

During failover, your key vault is in read-only mode. Requests that are supported in this mode are:

List certificates -

Get certificates -

List secrets -

Get secrets -

List keys -

Get (properties of) keys -

Encrypt -

Decrypt -

Wrap -

Unwrap -

Verify -

Sign -

Backup -

Reference:

<https://docs.microsoft.com/en-us/azure/key-vault/general/disaster-recovery-guidance>

 **Gowind2**  9 months, 3 weeks ago

Correct.

<https://docs.microsoft.com/en-us/azure/key-vault/general/disaster-recovery-guidance>

In the rare event that an entire Azure region is unavailable, the requests that you make of Azure Key Vault in that region are automatically routed

(failed over) to a secondary region except in the case of the Brazil South and Qatar Central region.

During failover, your key vault is in read-only mode. Requests that are supported in this mode are:

List certificates  
Get certificates  
List secrets  
Get secrets  
List keys  
Get (properties of) keys  
Encrypt  
Decrypt  
Wrap  
Unwrap  
Verify  
Sign  
Backup

upvoted 18 times

✉ **Darkx** Highly Voted 8 months, 2 weeks ago

appeared on 11th Oct 2022

upvoted 11 times

✉ **yonie** Most Recent 2 months ago

Correct

The contents of your key vault are replicated within the region and to a secondary region at least 150 miles away

During failover, your key vault is in read-only mode

<https://learn.microsoft.com/en-us/azure/key-vault/general/disaster-recovery-guidance>

upvoted 1 times

✉ **jj22222** 3 months, 3 weeks ago

1. kv - failover to server in paired region
2. during failover, delete is unavailable

upvoted 1 times

✉ **zellick** 4 months ago

1. Server in paired region
2. Delete

<https://learn.microsoft.com/en-us/azure/key-vault/general/disaster-recovery-guidance>

The contents of your key vault are replicated within the region and to a secondary region at least 150 miles away, but within the same geography to maintain high durability of your keys and secrets.

<https://learn.microsoft.com/en-us/azure/key-vault/general/disaster-recovery-guidance#failover>  
During failover, your key vault is in read-only mode.

During failover, you won't be able to make changes to key vault properties. You won't be able to change access policy or firewall configurations and settings.

After a failover is failed back, all request types (including read and write requests) are available.

upvoted 5 times

✉ **zellick** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 6 times

✉ **VBK8579** 4 months, 3 weeks ago

Answer:

A server in the paired region

Delete

upvoted 1 times

✉ **Born\_Again** 6 months, 4 weeks ago

During failover, your key vault is in read-only mode. Requests that are supported in this mode are:

List certificates  
Get certificates  
List secrets  
Get secrets  
List keys  
Get (properties of) keys  
Encrypt  
Decrypt  
Wrap  
Unwrap  
Verify  
Sign  
Backup

upvoted 2 times

 **most\_lenyora** 9 months, 3 weeks ago

Correct!

upvoted 2 times

**DRAG DROP -**

Your company identifies the following business continuity and disaster recovery objectives for virtual machines that host sales, finance, and reporting applications in the company's on-premises data center:

- ⇒ The sales application must be able to fail over to a second on-premises data center.
- ⇒ The reporting application must be able to recover point-in-time data at a daily granularity. The RTO is eight hours.
- ⇒ The finance application requires that data be retained for seven years. In the event of a disaster, the application must be able to run from Azure. The recovery time objective (RTO) is 10 minutes.

You need to recommend which services meet the business continuity and disaster recovery objectives. The solution must minimize costs.

What should you recommend for each application? To answer, drag the appropriate services to the correct applications. Each service may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

<b>Services</b>	<b>Answer Area</b>
Azure Backup only	Sales: <input type="text"/>
Azure Site Recovery and Azure Backup	Finance: <input type="text"/>
Azure Site Recovery only	Reporting: <input type="text"/>

**Correct Answer:**

<b>Services</b>	<b>Answer Area</b>
Azure Backup only	Sales: Azure Site Recovery only
Azure Site Recovery and Azure Backup	Finance: Azure Site Recovery and Azure Backup
Azure Site Recovery only	Reporting: Azure Backup only

Box 1: Azure Site Recovery -

**Azure Site Recovery -**

Coordinates virtual-machine and physical-server replication, failover, and fallback.

DR solutions have low Recovery point objectives; DR copy can be behind by a few seconds/minutes.

DR needs only operational recovery data, which can take hours to a day. Using DR data for long-term retention is not recommended because of the fine-grained data capture.

Disaster recovery solutions have smaller Recovery time objectives because they are more in sync with the source.

Remote monitor the health of machines and create customizable recovery plans.

Box 2: Azure Site Recovery and Azure Backup

Backup ensures that your data is safe and recoverable while Site Recovery keeps your workloads available when/if an outage occurs.

Box 3: Azure Backup only -

**Azure Backup -**

Backs up data on-premises and in the cloud

Have wide variability in their acceptable Recovery point objective. VM backups usually one day while database backups as low as 15 minutes.

Backup data is typically retained for 30 days or less. From a compliance view, data may need to be saved for years. Backup data is ideal for archiving in such instances.

Because of a larger Recovery point objective, the amount of data a backup solution needs to process is usually much higher, which leads to a

longer Recovery time objective.

Reference:

<https://lighthousemsp.com/whats-the-difference-between-azure-backup-and-azure-site-recovery/>

✉️  **Snownoodles**  9 months, 3 weeks ago

The given answer is correct.

They put Finance and Reporting in reversed order in question, they may confuse people like me during exam

upvoted 41 times

✉️  **airmancompsci** 6 months, 3 weeks ago

Took the AZ-305 on 12/7 and passed with a 935 only using this question bank (I have the Contributor access). I did not use AZ-304 or any other question bank. This question was on my exam and the two are reversed on the exam as well! This warning literally saved me on this.

upvoted 17 times

✉️  **KrisDeb** 5 months, 2 weeks ago

Thanks for this, I knew something's wrong with my answer...

upvoted 4 times

✉️  **Xinx** 9 months, 1 week ago

You saved me. I spent long time to understand the answer.

upvoted 3 times

✉️  **Dudulle** 7 months, 2 weeks ago

Yeah, I fell for it as well ! How freaking shitty those exams questions from MS can be, really, FFS !

upvoted 3 times

✉️  **elmugrat** 9 months, 1 week ago

Ty for mentioning it

upvoted 3 times

✉️  **jhargett1**  6 months, 3 weeks ago

Easy way to remember this:

RTO - backup

Failover - recovery

upvoted 21 times

✉️  **zellck**  4 months ago

Sales: ASR only

Finance: ASR and Azure Backup

Reporting: Azure Backup only

<https://learn.microsoft.com/en-us/azure/site-recovery/site-recovery-overview#what-does-site-recovery-provide>

On-premises VM replication

- You can replicate on-premises VMs and physical servers to Azure, or to a secondary on-premises datacenter. Replication to Azure eliminates the cost and complexity of maintaining a secondary datacenter.

<https://learn.microsoft.com/en-us/azure/backup/about-azure-vm-restore#concepts>

Recovery Point (also known as Restore Point): A recovery point is a copy of the original data that's being backed up.

upvoted 3 times

✉️  **zellck** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 2 times

✉️  **ckyap** 6 months, 4 weeks ago

It came out in my exam today 1st Dec 2022, answer provided should be correct

upvoted 5 times

✉️  **Gowind2** 9 months, 3 weeks ago

Correct.

Azure Backup delivers these key benefits:

Offload on-premises backup: Azure Backup offers a simple solution for backing up your on-premises resources to the cloud. Get short and long-term backup without the need to deploy complex on-premises backup solutions.

<https://docs.microsoft.com/en-us/azure/backup/backup-overview>

As an organization, you need to adopt a business continuity and disaster recovery (BCDR) strategy that keeps your data safe, and your apps and workloads online, when planned and unplanned outages occur.

<https://docs.microsoft.com/en-us/azure/site-recovery/site-recovery-overview>

upvoted 4 times

✉️  **most\_lenyora** 9 months, 3 weeks ago

Correct!

upvoted 2 times

You need to design a highly available Azure SQL database that meets the following requirements:

- ⇒ Failover between replicas of the database must occur without any data loss.
- ⇒ The database must remain available in the event of a zone outage.
- ⇒ Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Managed Instance Business Critical
- B. Azure SQL Database Premium
- C. Azure SQL Database Basic
- D. Azure SQL Managed Instance General Purpose

**Correct Answer: D**

General Purpose service tier provides zone redundant availability.

There are two high availability architectural models:

- \* Standard availability model that is based on a separation of compute and storage. It relies on high availability and reliability of the remote storage tier. This architecture targets budget-oriented business applications that can tolerate some performance degradation during maintenance activities.
- \* Premium availability model that is based on a cluster of database engine processes. It relies on the fact that there is always a quorum of available database engine nodes. This architecture targets mission-critical applications with high IO performance, high transaction rate and guarantees minimal performance impact to your workload during maintenance activities.

Note: Zone-redundant configuration for the general purpose service tier is offered for both serverless and provisioned compute. This configuration utilizes Azure

Availability Zones  $\rightarrow$  to replicate databases across multiple physical locations within an Azure region.  $\rightarrow$  By selecting zone-redundancy, you can make your new and existing serverless and provisioned general-purpose single databases and elastic pools resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes of the application logic.

Incorrect:

Not A: Azure SQL Managed Instance Business Critical is more expensive.

Not B: Premium is more expensive.

Not C: Azure SQL Database Basic, and General purpose provide only locally redundant availability.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla>

*Community vote distribution*

B (100%)

 **ckyap**  6 months, 4 weeks ago

It came out in the exam today at 1st Dec22, I selected B, should be correct

upvoted 21 times

 **Gowind2**  9 months, 3 weeks ago

**Selected Answer: B**

<https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>  
Zone-redundant configuration is not available in SQL Managed Instance. In SQL Database this feature is only available when the Gen5 hardware is selected.

To prevent Data Loss, Premium/Business Critical is required:

The primary node constantly pushes changes to the secondary nodes in order and ensures that the data is persisted to at least one secondary replica before committing each transaction. This process guarantees that if the primary node crashes for any reason, there is always a fully synchronized node to fail over to.

upvoted 12 times

 **randomGame** 7 months, 1 week ago

Today (20th nov. 2022), ZRS is in preview with SQL MI.

"This feature is currently in preview for SQL Managed Instance, and only available on the Business Critical service tier. In SQL Database, when using the Business Critical tier, zone-redundant configuration is only available when the Gen5 hardware is selected."

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#premium-and-business-critical-service-tier-zone-redundant-availability>

upvoted 3 times

 **mufflon** 9 months, 1 week ago

Yes, of the selectable alternatives, it can only be premium  
upvoted 1 times

 **NotMeAnyWay** Most Recent 3 months ago

**Selected Answer: B**

The best option would be B.

\*\*Azure SQL Database Premium\*\*. It provides high availability and failover capabilities, including the ability to remain available in the event of a zone outage, and supports failover between replicas without any data loss. Additionally, it provides a good balance of availability and cost, making it the most cost-effective option among the choices that still meets the requirements for high availability and failover.

upvoted 1 times

 **zellck** 4 months, 1 week ago

Same as Question 14.

<https://www.examtopics.com/discussions/microsoft/view/80378-exam-az-305-topic-3-question-14-discussion>

upvoted 2 times

 **zellck** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql#service-tiers>

The Premium service tier is designed for OLTP applications with high transaction rates and low latency I/O requirements. It offers the highest resilience to failures by using several isolated replicas.

upvoted 1 times

 **totalz** 4 months, 1 week ago

I think the answer is C, only DTU has basic & premium and both support ZRS.

upvoted 1 times

 **totalz** 4 months, 1 week ago

But none of the answers can guarantee no data loss!!

upvoted 1 times

 **totalz** 4 months, 1 week ago

Sorry, the first statement is wrong. I mixed up the concepts. However, I still found nothing certain on no-data-loss!

upvoted 1 times

 **Blues99** 4 months, 1 week ago

In the answers it says; A, B, C are incorrect

Incorrect:

Not A: Azure SQL Managed Instance Business Critical is more expensive.

Not B: Premium is more expensive.

Not C: Azure SQL Database Basic, and General purpose provide only locally redundant availability.

upvoted 3 times

 **jj22222** 3 months, 3 weeks ago

it says costs to be minimized

upvoted 1 times

 **cp2323** 4 months, 2 weeks ago

**Selected Answer: B**

its kind of repeated question, the answer should be B

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: B**

The best option would be to use Azure SQL Database Premium as it provides failover between replicas of the database with no data loss and also supports zone redundancy to ensure availability in the event of a zone outage. Additionally, Azure SQL Database Premium is more cost-effective compared to the higher-tier options such as Azure SQL Managed Instance Business Critical.

upvoted 4 times

 **OPT\_001122** 5 months ago

**Selected Answer: B**

B. Azure SQL Database Premium

upvoted 2 times

 **OPT\_001122** 4 months, 3 weeks ago

no dataloss is the key

upvoted 1 times

 **VooDooChild** 5 months ago

ChatGPT said:

## B. Azure SQL Database Premium

Azure SQL Database Premium is a highly available deployment option that meets the following requirements:

- ☞ Failover between replicas of the database must occur without any data loss. Azure SQL Database Premium uses active-passive replication, which ensures that the secondary replica is up to date with the primary replica and can take over with minimal data loss in case of a failover.
- ☞ The database must remain available in the event of a zone outage. Azure SQL Database Premium uses zone-redundant architecture, which ensures that the database is available even if an entire zone goes offline.
- ☞ Costs must be minimized. Azure SQL Database Premium is a cost-effective option as it allows you to pay for the resources you use and scale up or down as needed.

Azure SQL Managed Instance Business Critical it is an option that comes with high availability and disaster recovery but is more expensive than Azure SQL Database Premium.

Azure SQL Database Basic and Azure SQL Managed Instance General Purpose do not provide the same high availability and disaster recovery options as Azure SQL Database Premium.

upvoted 5 times

✉️ **totalz** 4 months, 1 week ago

Can ChatGPT gives out URLs for its references? "Azure SQL Database Premium is a cost-effective option as it allows you to pay for the resources you use and scale up or down as needed." is more or less a marketing slogan.

upvoted 3 times

✉️ **C\_M\_M** 2 months ago

Marketing slogan or not, same people setting the exam are the ones using it for marketing. The fact that you pay per use makes any serverless solution cost-effective. Premium is the only option that can guarantee no data loss. Consider that too.

upvoted 1 times

✉️ **RandomNickname** 5 months, 2 weeks ago

**Selected Answer: B**

Agree with other, answer should be B.

It's not SQL MI (D) since that would also include data loss for any unplanned failover.

<https://learn.microsoft.com/en-us/azure/azure-sql/managed-instance/auto-failover-group-sql-mi?view=azuresql&tabs=azure-powershell>

upvoted 3 times

✉️ **raphael13011** 6 months, 1 week ago

I would go with A as today (21/12/2022) ZRS is non on GA for General Purpose tier for Azure SQL : <https://azure.microsoft.com/en-us/updates/general-availability-zone-redundancy-for-azure-sql-database-general-purpose-tier/>

But I might be wrong, if some could correct me..

upvoted 1 times

✉️ **Born\_Again** 6 months, 4 weeks ago

B: based on the documents: Zone-redundant configuration is currently in preview for SQL Managed Instance, and only available for the Business Critical service tier.

upvoted 4 times

✉️ **patchf0x** 6 months, 2 weeks ago

I would still say that it is B, I tested several combinations and checked the costs. At the end, Managed Instances are not cheaper because you need AGs (Availability Groups). And that means a second instance for the redundancy option (you have at least the double costs).

upvoted 2 times

✉️ **patchf0x** 6 months, 2 weeks ago

I would like to add that AGs are created for GR and not only ZR. It must be definitely B.

upvoted 1 times

✉️ **A\_GEE** 7 months, 1 week ago

**Selected Answer: B**

Zone Redundant not supported by SQL MI

upvoted 1 times

✉️ **dc2k79** 7 months, 2 weeks ago

B

Zone-redundant configuration is not available in SQL Managed Instance. In SQL Database this feature is only available when the Gen5 hardware is selected.

upvoted 2 times

✉️ **Galron** 8 months, 1 week ago

SQL Premium DTU model is cheaper than base GPurp of SQL MI, I have change my mind 20 times over this question but I feel the clue is in the cost element of the question and since Premium is DTU, it will cost less when not being used compared to a vCore model of the MI.

upvoted 2 times

You need to design a highly available Azure SQL database that meets the following requirements:

- ⇒ Failover between replicas of the database must occur without any data loss.
- ⇒ The database must remain available in the event of a zone outage.
- ⇒ Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Managed Instance Business Critical
- B. Azure SQL Database Premium
- C. Azure SQL Database Basic
- D. Azure SQL Database Hyperscale

**Correct Answer: B**

Azure SQL Database Premium meets the requirements and is the least expensive.

Note: There are two high availability architectural models:

\* Standard availability model that is based on a separation of compute and storage. It relies on high availability and reliability of the remote storage tier. This architecture targets budget-oriented business applications that can tolerate some performance degradation during maintenance activities.

\* Premium availability model that is based on a cluster of database engine processes. It relies on the fact that there is always a quorum of available database engine nodes. This architecture targets mission-critical applications with high IO performance, high transaction rate and guarantees minimal performance impact to your workload during maintenance activities.

Note: Zone-redundant configuration for the general purpose service tier is offered for both serverless and provisioned compute. This configuration utilizes Azure

Availability Zones  $\rightarrow$  to replicate databases across multiple physical locations within an Azure region.  $\rightarrow$  By selecting zone-redundancy, you can make your new and existing serverless and provisioned general-purpose single databases and elastic pools resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes of the application logic.

Incorrect:

Not A: Azure SQL Managed Instance Business Critical is more expensive.

Not C: Azure SQL Database Basic, and General purpose provide only locally redundant availability.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla>

*Community vote distribution*

B (100%)

 **Snownoodles**  9 months, 3 weeks ago

duplicate with Question 13.

The given answer is correct

upvoted 7 times

 **Elton\_Bicalho** 9 months, 1 week ago

It is not duplicated. The answer options are different(trick). Pay attention to the COST.

upvoted 3 times

 **mdmahanti** 8 months, 2 weeks ago

Even the COST aspect is duplicated.

upvoted 2 times

 **Dudulle** 7 months, 2 weeks ago

Yep, entirely same question and entirely different answer. Indeed, B is the correct one (for both, obviously). Would suggest this site to fix this ...

upvoted 1 times

 **theboywonder**  2 days, 11 hours ago

duplicate, B is correct fo sho

upvoted 1 times

 **jj22222** 3 months, 3 weeks ago

this is duplicate with right answer

upvoted 1 times

 **zellck** 4 months, 1 week ago

Same as Question 16.

<https://www.examtopics.com/discussions/microsoft/view/79423-exam-az-305-topic-2-question-16-discussion>

upvoted 1 times

 **zellck** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql#service-tiers>

The Premium service tier is designed for OLTP applications with high transaction rates and low latency I/O requirements. It offers the highest resilience to failures by using several isolated replicas.

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: B**

The best option would be to use Azure SQL Database Premium as it provides failover between replicas of the database with no data loss and also supports zone redundancy to ensure availability in the event of a zone outage. Additionally, Azure SQL Database Premium is more cost-effective compared to the higher-tier options such as Azure SQL Managed Instance Business Critical.

If Premium isn't given option in exam then A

upvoted 1 times

 **dubuser** 4 months, 4 weeks ago

Appeared in todays exam (29/01/23)

But Premium was not in choices had Business Critical instead for Azure SQL and Azure MI

I answered Azure MI Business Critical assuming Failover meant Auto-Failover groups

Scored 903

upvoted 4 times

 **EXzw** 3 months, 1 week ago

I think should choose Business Critical for Azure SQL, the cheapest Azure SQL BC less than 1K USD for 2vCore less than 2K USD for 4vCore and for MI BC 4vCore Cost about 2.1K USD (please correct me if i'm wrong)

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: B**

B. Azure SQL Database Premium

upvoted 1 times

 **Gowind2** 9 months, 3 weeks ago

**Selected Answer: B**

<https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

Zone-redundant configuration is not available in SQL Managed Instance. In SQL Database this feature is only available when the Gen5 hardware is selected.

To prevent Data Loss, Premium/Business Critical is required:

The primary node constantly pushes changes to the secondary nodes in order and ensures that the data is persisted to at least one secondary replica before committing each transaction. This process guarantees that if the primary node crashes for any reason, there is always a fully synchronized node to fail over to

upvoted 2 times

 **Joalmici** 9 months, 3 weeks ago

**Selected Answer: B**

The B is the correct.

upvoted 3 times

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 need to deploy resources to host a stateless web app in an Azure subscription. The solution must meet the following requirements:

- ⇒ Provide access to the full .NET framework.
- ⇒ Provide redundancy if an Azure region fails.
- ⇒ Grant administrators access to the operating system to install custom application dependencies.

Solution: You deploy a web app in an Isolated App Service plan.

Does this meet the goal?

- A. Yes
- B. No

**Correct Answer: B**

Instead: You deploy two Azure virtual machines to two Azure regions, and you create an Azure Traffic Manager profile.

Note: Azure Traffic Manager is a DNS-based traffic load balancer that enables you to distribute traffic optimally to services across global Azure regions, while providing high availability and responsiveness.

Reference:

<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview>

*Community vote distribution*

B (100%)

✉️  **NotMeAnyWay** 2 months, 3 weeks ago

**Selected Answer: B**

B. No

While deploying a web app in an Isolated App Service plan provides access to the full .NET framework and grants administrators access to the operating system to install custom application dependencies, it does not inherently provide redundancy if an Azure region fails. To achieve redundancy, you would need to set up a multi-region deployment using Azure Traffic Manager or Azure Front Door, in addition to using the Isolated App Service plan.

upvoted 1 times

✉️  **zellck** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

App Service has not admin access to OS.

<https://learn.microsoft.com/en-us/azure/app-service/operating-system-functionality>

Linux apps in App Service run in their own containers. You have root access to the container but no access to the host operating system is allowed. Likewise, for apps running in Windows containers, you have administrative access to the container but no access to the host operating system.

upvoted 3 times

✉️  **moshos** 4 months, 3 weeks ago

**Selected Answer: B**

Correct answer: B

upvoted 3 times

✉️  **OPT\_001122** 5 months ago

**Selected Answer: B**

You deploy two Azure virtual machines to two Azure regions, and you create an Azure Traffic Manager profile.

upvoted 2 times

✉️  **itvinoth83** 7 months ago

On the AZ 305 exam, 28/11/22

upvoted 3 times

✉️  **Gowind2** 9 months, 3 weeks ago

**Selected Answer: B**

Correct answer but wrong explanation. It would be possible to use app service plan instead of VMs but you would need 1 app service plan per region and a L7 load-balancer like Azure Front Door.

<https://docs.microsoft.com/en-us/azure/architecture/reference-architectures/app-service-web-app/multi-region>

upvoted 1 times

 **Snownoodles** 9 months, 2 weeks ago

I don't agree - You cannot grant administrative permission to underlying VMs in App Service, which is required by the question:

<https://docs.microsoft.com/en-us/azure/app-service/operating-system-functionality>

So you have to user VMs to VMs for this case

upvoted 9 times

 **GarryK** 4 months, 3 weeks ago

Where does it say that we are talking about the host (VM) operating system? Your link says that we can have root access to the OS of the container:

Linux apps in App Service run in their own containers. You have root access to the container but no access to the host operating system is allowed. Likewise, for apps running in Windows containers, you have administrative access to the container but no access to the host operating system.

upvoted 1 times

 **most\_lenyora** 9 months, 3 weeks ago

Selected Answer: B

No is correct!

upvoted 1 times

You need to design a highly available Azure SQL database that meets the following requirements:

- ⇒ Failover between replicas of the database must occur without any data loss.
- ⇒ The database must remain available in the event of a zone outage.
- ⇒ Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Database Serverless
- B. Azure SQL Database Business Critical
- C. Azure SQL Database Basic
- D. Azure SQL Database Standard

**Correct Answer: A**

Now your new and existing serverless Azure SQL Databases allow for zone redundant configuration. This feature utilizes Azure Availability Zones to replicate databases across multiple physical locations within an Azure region. By selecting zone redundancy, you can make your serverless databases resilient to a much larger set of failures, including catastrophic datacenter outages without any changes of the application logic.

The SQL Database serverless compute tier optimizes price-performance and simplifies performance management for single databases with intermittent, unpredictable usage by auto-scaling compute and billing for compute used per second.

Incorrect:

Not B: Azure SQL Database Business Critical is a more expensive solution.

Not C: Azure SQL Database Basic does not provide zone redundancy.

Not D: Azure SQL Database Standard is a more expensive solution.

Reference:

<https://azure.microsoft.com/en-us/updates/public-preview-zone-redundant-configuration-for-azure-sql-database-serverless-compute-tier/>

*Community vote distribution*

B (60%)

A (40%)

✉️  **Snownoodles** Highly Voted 9 months, 3 weeks ago

Both AZ sql database standard and serverless(both are general purpose) support zone redundancy.

It's hard to compare cost between AZ database standard and AZ database serverless without a usage patterns.

In general, we can say Az database serverless is cost-effective.

So the given answer might be correct.

upvoted 18 times

✉️  **zellck** 4 months ago

Azure SQL DB Standard tier only supports LRS.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#basic-standard-and-general-purpose-service-tier-locally-redundant-availability>

upvoted 1 times

✉️  **leoletopic** 6 months, 2 weeks ago

"Auto-failover groups support geo-replication of all databases in the group to only one secondary server in a different region" ,So ,if you need only one secondary server to support failover, you must use Geo-Redundancy. not Zone Redundancy.

If you want in same regions ,you need more servers,which is not min cost

<https://learn.microsoft.com/en-us/azure/azure-sql/database/auto-failover-group-sql-db?view=azuresql&tabs=azure-powershell>

upvoted 1 times

✉️  **marcelina50** Highly Voted 1 month, 2 weeks ago

Selected Answer: B

Where are you mlantonis

upvoted 12 times

✉️  **theboywonder** Most Recent 2 days, 11 hours ago

duplicate question should be sql db premium, but in this case not available so best option would be business critical

upvoted 1 times

✉️  **pxo1000** 1 month, 4 weeks ago

The key here is the word "replicas"

Standard availability doesn't have multiple replicas. It has nodes

upvoted 2 times

lvz 1 month ago

very good point!

upvoted 1 times

Tuhaar 2 months ago

From ChatGPT as well, the answer is B

The deployment option that meets all the requirements is Azure SQL Database Business Critical.

Azure SQL Database Business Critical offers high availability through Always On availability groups. This feature allows for automatic failover between replicas without data loss. Additionally, it offers the ability to place replicas in different availability zones, ensuring availability in the event of a zone outage.

While Azure SQL Database Serverless and Basic options are available, they do not offer the same level of high availability as the Business Critical option. The Azure SQL Database Standard option offers basic high availability but does not offer the ability to place replicas in different availability zones.

While Azure SQL Database Business Critical is more expensive than the other options, it provides the necessary level of high availability required for this scenario.

upvoted 1 times

rex303 2 months, 3 weeks ago

**Selected Answer: B**

Azure SQL business critical.

The tipping point in this question is the following requirement:

Failover between replicas of the database must occur without any data loss.

If this requirement is to be met, we can only go for a database tier with the Premium availability model. Which includes premium and business critical service tiers.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#premium-and-business-critical-service-tier-locally-redundant-availability>

upvoted 2 times

NotMeAnyWay 2 months, 3 weeks ago

**Selected Answer: B**

B. Azure SQL Database Business Critical

Azure SQL Database Business Critical is the best option to meet the requirements. It provides a high level of availability with zero data loss during failovers because it uses Always On availability groups, with multiple replicas of the database. It also remains available during a zone outage, as it can be deployed with zone-redundant configurations. Although it may not be the least expensive option, it meets all other requirements and is the most suitable choice for this scenario.

Azure SQL Database Serverless is designed for workloads with intermittent usage patterns and focuses on auto-pausing and auto-resuming capabilities to optimize costs. It does not specifically address high availability or failover scenarios like the Business Critical tier does. The Business Critical tier, on the other hand, uses Always On availability groups to provide zero data loss during failovers and ensures high availability, making it a better choice for the given requirements.

upvoted 5 times

EXzw 3 months, 1 week ago

**Selected Answer: B**

the key is no data loss, only premium & BC tier support Always On Availability Group(no data loss).

<https://learn.microsoft.com/en-us/sql/database-engine/availability-groups/windows/failover-and-failover-modes-always-on-availability-groups?view=sql-server-ver16>

upvoted 3 times

jameslee 4 months ago

See table describes serverless support based on purchasing model, service tiers and hardware.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/serverless-tier-overview?view=azuresql&tabs=general-purpose#purchasing-model-and-service-tier>

upvoted 1 times

zellck 4 months, 1 week ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/serverless-tier-overview?view=azuresql&tabs=general-purpose>

Serverless is a compute tier for single databases in Azure SQL Database that automatically scales compute based on workload demand and bills for the amount of compute used per second. The serverless compute tier also automatically pauses databases during inactive periods when only storage is billed and automatically resumes databases when activity returns.

upvoted 3 times

zellck 4 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#general-purpose-service-tier-zone-redundant-availability>

Zone-redundant configuration for the General Purpose service tier is offered for both serverless and provisioned compute. This configuration utilizes Azure Availability Zones to replicate databases across multiple physical locations within an Azure region. By selecting zone-redundancy, you can make your new and existing serverless and provisioned general purpose single databases and elastic pools resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes of the application logic.

upvoted 2 times

✉ **sainandam** 4 months, 2 weeks ago

**Selected Answer: A**

Zone-redundant configuration for the General Purpose service tier is offered for both serverless and provisioned computing.

Serverless is cheaper when compared to provisioned computing.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#general-purpose-service-tier-zone-redundant-availability>

upvoted 2 times

✉ **Mangocurry** 4 months, 2 weeks ago

**Selected Answer: B**

General purpose ZRS is still in preview

upvoted 1 times

✉ **sainandam** 4 months, 2 weeks ago

It is GA in many regions - Zone-redundant configuration for the General Purpose service tier is offered for both serverless and provisioned computing.

Serverless is cheaper when compared to provisioned computing.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#general-purpose-service-tier-zone-redundant-availability>

upvoted 1 times

✉ **OPT\_001122** 5 months ago

**Selected Answer: A**

A. Azure SQL Database Serverless

upvoted 3 times

✉ **RandomNickname** 5 months, 2 weeks ago

**Selected Answer: B**

Agree with B.

Zone redundant with no data loss, Business Critical required.

See below;

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

With below from URL above;

Zone-redundant configuration is only available in SQL Database when Gen5 hardware is selected. Zone-redundant configuration is currently in preview for SQL Managed Instance, and only available for the Business Critical service tier.

upvoted 3 times

✉ **RandomNickname** 5 months, 2 weeks ago

Saying that, after further digging given answer A seems correct as per below URL;

<https://techcommunity.microsoft.com/t5/azure-sql-blog/zone-redundancy-for-azure-sql-database-general-purpose-tier/ba-p/3280376>

Looks like despite the business critical service tier note for zone-redundant, it looks like it's available for General Purpose, Gen5

upvoted 2 times

✉ **[Removed]** 5 months, 2 weeks ago

**Selected Answer: A**

"Costs must be minimized" - A

upvoted 2 times

✉ **sushantjadhav** 5 months, 3 weeks ago

**Selected Answer: A**

As far as the costing part is concerned, then answer A is correct.

upvoted 2 times

✉ **OrangeSG** 6 months, 1 week ago

**Selected Answer: A**

Your new and existing Azure SQL Databases and elastic pools that use the general purpose tier can enable the zone redundant configuration. This configuration is offered for both serverless and provisioned compute.

The zone redundant configuration utilizes Azure Availability Zones to replicate databases across multiple physical locations within an Azure region. By selecting zone redundancy, you can make your serverless and provisioned general purpose single databases and elastic pools resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes of the application logic. This configuration offers 99.995% availability SLA and RPO=0. For more information see general purpose service tier zone redundant availability.

Reference

Microsoft recently announced that Zone redundancy for Azure SQL Database general purpose tier

<https://techcommunity.microsoft.com/t5/azure-sql-blog/zone-redundancy-for-azure-sql-database-general-purpose-tier/ba-p/3280376>

upvoted 2 times

**HOTSPOT**

You have an on-premises Microsoft SQL Server database named SQL1.

You plan to migrate SQL1 to Azure.

You need to recommend a hosting solution for SQL1. The solution must meet the following requirements:

- Support the deployment of multiple secondary, read-only replicas.
- Support automatic replication between primary and secondary replicas.
- Support failover between primary and secondary replicas within a 15-minute recovery time objective (RTO).

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

NOTE: Each correct selection is worth one point.

**Answer Area**

Azure service or service tier:

Azure SQL Database
Azure SQL managed Instance
The Hyperscale service tier

Replication mechanism:

Active geo-replication
Auto-failover groups
Standard geo-replication

**Answer Area**

Azure service or service tier:

Azure SQL Database
Azure SQL managed Instance
The Hyperscale service tier

Correct Answer:

Replication mechanism:

Active geo-replication
Auto-failover groups
Standard geo-replication

 **RajFamily25** Highly Voted 5 months, 3 weeks ago

Azure service or service tier "Azure SQL Managed Instance"  
Replication mechanism should be "Auto failover groups"

Azure SQL Managed Instance is a fully managed, Azure-based version of SQL Server that can be used to host your on-premises SQL Server database in the cloud. It supports the deployment of multiple secondary, read-only replicas and can automatically replicate data between primary and secondary replicas. It also supports failover between primary and secondary replicas within a 15-minute RTO, which meets the requirement for the solution to have a recovery time objective of 15 minutes.

Auto failover groups is a feature of Azure SQL Managed Instance that allows you to automatically failover between primary and secondary replicas in the event of an outage or failure. It supports the deployment of multiple secondary, read-only replicas and can automatically replicate data between primary and secondary replicas. It also supports failover between primary and secondary replicas within a 15-minute RTO, which meets the requirement for the solution to have a recovery time objective of 15 minutes.

upvoted 32 times

✉ **betterthanlife** 1 month, 3 weeks ago

Please stop up-voting this guy... he's just copy/pasting the incorrect explanation from other dumps.

upvoted 2 times

✉ **betterthanlife** 1 month, 3 weeks ago

It is well documented that the RTO for Auto Failover groups is 1 HOUR.

<https://learn.microsoft.com/en-us/azure/sql-database/business-continuity-high-availability-disaster-recover-hadr-overview?view=azuresql#sql-database-features-that-you-can-use-to-provide-business-continuity>

SQL Managed Instances do not support geo replication

<https://learn.microsoft.com/en-us/azure/sql-database/business-continuity-high-availability-disaster-recover-hadr-overview?view=azuresql#compare-geo-replication-with-failover-groups>

Hyper-scale offers an RTO within 60 minutes (sometimes longer)

<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tier-hyperscale-frequently-asked-questions-faq?view=azuresql#what-is-the-recovery-point-objective--rpo--recovery-time-objective--rto--for-database-restore-in-hyperscale>

Thus... first response is: Azure SQL DB

upvoted 9 times

✉ **betterthanlife** 1 month, 3 weeks ago

This article, although old old states, "Only one secondary database can be created in a Microsoft defined "DR paired" Azure region."

<https://azure.microsoft.com/en-us/blog/azure-sql-database-standard-geo-replication/>

I also cannot find ANYTHING on Standard geo-replication within the past 3 years in a search, and thus...

Second response: Active Geo-replication as it supports automatic replication between primary and secondary replicaS.

There is no mention that failovers must be automatic, just have an RTO of 15 minutes, which if done manually the RTO is 30 seconds.

<https://learn.microsoft.com/en-us/azure/sql-database/business-continuity-high-availability-disaster-recover-hadr-overview?view=azuresql#sql-database-features-that-you-can-use-to-provide-business-continuity>

<https://learn.microsoft.com/en-us/azure/azure-sql/database/active-geo-replication-overview?view=azuresql>

upvoted 1 times

✉ **betterthanlife** 1 month, 3 weeks ago

Response 1: Azure SQL DB

Response 2: Active geo-replication

Standard geo-replication no longer exists anyway - [https://learn.microsoft.com/en-us/previous-versions/azure/dn758204\(v=azure.100\)?redirectionfrom=MSDN](https://learn.microsoft.com/en-us/previous-versions/azure/dn758204(v=azure.100)?redirectionfrom=MSDN)

upvoted 5 times

✉ **GarryK** 4 months, 3 weeks ago

Wrong. Azure MI only support 1 additional replicas:

<https://learn.microsoft.com/en-us/azure/sql-database/service-tier-business-critical?view=azuresql>

1 built-in high availability replica is readable

0 - 1 geo-replicas using auto-failover groups

upvoted 3 times

✉ **betterthanlife** 1 month, 3 weeks ago

"Wrong".

SQL Managed Instance

Auto-failover groups

As part of High Availability architecture, each single database, elastic pool database, and \*\*managed instance\*\* in the Premium and Business Critical service tier is automatically provisioned with a primary read-write replica and \*\*one or more secondary read-only replicas\*\*.

<https://learn.microsoft.com/en-us/azure/sql-database/read-scale-out?view=azuresql>

upvoted 2 times

✉ **moshos** 4 months, 3 weeks ago

So 1 built-in + 1 geo-replica = 2 replicas. This covers the multiple replicas requirement.

upvoted 2 times

✉ **66xxx66** 4 months, 2 weeks ago

condition says : Support the deployment of "multiple secondary, read-only" replicas, so we shouldn't count built-in replica

upvoted 1 times

✉ **saiyandjinn** 4 months, 3 weeks ago

read the docs, and I agree

upvoted 2 times

✉ **zellck**  4 months, 1 week ago

1. Azure SQL DB

2. Active geo-replication

<https://learn.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql#resource-limits>

Azure SQL Database

-Read-only replicas

Read scale with 1-4 high availability replicas or 1-30 named replicas

0 - 4 geo-replicas

upvoted 17 times

✉️ **zellck** 4 months, 1 week ago

To support 15 mins RTO, only manual failover can meet the requirements.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/business-continuity-high-availability-disaster-recover-hadr-overview?view=azuresql#recover-a-database-to-the-existing-server>

Manual database failover refers to failover of a single database to its geo-replicated secondary using the unplanned mode. See the table earlier in this article for details of the auto-failover RTO and RPO.

Manual database failover

- RTO - 30s

<https://learn.microsoft.com/en-us/azure/azure-sql/database/business-continuity-high-availability-disaster-recover-hadr-overview?view=azuresql#recover-a-database-to-the-existing-server>

upvoted 3 times

✉️ **yonie** 2 months ago

This seems to be a tricky question:

Since choosing Azure SQL DB includes the General Purpose tier that doesn't have replicas, I would argue that we need to choose Hyperscale as the best answer.

Under Azure SQL DB we have three service tiers: General Purpose, Business Critical and Hyperscale.

\*Business Critical\* supports up to 3 replicas:

"Every database is a cluster of database nodes with one primary replica that is accessible for customer workloads, and three secondary replicas containing copies of data."

<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tiers-sql-database-vcore?view=azuresql#business-critical>

Hyperscale supports up to 4 replicas

<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tiers-sql-database-vcore?view=azuresql#hyperscale>

upvoted 1 times

✉️ **zellck** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql#platform-capabilities>

Azure SQL Database

Active geo-replication

- Yes - all service tiers.

upvoted 3 times

✉️ **zellck** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/azure-sql/database/active-geo-replication-overview?view=azuresql>

Active geo-replication is a feature that lets you create a continuously synchronized readable secondary database for a primary database. The readable secondary database may be in the same Azure region as the primary, or, more commonly, in a different region. This kind of readable secondary database is also known as a geo-secondary or geo-replica.

Active geo-replication is designed as a business continuity solution that lets you perform quick disaster recovery of individual databases in case of a regional disaster or a large scale outage. Once geo-replication is set up, you can initiate a geo-failover to a geo-secondary in a different Azure region. The geo-failover is initiated programmatically by the application or manually by the user.

upvoted 2 times

✉️ **RSDXB** [Most Recent] 1 day, 9 hours ago

Azure SQL Database and Active Geo Replication

<https://www.sqlshack.com/understanding-business-continuity-solutions-for-azure-sql-paas-services/>

upvoted 1 times

✉️ **Tr619899** 2 weeks, 4 days ago

For this scenario, I would recommend using Azure SQL Managed Instance as the hosting solution for SQL1. Azure SQL Managed Instance is a fully managed SQL Server instance hosted in Azure that provides near 100% compatibility with on-premises SQL Server.

To meet the requirements for replication and failover, you can use Auto-failover groups. This feature enables you to manage replication and failover of multiple databases on a SQL Managed Instance. It supports automatic replication between primary and secondary replicas, and allows you to configure failover between primary and secondary replicas within a specified recovery time objective (RTO).

upvoted 1 times

✉️ **Tr619899** 3 weeks, 4 days ago

According to context, the correct answer is Azure SQL Managed Instance with Auto-failover groups. This solution meets the requirements of supporting multiple secondary, read-only replicas, automatic replication between primary and secondary replicas, and failover between primary and secondary replicas within a 15-minute RTO.

upvoted 1 times

✉️ **NotMeAnyWay** 2 months, 3 weeks ago

1. Azure service or service tier? c. The Hyperscale service tier (of Azure SQL Database)

The Hyperscale service tier supports the deployment of multiple secondary, read-only replicas, automatic replication between primary and

secondary replicas, and failover capabilities. It also allows you to scale out the read workload, which meets the requirements mentioned in the question.

2, Replication mechanism? a. Active geo-replication

Active geo-replication supports the creation of up to four readable secondary replicas within the same or different Azure regions. It provides automatic replication between primary and secondary replicas, and you can initiate failover manually when needed. The recovery time objective (RTO) for active geo-replication is less than 30 seconds, which meets the requirement of a 15-minute RTO.

upvoted 4 times

✉️ **steel72** 3 months, 1 week ago

"Azure SQL Database" and "Active geo-replication".

Active geo-replication covers the first two requirements (multiple read replicas and automatic replication):

<https://learn.microsoft.com/en-us/azure/azure-sql/database/active-geo-replication-overview?view=azuresql>

Please see the note which states "Active geo-replication is not supported by Azure SQL Managed Instance."

Also in the following page it's stated that the Hyperscale tier can only have one geo-replica:

<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tier-hyperscale-replicas?view=azuresql&tabs=portal#geo-replica>

So the tier can only be "Azure SQL Database".

upvoted 6 times

✉️ **EXzw** 3 months, 1 week ago

Agree on this.

upvoted 1 times

✉️ **steel72** 3 months, 1 week ago

Please also check the following page which states that auto-failover groups do not support multiple replicas:

<https://learn.microsoft.com/en-us/azure/azure-sql/database/business-continuity-high-availability-disaster-recover-hadr-overview?view=azuresql#compare-geo-replication-with-failover-groups>

Furthermore the requirements do not state that the failover should be automatic.

And the following article which also states that standard geo-replication only supports one replica:

<https://azure.microsoft.com/en-us/blog/azure-sql-database-standard-geo-replication/>

upvoted 1 times

✉️ **malcubierre** 3 months, 1 week ago

Azure SQL Managed Instance + auto-failover groups seems to cover multiple secondary read replicas.... : <https://learn.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql#resource-limits>

upvoted 1 times

✉️ **vb3d** 3 months, 3 weeks ago

Reading all comments and lots of documentation I found that the main hint here is that Auto-failover doesn't support multiple replicas. so must be Azure SQL Database with active geo replication

upvoted 2 times

✉️ **ExamDev** 3 months, 3 weeks ago

I asked Bing AI and it said Azure SQL Managed Instance with auto-failover groups. :)

upvoted 1 times

✉️ **SH\_22** 4 months, 1 week ago

<https://youtu.be/oJCwbllnrwY?t=23>

from this Azure intro video auto failover does not support multiple replicas => its not.

Standard repl keeps offline copy => its not

only active geo-replication is an option which belongs to Azure SQL Premium

I think MI+Auto-failover group cannot be the choice.

I would go for Azure SQL + active geo-replication

upvoted 1 times

✉️ **SH\_22** 4 months, 1 week ago

Or could be Hyperscale too instead of Azure sql, but I see no specification of big data in the requirements

upvoted 1 times

✉️ **mscbsgt** 4 months, 1 week ago

" Azure SQL Managed Instance supports one secondary read-only replica."

<https://learn.microsoft.com/en-us/azure/azure-sql/database/read-scale-out?view=azuresql-mi>

upvoted 1 times

✉️ **Blues99** 4 months, 1 week ago

Correct:-

Hyperscale: Named replicas support for up to 30 named replicas (for each primary replica).

SQL Database : Up to four geo-secondaries can be created for a primary.

Azure SQL Managed Instance supports one secondary read-only replica.

upvoted 1 times

✉️ **GarryK** 4 months, 3 weeks ago

Hard to conclude.

- SQL Manage Instance only support 1 replicas so its certainly wrong answers
- Now SQL Azure DB with the business critical tier and active geo replication could meets because its has up to 4 replicas, read scale out and active geo replication enables faster RTO/RPO. [https://azure.microsoft.com/en-gb/support/legal/sla/azure-sql-database/v1\\_8/](https://azure.microsoft.com/en-gb/support/legal/sla/azure-sql-database/v1_8/)
- Hyperscale could also meet the demand :  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tier-hyperscale-frequently-asked-questions-faq?view=azuresql>

But honestly Hyperscale looks a bit overkill. So I would go with Azure SQL DB Business critical tier + active geo replication, else hyperscale + active geo

upvoted 4 times

✉ **moshos** 4 months, 3 weeks ago

1 built-in + 1 geo-replica = 2 replicas. This covers the multiple replicas requirement. I think SQL Manage Instance is still correct.

upvoted 1 times

✉ **GarryK** 4 months, 3 weeks ago

The pb is that the question mix between Databases (DB or MI) and service tier (General Purpose/Standard Business Critical/Premium Hyperscale)

upvoted 2 times

✉ **VBK8579** 4 months, 3 weeks ago

Azure SQL Managed Instance with Auto-failover groups

upvoted 4 times

✉ **OPT\_001122** 5 months ago

- 1.Azure SQL Managed Instance
- 2.Auto failover groups

upvoted 2 times

✉ **Georgego** 5 months ago

Answer is correct.

The requirements ask for "Multiple secondary read-only replicas" so that means it cannot be Azure SQL managed instance with Auto failover groups according to this comparison matrix...

<https://learn.microsoft.com/en-us/azure/azure-sql/database/business-continuity-high-availability-disaster-recover-hadr-overview?view=azuresql#compare-geo-replication-with-failover-groups>

upvoted 2 times

**HOTSPOT**

You have two on-premises Microsoft SQL Server 2017 instances that host an Always On availability group named AG1. AG1 contains a single database named DB1.

You have an Azure subscription that contains a virtual machine named VM1. VM1 runs Linux and contains a SQL Server 2019 instance.

You need to migrate DB1 to VM1. The solution must minimize downtime on DB1.

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

NOTE: Each correct selection is worth one point.

Prepare for the migration by:

- Adding a secondary replica to AG1
- Creating an Always On availability group on VM1
- Upgrading the on-premises SQL Server instances

Perform the migration by using:

- A distributed availability group
- Azure Migrate
- Log shipping

Prepare for the migration by:

- Adding a secondary replica to AG1
- Creating an Always On availability group on VM1
- Upgrading the on-premises SQL Server instances

**Correct Answer:**

Perform the migration by using:

- A distributed availability group
- Azure Migrate
- Log shipping

 **RajFamily25** Highly Voted 5 months, 3 weeks ago

First one should be A:

Prepare For the migration by:

- A. Adding a secondary replica to AG1

Reason:

Creating an Always On availability group on VM1 would not be necessary, as you already have an availability group (AG1) in place on your on-premises SQL Server instances.

By adding a secondary replica to AG1, you can provide a copy of DB1 that can be used for the migration. This will allow you to minimize downtime on DB1 by performing the migration on the secondary replica, while the primary replica remains available for use.

Perform the migration by using:

- B. Azure migrate

upvoted 34 times

 **betterthanlife** 1 month, 3 weeks ago

Please, stop voting this guy up, he's not thinking, he's just copy/pasting the explanation from another exam dump. In this case it is correct that option A is "Adding a secondary replica to AG1" ... I know this because I researched it. But other questions that he posts (plagiarizes) in are WRONG responses.

upvoted 8 times

👤 **betterthanlife** 1 month, 3 weeks ago

This article clearly covers adding a Linux SQL server to an existing AonAG.  
<https://learn.microsoft.com/en-us/sql/linux/sql-server-linux-availability-group-cross-platform?view=sql-server-ver16>  
Furthermore, Azure Migrate does not allow targeting a Linux box in Azure IaaS, it only allows targeting Azure SQL or Azure Managed Instance.  
<https://www.youtube.com/watch?v=QNmkaWi3Ltk>  
Correct responses:  
Adding a secondary replica to AG1  
Log shipping  
upvoted 3 times

👤 **betterthanlife** 1 month, 3 weeks ago

I was incorrect in my above response for option 2, how to migrate (Log shipping IS NOT correct) as when I was looking in the portal I only saw Azure SQL DB & MI.  
This video clearly shows at 11:35 you can migrate to an Azure IaaS VM running SQL (evidentially one that is running Linux)  
- Adding a secondary replica to AG1  
- Azure Migrate  
upvoted 4 times

👤 **theboywonder** 2 days, 10 hours ago

ofc it's running "SQL server" on linux  
upvoted 1 times

👤 **curtmcgirt** 3 months, 1 week ago

does it matter that vm1 "runs linux and sql server 2019" but on-prem AG1 sql is 2017?  
upvoted 1 times

👤 **willybsmith** 3 weeks, 6 days ago

Yep..one of the Microsoft pages notes "Only replicas that are on the same major build of SQL Server will be readable. See Rolling upgrade basics for more information." so maybe its update the older on prem version first?  
upvoted 1 times

👤 **RandomNickname** 5 months, 2 weeks ago

Absolutely agree.  
upvoted 3 times

👤 **RandomNickname** 5 months, 2 weeks ago

To confirm it should be;  
Secondary replica  
Azure Migrate

The given answer by exam topics is wrong.  
upvoted 5 times

👤 **chessace2000** Highly Voted 4 months, 2 weeks ago

This should be  
1. Creating an Always On availability group on VM1  
2. Use distributed availability group

Reference: <https://learn.microsoft.com/en-us/azure/azure-sql/migration-guides/virtual-machines/sql-server-distributed-availability-group-migrate-ag?view=azuresql>  
upvoted 13 times

👤 **fishy\_resolver** 1 month, 2 weeks ago

The question seems to hint towards using distributed availability groups to do the migration. But for 1. I would rather say the secondary replica.  
There is already an availability group AG1 on VM1. And the steps in the link you provided requires you to add a target availability group.  
upvoted 1 times

👤 **steel172** 3 months, 1 week ago

I think this is wrong, in the link you provide it states that Windows Server Failover Cluster is required. The target machine runs Linux.  
upvoted 1 times

👤 **DeBoer** 4 months, 1 week ago

the link you provided, together with the prereqs in <https://learn.microsoft.com/en-us/azure/azure-sql/migration-guides/virtual-machines/sql-server-distributed-availability-group-migrate-prerequisites?view=azuresql>, show that this makes the most sense. Same version of SQL is recommended - but not required in this scenario.  
upvoted 3 times

👤 **Tr619899** Most Recent 2 weeks, 4 days ago

To prepare for the migration of DB1 to VM1, you should create an Always On availability group on VM1. This will allow you to replicate data from the on-premises SQL Server instances to the SQL Server instance on VM1.

To perform the migration with minimal downtime, you can use a distributed availability group. This feature allows you to create an availability group that spans multiple SQL Server instances, including instances that are hosted on different platforms or in different locations. By adding the SQL Server instance on VM1 as a replica in the distributed availability group, you can replicate data from the on-premises SQL Server instances to VM1 and perform a controlled failover with minimal downtime.

upvoted 1 times

✉ **sjb666** 1 month, 3 weeks ago

Prepare : Secondary Replica  
Perform: Log Shipping

upvoted 1 times

✉ **Bigbluee** 2 months, 3 weeks ago

I don't like asking chatbot but in this case with so many answers, i dediced to overkill chatbot with questions and the summary makes sense.

"In your case, since you are migrating a single database, you can use an Always On availability group, log shipping, backup and restore, or transactional replication, as discussed earlier.

However, if you have a requirement to maintain high availability and disaster recovery for your database in a distributed environment after the migration, you can consider using a DAG. "

There is no requirement to maintain high availability after migration so the answer should be "Always On availability group with log shipping".

Why not "Azure Migrate"?

"while using Azure Migration can simplify the migration process, it may not necessarily minimize downtime. You may still need to plan for an appropriate maintenance window to complete the migration with minimal disruption to your application."

upvoted 1 times

✉ **NotMeAnyway** 2 months, 3 weeks ago

1. Prepare for the migration by? b. creating an Always On availability group on VM1

Before migrating DB1 to VM1, you should create an Always On availability group on VM1 that includes a primary replica of the SQL Server 2019 instance. This will help you prepare VM1 for the migration and minimize downtime.

2. Perform the migration by using? c. Log shipping

Log shipping is a SQL Server high availability and disaster recovery solution that allows you to synchronize data between SQL Server instances with different versions and operating systems.

With log shipping, you can periodically take backups of the transaction logs from the primary SQL Server 2017 instance on-premises and then restore them on the secondary SQL Server 2019 instance on VM1 (Linux). This process ensures that the secondary SQL Server instance (VM1) remains updated with changes from the primary SQL Server instance.

When you are ready to migrate, you can perform a final log backup on the primary SQL Server 2017 instance, restore it on the secondary SQL Server 2019 instance (VM1), and then change the roles to make VM1 the primary SQL Server instance.

upvoted 2 times

✉ **SedateBloggs** 3 months ago

Hi

I would suggest Creating an Always on AG on VM1 for prepare for the migration and Using A distributed availability group as per:

" A distributed availability group is a special type of availability group that spans two separate availability groups. The availability groups that participate in a distributed availability group don't need to be in the same location and include cross-domain support.

This method minimizes downtime, use when you have an availability group configured on-premises" from <https://learn.microsoft.com/en-us/azure/azure-sql/migration-guides/virtual-machines/sql-server-to-sql-on-azure-vm-migration-overview?view=azuresql>

upvoted 2 times

✉ **rasikaroshan** 3 months, 1 week ago

I would go with

1. Creating an Always On availability group on VM1
2. Use distributed availability group

<https://learn.microsoft.com/en-us/sql/database-engine/availability-groups/windows/distributed-availability-groups?view=sql-server-ver15>

upvoted 3 times

✉ **T10T** 3 months, 1 week ago

Prepare for the migration by:

"Creating an Always On availability group on VM1"

You need to create an Always On availability group on VM1 (the target Azure virtual machine running Linux with SQL Server 2019). This will help you set up a Distributed Availability Group to replicate data between on-premises SQL Server instances and the Azure virtual machine.

Perform the migration by using:  
"a distributed availability group"

To minimize downtime during the migration, you should use a Distributed Availability Group (DAG). A DAG will allow you to configure data synchronization between the on-premises AG1 availability group and the newly created availability group on VM1. This enables replication of data with minimal downtime and allows you to perform a planned failover when the migration is ready to proceed.

resource = <https://learn.microsoft.com/en-us/sql/database-engine/availability-groups/windows/distributed-availability-groups?view=sql-server-ver15>

upvoted 1 times

✉ **vb3d** 3 months, 3 weeks ago

The key part for me in this question is "You need to migrate DB1 to VM1"  
This means that you are not going to use VM1 as a secondary replica, instead it will be the new place for your Always on group.  
So solution should be "Creating an Always On availability group on VM1"  
Also, you don't need to upgrade as it is not going to be part of the same group.  
Second option all agree that it is "Azure Migrate"

upvoted 3 times

✉ **zellck** 4 months ago

1. Creating an Always On availability group on VM1
2. Azure Migrate

<https://learn.microsoft.com/en-us/azure/azure-sql/migration-guides/virtual-machines/sql-server-availability-group-to-sql-on-azure-vm?view=azuresql>

<https://learn.microsoft.com/en-us/azure/migrate/migrate-services-overview>

Azure Migrate provides a simplified migration, modernization, and optimization service for Azure. All pre-migration steps such as discovery, assessments, and right-sizing of on-premises resources are included for infrastructure, data, and applications. Azure Migrate's extensible framework allows for integration of third-party tools, thus expanding the scope of supported use-cases. It provides the following:

Assessment, migration, and modernization: In the Azure Migrate hub, you can assess, migrate, and modernize:

- Databases: Assess on-premises SQL Server instances and databases to migrate them to an SQL Server on an Azure VM or an Azure SQL Managed Instance or to an Azure SQL Database.

upvoted 5 times

✉ **abxc** 4 months ago

Shouldn't it be upgrade on prem instances and use distributed availability group as we are migrating it to a Linux vm?

upvoted 1 times

✉ **[Removed]** 4 months, 2 weeks ago

As ED79 right mentioned, to use AG you need same versions of SQL instances, so upgrading is only the option from A, then when you have same versions you can setup another secondary replica for VM1 <https://www.sqlshack.com/configure-cross-platform-sql-server-always-on-availability-groups/>, it allows to perform failover with minimal downtime. No necessary to use Azure Migrate, that also is another option.

upvoted 2 times

✉ **ed79** 4 months, 3 weeks ago

Each server instance must be running the same version of SQL Server to participate in an Always On Availability Group.

upvoted 6 times

✉ **T10T** 3 months, 1 week ago

I disagree, if you are using the DAG method to migrate you can mix and match versions from 2017 on.

"Distributed availability groups in SQL Server 2017 or later can mix major versions of SQL Server in the same distributed availability group." resource = <https://learn.microsoft.com/en-us/sql/database-engine/availability-groups/windows/distributed-availability-groups?view=sql-server-ver16>

upvoted 1 times

✉ **VBK8579** 4 months, 3 weeks ago

For preparing the migration, you can add a secondary replica to AG1.

For performing the migration, you can use Azure Migrate.

upvoted 2 times

✉ **janvandermerwer** 5 months, 1 week ago

Replica + migrate

upvoted 3 times

✉ **Aziza\_Adam** 5 months, 3 weeks ago

A is correct plus Azure migrate

upvoted 2 times

**HOTSPOT**

You are building an Azure web app that will store the Personally Identifiable Information (PII) of employees.

You need to recommend an Azure SQL Database solution for the web app. The solution must meet the following requirements:

- Maintain availability in the event of a single datacenter outage.
- Support the encryption of specific columns that contain PII.
- Automatically scale up during payroll operations.
- Minimize costs.

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

NOTE: Each correct selection is worth one point.

**Answer Area**

Service tier and computer tier:

Business Critical service tier and Serverless computer tier  
General Purpose service tier and Serverless computer tier  
Hyperscale service tier and Provisioned compute tier

Encryption method:

Always Encrypted  
Microsoft SQL Server and database encryption keys  
Transparent Data Encryption (TDE)

**Answer Area**

Service tier and computer tier:

Business Critical service tier and Serverless computer tier  
General Purpose service tier and Serverless computer tier  
Hyperscale service tier and Provisioned compute tier

Correct Answer:

Encryption method:

Always Encrypted  
Microsoft SQL Server and database encryption keys  
Transparent Data Encryption (TDE)

 **janvandermerwer** Highly Voted 5 months, 1 week ago

Always Encrypted is a feature designed to protect sensitive data stored in specific database columns from access (for example, credit card numbers, national identification numbers, or data on a need to know basis). This includes database administrators or other privileged users who are authorized to access the database to perform management tasks, but have no business need to access the particular data in the encrypted columns. The data is always encrypted, which means the encrypted data is decrypted only for processing by client applications with access to the encryption key. The encryption key is never exposed to SQL Database or SQL Managed Instance and can be stored either in the Windows Certificate Store or in Azure Key Vault.

upvoted 10 times

 **janvandermerwer** 5 months, 1 week ago

General/Standard serveless for db tier.  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#general-purpose-service-tier-zone-redundant-availability>  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/serverless-tier-overview?view=azuresql>

upvoted 8 times

 **zelick** Highly Voted 4 months, 1 week ago

1. GP service tier and Serverless compute tier
2. Always Encrypted

<https://learn.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql#service-tiers>

The General Purpose service tier is designed for common workloads. It offers budget-oriented balanced compute and storage options.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql#compute-tiers>

Serverless compute tier: auto-scales compute resources based on workload activity and bills for the amount of compute used, per second. The serverless compute tier is generally available in the General Purpose service tier, and is currently in preview in the Hyperscale service tier.

upvoted 10 times

✉️ **zellick** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/sql/relational-databases/security/encryption/always-encrypted-database-engine?view=sql-server-ver16>  
Always Encrypted is a feature designed to protect sensitive data, such as credit card numbers or national identification numbers (for example, U.S. social security numbers), stored in Azure SQL Database, Azure SQL Managed Instance, and SQL Server databases. Always Encrypted allows clients to encrypt sensitive data inside client applications and never reveal the encryption keys to the Database Engine. This provides a separation between those who own the data and can view it, and those who manage the data but should have no access - on-premises database administrators, cloud database operators, or other high-privileged unauthorized users. As a result, Always Encrypted enables customers to confidently store their sensitive data in the cloud, and to reduce the likelihood of data theft by malicious insiders.

upvoted 2 times

✉️ **Tr619899** [Most Recent] 2 weeks, 4 days ago

For this scenario, I would recommend using the General Purpose service tier with the Serverless compute tier for the Azure SQL Database solution. This configuration provides cost-effective storage and compute resources that can automatically scale up during periods of high demand, such as during payroll operations.

To support the encryption of specific columns that contain PII, you can use the Always Encrypted feature. This feature allows you to encrypt sensitive data within client applications and never reveal the encryption keys to the database engine. This helps to ensure that sensitive data remains protected at all times, even if the database is compromised.

upvoted 1 times

✉️ **lvz** 1 month ago

As of 27-05-2023, I am trying to figure out if there is such a thing called Azure sql business critical, serverless tier. I don't see one. I have been searching, neither Premium has serverless tier, only general purpose do. So if anyone is aware of it, please share the link below the post. thx  
upvoted 3 times

✉️ **nakacom** 1 month ago

<https://learn.microsoft.com/en-us/azure/azure-arc/data/service-tiers>  
upvoted 2 times

✉️ **NotMeAnyWay** 2 months, 3 weeks ago

1. Service tier and compute tier? b. General Purpose service tier and serverless compute tier

The General Purpose service tier with serverless compute tier provides a cost-effective solution that meets the requirements. General Purpose tier supports zone-redundant configurations, which can maintain availability in the event of a single datacenter outage. The serverless compute tier automatically scales up or down based on workload, which is ideal for handling the increased load during payroll operations.

2. Encryption method? a. Always Encrypted

Always Encrypted is the recommended encryption method for this scenario because it allows you to encrypt specific columns that contain PII. This ensures that sensitive data is encrypted both at rest and in transit, providing a higher level of security for PII. Transparent Data Encryption (TDE) encrypts the entire database at rest but does not provide column-level encryption, and Microsoft SQL Server and database encryption keys would involve additional manual configuration and management of keys.

upvoted 6 times

✉️ **VBK8579** 4 months, 3 weeks ago

For the Service tier and computer tier, you should recommend "General Purpose service tier and Provisioned compute tier".

For the Encryption method, you should recommend "Always Encrypted".

upvoted 4 times

✉️ **jwjwjjw** 5 months ago

First box is "General Purpose":

Zone-redundant configuration for the General Purpose service tier is offered for both serverless and provisioned compute.

<https://learn.microsoft.com/en-GB/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

upvoted 1 times

✉️ **RandomNickname** 5 months ago

General Purpose supports ZRS.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#general-purpose-service-tier-zone-redundant-availability>

Always encrypted for securing data in transit.

<https://azure.microsoft.com/en-us/blog/transparent-data-encryption-or-always-encrypted/>

upvoted 3 times

✉️ **maarten4119** 5 months ago

Why business critical service tier and not general purpose?

upvoted 2 times

✉️ **rvnz45** 5 months ago

it is still in preview and also need Gen5 hardware selected  
upvoted 2 times

 **zodata** 5 months, 1 week ago

Correct.

Always Encrypted is a feature designed to protect sensitive data stored in specific database columns from access (for example, credit card numbers, national identification numbers, or data on a need to know basis).

upvoted 1 times

You plan to deploy an Azure Database for MySQL flexible server named Server1 to the East US Azure region.

You need to implement a business continuity solution for Server1. The solution must minimize downtime in the event of a failover to a paired region.

What should you do?

- A. Create a read replica.
- B. Store the database files in Azure premium file shares.
- C. Implement Geo-redundant backup.
- D. Configure native MySQL replication.

**Correct Answer: C**

*Community vote distribution*

C (100%)

  **Dumber** 6 days, 2 hours ago

It tend to differ.. Answer A seems to be possible as well. It is faster then a restore.

<https://learn.microsoft.com/en-us/azure/mysql/flexible-server/concepts-read-replicas#cross-region-replication-in-geo-paired-region>

You can create a read replica in a different region from your source server. Cross-region replication can be helpful for scenarios like disaster recovery planning or bringing data closer to your users. Azure database for MySQL Flexible Server allows you to provision read-replica in the Azure supported [geo-paired region]

upvoted 1 times

  **yonie** 2 months ago

**Selected Answer: C**

The service backups can be configured as geo-redundant at create time.

<https://learn.microsoft.com/en-us/azure/mysql/flexible-server/concepts-business-continuity>

upvoted 1 times

  **C\_M\_M** 2 months ago

**Selected Answer: C**

Correct

Azure MySQL server -flexible only has zonal redundancy by default. YOu must enable geo-redundancy by yourself if you plan to use it for pair-region disaster recovery

<https://learn.microsoft.com/en-us/azure/mysql/flexible-server/how-to-move-regions>

upvoted 1 times

  **C\_M\_M** 2 months ago

Correct

Azure MySQL server -flexible only has zonal redundancy by default. YOu must enable geo-redundancy by yourself if you plan to use it for pair-region disaster recovery

<https://learn.microsoft.com/en-us/azure/mysql/flexible-server/how-to-move-regions>

upvoted 1 times

  **chillzz** 2 months, 1 week ago

**Selected Answer: C**

High availability seems only available in the same zone

<https://learn.microsoft.com/en-us/azure/mysql/flexible-server/concepts-high-availability>

To failover to another region, you would use a geo-redundant backup

<https://learn.microsoft.com/en-us/azure/mysql/flexible-server/concepts-business-continuity>

upvoted 2 times

Question #1

Topic 4

You have an Azure subscription that contains a Basic Azure virtual WAN named VirtualWAN1 and the virtual hubs shown in the following table.

Name	Location
Hub1	US East
Hub2	US West

You have an ExpressRoute circuit in the US East Azure region.

You need to create an ExpressRoute association to VirtualWAN1.

What should you do first?

- A. Upgrade VirtualWAN1 to Standard.
- B. Create a gateway on Hub1.
- C. Enable the ExpressRoute premium add-on.
- D. Create a hub virtual network in US East.

**Correct Answer: A**

A basic Azure virtual WAN does not support express route. You have to upgrade to standard.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-wan/virtual-wan-about>

*Community vote distribution*

A (100%)

 **mmar123** Highly Voted 1 year, 4 months ago

There are two types of Virtual WANs. one is the BASIC and the second one is STANDARD. BASIC supports only SITE to SITE VPN. STANDARD supports below configs,

ExpressRoute  
User VPN (P2S)  
VPN (site-to-site)  
Inter-hub and VNet-to-VNet transiting through the virtual hub  
Azure Firewall  
NVA in a virtual WAN

NOTE: You can upgrade from Basic to Standard, but you cannot revert from Standard back to Basic.

upvoted 63 times

 **Eltooth** Highly Voted 1 year, 6 months ago

Selected Answer: A

Correct answer - A.

<https://docs.microsoft.com/en-us/azure/virtual-wan/virtual-wan-about#basicstandard>

upvoted 14 times

 **NotMeAnyWay** Most Recent 2 months, 3 weeks ago

Selected Answer: A

A. Upgrade VirtualWAN1 to Standard.

To create an ExpressRoute association with VirtualWAN1, you need to upgrade VirtualWAN1 from the Basic tier to the Standard tier. ExpressRoute connectivity to a virtual WAN is only supported in the Standard tier of Azure Virtual WAN. Once you have upgraded VirtualWAN1 to the Standard tier, you can proceed with setting up the ExpressRoute association.

upvoted 1 times

 **VBK8579** 4 months, 2 weeks ago

Selected Answer: A

Steps to perform in sequence

1. Upgrade VirtualWAN1 to Standard.
2. Create a virtual hub in the US East region and associate it with the ExpressRoute circuit.
3. Associate the virtual hub with VirtualWAN1.

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: A**

A. Upgrade VirtualWAN1 to Standard

upvoted 1 times

 **egdeeptha** 7 months, 1 week ago

**Selected Answer: A**

<https://learn.microsoft.com/en-us/azure/virtual-wan/virtual-wan-expressroute-portal>

Type: Basic or Standard. Select Standard. If you select Basic, understand that Basic virtual WANs can only contain Basic hubs. Basic hubs can only be used for site-to-site connections.

upvoted 2 times

 **al608** 1 year ago

did my Exam today. This was on there.

upvoted 2 times

 **mitsuichiu** 1 year ago

Correct answer - A.

upvoted 1 times

 **Gor** 1 year, 1 month ago

**Selected Answer: A**

Correct Answer - A

<https://docs.microsoft.com/en-us/azure/virtual-wan/virtual-wan-about#basicstandard>

upvoted 1 times

 **Teringzooi** 1 year, 2 months ago

**Selected Answer: A**

Answer is A

<https://docs.microsoft.com/en-us/azure/virtual-wan/virtual-wan-about#basicstandard>

upvoted 1 times

 **Contactfornitish** 1 year, 2 months ago

Came in exam today 04/04/2022

upvoted 2 times

 **Insanewhip** 1 year, 3 months ago

Appeared on my exam today, March 10th, 2022. I selected A.

upvoted 2 times

 **jinger** 1 year, 3 months ago

Answer A is correct

upvoted 1 times

 **Nansman** 1 year, 4 months ago

Answer A is correct.

upvoted 2 times

 **[Removed]** 1 year, 6 months ago

**Selected Answer: A**

A is correct

upvoted 4 times

You have an Azure subscription that contains a storage account.

An application sometimes writes duplicate files to the storage account.

You have a PowerShell script that identifies and deletes duplicate files in the storage account. Currently, the script is run manually after approval from the operations manager.

You need to recommend a serverless solution that performs the following actions:

- ⇒ Runs the script once an hour to identify whether duplicate files exist
- ⇒ Sends an email notification to the operations manager requesting approval to delete the duplicate files
- ⇒ Processes an email response from the operations manager specifying whether the deletion was approved
- ⇒ Runs the script if the deletion was approved

What should you include in the recommendation?

- A. Azure Logic Apps and Azure Event Grid
- B. Azure Logic Apps and Azure Functions
- C. Azure Pipelines and Azure Service Fabric
- D. Azure Functions and Azure Batch

**Correct Answer: B**

You can schedule a powershell script with Azure Logic Apps.

When you want to run code that performs a specific job in your logic apps, you can create your own function by using Azure Functions. This service helps you create Node.js, C#, and F# functions so you don't have to build a complete app or infrastructure to run code. You can also call logic apps from inside Azure functions.

Reference:

<https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-azure-functions>

*Community vote distribution*

B (100%)

✉  **Eltooth**  1 year, 6 months ago

**Selected Answer: B**

Correct answer - B

upvoted 23 times

✉  **itvinoth83**  7 months ago

On the AZ 305 exam, 28/11/22

upvoted 8 times

✉  **NotMeAnyWay**  2 months, 3 weeks ago

**Selected Answer: B**

B. Azure Logic Apps and Azure Functions

Azure Logic Apps is a serverless solution that enables you to create and run workflows that integrate with various services and systems. You can use Azure Logic Apps to create a workflow that runs the PowerShell script once an hour using a time-based trigger, sends an email notification to the operations manager for approval, and processes the email response.

Azure Functions is a serverless compute service that allows you to run event-driven code without having to manage infrastructure explicitly. You can use Azure Functions to host the PowerShell script, which can be triggered by the Logic App when the operations manager approves the deletion.

Combining Azure Logic Apps and Azure Functions will provide the necessary components to meet the requirements of the scenario.

upvoted 1 times

✉  **VBK8579** 4 months, 2 weeks ago

**Selected Answer: B**

Azure Logic Apps can be used to schedule the script to run once an hour, send an email notification to the operations manager requesting approval to delete the duplicate files, and process the email response from the operations manager specifying whether the deletion was approved.

Azure Functions can be used to run the script that identifies and deletes the duplicate files, based on the response received from the operations manager. This way, the solution can be triggered only when the operations manager approves the deletion, providing an additional layer of control and security.

upvoted 1 times

 **OPT\_001122** 5 months ago

**Selected Answer: B**

B. Azure Logic Apps and Azure Functions

- do not get confused with azure batch

upvoted 1 times

 **Gor** 1 year, 1 month ago

**Selected Answer: B**

B is correct.

<https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-azure-functions>

upvoted 2 times

 **dasEnder** 1 year, 1 month ago

**Selected Answer: B**

I would like to add: as far as I know Logic Apps do not support PowerShell (the answer explanation says otherwise). Azure Pipelines is for CI (devOps). And batch is for HPC workloads. So B is the only viable option.

upvoted 5 times

 **datafypk** 1 year, 1 month ago

was in exam 8 May 22

upvoted 3 times

 **Teringzooi** 1 year, 2 months ago

**Selected Answer: B**

B is correct.

<https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-azure-functions>

upvoted 1 times

 **akkrishna22** 1 year, 2 months ago

correct answer B - on exam 03-31-2022

upvoted 3 times

 **piyipo3349** 1 year, 3 months ago

**Selected Answer: B**

Correct answer - B

upvoted 1 times

 **cega** 1 year, 3 months ago

Correct answer

upvoted 1 times

 **Makinto** 1 year, 4 months ago

**Selected Answer: B**

Correct answer - B

upvoted 1 times

Your company has the infrastructure shown in the following table.

Location	Resource
Azure	<ul style="list-style-type: none"> <li>• Azure subscription named Subscription1</li> <li>• 20 Azure web apps</li> </ul>
On-premises datacenter	<ul style="list-style-type: none"> <li>• Active Directory domain</li> <li>• Server running Azure AD Connect</li> <li>• Linux computer named Server1</li> </ul>

The on-premises Active Directory domain syncs with Azure Active Directory (Azure AD).

Server1 runs an application named App1 that uses LDAP queries to verify user identities in the on-premises Active Directory domain.

You plan to migrate Server1 to a virtual machine in Subscription1.

A company security policy states that the virtual machines and services deployed to Subscription1 must be prevented from accessing the on-premises network.

You need to recommend a solution to ensure that App1 continues to function after the migration. The solution must meet the security policy.

What should you include in the recommendation?

- A. Azure AD Application Proxy
- B. the Active Directory Domain Services role on a virtual machine
- C. an Azure VPN gateway
- D. Azure AD Domain Services (Azure AD DS)

**Correct Answer: D**

Azure Active Directory Domain Services (Azure AD DS) provides managed domain services such as domain join, group policy, lightweight directory access protocol (LDAP), and Kerberos/NTLM authentication.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory-domain-services/overview>

*Community vote distribution*

D (96%) 4%

 **bkrich**  1 year, 6 months ago

**Selected Answer: D**

D seems to be correct. You can use Azure AD DS and sync identities needed from Azure AD to Azure AD DS to use legacy protocols like LDAP, Kerberos and NTLM

upvoted 24 times

 **Eltooth**  1 year, 6 months ago

**Selected Answer: D**

AD DS in azure on a VM would be easiest option however policy restricts access.

Correct answer - D

upvoted 10 times

 **FrancisFerreira** 1 year, 3 months ago

If you have AD DS in an Azure VM, you wouldn't need to access the internal network as the on-prem AD DS is already synced to Azure AD.

Why would you do that tho? It's one extra VM to maintain, coz Server1 is a Linux VM that can't host AD DS, so you would need an extra Win VM just for that.

upvoted 7 times

 **betterthanlife**  1 month, 3 weeks ago

D is correct, App Proxy would not work & both the VPN gateway or DC in Azure IaaS would violate the requirement that virtual machines and services deployed to Subscription1 must be prevented from accessing the on-premises network.

upvoted 1 times

 **NotMeAnyWay** 2 months, 3 weeks ago

**Selected Answer: D**

#### D. Azure AD Domain Services (Azure AD DS)

Azure AD Domain Services (Azure AD DS) provides managed domain services such as domain join, group policy, LDAP, and Kerberos/NTLM authentication. It integrates with your existing Azure AD tenant, allowing you to continue using LDAP queries to verify user identities after migrating Server1 to a virtual machine in Subscription1.

By using Azure AD DS, you can ensure that App1 continues to function after migration while adhering to the company security policy that prevents virtual machines and services deployed to Subscription1 from accessing the on-premises network.

upvoted 2 times

 **OPT\_001122** 5 months ago

**Selected Answer: D**

D. Azure AD Domain Services (Azure AD DS)

upvoted 1 times

 **Gowind2** 9 months, 3 weeks ago

**Selected Answer: D**

Example here: <https://docs.microsoft.com/en-us/azure/active-directory-domain-services/scenarios#azure-ad-ds-for-hybrid-organizations>

Azure AD Already exists and is synced with on premises AD.

upvoted 2 times

 **lemoniazure** 10 months, 3 weeks ago

D,

Reason:

An Azure AD DS managed domain lets you run legacy applications in the cloud that can't use modern authentication methods, or where you don't want directory lookups to always go back to an on-premises AD DS environment. You can lift and shift those legacy applications from your on-premises environment into a managed domain, without needing to manage the AD DS environment in the cloud.

Azure AD DS integrates with your existing Azure AD tenant. This integration lets users sign in to services and applications connected to the managed domain using their existing credentials. You can also use existing groups and user accounts to secure access to resources. These features provide a smoother lift-and-shift of on-premises resources to Azure.

upvoted 4 times

 **shaojunni** 11 months ago

D is correct. B is incorrect, since AAD is already in place and synced with AD on-premise.

upvoted 1 times

 **AubinBakana** 11 months, 1 week ago

**Selected Answer: D**

This is the best answer. Azure AD DS was designed exactly for this type of scenario.

upvoted 1 times

 **codingdown** 11 months, 2 weeks ago

**Selected Answer: A**

Application Proxy is a feature of Azure AD that enables users to access on-premises web applications from a remote client.

upvoted 1 times

 **AubinBakana** 11 months, 1 week ago

Yes, but we are not talking about users here. This is an application feature. App Proxy is a jump box that allows users to connect to services on-prem without poking a hole in the Firewall. Totally different situation here.

upvoted 3 times

 **codingdown** 11 months, 2 weeks ago

**Selected Answer: A**

Application Proxy is a feature of Azure AD that enables users to access on-premises web applications from a remote client.

upvoted 1 times

 **tunmise\_ay** 1 year ago

was in exam 1 June 2022

upvoted 5 times

 **al608** 1 year ago

did any other questions from this come. I am doing my exam on the 22nd

upvoted 1 times

 **Gor** 1 year, 1 month ago

**Selected Answer: D**

Correct answer - D

<https://docs.microsoft.com/en-us/azure/active-directory-domain-services/faqs#can-i-add-domain-controllers-to-an-azure-ad-domain-services-managed-domain>

upvoted 2 times

 **winframe** 1 year, 1 month ago

App1 requires to use LDAP queries to verify identities. I suppose the App will not modify (question doesn't refer to any changes in the App), no LDAP in AZ AD, so the only possibility is deploy an AD DS in Azure. VPN is in place. B seems to be correct, a Domain Controller in Azure  
upvoted 2 times

✉ **datafypk** 1 year, 1 month ago

was in exam 8 May 22

upvoted 4 times

✉ **Teringzooi** 1 year, 2 months ago

**Selected Answer: D**

Correct answer - D

<https://docs.microsoft.com/en-us/azure/active-directory-domain-services/faqs#can-i-add-domain-controllers-to-an-azure-ad-domain-services-managed-domain>

upvoted 1 times

✉ **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22

upvoted 2 times

You need to design a solution that will execute custom C# code in response to an event routed to Azure Event Grid. The solution must meet the following requirements:

- ⇒ The executed code must be able to access the private IP address of a Microsoft SQL Server instance that runs on an Azure virtual machine.
- ⇒ Costs must be minimized.

What should you include in the solution?

- A. Azure Logic Apps in the Consumption plan
- B. Azure Functions in the Premium plan
- C. Azure Functions in the Consumption plan
- D. Azure Logic Apps in the integrated service environment

**Correct Answer: B**

Virtual connectivity is included in the Premium plan.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale#hosting-plans-comparison>

*Community vote distribution*

B (99%)

✉  **Eltooth** Highly Voted 1 year, 6 months ago

**Selected Answer: B**

Correct answer - B

Consumption plan cannot access Virtual Network Integration features.

Virtual network integration allows your function app to access resources inside a virtual network.

<https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale#networking-features>

upvoted 43 times

✉  **sairaj9396** 1 year, 1 month ago

Correct!

upvoted 1 times

✉  **RKMCT** Highly Voted 1 year, 5 months ago

B is correct Answer.

Premium Plan get virtual network connectivity.

<https://docs.microsoft.com/en-us/azure/azure-functions/functions-scale>

upvoted 8 times

✉  **NotMeAnyWay** Most Recent 2 months, 3 weeks ago

**Selected Answer: B**

B. Azure Functions in the Premium plan

Azure Functions in the Premium plan is the best solution to meet the requirements. With the Premium plan, you can execute custom C# code in response to an event routed to Azure Event Grid. Additionally, the Premium plan allows you to access resources in a virtual network, such as the private IP address of a SQL Server instance running on an Azure virtual machine.

Azure Functions in the Consumption plan does not support virtual network integration, which is necessary for accessing the private IP address of the SQL Server instance. Azure Logic Apps in both the Consumption plan and the integrated service environment are not ideal for executing custom C# code and may not be as cost-effective as Azure Functions in the Premium plan.

upvoted 3 times

✉  **VBK8579** 4 months, 2 weeks ago

**Selected Answer: B**

Access to Private IP: Azure Functions in the Premium plan supports accessing resources within a virtual network, which includes accessing the private IP address of a Microsoft SQL Server instance running on an Azure virtual machine. Azure Functions in the Consumption plan do not support this.

upvoted 1 times

✉  **OPT\_001122** 5 months ago

**Selected Answer: B**

B. Azure Functions in the Premium plan

upvoted 1 times

 **mtc9** 7 months, 3 weeks ago

Correct answer: B

Logic App will not run your custom code, so function.

Consumption plan doesn't support vnet integration, you need premium or application plan. Application plan is not enlisted in the answers, so Functions Premium.

upvoted 2 times

 **Gowind2** 9 months, 3 weeks ago

**Selected Answer: B**

Implementation example here: <https://docs.microsoft.com/en-us/azure/azure-functions/functions-create-vnet>

upvoted 1 times

 **kaushik** 10 months ago

was in my exam 31-08-2022

upvoted 3 times

 **AubinBakana** 11 months, 1 week ago

**Selected Answer: B**

A premium Function App can access VM features such private IPs, not basic. Logic App is not an option, you can't write code directly to Logic App.

upvoted 1 times

 **Razvan123** 11 months, 1 week ago

You can use a Private Link to access the DB. So Consumption plan also works.

upvoted 1 times

 **Atanu** 11 months, 2 weeks ago

This question has been taken from AZ-304, Option C is correct

upvoted 1 times

 **mtc9** 11 months, 2 weeks ago

You don't need premium plan, you can also use app service plan to integrate with vnet, but this option was not enlisted in possible answers, so premium plan is the only viable answer here. Login apps are not implemented by C# code.

upvoted 1 times

 **SilverFox22** 11 months, 2 weeks ago

**Selected Answer: B**

A Consumption plan cannot access Virtual Network Integration features (like accessing the Private IP address).

upvoted 2 times

 **bellorg** 11 months, 4 weeks ago

B is correct

upvoted 2 times

 **thatsme2121** 12 months ago

**Selected Answer: B**

Premium - You require features that aren't available on the Consumption plan, such as virtual network connectivity.

upvoted 2 times

 **al608** 1 year ago

did my Exam today. This was on there.

upvoted 1 times

 **Rock** 1 year ago

Correct Answer is B

"The Premium plan provides serverless scale while supporting virtual network integration."

<https://docs.microsoft.com/en-us/azure/azure-functions/functions-create-vnet>

upvoted 2 times

You have an on-premises network and an Azure subscription. The on-premises network has several branch offices.

A branch office in Toronto contains a virtual machine named VM1 that is configured as a file server. Users access the shared files on VM1 from all the offices.

You need to recommend a solution to ensure that the users can access the shared files as quickly as possible if the Toronto branch office is inaccessible.

What should you include in the recommendation?

- A. a Recovery Services vault and Windows Server Backup
- B. Azure blob containers and Azure File Sync
- C. a Recovery Services vault and Azure Backup
- D. an Azure file share and Azure File Sync

**Correct Answer: D**

Use Azure File Sync to centralize your organization's file shares in Azure Files, while keeping the flexibility, performance, and compatibility of an on-premises file server. Azure File Sync transforms Windows Server into a quick cache of your Azure file share.

Reference:

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

*Community vote distribution*

D (100%)

 **bkrich** Highly Voted 1 year, 6 months ago

**Selected Answer: D**

They say "quickly as possible" so an Azure Fileshare with AzureFileSync running looks to be the quickest option to get things accessible again.  
upvoted 21 times

 **Eltooth** Highly Voted 1 year, 6 months ago

**Selected Answer: D**

Azure file share and sync offers "offline" access if primary server is unavailable as copy is help in cloud endpoint.  
upvoted 7 times

 **Eltooth** 1 year, 6 months ago

With almost immediate content upload data is sync'd from server endpoint almost immediately ensuring near-live copy (<60 seconds).  
upvoted 3 times

 **NotMeAnyway** Most Recent 2 months, 3 weeks ago

**Selected Answer: D**

D. an Azure file share and Azure File Sync

Azure File Sync enables you to centralize your organization's file shares in Azure Files while maintaining local access to the data. In this scenario, you can use Azure File Sync to synchronize the shared files on VM1 to an Azure file share. This ensures that the latest versions of the files are available in Azure.

In case the Toronto branch office becomes inaccessible, users can access the shared files directly from the Azure file share. This allows them to access the files as quickly as possible without relying on the availability of the Toronto branch office.

upvoted 2 times

 **OPT\_001122** 5 months ago

**Selected Answer: D**

D. an Azure file share and Azure File Sync  
upvoted 1 times

 **Dinima** 9 months, 1 week ago

Selected Answer: D

upvoted 1 times

 **CloudJordao** 9 months, 3 weeks ago

**Selected Answer: D**

correct  
upvoted 1 times

 **AubinBakana** 11 months ago

**Selected Answer: D**

This one would be a bonus if it came  
upvoted 1 times

 **Gor** 1 year, 1 month ago

**Selected Answer: D**

Correct Answer - D.  
<https://docs.microsoft.com/en-us/azure/storage/files/storage-sync-files-deployment-guide>  
upvoted 1 times

 **datafypk** 1 year, 1 month ago

was in exam 8 May 22  
upvoted 3 times

 **Teringzooi** 1 year, 2 months ago

**Selected Answer: D**

Correct answer: D  
Azure file share and Azure filesync.  
upvoted 1 times

 **g6singh** 1 year, 2 months ago

"Azure file share and sync offers "offline" access if primary server is unavailable as copy is help in cloud endpoint. " Does Azure File Share with Sync offers both read write operations or just a read only copy, in case primary server is unavailable ?  
upvoted 2 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22  
upvoted 2 times

 **HGD545** 1 year, 4 months ago

On the AZ-305 2/22/22  
upvoted 3 times

 **makovec25** 1 year, 4 months ago

**Selected Answer: D**

D for sure  
upvoted 2 times

 **jeremykebir** 1 year, 5 months ago

**Selected Answer: D**

D is good  
upvoted 3 times

**HOTSPOT -**

You have an Azure subscription named Subscription1 that is linked to a hybrid Azure Active Directory (Azure AD) tenant.

You have an on-premises datacenter that does NOT have a VPN connection to Subscription1. The datacenter contains a computer named Server1 that has

Microsoft SQL Server 2016 installed. Server is prevented from accessing the internet.

An Azure logic app resource named LogicApp1 requires write access to a database on Server1.

You need to recommend a solution to provide LogicApp1 with the ability to access Server1.

What should you recommend deploying on-premises and in Azure? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

On-premises:

A Web Application Proxy for Windows Server
An Azure AD Application Proxy connector
An On-premises data gateway
Hybrid Connection Manager

Azure:

A connection gateway resource
An Azure Application Gateway
An Azure Event Grid domain
An enterprise application

**Answer Area**

On-premises:

A Web Application Proxy for Windows Server
An Azure AD Application Proxy connector
An On-premises data gateway
Hybrid Connection Manager

Correct Answer:

Azure:

A connection gateway resource
An Azure Application Gateway
An Azure Event Grid domain
An enterprise application

Box 1: An on-premises data gateway

For logic apps in global, multi-tenant Azure that connect to on-premises SQL Server, you need to have the on-premises data gateway installed on a local computer and a data gateway resource that's already created in Azure.

Box 2: A connection gateway resource

Reference:

<https://docs.microsoft.com/en-us/azure/connectors/connectors-create-api-sqlazure>

 **SilverFox22**  1 year, 5 months ago

The chosen answer is correct. <https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-gateway-connection>  
upvoted 35 times

 **FrancisFerreira**  1 year, 3 months ago

Okay, got this wrong. Thought the solution was to build around AD Application Proxy.  
Mainly coz I couldn't wrap my head around the fact that Server1 has no internet connectivity.

Well, turns out we don't need to install the On-Prem Data Gateway on the same computer as our data source. So yeah, we could install it on any other machine (that's not a domain controller) that has access to internet and is on the same network as Server1.

<https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-gateway-install#prerequisites>

The highlighted answers are correct.

upvoted 17 times

✉ **ssgg100** 5 months, 2 weeks ago

It has no VPN connection, not Internet.

upvoted 1 times

✉ **PN117** 4 months, 3 weeks ago

"Server is prevented from accessing the internet."

upvoted 1 times

✉ **ronin201** [Most Recent] 2 weeks, 2 days ago

How on-prem GW connect to azure if no Internet on the server1? wrong description

upvoted 1 times

✉ **funlove15** 2 months, 3 weeks ago

correct

upvoted 1 times

✉ **NotMeAnyWay** 2 months, 3 weeks ago

1. On-premises? c. an on-premises data gateway

An on-premises data gateway allows you to securely access on-premises data and resources from Azure Logic Apps. In this scenario, deploying an on-premises data gateway on Server1 or another server in the datacenter will enable LogicApp1 to access the SQL Server 2016 database on Server1.

2. Azure? a. A connection gateway resource

In Azure, you should deploy a connection gateway resource. This gateway resource will communicate with the on-premises data gateway to provide LogicApp1 with the ability to access the SQL Server 2016 database on Server1 securely.

upvoted 4 times

✉ **omerco61** 4 months, 2 weeks ago

Correct Answer;

Look architecture

<https://www.biinsight.com/wp-content/uploads/2018/03/On-prem-DATA-Gateway-for-Azure-AS-How-it-works-Demo.png>

upvoted 1 times

✉ **OPT\_001122** 4 months, 2 weeks ago

Box 1: An on-premises data gateway

Box 2: A connection gateway resource

upvoted 2 times

✉ **bd1234** 3 months, 1 week ago

I mean OPT answer is right.

Create a new resource group or select an existing one where you want to deploy the Logic App.

Create a new Logic App resource in the selected resource group.

In the Logic App Designer, add a new trigger for the Logic App, such as the Recurrence trigger or any other trigger that suits your needs.

Add a new action to the Logic App and select the SQL Server connector.

Configure the SQL Server connector to connect to the SQL Server instance running on Server1 through the On-premises data gateway.

Define the action to be taken on the database once the connection is established. In this case, it could be writing data to the SQL Server database.

Save and test the Logic App to ensure that it is working correctly.

upvoted 1 times

✉ **bd1234** 3 months, 1 week ago

please delete above

upvoted 1 times

✉ **orionduo** 4 months, 2 weeks ago

The answer is right

Before you can connect to on-premises data sources from Azure Logic Apps, download and install the on-premises data gateway on a local computer. The gateway works as a bridge that provides quick data transfer and encryption between data sources on premises and your logic apps.

The on-premises data gateway depends on Azure Service Bus Messaging for cloud connectivity and establishes the corresponding outbound connections to the gateway's associated Azure region.

<https://learn.microsoft.com/en-us/azure/logic-apps/logic-apps-gateway-connection>

<https://learn.microsoft.com/en-us/azure/logic-apps/logic-apps-gateway-install>

<https://learn.microsoft.com/en-us/azure/connectors/connectors-create-api-sqlazure?tabs=consumption>

upvoted 1 times

✉ **bd1234** 3 months, 1 week ago

I hope everyone pay attention on this correct answer:

Create a new resource group or select an existing one where you want to deploy the Logic App.

Create a new Logic App resource in the selected resource group.

In the Logic App Designer, add a new trigger for the Logic App, such as the Recurrence trigger or any other trigger that suits your needs.

Add a new action to the Logic App and select the SQL Server connector.

Configure the SQL Server connector to connect to the SQL Server instance running on Server1 through the On-premises data gateway.

Define the action to be taken on the database once the connection is established. In this case, it could be writing data to the SQL Server database.

Save and test the Logic App to ensure that it is working correctly.

upvoted 1 times

 **bd1234** 3 months, 1 week ago

please delete above

upvoted 1 times

 **itvinoth83** 7 months ago

On the AZ 305 exam, 28/11/22

upvoted 5 times

 **AubinBakana** 11 months ago

Same solution applies for access to on-prem from the following Resources:

Power Automate,

- Power BI,

- Power Apps,

- Azure Analysis Services.

upvoted 2 times

 **tictaclu** 11 months, 3 weeks ago

After you install the on-premises data gateway on a local computer and before you can access data sources on premises from your logic apps, you have to create a gateway resource in Azure for your gateway installation. You can then select this gateway resource in the triggers and actions that you want to use for the on-premises connectors available in Azure Logic Apps.

Azure VPN gateway is used to connect only to IAAS such as VM, VMSS which has Private IP address from On-Prem to Azure. The communication is over IKE protocol. You need a Gateway in Azure as well as a VPN device in On-Prem to connect using this mode.

Using On-Prem Data Gateway you can communicate to Azure SAAS and PAAS services over HTTP/HTTPS. You only need Gateway at On-Premises, no gateway is required in Azure end.

upvoted 4 times

 **tunmise\_ay** 1 year ago

was in exam 1 June 2022

upvoted 5 times

 **Gor** 1 year, 1 month ago

On-Premises: On-Premises Data Gateway

Azure: Connection Gateway Resource

<https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-gateway-connection>

<https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-gateway-install#prerequisites>

upvoted 2 times

 **Teringzooi** 1 year, 2 months ago

Correct!

<https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-gateway-connection>

<https://docs.microsoft.com/en-us/azure/logic-apps/logic-apps-gateway-install#prerequisites>

upvoted 1 times

 **Contactfornitish** 1 year, 2 months ago

Came in exam today 4/4/2022

upvoted 5 times

 **akkrishna22** 1 year, 2 months ago

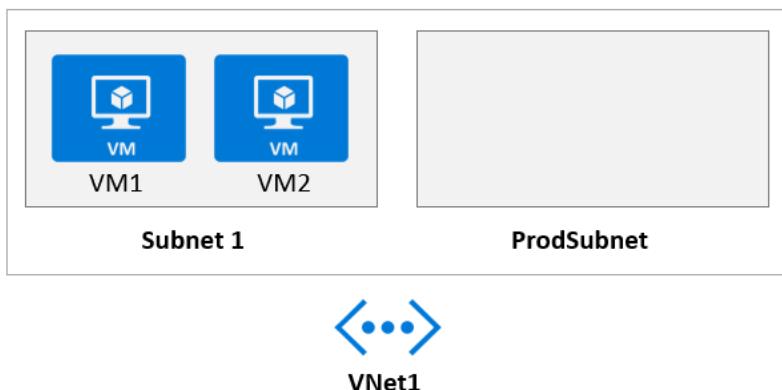
on exam 03-31-2022

upvoted 4 times

**HOTSPOT -**

Your company develops a web service that is deployed to an Azure virtual machine named VM1. The web service allows an API to access real-time data from VM1.

The current virtual machine deployment is shown in the Deployment exhibit.



The chief technology officer (CTO) sends you the following email message: "Our developers have deployed the web service to a virtual machine named VM1.

Testing has shown that the API is accessible from VM1 and VM2. Our partners must be able to connect to the API over the Internet. Partners will use this data in applications that they develop."

You deploy an Azure API Management (APIM) service. The relevant API Management configuration is shown in the API exhibit.

<b>Virtual network</b>	<b>Off</b>	<b>External</b>	<b>Internal</b>	
<b>Location</b>	<b>Virtual network</b>			<b>Subnet</b>
West Europe	VNet1		ProdSubnet	

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

<b>Statements</b>	<b>Yes</b>	<b>No</b>
The API is available to partners over the internet.	<input type="radio"/>	<input type="radio"/>
The APIM instance can access real-time data from VM1.	<input type="radio"/>	<input type="radio"/>
A VPN gateway is required for partner access.	<input type="radio"/>	<input type="radio"/>

## Answer Area

Statements	Yes	No
Correct Answer: The API is available to partners over the internet.	<input checked="" type="radio"/>	<input type="radio"/>
The APIM instance can access real-time data from VM1.	<input checked="" type="radio"/>	<input type="radio"/>
A VPN gateway is required for partner access.	<input type="radio"/>	<input checked="" type="radio"/>

Reference:

<https://docs.microsoft.com/en-us/azure/api-management/api-management-using-with-vnet>

✉ AKYK Highly Voted 1 year, 4 months ago

Correct answers!

upvoted 21 times

✉ orionduo Highly Voted 4 months, 2 weeks ago

The answer is right.

Yes - Because we are using an APIM, deployed to a VNET but configured to be "External"

Yes - Because the APIM is deployed in the same vNET as VM1 just in a different subnet. Communication between subnets are enabled by default and there is no mention of otherwise.

No - VPN required because the APIM is accessible from the internet by virtue of it being configured as "External"

upvoted 12 times

✉ funlove15 Most Recent 2 months, 3 weeks ago

Correct

upvoted 1 times

✉ rehanalam 5 months, 1 week ago

looks like are are no . subnet is mandatory to add a vent ,, it can only connect to the subnet mentioned under vent.. not the all subnet.

upvoted 1 times

✉ Q12346 5 months, 1 week ago

shown on 1/14/2023

upvoted 7 times

✉ JulienYork 7 months ago

yes as it seems

upvoted 1 times

✉ itvinoth83 7 months ago

On the AZ 305 exam, 28/11/22

upvoted 5 times

✉ mohamed1999 7 months, 3 weeks ago

The reason it is Yes, Yes, No is because when you deploy the APIM it is accessible from the internet and due to no mention of modifications on the NSG we can assume that traffic in the Vnet can move freely.

upvoted 2 times

✉ AubinBakana 11 months ago

Basically, you deploy the APIM in ProdSubnet. It's a little guessing game at this stage as they do not say anything about the virtual network(VNET1) or NSG. Because the API on VM1 is accessible over the internet, it is assumed that you can connect VNET1 from the internet. ProdSubnet is in VNET1, default security rules imply they can communicate freely.

Answer is correct but this was not designed as a gift. It's a tough one.

upvoted 1 times

✉ JaQua 1 year ago

Correct answer. See <https://docs.microsoft.com/en-us/azure/api-management/virtual-network-concepts?tabs=stv2>

upvoted 1 times

✉ Gor 1 year, 1 month ago

Answers are correct.

upvoted 1 times

✉ dasEnder 1 year, 1 month ago

When you think they are making a question about Azure API Management and results is a question about default VNet and NSG networking rules, dang!

upvoted 2 times

✉️  **akkrishna22** 1 year, 2 months ago  
was there in the exam on 03-31-2022  
upvoted 5 times

✉️  **Justin0020** 1 year, 3 months ago  
Was in my exam om March. 10  
upvoted 4 times

✉️  **hamid28** 1 year, 5 months ago  
correct answer  
upvoted 5 times

✉️  **frenchy237** 1 year, 5 months ago  
Why is the first part yes? They selected Prod Subnet not Subnet 1. This part confuses me  
upvoted 10 times

✉️  **FrancisFerreira** 1 year, 3 months ago  
Since they didn't say anything about it, we gotta assume default access between subnets is in place, which means resources in ProdSubnet can access resources in Subnet1 and vice-versa. And that is why the answer is Yes. It would be No only if the subnets were segregated (via NSGs, for instance).  
upvoted 11 times

✉️  **SilverFox22** 1 year, 5 months ago  
From the graphic in <https://docs.microsoft.com/en-us/azure/api-management/api-management-using-with-vnet>, the APIM uses a subnet, but makes resources on the whole VNet available.  
upvoted 4 times

✉️  **SilverFox22** 1 year, 5 months ago  
The given answer is correct. For more on the second statement, see <https://docs.microsoft.com/en-us/azure/api-management/api-management-howto-use-azure-monitor>  
upvoted 3 times

**DRAG DROP -**

Your company has an existing web app that runs on Azure virtual machines.

You need to ensure that the app is protected from SQL injection attempts and uses a layer-7 load balancer. The solution must minimize disruptions to the code of the app.

What should you recommend? To answer, drag the appropriate services to the correct targets. Each service may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

**Services**
 Web Application Firewall (WAF)

 Azure Application Gateway

 Azure Load Balancer

 Azure Traffic Manager

 SSL offloading

 URL-based content routing
**Answer Area**

Azure service:

 Service

Feature:

 Service
**Correct Answer:****Services**
 Web Application Firewall (WAF)

 Azure Application Gateway

 Azure Load Balancer

 Azure Traffic Manager

 SSL offloading

 URL-based content routing
**Answer Area**

Azure service:

 Azure Application Gateway

Feature:

 Web Application Firewall (WAF)
**Box 1: Azure Application Gateway**

The Azure Application Gateway Web Application Firewall (WAF) provides protection for web applications. These protections are provided by the Open Web Application Security Project (OWASP) Core Rule Set (CRS).

**Box 2: Web Application Firewall (WAF)**

Reference:

<https://docs.microsoft.com/en-us/azure/web-application-firewall/ag/application-gateway-customize-waf-rules-portal>

 **Eltooth** Highly Voted 1 year, 6 months ago

Correct answer - App Gateway and WAF.

WAF v2 has latest OWASP rules (3.2) in preview and requires App Gateway with required /24 subnet to deploy.

upvoted 25 times

-  **Davin0406** Highly Voted 8 months, 2 weeks ago  
Azure Application Gateway and WAF. appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 15 times
-  **azkumar305** Most Recent 2 months, 2 weeks ago  
Got this on 14-Apr-2023  
upvoted 5 times
-  **casmo** 8 months, 1 week ago  
Correct Answer  
upvoted 1 times
-  **Darkx** 8 months, 2 weeks ago  
appeared on 11th Oct 2022  
upvoted 4 times
-  **kaushik** 10 months ago  
was in my exam 31-08- 2022  
upvoted 5 times
-  **Haripr** 11 months, 3 weeks ago  
was in my exam 29 June 2022  
upvoted 4 times
-  **al608** 1 year ago  
did my Exam today. This was on there.  
upvoted 2 times
-  **Gor** 1 year, 1 month ago  
App Gateway and WAF.  
<https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/load-balancing-overview>  
upvoted 1 times
-  **Teringzooi** 1 year, 2 months ago  
Correct answer: Application Gateway and WAF  
  
WAF v2 has latest OWASP rules (3.2) in preview and requires App Gateway with required /24 subnet to deploy.  
upvoted 2 times
-  **Justin0020** 1 year, 3 months ago  
Was in my exam om March. 10  
upvoted 5 times
-  **jkklim** 1 year, 4 months ago  
<https://docs.microsoft.com/en-us/azure/application-gateway/overview>  
  
correct answer  
upvoted 6 times
-  **jkklim** 1 year, 4 months ago  
<https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/load-balancing-overview>  
  
Above URL will shows azure application gateway vs azure traffic manager (both are layer 7).  
But application gateway is the anwser for IaaS INFRASTRUTURE (AZURE VM)  
upvoted 5 times
-  **jkklim** 1 year, 4 months ago  
always remember that application gateway can contains WAF, the rest cannot  
upvoted 4 times
-  **FrancisFerreira** 1 year, 3 months ago  
Traffic Manager is \*not\* Layer 7. It is DNS-based.  
upvoted 3 times
-  **FabioVi** 1 year, 2 months ago  
I think that DNS layer is indeed layer 7...  
upvoted 5 times

You are designing a microservices architecture that will be hosted in an Azure Kubernetes Service (AKS) cluster. Apps that will consume the microservices will be hosted on Azure virtual machines. The virtual machines and the AKS cluster will reside on the same virtual network.

You need to design a solution to expose the microservices to the consumer apps. The solution must meet the following requirements:

- ⇒ Ingress access to the microservices must be restricted to a single private IP address and protected by using mutual TLS authentication.
- ⇒ The number of incoming microservice calls must be rate-limited.
- ⇒ Costs must be minimized.

What should you include in the solution?

- A. Azure App Gateway with Azure Web Application Firewall (WAF)
- B. Azure API Management Standard tier with a service endpoint
- C. Azure Front Door with Azure Web Application Firewall (WAF)
- D. Azure API Management Premium tier with virtual network connection

**Correct Answer: D**

One option is to deploy APIM (API Management) inside the cluster VNet.

The AKS cluster and the applications that consume the microservices might reside within the same VNet, hence there is no reason to expose the cluster publicly as all API traffic will remain within the VNet. For these scenarios, you can deploy API Management into the cluster VNet. API Management Premium tier supports

VNet deployment.

Reference:

<https://docs.microsoft.com/en-us/azure/api-management/api-management-kubernetes>

*Community vote distribution*

D (90%)	10%
---------	-----

✉  **Greysi**  1 year, 5 months ago

**Selected Answer: D**

D is correct answer!  
upvoted 12 times

✉  **GarryK**  9 months, 3 weeks ago

**Selected Answer: D**

<https://docs.microsoft.com/en-us/azure/api-management/virtual-network-concepts?tabs=stv2>  
Vnet = Dev or Premium or Private Endpoint. Service Endpoint is not available  
upvoted 6 times

✉  **Tr619899**  3 weeks, 4 days ago

The best option to meet the requirements you mentioned would be to use Azure API Management with a virtual network connection. This can be achieved with the Premium tier of Azure API Management. This will allow you to restrict ingress access to a single private IP address and protect it using mutual TLS authentication. Additionally, Azure API Management provides rate limiting capabilities and can be deployed within a virtual network to minimize costs. So, the correct answer is

D. Azure API Management Premium tier with virtual network connection.

upvoted 2 times

✉  **NotMeAnyWay** 2 months, 3 weeks ago

**Selected Answer: D**

D. Azure API Management Premium tier with a virtual network connection

Azure API Management Premium tier supports virtual network integration, which allows you to restrict ingress access to the microservices to a single private IP address within the virtual network. This tier also supports mutual TLS authentication, rate-limiting policies, and provides a solution for exposing the microservices to the consumer apps while minimizing costs.

upvoted 3 times

✉  **JohnPhan** 3 months, 1 week ago

**Selected Answer: D**

D is correct answer!  
upvoted 1 times

✉  **malcubierre** 3 months, 1 week ago

**Selected Answer: D**

- A: No rate limited
- B: Does not have Private Endpoint integration
- C: Does not make sense, and does not rate limited
- D: OK, rate limited + PE integration

upvoted 3 times

 **OPT\_001122** 4 months, 2 weeks ago

**Selected Answer: D**

D. Azure API Management Premium tier with virtual network connection  
upvoted 1 times

 **orionduo** 4 months, 2 weeks ago

**Selected Answer: D**

One option is to deploy APIM (API Management) inside the cluster VNet.  
The AKS cluster and the applications that consume the microservices might reside within the same VNet, hence there is no reason to expose the cluster publicly as all API traffic will remain within the VNet. For these scenarios, you can deploy API Management into the cluster VNet. API Management Premium tier supports VNet deployment.  
upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: D**

Option D, Azure API Management Premium tier with virtual network connection, can meet the requirements mentioned in the question. Azure API Management service can be deployed in a virtual network and access to the microservices can be restricted to a single private IP address by using a virtual network connection. Azure API Management also supports mutual TLS authentication and rate limiting.  
upvoted 1 times

 **rjcverar** 6 months, 3 weeks ago

**Selected Answer: D**

D Indeed. =) Happy test everyone  
upvoted 2 times

 **Snownoodles** 9 months, 3 weeks ago

**Selected Answer: B**

Private service endpoint support is available in the Premium, Standard, Basic, and Developer tiers of API Management.  
<https://docs.microsoft.com/en-us/azure/api-management/private-endpoint>  
upvoted 1 times

 **Snownoodles** 9 months, 3 weeks ago

Sorry, correct answer is D, since B is talking about service endpoint.  
upvoted 3 times

 **AubinBakana** 11 months ago

Thank you. I would have got this wrong on the exam, hands down. Not any more!  
upvoted 1 times

 **al608** 1 year ago

did my Exam today. This was on there.  
upvoted 4 times

 **Gor** 1 year, 1 month ago

**Selected Answer: D**

Correct answer: D  
<https://docs.microsoft.com/en-us/azure/api-management/api-management-kubernetes#option-3-deploy-apim-inside-the-cluster-vnet>  
upvoted 2 times

 **Teringzooi** 1 year, 2 months ago

**Selected Answer: D**

Correct answer: D  
<https://docs.microsoft.com/en-us/azure/api-management/api-management-kubernetes#option-3-deploy-apim-inside-the-cluster-vnet>  
upvoted 2 times

 **Rajesh123** 1 year, 2 months ago

**Selected Answer: D**

Rate limit is supported in Premium  
upvoted 4 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22  
upvoted 1 times

You have a .NET web service named Service1 that performs the following tasks:

- ⇒ Reads and writes temporary files to the local file system.
- ⇒ Writes to the Application event log.

You need to recommend a solution to host Service1 in Azure. The solution must meet the following requirements:

- ⇒ Minimize maintenance overhead.
- ⇒ Minimize costs.

What should you include in the recommendation?

- A. an Azure App Service web app
- B. an Azure virtual machine scale set
- C. an App Service Environment (ASE)
- D. an Azure Functions app

**Correct Answer: A**

Azure Web App meets the requirements and is less expensive compared to VM scale sets.

Reference:

<https://docs.microsoft.com/en-us/azure/app-service/troubleshoot-diagnostic-logs>

*Community vote distribution*

A (86%)      14%

 **Balaji\_c\_s**  9 months, 2 weeks ago

**Selected Answer: A**

A is correct

upvoted 14 times

 **techrat**  1 month, 4 weeks ago

Passed exam with 979 today, this question was on the exam. I am 1000% confident A is correct.

upvoted 5 times

 **NotMeAnyWay**  2 months, 3 weeks ago

**Selected Answer: A**

A. an Azure App Service web app

Azure App Service is a fully managed platform for building, deploying, and scaling web apps. By hosting Service1 as an Azure App Service web app, you can minimize maintenance overhead, as the platform takes care of the underlying infrastructure, patching, and scaling. Azure App Service also offers a cost-effective solution that can be scaled up or out as needed to meet the demands of your application.

While Azure Functions, virtual machine scale sets, and App Service Environments can also host web services, they may not provide the same balance of minimal maintenance overhead and cost-effectiveness as Azure App Service web apps do in this scenario.

upvoted 4 times

 **malcubierre** 3 months, 1 week ago

Azure Functions seem to access to local temporary files and can write to event log... why is not the correct option?

upvoted 1 times

 **orionduo** 4 months, 2 weeks ago

**Selected Answer: A**

Azure provides built-in diagnostics to assist with debugging an App Service app.

There are three main types of files that an Azure Web App can deal with

- ① Persisted files
- ② Temporary files
- ③ Machine level read-only files

Logs messages generated by your application code. The messages can be generated by the web framework you choose, or from your application code directly using the standard logging pattern of your language. Each message is assigned one of the following categories: Critical, Error, Warning, Info, Debug, and Trace. You can select how verbose you want the logging to be by setting the severity level when you enable application logging.

upvoted 2 times

 **moshos** 4 months, 2 weeks ago

**Selected Answer: A**

Correct answer: A

upvoted 1 times

✉ **VBK8579** 4 months, 3 weeks ago

**Selected Answer: A**

A. an Azure App Service web app would be the best solution as it provides low maintenance overhead and cost-effectiveness while being able to host .NET web services. Additionally, Azure App Service provides easy integration with other Azure services, and it supports the reading and writing of files to the local file system. The Application event log can also be written to using Azure Diagnostic Logs, which can be configured within the Azure App Service.

upvoted 2 times

✉ **VBK8579** 5 months ago

A. an Azure App Service web app

upvoted 1 times

✉ **509325\_5153** 7 months ago

How come a function app isn't a good answer here?

upvoted 1 times

✉ **Ivanwu** 6 months, 3 weeks ago

a .NET web service ?

upvoted 2 times

✉ **Galron** 8 months ago

**Selected Answer: A**

Web App can write Application Event logs, you enable this in the Monitoring section of the Web App.

upvoted 4 times

✉ **sKaiNL** 9 months, 1 week ago

**Selected Answer: A**

A should be ok

upvoted 3 times

✉ **GarryK** 9 months, 3 weeks ago

**Selected Answer: B**

Answer is B.

App service has local disk to write temp files. For more persistent files, mount shares:

<https://docs.microsoft.com/en-us/azure/app-service/operating-system-functionality>

<https://docs.microsoft.com/en-us/azure/app-service/configure-connect-to-azure-storage?tabs=portal&pivots=container-linux>

App Service can write to application logging windows:

<https://docs.microsoft.com/en-us/azure/app-service/troubleshoot-diagnostic-logs>

it was never said that the app wanted to write logs into a filesystem.

upvoted 2 times

✉ **GarryK** 9 months, 3 weeks ago

Sorry A

upvoted 3 times

✉ **One111** 9 months, 4 weeks ago

@Mderators, please fit answer for this one. Web App can't write to Windows OS Application event log. In addition if question is not about Application event log, but about Application log it is still invalid, because of limited up to 12 hours enabled time.

upvoted 1 times

✉ **bootless** 9 months, 4 weeks ago

**Selected Answer: B**

Answer cannot be correct because with a web app this feature will only be on for 12 hours. After this time it will be disabled and has to be enabled again. So you have to use VMs

upvoted 3 times

✉ **bootless** 9 months, 4 weeks ago

Source: <https://docs.microsoft.com/en-us/azure/app-service/troubleshoot-diagnostic-logs#enable-application-logging-windows>

Quote: "The Filesystem option is for temporary debugging purposes, and turns itself off in 12 hours. The Blob option is for long-term logging, and needs a blob storage container to write logs to."

upvoted 1 times

✉ **mse89** 9 months, 4 weeks ago

hello, i think answer is A because is asking for Application event log and not for filesystem log. Also app service minimize the costs.

upvoted 3 times

✉ **mse89** 9 months, 4 weeks ago

You're Right, to analyze the application log we have to choose Application Logging (Filesystem) or Application Logging (Blob).

But to minimize the maintenance and the costs i think A is still the correct answer.

upvoted 3 times



You have the Azure resources shown in the following table.

Name	Type	Location
US-Central-Firewall-policy	Azure Firewall policy	Central US
US-East-Firewall-policy	Azure Firewall policy	East US
EU-Firewall-policy	Azure Firewall policy	West Europe
USEastfirewall	Azure Firewall	Central US
USWestfirewall	Azure Firewall	East US
EUFirewall	Azure Firewall	West Europe

You need to deploy a new Azure Firewall policy that will contain mandatory rules for all Azure Firewall deployments. The new policy will be configured as a parent policy for the existing policies.

What is the minimum number of additional Azure Firewall policies you should create?

- A. 0
- B. 1
- C. 2
- D. 3

**Correct Answer: D**

Firewall policies work across regions and subscriptions.

Place all your global configurations in the parent policy.

The parent policy is required to be in the same region as the child policy.

Each of the three regions must have a new parent policy.

Reference:

<https://docs.microsoft.com/en-us/azure/firewall-manager/overview>

*Community vote distribution*

D (77%)

B (23%)

✉️  **Greysi**  1 year, 5 months ago

**Selected Answer: D**

Parent policy must be in the same region as child policy!

You get this information when creating a Firewall Policy. Parent Policy drop down list only shows policies in the same region.

Existing Firewall Policies are located in different regions. To link them to a new parent policy, each region must have a new parent policy => 3 new policies.

upvoted 40 times

✉️  **blacknurse** 1 year, 5 months ago

I am in agreement with your answer. If you look at <https://blog.cloud63.fr/azure-firewall/> then your premise is correct.

upvoted 3 times

✉️  **SilverFox22** 1 year, 5 months ago

It states in the question "The new policy will be configured as a parent policy for the existing policies." So then just 1 policy, that will be inherited by the existing child policies.

upvoted 3 times

✉️  **One11** 9 months, 4 weeks ago

You will get 3 objects which you will need to maintain separately.

upvoted 2 times

✉️  **FrancisFerreira** 1 year, 3 months ago

"Parent policy must be in the same region as child policy. Firewall policy can be associated with Firewalls across regions regardless of where they are stored."

That's from Azure Portal, showed for the field "Parent Policy" when creating a new policy or editing an existing one. We can't associate existing child policies to the new parent policy if their are not in the same region.

Since our existing child policies are in 3 different regions, we would need 3 different parent policies.

upvoted 8 times

 **LillyLiver** 11 months, 3 weeks ago

Confirmed. Parent policy must be in the same region according to my work tenant.  
upvoted 1 times

 **sapien45** 1 year ago

You are the GOAT  
upvoted 1 times

 **Redimido** Highly Voted 1 year, 4 months ago

**Selected Answer: D**

Tested in Portal.

1. Created 1 named "Parent" policy in West Europe

Created 1 named "Child" policy - in West US - unable to set "Parent" as parent policy.

Changed region to West Europe, could directly choose "Parent" as parent.

2. Created second policy named "Parent2" in West US.

Went to the "Child" policy, still located in West Europe.

Tried to choose Parent policy from the menu. The only parent that showed up was "Parent" also located in West Europe.

Conclusion: You can't set a Parent Policy from different region to a child in a given region.

Therefore we need 3 different region policies to be set as parents if we do not change the child's regions.

upvoted 21 times

 **codingdown** 11 months, 1 week ago

Parent policy must be in the same region as child policy but firewall policy can be associated with firewalls across regions.

upvoted 4 times

 **Trillionairejeffe** Most Recent 1 day, 18 hours ago

Hierarchical policies

New policies can be created from scratch or inherited from existing policies. Inheritance allows DevOps to create local firewall policies on top of organization mandated base policy.

Policies created with non-empty parent policies inherit all rule collections from the parent policy. The parent policy and the child policy must be in the same region. A firewall policy can be associated with firewalls across regions regardless where they are stored:

<https://learn.microsoft.com/en-us/azure/firewall-manager/policy-overview#hierarchical-policies>

upvoted 1 times

 **Trillionairejeffe** 1 day, 18 hours ago

Answer is : B

upvoted 1 times

 **bd1234** 3 months, 2 weeks ago

B:

Firewall Policy is the recommended method to configure your Azure Firewall. It's a global resource that can be used across multiple Azure Firewall instances in Secured Virtual Hubs and Hub Virtual Networks. Policies work across regions and subscriptions.

upvoted 1 times

 **bd1234** 3 months, 3 weeks ago

Should be B.

As the global parent policy, all else Hierarchical policies should call local policies, different than we call child of global.

upvoted 1 times

 **Anzus** 4 months, 2 weeks ago

**Selected Answer: B**

The question states:

You need to deploy a new Azure Firewall policy that will contain mandatory rules for all Azure Firewall deployments. The new policy will be configured as a parent policy for the existing policies.

It also states that the policies are already created. If you need one for all of them, you only need to create 1, the "Firewall Policy" that is a global resource. Since this works as hub and spoke, you only need one to centrally manage the 3 policies that exist already.

upvoted 3 times

 **AzureMasterChamp** 3 months ago

It seems you are right! <https://learn.microsoft.com/en-us/azure/firewall-manager/rule-hierarchy>

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: D**

o have the existing policies linked to a new parent policy, each region must have a separate parent policy. Therefore, a minimum of 3 additional Azure Firewall policies would need to be created. The answer is D.

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

To have the existing policies linked to a new parent policy, each region must have a separate parent policy. Therefore, a minimum of 3 additional Azure Firewall policies would need to be created. The answer is D.

upvoted 1 times

✉  **ServerBrain** 5 months, 3 weeks ago

**Selected Answer: D**

The question says:

"The new policy will be configured as a parent policy for the existing policies."

So for you to have parent policy, have to deploy 3 policies for the child policies that are in the three regions..

upvoted 1 times

✉  **pabloartgal** 7 months, 3 weeks ago

By searching for a little bit more information I think the correct answer is B.1

You have two kind of hierarchical policies on Azure Firewall Manager; local policies and global policies.

The key is you can use Azure Firewall Manager to centrally manage Azure Firewall policies across multiple secured virtual hubs. For example, your global admin can author global firewall policies to enforce organization wide firewall policy across teams. Locally authored firewall policies allow a DevOps self-service model for better agility.

At the end of the document, you will be able to find some of the actual limitations with this kind of policy hierarchy:

Base policies must be in same region as local policy. Create all your local policies in the same region as the base policy. You can still apply a policy that was created in one region on a secured hub from another region.

upvoted 1 times

✉  **8eebs** 10 months, 2 weeks ago

There was a lot of debate in the comments so thought i'd test this out.

I created a Firewall Policy within West Europe.

When i created a secondary policy as a child it would ONLY allow me to select first policy if the region was the same. I tested with both Standard and Premium Policies.

upvoted 3 times

✉  **shaojunni** 11 months ago

Answer is B, 1 parent policy. The new policy can contain one of existing policy as child policy, then include all the firewall rules from other 2 policies. What is the point to create 3 parent polices which only contains corresponding child policy?

upvoted 1 times

✉  **AubinBakana** 11 months ago

**Selected Answer: B**

It is clear here that people are not familiar with Firewall Manager. Th answer is correct

upvoted 2 times

✉  **codingdown** 11 months, 1 week ago

**Selected Answer: B**

Parent policy must be in the same region as child policy but firewall policy can be associated with firewalls across regions.

upvoted 3 times

✉  **JayBee65** 11 months ago

So you must have 3 policies, because currently there are 3 policies, each in different regions, so you need to create 3 parent policies, so D not B

upvoted 1 times

✉  **SilverFox22** 11 months, 2 weeks ago

**Selected Answer: D**

A Parent policy must be in the same region as child policy.

upvoted 3 times

✉  **codingdown** 11 months, 1 week ago

Parent policy must be in the same region as child policy but firewall policy can be associated with firewalls across regions.

upvoted 1 times

✉  **JayBee65** 11 months ago

So you must have 3 policies, because currently there are 3 policies, each in different regions, so you need to create 3 parent policies, so D not B

upvoted 2 times

✉  **bellorg** 11 months, 3 weeks ago

Correct naswer is 3, azure policy need to be Premium and in the same region

upvoted 1 times

✉  **Tsunami28** 12 months ago

I would like to chalenge you all, by saying that the correct answer is C(2).

Why? I agree that we need to have parent/child in the same region.

Semantics of the question - they are saying that we need to deploy 1, and asking how much more additional ones? -> 1+2=3

upvoted 2 times

✉  **JayBee65** 11 months ago

I don't understand what you are saying. Currently there are 3 policies. You need to create a parent policy for these policies, and as these policies are in different regions, and parent and child policy must be in the same region, you need to create 3 new policies, one in each region. This will give you 3 parent policies + 3 child policies = 6 policies.

upvoted 1 times

 **Gor** 1 year, 1 month ago

**Selected Answer: D**

Parent policy must be in the same region as child policy!

upvoted 3 times

Your company has an app named App1 that uses data from the on-premises Microsoft SQL Server databases shown in the following table.

NAME	SIZE
DB1	400 GB
DB2	250 GB
DB3	300 GB
DB4	50 GB

App1 and the data are used on the first day of the month only. The data is not expected to grow more than 3 percent each year.

The company is rewriting App1 as an Azure web app and plans to migrate all the data to Azure.

You need to migrate the data to Azure SQL Database and ensure that the database is only available on the first day of each month.

Which service tier should you use?

- A. vCore-based General Purpose
- B. DTU-based Standard
- C. vCore-based Business Critical
- D. DTU-based Basic

**Correct Answer: A**

Note: App1 and the data are used on the first day of the month only. See Serverless compute tier below.

The vCore based purchasing model.

The term vCore refers to the Virtual Core. In this purchasing model of Azure SQL Database, you can choose from the provisioned compute tier and serverless compute tier.

\* Provisioned compute tier: You choose the exact compute resources for the workload.

\* Serverless compute tier: Azure automatically pauses and resumes the database based on workload activity in the serverless tier. During the pause period, Azure does not charge you for the compute resources.

Reference:

<https://www.sqlshack.com/dtu-and-vcore-based-models-for-azure-sql-databases/>

*Community vote distribution*

A (92%) 8%

 **GarryK**  9 months, 2 weeks ago

**Selected Answer: A**

Correct. Use the serverless model in vcore

<https://docs.microsoft.com/en-us/azure/azure-sql/database/service-tiers-sql-database-vcore?view=azuresql>

While the provisioned compute tier provides a specific amount of compute resources that are continuously provisioned independent of workload activity, the serverless compute tier auto-scales compute resources based on workload activity.

While the provisioned compute tier bills for the amount of compute provisioned at a fixed price per hour, the serverless compute tier bills for the amount of compute used, per second.

upvoted 7 times

 **learn254**  1 month, 1 week ago

**Selected Answer: D**

I think the answers changed based on the answers I see now

Based on the given scenario, where the database is only used on the first day of each month and the data is not expected to grow more than 3 percent each year, the most cost-effective option would be to choose the DTU-based Basic service tier.

The DTU-based Basic service tier is suitable for small databases with light workloads and provides a low-cost option. Since the data size is relatively small (DB1 - 400GB, DB2 - 250GB, DB3 - 300GB, DB4 - 50GB), the Basic tier should be sufficient to handle the workload on the first day of each month.

The vCore-based General Purpose and Business Critical service tiers are more suitable for larger databases or databases with higher performance requirements. They offer more scalability, higher performance, and additional features but come at a higher cost.

Given the provided requirements and data sizes, the DTU-based Basic service tier is the most appropriate and cost-effective option for migrating the data to Azure SQL Database for the given scenario.

upvoted 1 times

 **Exzw** 3 months ago

i want to ask a question , if DB size is less than 100GB, will DTU based standard be a better choice?  
upvoted 1 times

 **GS300** 2 months ago

I agree, why not use DTU for this scenario?  
upvoted 1 times

 **cblppcj** 1 month, 1 week ago

I've heard Microsoft are moving away from DTU based to vCore based as a recommendation.  
upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: A**

A. vCore-based General Purpose is the recommended service tier for this scenario. This tier provides the ability to control compute resources through vCores and can be scaled up and down as needed. The ability to only make the database available on the first day of each month can be achieved through the use of Azure Database for SQL's built-in pause/resume functionality. This would allow you to pause the database when it's not needed, reducing costs, and then resume it when it's needed again.

upvoted 2 times

 **ROLLINGROCKS** 9 months, 3 weeks ago

One (dumb) question, fellas...  
Im wondering, whenever you choose serverless for a case like this... what happens with the data? Like I understand you pay for the compute resources whenever you use them but what about the storage?  
upvoted 3 times

 **ROLLINGROCKS** 9 months, 3 weeks ago

I mean, does the data persist?  
upvoted 1 times

 **Moumita** 9 months, 3 weeks ago

Yes, You still pay for the storage while saving billing on compute.  
upvoted 5 times

 **Snownoodles** 9 months, 3 weeks ago

**Selected Answer: A**

The given answer is correct: serverless model in vcore general purpose  
upvoted 3 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages. What should you include in the recommendation?

- A. Azure Service Fabric
- B. Azure Data Lake
- C. Azure Service Bus
- D. Azure Traffic Manager

**Correct Answer: C**

Asynchronous messaging options in Azure include Azure Service Bus, Event Grid, and Event Hubs.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/messaging>

*Community vote distribution*

C (100%)

✉️  **jkklim** Highly Voted 1 year, 4 months ago

<https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

ANSWER IS C

upvoted 8 times

✉️  **Eltooth** Highly Voted 1 year, 6 months ago

Selected Answer: C

Answer is correct.

<https://www.examtopics.com/discussions/microsoft/view/19509-exam-az-301-topic-3-question-1-discussion/>

upvoted 7 times

✉️  **omerc061** Most Recent 4 months, 2 weeks ago

C

Let me explain

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview#:~:text=Data%20is%20transferred,Avro%2C%20Plain%20Text.>

upvoted 1 times

✉️  **VBK8579** 4 months, 3 weeks ago

Selected Answer: C

C. Azure Service Bus

upvoted 1 times

✉️  **GarryK** 9 months, 2 weeks ago

Selected Answer: C

Correct. Its the only service in the list which provides messaging.

<https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

Azure Service Bus is a fully managed enterprise message broker with message queues and publish-subscribe topics (in a namespace).

upvoted 2 times

✉️  **Gor** 1 year, 1 month ago

Selected Answer: C

<https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

upvoted 1 times

✉️  **ashxos** 1 year, 1 month ago

Selected Answer: C

A message broker provides temporal decoupling. The producer and consumer don't have to run concurrently. A producer can send a message to the message broker regardless of the availability of the consumer. Conversely, the consumer isn't restricted by the producer's availability.

upvoted 2 times

✉️  **Teringzooi** 1 year, 2 months ago

**Selected Answer: C**

Correct answer: C

<https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

upvoted 1 times

 **Contactfornitish** 1 year, 2 months ago

Came in exam today. 4/4/2022 .. Async was stuck in mind about Bus

upvoted 4 times

Your company has 300 virtual machines hosted in a VMware environment. The virtual machines vary in size and have various utilization levels.

You plan to move all the virtual machines to Azure.

You need to recommend how many and what size Azure virtual machines will be required to move the current workloads to Azure. The solution must minimize administrative effort.

What should you use to make the recommendation?

- A. Azure Pricing calculator
- B. Azure Advisor
- C. Azure Migrate
- D. Azure Cost Management

**Correct Answer: C**

Azure Migrate provides a centralized hub to assess and migrate on-premises servers, infrastructure, applications, and data to Azure. It provides the following:

Unified migration platform: A single portal to start, run, and track your migration to Azure. Range of tools: A range of tools for assessment and migration.

Reference:

<https://docs.microsoft.com/en-us/azure/migrate/migrate-services-overview>

*Community vote distribution*

C (100%)

 **Eltooth** Highly Voted 1 year, 6 months ago

**Selected Answer: C**

Correct answer - C.

Azure migrate

upvoted 10 times

 **HGD545** Highly Voted 1 year, 4 months ago

On the AZ-305 2/22/22

upvoted 8 times

 **azkumar305** Most Recent 2 months, 2 weeks ago

Got this on 14-Apr-2023

upvoted 2 times

 **OPT\_001122** 4 months, 2 weeks ago

**Selected Answer: C**

C. Azure Migrate

upvoted 2 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: C**

The best solution to make the recommendation would be to use Azure Migrate. Azure Migrate provides centralized assessment and migration to Azure. It helps you to determine the best Azure resource configuration for your workloads, and provides detailed migration guidance, including sizing and performance recommendations, as well as step-by-step instructions for migrating the virtual machines to Azure. Azure Migrate automates many of the migration steps and provides a single place to manage the entire migration, helping to minimize administrative effort.

upvoted 2 times

 **Velidot100** 9 months, 2 weeks ago

On the exam - 12. Sept 22

upvoted 1 times

 **GarryK** 9 months, 2 weeks ago

**Selected Answer: C**

Correct

Azure Migrate: Discovery and assessment tool

The Azure Migrate: Discovery and assessment tool discovers and assesses on-premises VMware VMs, Hyper-V VMs, and physical servers for migration to Azure.

Here's what the tool does:

Azure readiness: Assesses whether on-premises servers, SQL Servers and web apps are ready for migration to Azure.

Azure sizing: Estimates the size of Azure VMs/Azure SQL configuration/number of Azure VMware Solution nodes after migration.

Azure cost estimation: Estimates costs for running on-premises servers in Azure.

Dependency analysis: Identifies cross-server dependencies and optimization strategies for moving interdependent servers to Azure. Learn more about Discovery and assessment with dependency analysis.

<https://docs.microsoft.com/en-us/azure/migrate/migrate-services-overview>

upvoted 3 times

 **Gor** 1 year, 1 month ago

**Selected Answer: C**

Correct answer - C.

Azure migrate

upvoted 1 times

 **datafypk** 1 year, 1 month ago

was in exam 8 May 22

upvoted 1 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22

upvoted 2 times

 **default\_wizard** 1 year, 6 months ago

correct answer given

upvoted 5 times

You plan to provision a High Performance Computing (HPC) cluster in Azure that will use a third-party scheduler.

You need to recommend a solution to provision and manage the HPC cluster node.

What should you include in the recommendation?

- A. Azure Automation
- B. Azure CycleCloud
- C. Azure Purview
- D. Azure Lighthouse

**Correct Answer: B**

You can dynamically provision Azure HPC clusters with Azure CycleCloud.

Azure CycleCloud is the simplest way to manage HPC workloads.

Note: Azure CycleCloud is an enterprise-friendly tool for orchestrating and managing High Performance Computing (HPC) environments on Azure. With

CycleCloud, users can provision infrastructure for HPC systems, deploy familiar HPC schedulers, and automatically scale the infrastructure to run jobs efficiently at any scale. Through CycleCloud, users can create different types of file systems and mount them to the compute cluster nodes to support HPC workloads.

Reference:

<https://docs.microsoft.com/en-us/azure/cyclecloud/overview>

*Community vote distribution*

B (100%)

 **Eltooth** Highly Voted 1 year, 6 months ago

**Selected Answer: B**

Answer appears to be correct - Cyclecloud.

upvoted 12 times

 **HGD545** Highly Voted 1 year, 4 months ago

On the AZ-305 2/22/22

upvoted 8 times

 **NotMeAnyWay** Most Recent 2 months, 2 weeks ago

**Selected Answer: B**

Azure CycleCloud is a tool designed to manage and orchestrate HPC workloads in Azure. It simplifies the creation, management, and scaling of HPC clusters while supporting various third-party schedulers. This makes it an ideal solution for provisioning and managing an HPC cluster with a third-party scheduler in Azure.

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: B**

B. Azure CycleCloud

upvoted 1 times

 **GarryK** 9 months, 2 weeks ago

**Selected Answer: B**

<https://docs.microsoft.com/en-us/azure/architecture/topics/high-performance-computing>

Azure CycleCloud

Azure CycleCloud Provides the simplest way to manage HPC workloads using any scheduler (like Slurm, Grid Engine, HPC Pack, HTCondor, LSF, PBS Pro, or Symphony), on Azure

CycleCloud allows you to:

Deploy full clusters and other resources, including scheduler, compute VMs, storage, networking, and cache  
Orchestrate job, data, and cloud workflows

Give admins full control over which users can run jobs, as well as where and at what cost

Customize and optimize clusters through advanced policy and governance features, including cost controls, Active Directory integration, monitoring, and reporting

Use your current job scheduler and applications without modification

Take advantage of built-in autoscaling and battle-tested reference architectures for a wide range of HPC workloads and industries

upvoted 2 times

 **Gor** 1 year, 1 month ago

**Selected Answer: B**

For HPC.

upvoted 1 times

 **datafypk** 1 year, 1 month ago

was in exam 8 May 22

upvoted 1 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22

upvoted 1 times

 **Redimido** 1 year, 4 months ago

**Selected Answer: B**

The only HPC cluster management solution here.

upvoted 6 times

**HOTSPOT -**

You are designing an Azure App Service web app.

You plan to deploy the web app to the North Europe Azure region and the West Europe Azure region.

You need to recommend a solution for the web app. The solution must meet the following requirements:

- ⇒ Users must always access the web app from the North Europe region, unless the region fails.
- ⇒ The web app must be available to users if an Azure region is unavailable.
- ⇒ Deployment costs must be minimized.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Request routing method:

A Traffic Manager profile
Azure Application Gateway
Azure Load Balancer

Request routing configuration:

Cookie-based session affinity
Performance traffic routing
Priority traffic routing
Weighted traffic routing

**Answer Area**

Request routing method:

A Traffic Manager profile
Azure Application Gateway
Azure Load Balancer

Correct Answer:

Request routing configuration:

Cookie-based session affinity
Performance traffic routing
Priority traffic routing
Weighted traffic routing

Box 1: A Traffic Manager profile

To support load balancing across the regions we need a Traffic Manager.

Box 2: Priority traffic routing -

Priority traffic-routing method.

Often an organization wants to provide reliability for their services. To do so, they deploy one or more backup services in case their primary goes down. The

'Priority' traffic-routing method allows Azure customers to easily implement this failover pattern.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/reference-architectures/app-service-web-app/multi-region>

<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-routing-methods>

  **it4s2**  1 year, 6 months ago

Correct - Traffic manager as global solution with priority routing  
upvoted 27 times

 **ServerBrain** 5 months, 3 weeks ago

Yeah, Traffic Manager uses DNS to direct client requests..  
upvoted 2 times

 **Eltooth** Highly Voted 1 year, 6 months ago

Answer is correct - Traffic manager and priority based routing.  
<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-routing-methods>  
upvoted 13 times

 **NotMeAnyWay** Most Recent 2 months, 2 weeks ago

Correct:

1. Request routing method: a. a Traffic Manager Profile

To meet the requirements of directing users to the North Europe region and providing high availability, you should use Azure Traffic Manager. Traffic Manager is a DNS-based traffic load balancer that allows you to distribute traffic optimally to services across global Azure regions while providing high availability.

2. Request routing configuration: c. Priority Traffic Routing

To ensure that users access the web app from the North Europe region unless it fails, use priority traffic routing. With priority routing, you can assign a priority value to each endpoint, and Traffic Manager routes the traffic to the endpoint with the highest priority available. In this case, assign a higher priority to the North Europe region, and a lower priority to the West Europe region. This will ensure that users are directed to the North Europe region as long as it is available, and to the West Europe region in case of a failure.

upvoted 2 times

 **GarryK** 9 months, 2 weeks ago

Correct

<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-routing-methods>

Priority: Select Priority routing when you want to have a primary service endpoint for all traffic. You can provide multiple backup endpoints in case the primary or one of the backup endpoints is unavailable.

upvoted 2 times

 **Gor** 1 year, 1 month ago

Answer is correct.

Azure Traffic manager as global solution with priority routing.

<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-routing-methods>

upvoted 1 times

 **cheese929** 1 year, 1 month ago

Agree with the answer. Only Traffic Manager supports multi-region routing. And priority routing to route traffic to route traffic to Western Europe first.

upvoted 5 times

 **Teringzooi** 1 year, 2 months ago

Correct answer!

<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-routing-methods>

upvoted 1 times

 **esther823** 1 year, 2 months ago

in my exam on 31 Mar 22

upvoted 2 times

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 plan to deploy multiple instances of an Azure web app across several Azure regions.

You need to design an access solution for the app. The solution must meet the following replication requirements:

- ⇒ Support rate limiting.
- ⇒ Balance requests between all instances.
- ⇒ Ensure that users can access the app in the event of a regional outage.

Solution: You use Azure Traffic Manager to provide access to the app.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: B**

Azure Traffic Manager is a DNS-based traffic load balancer. This service allows you to distribute traffic to your public facing applications across the global Azure regions. Traffic Manager also provides your public endpoints with high availability and quick responsiveness. It does not provide rate limiting.

Note: Azure Front Door would meet the requirements. The Azure Web Application Firewall (WAF) rate limit rule for Azure Front Door controls the number of requests allowed from clients during a one-minute duration.

Reference:

<https://docs.microsoft.com/en-us/azure/app-service/web-sites-traffic-manager> <https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview> <https://docs.microsoft.com/en-us/azure/web-application-firewall/afds/waf-front-door-rate-limit-powershell>

*Community vote distribution*

B (100%)

✉️  **GarryK**  9 months, 2 weeks ago

**Selected Answer: B**

Correct. Azure Traffic Manager does not have rate limit. Use Azure Front Door with WAF

<https://docs.microsoft.com/en-us/azure/web-application-firewall/afds/waf-front-door-rate-limit-configure?pivot=portal>

upvoted 11 times

✉️  **NotMeAnyWay**  2 months, 2 weeks ago

**Selected Answer: B**

To achieve rate limiting along with load balancing and high availability, you should use Azure Front Door with the Web Application Firewall (WAF).

Azure Front Door is a global, scalable entry-point that uses the Microsoft global edge network to create fast, secure, and widely scalable web applications. It provides load balancing and failover across multiple regions.

By enabling the WAF on Azure Front Door, you can configure custom rate limiting rules to protect your web app from excessive traffic and potential attacks.

So, using Azure Front Door with WAF will meet the requirements of supporting rate limiting, balancing requests between instances, and ensuring app accessibility during regional outages.

upvoted 1 times

✉️  **OPT\_001122** 5 months ago

**Selected Answer: B**

rate limit -> Azure Front Door with WAF

upvoted 1 times

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 plan to deploy multiple instances of an Azure web app across several Azure regions.

You need to design an access solution for the app. The solution must meet the following replication requirements:

- Support rate limiting.
- Balance requests between all instances.
- Ensure that users can access the app in the event of a regional outage.

Solution: You use Azure Load Balancer to provide access to the app.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: B**

Azure Application Gateway and Azure Load Balancer do not support rate or connection limits.

Note: Azure Front Door would meet the requirements. The Azure Web Application Firewall (WAF) rate limit rule for Azure Front Door controls the number of requests allowed from clients during a one-minute duration.

Reference:

<https://www.nginx.com/blog/nginx-plus-and-azure-load-balancers-on-microsoft-azure/> <https://docs.microsoft.com/en-us/azure/web-application-firewall/afds/waf-front-door-rate-limit-powershell>

*Community vote distribution*

B (100%)

  **GarryK**  9 months, 2 weeks ago

**Selected Answer: B**

Explanation is wrong. Azure Application Gateway and Azure Load Balancer load balance within a region (no support for regional outage). See Regional vs Global  
<https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/load-balancing-overview>

upvoted 5 times

  **GarryK** 9 months, 2 weeks ago

So they cant be used to support a failover in case a region fails

upvoted 1 times

  **azkumar305**  2 months, 2 weeks ago

Got this on 14-Apr-2023

upvoted 1 times

  **NotMeAnyWay** 2 months, 2 weeks ago

**Selected Answer: B**

Azure Load Balancer is a regional Layer 4 load balancer that can distribute network traffic within a single region. While it can balance requests between instances within that region, it cannot distribute traffic across multiple regions.

Additionally, Azure Load Balancer does not have built-in rate limiting functionality.

For your requirements, you should consider using Azure Front Door with Web Application Firewall (WAF). Azure Front Door is a global load balancer that can distribute traffic optimally to services across multiple regions, ensuring high availability in the event of a regional outage. By enabling WAF, you can configure custom rate limiting rules to control incoming traffic to your web app.

upvoted 1 times

  **ServerBrain** 5 months, 3 weeks ago

**Selected Answer: B**

So there you have it:

Azure Application Gateway, Azure Load Balancer and Azure Traffic Manage do not provide rate limiting.

Only Azure Web Application Firewall (WAF) rate limit rule for Azure Front Door does !!

upvoted 1 times

  **Snownoodles** 8 months, 1 week ago

**Selected Answer: B**

The correct option should be Azure Front Door+WAF  
upvoted 2 times

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 plan to deploy multiple instances of an Azure web app across several Azure regions.

You need to design an access solution for the app. The solution must meet the following replication requirements:

- Support rate limiting.
- Balance requests between all instances.
- Ensure that users can access the app in the event of a regional outage.

Solution: You use Azure Application Gateway to provide access to the app.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: B**

Azure Application Gateway and Azure Load Balancer do not support rate or connection limits.

Note: Azure Front Door would meet the requirements. The Azure Web Application Firewall (WAF) rate limit rule for Azure Front Door controls the number of requests allowed from clients during a one-minute duration.

Reference:

<https://www.nginx.com/blog/nginx-plus-and-azure-load-balancers-on-microsoft-azure/> <https://docs.microsoft.com/en-us/azure/web-application-firewall/afds/waf-front-door-rate-limit-powershell>

*Community vote distribution*

B (100%)

 **NotMeAnyWay** 2 months, 2 weeks ago

**Selected Answer: B**

No, this solution does not meet the goal.

Azure Application Gateway is a Layer 7 load balancer that provides features like SSL termination, cookie-based session affinity, and URL-based routing. However, it operates within a single region and cannot distribute traffic across multiple regions.

To meet the requirements of supporting rate limiting, balancing requests between instances across multiple regions, and ensuring app accessibility during regional outages, you should use Azure Front Door with Web Application Firewall (WAF). Azure Front Door is a global load balancer that can distribute traffic optimally to services across multiple regions, ensuring high availability in the event of a regional outage. By enabling WAF, you can configure custom rate limiting rules to control incoming traffic to your web app.

upvoted 1 times

 **\_fvt** 4 months, 1 week ago

**Selected Answer: B**

B - No : App Gateway is not multi-regional, listeners and backend pools must belong to the same region.

upvoted 2 times

 **avocadoraptor** 4 months, 3 weeks ago

**Selected Answer: B**

No - B

upvoted 1 times

 **VBK8579** 5 months ago

B - No

upvoted 1 times

 **MilePetroza** 6 months, 1 week ago

Azure front door + AWF.

upvoted 3 times

**HOTSPOT -**

Your company has two on-premises sites in New York and Los Angeles and Azure virtual networks in the East US Azure region and the West US Azure region.

Each on-premises site has ExpressRoute Global Reach circuits to both regions.

You need to recommend a solution that meets the following requirements:

- ⇒ Outbound traffic to the internet from workloads hosted on the virtual networks must be routed through the closest available on-premises site.
- ⇒ If an on-premises site fails, traffic from the workloads on the virtual networks to the internet must reroute automatically to the other site.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Routing from the virtual networks to the on-premises locations must be configured by using:

Azure default routes
Border Gateway Protocol (BGP)
User-defined routes

The automatic routing configuration following a failover must be handled by using:

Border Gateway Protocol (BGP)
Hot Standby Routing Protocol (HSRP)
Virtual Router Redundancy Protocol (VRRP)

Correct Answer:

**Answer Area**

Routing from the virtual networks to the on-premises locations must be configured by using:

Azure default routes
Border Gateway Protocol (BGP)
User-defined routes

The automatic routing configuration following a failover must be handled by using:

Border Gateway Protocol (BGP)
Hot Standby Routing Protocol (HSRP)
Virtual Router Redundancy Protocol (VRRP)

Box 1: Border Gateway Protocol (BGP)

An on-premises network gateway can exchange routes with an Azure virtual network gateway using the border gateway protocol (BGP). Using BGP with an Azure virtual network gateway is dependent on the type you selected when you created the gateway. If the type you selected were: ExpressRoute: You must use BGP to advertise on-premises routes to the Microsoft Edge router. You cannot create user-defined routes to force traffic to the

ExpressRoute virtual network gateway if you deploy a virtual network gateway deployed as type: ExpressRoute. You can use user-defined routes for forcing traffic from the Express Route to, for example, a Network Virtual Appliance.

Box 2: Border Gateway Protocol (BGP)

Incorrect:

Microsoft does not support HSRP or VRRP for high availability configurations.

Reference:

<https://docs.microsoft.com/ja-jp/azure/expressroute/designing-for-disaster-recovery-with-expressroute-privatepeering>

<https://docs.microsoft.com/en-us/azure/expressroute/expressroute-routing>

 **GarryK**  9 months, 2 weeks ago

Correct.

Layer 3 connectivity

Microsoft uses BGP, an industry standard dynamic routing protocol, to exchange routes between your on-premises network, your instances in Azure, and Microsoft public addresses. We establish multiple BGP sessions with your network for different traffic profiles. More details can be

found in the ExpressRoute circuit and routing domains article.  
<https://docs.microsoft.com/en-us/azure/expressroute/expressroute-introduction>

upvoted 13 times

✉️ **Galron** 8 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/virtual-network/virtual-networks-udr-overview> Virtual network gateway Prefixes advertised from on-premises via BGP, or configured in the local network gateway Virtual network gateway All  
upvoted 1 times

✉️ **King\_Laps** [Most Recent] 2 months, 1 week ago

The given answer is correct. Its BGP for both  
upvoted 1 times

✉️ **NotMeAnyWay** 2 months, 2 weeks ago

1. Routing from the virtual networks to the on-premises location must be configured by using: b. Border Gateway Protocol (BGP)  
To configure routing between the Azure virtual networks and the on-premises locations, you should use Border Gateway Protocol (BGP). BGP is a dynamic routing protocol that enables automatic route updates between ExpressRoute circuits and the on-premises sites.

2. The automatic routing configuration following a failover must be handled by using: a. Border Gateway Protocol (BGP)  
BGP can also handle automatic routing configuration in the event of a failover. It can dynamically detect when a site fails and automatically reroute traffic to the other available site. This ensures that traffic from the workloads on the virtual networks to the internet is rerouted to the other on-premises site if one site fails.

upvoted 3 times

✉️ **NinjaDog00** 2 months, 3 weeks ago

Lol why is networking question here  
upvoted 2 times

✉️ **VBK8579** 4 months, 3 weeks ago

Routing from the virtual networks to the on-premises locations must be configured by using: b. Border Gateway Protocol (BGP)

The automatic routing configuration following a failover must be handled by using: a. Border Gateway Protocol (BGP)  
upvoted 1 times

✉️ **Ghoshy** 6 months ago

Exam Question 12/28/2022.  
upvoted 3 times

✉️ **stxc** 7 months ago

for the 1st question, I think it should be "User Defined"  
If multiple routes contain the same address prefix, Azure selects the route type, based on the following priority:

1- User-defined route  
2- BGP route  
3- System route  
<https://learn.microsoft.com/en-us/azure/virtual-network/virtual-networks-udr-overview>  
upvoted 4 times

✉️ **Snownoodles** 8 months, 1 week ago

The given answer is correct.  
The first question can also be implemented by UDR in a simple environment as given.  
But in practice, with the consideration of scalability, BGP should be the first choice.  
upvoted 4 times

✉️ **Neo2c** 9 months, 3 weeks ago

I think it's User-defined route and BGP  
<https://docs.microsoft.com/en-us/azure/virtual-network/virtual-networks-udr-overview#how-azure-selects-a-route>  
upvoted 2 times

✉️ **ServerBrain** 5 months, 3 weeks ago

No.. As said, "You cannot create user-defined routes to force traffic to the ExpressRoute virtual network gateway if you deploy a virtual network gateway deployed as type: ExpressRoute."  
upvoted 1 times

✉️ **GarryK** 9 months, 2 weeks ago

No. User-Defined route is like static routing so yes it will override BGP for internet but would not fail over so you will lose connectivity to Internet at least. So your 0.0.0.0/0 must also be announced via BGP and will override the default routes per your link.  
upvoted 8 times

✉️ **GarryK** 9 months, 2 weeks ago

To say it otherwise, if you decide to use user defined routing for the first part, then even if you use BGP for the second part, it would not work as user defined routing would override whatever you announce via BGP so your solution would not meet both requirements  
upvoted 6 times

**HOTSPOT -**

You are designing an application that will use Azure Linux virtual machines to analyze video files. The files will be uploaded from corporate offices that connect to Azure by using ExpressRoute.

You plan to provision an Azure Storage account to host the files.

You need to ensure that the storage account meets the following requirements:

- ⇒ Supports video files of up to 7 TB
- ⇒ Provides the highest availability possible
- ⇒ Ensures that storage is optimized for the large video files
- ⇒ Ensures that files from the on-premises network are uploaded by using ExpressRoute

How should you configure the storage account? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Storage account type:	<input type="checkbox"/> Premium files shares <input type="checkbox"/> Premium page blobs <input type="checkbox"/> Standard general-purpose v2
Data redundancy:	<input type="checkbox"/> Zone-redundant storage (ZRS) <input type="checkbox"/> Locally-redundant storage (LRS) <input type="checkbox"/> Geo-redundant storage (GRS)
Networking:	<input type="checkbox"/> Azure Route Server <input type="checkbox"/> A private endpoint <input type="checkbox"/> A service endpoint

**Answer Area**

**Correct Answer:**

Storage account type:	<input checked="" type="checkbox"/> Premium files shares <input checked="" type="checkbox"/> Premium page blobs <input checked="" type="checkbox"/> Standard general-purpose v2
Data redundancy:	<input checked="" type="checkbox"/> Zone-redundant storage (ZRS) <input checked="" type="checkbox"/> Locally-redundant storage (LRS) <input checked="" type="checkbox"/> Geo-redundant storage (GRS)
Networking:	<input checked="" type="checkbox"/> Azure Route Server <input checked="" type="checkbox"/> A private endpoint <input checked="" type="checkbox"/> A service endpoint

Box 1: Premium page blobs -

The maximum size for a page blob is 8 TiB.

Incorrect:

Not Premium file shares:

Max file size for Standard and Premium file shares are 4 TB.

Box 2: Geo-redundant storage (GRS)

GRS provides additional redundancy for data storage compared to LRS or ZRS.

Box 3: A private endpoint -

Azure Private Link allows you to securely link Azure PaaS services to your virtual network using private endpoints. For many services, you just set up an endpoint per resource. This means you can connect your on-premises or multi-cloud servers with Azure Arc and send all traffic over an Azure ExpressRoute or site-to-site

VPN connection instead of using public networks.

Reference:

<https://docs.microsoft.com/en-us/rest/api/storageservices/understanding-block-blobs--append-blobs-and-page-blobs>

<https://docs.microsoft.com/en-us/azure/storage/files/storage-files-scale-targets> <https://docs.microsoft.com/en-us/azure/azure-arc/servers/private-link-security>

✉  **ezfix** Highly Voted 9 months ago

A lot of buzzwords in the question... Video files = block blobs... decision is whether premium block blob or general purpose v2. No premium block blob was mentioned so it has to be general purpose v2. Next is highest availability possible, and general purpose v2 supports LRS, ZRS, and GRS... so go with GRS. The expressroute connects directly to the Azure network, bypassing the internet. So private endpoint.

upvoted 71 times

✉  **JaffaDaffa** 8 months, 2 weeks ago

<https://learn.microsoft.com/en-us/rest/api/storageservices/understanding-block-blobs--append-blobs--and-page-blobs>

upvoted 2 times

✉  **JaffaDaffa** 8 months, 2 weeks ago

<https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-pageblob-overview?tabs=dotnet>

Page blobs support video files.

upvoted 5 times

✉  **Balaji\_c\_s** Highly Voted 9 months, 2 weeks ago

Its Premium Page Blobs + LRS (its the only supported redundancy for PPB) + Private Endpoint

Why Premium Page Blobs :

If you have a PaaS service for shared media access for collaborative video editing applications, page blobs enable fast access to random locations in the media

<https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blob-pageblob-overview?tabs=dotnet#sample-use-cases>

upvoted 28 times

✉  **ckyap** 7 months, 1 week ago

Not sure if Page block is a good option here, because it is optimized for OS disk/Database.

<https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-pageblob-overview?tabs=dotnet#sample-use-cases>:~:text=Page%20blobs%20are%20a%20collection%20of%20512%2Dbyte%20pages%2C%20which%20provide%20the%20ability%20to%20read/write%20arbitrary%20ranges%20of%20bytes.%20Hence%2C%20page%20blobs%20are%20ideal%20for%20storing%20index%2Dbased%20and%20sparse%20data%20structures%20like%20OS%20and%20data%20disks%20for%20Virtual%20Machines%20and%20Databases.

upvoted 3 times

✉  **sondrex** 8 months ago

your answer is not correct because LRS not support ( Provides the highest availability possible) Correct answer general v2-GRS-PE

upvoted 10 times

✉  **pkkalra** 4 months, 2 weeks ago

you have to choose the right storage (page blob) and then choose highest available redundancy. No point in storing blobs which VMs can't load to analyse (it should be able to read blob in chunks to analyse the video which is the requirement here).

upvoted 2 times

✉  **sKaiNL** 9 months, 1 week ago

The explanation says Premium Page Blobs is correct. But Premium File Shares is selected in the answer area. Please correct one of them.

upvoted 8 times

✉  **MeysamBayani** Most Recent 4 weeks ago

Storage: Premium file share

Data Redundancy:ZRS

premium dosent suport GRS

upvoted 2 times

✉  **lombri** 1 month, 3 weeks ago

Storage: Premium file share

Premium file shares support files up to 100 TiB in size,

Premium file shares provide faster performance and lower latency than standard file shares, which would be beneficial for analyzing large video files.

Premium file shares can be accessed from anywhere in the world, which makes it suitable for your scenario where video files are uploaded from corporate offices that connect to Azure by using ExpressRoute.

Data Redundancy: GRS (Geo-Redundant Storage)

GRS provides additional redundancy for data storage compared to LRS or ZRS, with data being replicated to a secondary region, GRS provides the highest availability possible, as it maintains multiple copies of data in different regions.

Networking: Private Endpoint

By configuring a private endpoint for the Azure Storage account, you can ensure that files from the on-premises network are uploaded using

ExpressRoute, which provides a more reliable and secure connection compared to the public internet. A private endpoint also enhances security and reduces exposure to public endpoints.

upvoted 2 times

✉ **betterthanlife** 1 month, 2 weeks ago

You only have the options of LRS or ZRS with a Premium Page blob or Premium File shares storage account. But, if you were to choose "Premium file share" for storage then you'd at least get the Data redundancy" response correct. Given GPv2 is the only storage account type that supports GRS & meets the requirement for providing the highest availability possible I suggest:"

GPv2

GRS

PE

upvoted 3 times

✉ **lombri** 1 month ago

You right

upvoted 1 times

✉ **sjb666** 1 month, 3 weeks ago

Storage account type: Gen Purpose v2.

Incorrect: both premium options don't support highest availability possible (Standard Azure file shares up to 5-TiB support all four redundancy types. Standard file shares larger than 5-TiB only support LRS and ZRS. Premium Azure file shares only support LRS and ZRS, see <https://learn.microsoft.com/en-us/azure/storage/files/storage-files-planning#redundancy>)

Other two answers are CORRECT, GRS and PE

upvoted 1 times

✉ **betterthanlife** 1 month, 3 weeks ago

GPv2

GRS

PE

GPv2 - As it's been stated over & over & over again (& again by me below) File Share only does not meet the 7TB requirement (caps at 4TiB/~4.4TB.). GPv2 does support NFS 3.0

<https://learn.microsoft.com/en-us/azure/storage/blobs/network-file-system-protocol-support-how-to>

GRS - Even though the GPv2 may not be the "best" we need " the highest availability possible", this is GRS.

PE - Not sure why except for what other said & because I have to take this stupid exam & never use this stuff I'm going with it.

upvoted 1 times

✉ **NotMeAnyway** 2 months, 2 weeks ago

1. Storage account type: a. Premium files shares

For hosting large video files and optimizing storage for them, you should use Azure Premium Files shares. Premium Files shares provide high-performance, low-latency file storage and can support up to 100 TiB shares, which can accommodate your 7 TB video files requirement.

2. Data redundancy: a. ZRS

To provide the highest availability possible, use Zone-Redundant Storage (ZRS). ZRS replicates data across three availability zones within the same region, ensuring that your data remains available even if one of the zones experiences an outage.

3. Networking: c. A service endpoint

Service endpoints enable secure and direct connectivity from your virtual network to Azure services over your Azure private network. This will allow the traffic from the on-premises network to be routed through ExpressRoute when uploading files to the storage account.

upvoted 1 times

✉ **SedateBloggs** 2 months, 3 weeks ago

Individual files stored in Azure File shares for both standard file share is 4TB and premium file share is 4TB

<https://learn.microsoft.com/en-us/azure/storage/files/storage-files-scale-targets>

Max file size for Premium Page blobs is 8TB (see under About page blobs)

<https://learn.microsoft.com/en-us/rest/api/storageservices/understanding-block-blobs--append-blobs--and-page-blobs#about-page-blobs>

Max file size for block blobs is 190.7 TiB (see under About block blobs)

<https://learn.microsoft.com/en-us/rest/api/storageservices/understanding-block-blobs--append-blobs--and-page-blobs#about-block-blobs>

Standard general-purpose v2 will allow for LRS, GRS, ZRS and GZRS so in this particular scenario I would suggest it is standard general purpose v2 (and use a block blob allowing you to store a single file of 190.7 TiB), give it GRS and use a private endpoint

upvoted 1 times

✉ **EXzw** 3 months ago

From GPT:

Premium File Shares and Premium Page Blobs both offer high performance based on SSDs, but they have different use cases and access patterns. Based on your requirements, I would recommend using Premium File Shares.

Here's a comparison of Premium Page Blobs and Premium File Shares:

Premium Page Blobs:

Designed for random access patterns and best suited for use with Azure Virtual Machines as VHDs.

Support files up to 8 TiB in size.

Optimized for random read-write operations, but not ideal for sequential read-write patterns typically associated with video files.  
Accessible via Azure Blob Storage APIs or SDKs, which might require custom code for handling video files.

upvoted 1 times

✉️ **EXzw** 3 months ago

Premium File Shares:  
Designed for high-performance, low-latency file storage and access.  
Support files up to 4 TiB in size and share size up to 100 TiB.  
Provide better performance for sequential read-write patterns, which is typical for video files.  
Accessible using standard file protocols (SMB, NFS), making it easy to integrate with existing applications and tools that work with file shares.  
In your case, where you need to analyze large video files, Premium File Shares would be more suitable as they provide better performance for sequential read-write patterns, which are common with video files. Additionally, Premium File Shares support standard file protocols, making it easier to integrate with your existing applications and tools.

upvoted 1 times

✉️ **rocroberto** 3 months, 2 weeks ago

(Premium) Page Blobs only allows LRS  
File shares only allows 5TB in GRS and ZRS but they DO allow up to 100TB in LRS and ZRS  
So, with this logic Files shares + ZRS would be a better choice, would it not ?

upvoted 1 times

✉️ **T10T** 3 months, 1 week ago

No, the maximum size of a FILE SHARE can be 100 TiB, but the maximum FILE SIZE for standard or premium file shares is 4 TiB.

reference: <https://learn.microsoft.com/en-us/azure/storage/files/storage-files-scale-targets>

upvoted 1 times

✉️ **skydivex** 3 months, 3 weeks ago

It cannot be Standard General-Purpose v2. Microsoft clearly recommends to use premium file share account types if you want support for NFS.  
The question is talking about Linux, so NFS is necessary.  
So the answer could be one of the Premium Page Blob or Premium File Share.  
The requirement is up to 7TB of storage. Only Page Blob supports up to 8TB. Premium file share max size is 4TB.  
For the replication, premium page blob only supports LRS. Private end point is the obvious answer to accessing a resource in a VNET from multiple locations.  
The correct answers are:  
Box1: Premium Page Blob  
Box2: LRS  
Box3: Private End Point

upvoted 6 times

✉️ **comoon** 3 months, 3 weeks ago

Guys, what about this restriction?  
What size file share do you need?  
In local and zone redundant storage accounts, Azure file shares can span up to 100 TiB. However, in geo- and geo-zone redundant storage accounts, Azure file shares can span only up to 5 TiB.  
<https://learn.microsoft.com/en-us/azure/storage/files/storage-how-to-create-file-share?tabs=azure-portal>  
It looks like v2,ZRS is a correct answer

upvoted 1 times

✉️ **sojoner** 3 months, 3 weeks ago

Host is a linux server  
Premium File share  
ZRS  
Private end point  
<https://learn.microsoft.com/en-us/azure/storage/files/storage-files-quick-create-use-linux>

upvoted 1 times

✉️ **T10T** 3 months, 1 week ago

That is incorrect. Premium File shares do not meet the FILE SIZE requirement.  
reference: <https://learn.microsoft.com/en-us/azure/storage/files/storage-files-scale-targets>

upvoted 2 times

✉️ **betterthanlife** 1 month, 3 weeks ago

The article rules out Standard & Premium File share, search the article for "Maximum file size"... it's only 4TiB/~4.4TB (which is < the 7 TB requirement). Unless someone finds documentation more recent than 03/29/2023 it's NOT Premium File Share.

upvoted 1 times

✉️ **kwaku2027** 4 months, 1 week ago

I have no explanation to give at the moment but the correct answers are as follows:

1. Premium file shares
2. LRS
3. Azure Route Server

upvoted 1 times

✉️ **Blues99** 4 months, 1 week ago

Wrong 100%:

Premium File share and premium page blob support only LRS,

general purpose v2 support LRS/ GRS/ RA-GRS  
<https://learn.microsoft.com/en-us/answers/questions/564764/azure-storage-general-purpose-v2-premium-account>  
So Correct answer is General Purpose V2 and Private end point

upvoted 1 times

 **betterthanlife** 1 month, 2 weeks ago

Blues99 100% wrong.

Sitting here looking at the Basics tab on the "Create a storage account" page, with "Premium" selected for Performance, "Page blobs" selected for "Premium account type"... Redundancy shows 2 options, LRS & ZRS.

If I choose "File shares" for "Premium account type"... Redundancy shows the same 2 options, LRS & ZRS.

100% (take a look)

upvoted 1 times

 **Lu5ck** 4 months, 3 weeks ago

There actually TWO possible answers, but which is the BETTER answer?

Choice 1:

v2, GRS, private endpoint

Choice 2:

Premium page blob, LRS, private endpoint

Do not forget, v2 does support blobs, the performance just not as good as premium but it has greater flexibility. In such comparison, I feel that choice 1 is a better than choice 2. This greater redundancy outweigh the con of performance.

upvoted 1 times

 **DeBoer** 4 months, 1 week ago

Agree that option 1 is the best and using GRS; only difference being that I'd recommend ZRS for your second option (premium storage accts support LRS and ZRS, they're asking for max redundancy here)

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

Per Chat GPT : The storage account should be configured as follows:

Storage account type: Premium files shares

Data redundancy: Geo-redundant storage (GRS)

Networking: A private endpoint

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

Wrong answer. Chat GPT is screwing with different answers

upvoted 6 times

**HOTSPOT -**

A company plans to implement an HTTP-based API to support a web app. The web app allows customers to check the status of their orders.

The API must meet the following requirements:

- Implement Azure Functions.
- Provide public read-only operations.
- Prevent write operations.

You need to recommend which HTTP methods and authorization level to configure.

What should you recommend? To answer, configure the appropriate options in the dialog box in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

HTTP methods:

API methods
GET only
GET and POST only
GET, POST, and OPTIONS only

Authorization level:

Function
Anonymous
Admin

**Answer Area**

HTTP methods:

API methods
GET only
GET and POST only
GET, POST, and OPTIONS only

Correct Answer:

Authorization level:

Function
Anonymous
Admin

Box 1: GET only -

Get for read-only-

Box 2: Anonymous -

Anonymous for public operations.

 **Davin0406** Highly Voted 8 months, 2 weeks ago

Get only and Anonymous. appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.

upvoted 35 times

 **lombri** Most Recent 1 month, 3 weeks ago

For the given requirements, I would recommend the following HTTP methods and authorization level to configure:

HTTP Methods: GET

Since the API only needs to provide public read-only operations, the GET method would be sufficient to retrieve data.

Authorization Level: Anonymous

Since the API needs to be publicly accessible for read-only operations, an anonymous authorization level should be used to allow unrestricted access without requiring any authentication or authorization.

upvoted 1 times

 **King\_Laps** 2 months, 1 week ago

The correct answer should be GET HTTP method for public read-only operations and configure authorization level as Anonymous..

upvoted 1 times

 **NotMeAnyway** 2 months, 2 weeks ago

Correct!

1. HTTP methods: b. GET only

As the API needs to provide public read-only operations and prevent write operations, you should use only the GET method. The GET method is used to retrieve data and is considered read-only, which meets the requirements.

2. Authorization level: b. Anonymous

To allow public read-only access without requiring any authentication or authorization, you should set the authorization level to Anonymous. This will enable any user to access the API without providing a key, allowing them to check the status of their orders as required.

upvoted 2 times

 **VBK8579** 4 months, 3 weeks ago

GET HTTP method for public read-only operations and configure authorization level as Anonymous.

upvoted 3 times

 **tfulanchan** 5 months ago

The web app allows customers to check the status of their orders.

Level value Description

anonymous No API key is required.

function A function-specific API key is required. This is the default value when a level isn't specifically set.

admin The master key is required.

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-bindings-http-webhook-trigger?tabs=in-process%2Cfunctionsv2&pivots=programming-language-csharp#http-auth>

Customers may not have API key. Anonymous.

upvoted 2 times

 **dewiser** 6 months, 3 weeks ago

GET, Anonymous

upvoted 4 times

 **Darkx** 8 months, 2 weeks ago

appeared on 11th Oct 2022

upvoted 3 times

 **Velidot100** 9 months, 2 weeks ago

Got this on my exam - 12. September 2022

upvoted 2 times

 **jellybiscuit** 9 months, 1 week ago

Really? This seems way outside the scope of the test.

upvoted 1 times

 **SilverFox22** 5 months, 4 weeks ago

Questions like this I am really glad for ExamTopics. None of the materials I have reviewed, from several sources, have mentioned anything like this.

upvoted 2 times

 **Jeffab** 8 months, 2 weeks ago

That was my thought too! I have read all the Learn material for 305 and would love to know where this is covered in objectives?

upvoted 2 times

 **Dudulle** 7 months, 2 weeks ago

Not the first question, by far, not at all covered in the courses ... It is generic HTML knowledge, but yeah, like other questions, a bit abusive to find it here !

upvoted 2 times

 **GarryK** 9 months, 2 weeks ago

Correct

Http Method: [https://www.w3schools.com/tags/ref\\_httpmethods.asp](https://www.w3schools.com/tags/ref_httpmethods.asp)

Anonymous (for public access)

upvoted 2 times

You have an Azure subscription.

You need to recommend a solution to provide developers with the ability to provision Azure virtual machines. The solution must meet the following requirements:

- ⇒ Only allow the creation of the virtual machines in specific regions.
- ⇒ Only allow the creation of specific sizes of virtual machines.

What should you include in the recommendation?

- A. Azure Resource Manager (ARM) templates
- B. Azure Policy
- C. Conditional Access policies
- D. role-based access control (RBAC)

**Correct Answer: B**

Azure Policies allows you to specify allowed locations, and allowed VM SKUs.

Reference:

<https://docs.microsoft.com/en-us/azure/governance/policy/tutorials/create-and-manage>

*Community vote distribution*

B (100%)

 **bootless** Highly Voted  9 months, 4 weeks ago

**Selected Answer: B**

Correct answer

upvoted 9 times

 **GarryK** Highly Voted  9 months, 2 weeks ago

**Selected Answer: B**

Correct

<https://docs.microsoft.com/en-us/azure/governance/policy/samples/built-in-policies>  
Allowed virtual machine size SKUs This policy enables you to specify a set of virtual machine size SKUs that your organization can deploy.  
Allowed locations This policy enables you to restrict the locations your organization can specify when deploying resources. Use to enforce your geo-compliance requirements. Excludes resource groups, Microsoft.AzureActiveDirectory/b2cDirectories, and resources that use the 'global' region.

upvoted 6 times

 **King\_Laps** Most Recent  2 months, 1 week ago

The given answer is correct

upvoted 1 times

 **NotMeAnyWay** 2 months, 2 weeks ago

**Selected Answer: B**

B. Azure Policy

Azure Policy is a service that helps you create, assign, and manage policies to enforce different rules and effects over your resources. By using Azure Policy, you can ensure that your resources stay compliant with your corporate standards.

In this scenario, you can create and assign policies to restrict the creation of virtual machines to specific regions and sizes, which meets both requirements.

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: B**

B. Azure Policy

upvoted 2 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

B. Azure Policy

upvoted 1 times

 **AF2000** 6 months ago

**Selected Answer: B**

Correct  
upvoted 1 times

**DRAG DROP -**

You have an on-premises network that uses an IP address space of 172.16.0.0/16.

You plan to deploy 30 virtual machines to a new Azure subscription.

You identify the following technical requirements:

- ⇒ All Azure virtual machines must be placed on the same subnet named Subnet1.
- ⇒ All the Azure virtual machines must be able to communicate with all on-premises servers.
- ⇒ The servers must be able to communicate between the on-premises network and Azure by using a site-to-site VPN.

You need to recommend a subnet design that meets the technical requirements.

What should you include in the recommendation? To answer, drag the appropriate network addresses to the correct subnets. Each network address may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

**Network Addresses      Answer Area**

172.16.0.0/16  
172.16.1.0/27  
192.168.0.0/24  
192.168.1.0/27

Subnet1:

Gateway subnet:

**Correct Answer:**

**Network Addresses      Answer Area**

172.16.0.0/16  
172.16.1.0/27  
192.168.0.0/24  
192.168.1.0/27

Subnet1:  192.168.0.0/24

Gateway subnet:  192.168.1.0/27

✉ **Davin0406** Highly Voted 8 months, 2 weeks ago

Correct. appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 27 times

✉ **GarryK** Highly Voted 9 months, 2 weeks ago

Correct:  
<https://docs.microsoft.com/en-us/azure/vpn-gateway/tutorial-site-to-site-portal?source=recommendations>

Create a virtual network

Create a VPN gateway

Create a local network gateway

Create a VPN connection

Verify the connection

Connect to a virtual machine

None of the subnets of your on-premises network can overlap with the virtual network subnets that you want to connect to.

upvoted 10 times

✉ **yonie** 2 months ago

Thanks!

upvoted 1 times

✉ **weiofu** Most Recent 1 month, 3 weeks ago

1. Cannot overlap -> 172.16.0.0/16 is out
2. 30 machines -> 192.168.1.0/27 is 32 IPs, but Azure always uses 5 for itself, so would be too small for the machine subnet  
=> process of elimination leads to Subnet1 = 192.168.0.0/24, Gateway Subnet = 192.168.1.0/27

upvoted 4 times

✉ **King\_Laps** 2 months, 1 week ago

Subnet1: 192.168.0.0/24  
Gateway Subnet: 192.168.1.0/27  
upvoted 1 times

✉️ **azkumar305** 2 months, 2 weeks ago  
I got this on 14-Apr-2023  
upvoted 1 times

✉️ **NotMeAnyWay** 2 months, 2 weeks ago  
Subnet1: 192.168.0.0/24  
Gateway Subnet: 192.168.1.0/27

Using the 192.168.0.0/24 address for Subnet1 in Azure allows you to deploy the 30 virtual machines without overlapping with your on-premises IP address space (172.16.0.0/16).

For the Gateway Subnet, using 192.168.1.0/27 is correct because it ensures that the Gateway Subnet is separate from the Azure VMs subnet (Subnet1) and also does not overlap with the on-premises IP address space. By keeping the Gateway Subnet distinct from both the Azure VMs subnet and the on-premises IP address space, you can avoid any potential routing issues and ensure proper communication between the on-premises network and Azure through a site-to-site VPN.

upvoted 1 times

✉️ **NianSpannie98** 4 months, 2 weeks ago  
This is Correct. On Prem and Vnet IP Addresses can not overlap for site to site or point to site connections. on prem is currently 172.16.0.0/16, so 172.16.x.x/16 and up is not available for Vnet. So subnet is 192.168.0.0/24

Microsoft also recommends Gateway to be /27. So 192.168.1.0/27 is correct  
upvoted 5 times

✉️ **VBK8579** 4 months, 3 weeks ago  
For the Azure virtual machines to communicate with the on-premises network and meet the technical requirements, the subnet design should be as follows:  
  
Network address for Subnet1: 192.168.0.0/24 or 192.168.1.0/27  
Network address for Gateway subnet: 192.168.0.0/27 or 192.168.1.0/28  
It's important to note that using private IP addresses that are not reserved for private networks (such as 172.16.0.0/16) is not recommended in a production environment as it may cause IP address conflicts.  
upvoted 2 times

✉️ **OPT\_001122** 4 months, 3 weeks ago  
Given answer is correct,  
Thanks all who have mentioned the exam dates  
upvoted 1 times

✉️ **rocroberto** 7 months ago  
I would think that another reason why the 172.X.X are not usable is because those are Non Routable IP Addresses (they cannot be used except by Azure systems)  
upvoted 1 times

✉️ **Guest** 6 months, 2 weeks ago  
192.168.x.x is not routable either so that would make no difference  
172.16.x.x is also a private range  
See <https://www.okta.com/identity-101/understanding-private-ip-ranges/>  
But you can't have overlapping IP ranges, so that's why 172.16.x.x can't be used in Azure for this case  
Gateway subnet must be /27 or larger  
30 machines + reserved ip's requires at least a /26, so their answer is correct  
upvoted 5 times

✉️ **Darkx** 8 months, 2 weeks ago  
appeared on 11th Oct 2022  
upvoted 3 times

You have data files in Azure Blob Storage.  
You plan to transform the files and move them to Azure Data Lake Storage.  
You need to transform the data by using mapping data flow.  
Which service should you use?

- A. Azure Databricks
- B. Azure Storage Sync
- C. Azure Data Factory
- D. Azure Data Box Gateway

**Correct Answer: C**

You can copy and transform data in Azure Data Lake Storage Gen2 using Azure Data Factory or Azure Synapse Analytics.

Reference:

<https://docs.microsoft.com/en-us/azure/data-factory/connector-azure-data-lake-storage>

*Community vote distribution*

C (100%)

✉️  **Davin0406**  8 months, 2 weeks ago

**Selected Answer: C**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 12 times

✉️  **GarryK**  9 months, 2 weeks ago

**Selected Answer: C**

Correct

<https://docs.microsoft.com/en-us/azure/data-factory/concepts-data-flow-overview>

What are mapping data flows?

Mapping data flows are visually designed data transformations in Azure Data Factory. Data flows allow data engineers to develop data transformation logic without writing code. The resulting data flows are executed as activities within Azure Data Factory pipelines that use scaled-out Apache Spark clusters. Data flow activities can be operationalized using existing Azure Data Factory scheduling, control, flow, and monitoring capabilities.

upvoted 5 times

✉️  **jellybiscuit** 9 months, 1 week ago

Correct. Both Databricks and Data Factory can move the data.

The key point here is the "mapping data flow" which is the GUI that only Data Factory provides.

upvoted 3 times

✉️  **mtc9** 7 months, 2 weeks ago

Synapse also provides that but was not a choice

upvoted 3 times

✉️  **lombri**  1 month, 3 weeks ago

**Selected Answer: C**

Azure Data Factory is a cloud-based data integration service that allows you to create, schedule, and manage data pipelines that can move and transform data across different sources and destinations, including Azure Blob Storage and Azure Data Lake Storage.

Azure Databricks is a cloud-based analytics platform that allows you to process large amounts of data using Apache Spark. It can also be used for data transformation and ETL, but it requires more technical expertise and development effort than using Azure Data Factory mapping data flows.

Azure Storage Sync is a service that allows you to sync on-premises file servers with Azure file shares, but it does not support data transformation.

Azure Data Box Gateway is a hardware device that allows you to transfer large amounts of data to Azure, but it does not support data transformation using mapping data flow.

upvoted 1 times

✉️  **NotMeAnyWay** 2 months, 2 weeks ago

**Selected Answer: C**

C. Azure Data Factory

Azure Data Factory is the appropriate service to use for transforming data using mapping data flow. Mapping data flow is a feature in Azure Data

Factory that allows you to visually design, build, and manage data transformation processes without writing any code. You can use mapping data flow in Azure Data Factory to transform the data files in Azure Blob Storage and move them to Azure Data Lake Storage as per your requirements.

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: C**

C. Azure Data Factory

upvoted 2 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

For mapping

C. Azure Data Factory

upvoted 1 times

You have an Azure subscription.

You need to deploy an Azure Kubernetes Service (AKS) solution that will use Windows Server 2019 nodes. The solution must meet the following requirements:

- ⇒ Minimize the time it takes to provision compute resources during scale-out operations.
- ⇒ Support autoscaling of Windows Server containers.

Which scaling option should you recommend?

- A. Kubernetes version 1.20.2 or newer
- B. Virtual nodes with Virtual Kubelet ACI
- C. cluster autoscaler
- D. horizontal pod autoscaler

**Correct Answer: C**

Deployments can scale across AKS with no delay as cluster autoscaler deploys new nodes in your AKS cluster.

Note: AKS clusters can scale in one of two ways:

\* The cluster autoscaler watches for pods that can't be scheduled on nodes because of resource constraints. The cluster then automatically increases the number of nodes.

\* The horizontal pod autoscaler uses the Metrics Server in a Kubernetes cluster to monitor the resource demand of pods. If an application needs more resources, the number of pods is automatically increased to meet the demand.

Incorrect:

Not D: If your application needs to rapidly scale, the horizontal pod autoscaler may schedule more pods than can be provided by the existing compute resources in the node pool. If configured, this scenario would then trigger the cluster autoscaler to deploy additional nodes in the node pool, but it may take a few minutes for those nodes to successfully provision and allow the Kubernetes scheduler to run pods on them.

Reference:

<https://docs.microsoft.com/en-us/azure/aks/cluster-autoscaler>

*Community vote distribution*

C (78%)	B (17%)	3%
---------	---------	----

✉️  **GarryK**  9 months, 2 weeks ago

**Selected Answer: C**

Correct.

Cluster autoscaler help provision new nodes (compute resources)

Cluster autoscaler works on top of horizontal pod autoscaler.

Azure AKS support windows <https://docs.microsoft.com/en-us/azure/aks/learn/quick-windows-container-deploy-cli>

upvoted 17 times

✉️  **GarryK** 4 months, 2 weeks ago

To those answering B. The solution must use Windows Server 2019 nodes.

You need to deploy an Azure Kubernetes Service (AKS) solution that will use Windows Server 2019 nodes.

Virtual nodes only support Linux nodes.

<https://learn.microsoft.com/en-us/azure/aks/virtual-nodes>

Virtual nodes are only supported with Linux pods and nodes.

It can of course host linux or windows containers, but that's not the requirement.

upvoted 7 times

✉️  **Snownoodles**  8 months ago

**Selected Answer: C**

The correct answer is C. AKS doesn't support Windows 2019 virtual node so far, you have to " manually install the open source Virtual Kubelet ACI provider to schedule Windows Server containers to ACI"

Since the ask is " Minimize the time it takes to provision compute resources during scale-out operations", so the correct answer should be C

upvoted 10 times

✉️  **Tr619899**  3 weeks, 1 day ago

The correct answer is C. cluster autoscaler.

The cluster autoscaler automatically adjusts the number of nodes in an Azure Kubernetes Service (AKS) cluster when there are not enough resources to schedule pods or when nodes are underutilized and their pods can be rescheduled onto other nodes in the cluster. This helps to minimize the time it takes to provision compute resources during scale-out operations and supports autoscaling of Windows Server containers.

upvoted 1 times

✉️  **NotMeAnyWay** 2 months, 2 weeks ago

**Selected Answer: C**

C. cluster autoscaler

Cluster autoscaler automatically adjusts the size of the AKS cluster by adding or removing nodes based on the resource demands of your workloads. It helps to ensure that you have enough capacity to run your applications while minimizing costs. While it may not minimize provisioning time to the same extent as virtual nodes, it does support autoscaling for Windows Server containers.

upvoted 1 times

 **Eusouzati** 4 months, 1 week ago

**Selected Answer: D**

Horizontal Pod Autoscaler (HPA) with custom metrics: HPA automatically scales the number of pods in a deployment based on CPU utilization or other metrics. To support autoscaling of Windows Server containers, you can use HPA with custom metrics to scale based on the memory or CPU usage of the containers running on Windows Server nodes. By scaling based on custom metrics, you can ensure that the scale-out operation is efficient and minimizes the time it takes to provision compute resources.

Note that the AKS cluster should be configured to use Windows Server 2019 nodes by specifying the appropriate node image in the AKS node pool configuration.

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: C**

C. Cluster Autoscaler

upvoted 1 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

C. cluster autoscaler

upvoted 1 times

 **hyur** 5 months ago

B. Virtual nodes with Virtual Kubelet ACI

Virtual nodes with Virtual Kubelet ACI (Azure Container Instances) can minimize the time it takes to provision compute resources during scale-out operations, and support autoscaling of Windows Server containers. This is because Virtual Kubelet allows you to use Azure Container Instances (ACI) as a virtual node in your AKS cluster, allowing you to scale out your cluster with ACI resources as needed. This can be a good option as it allows you to take advantage of the fast provisioning and scalability of ACI while still using AKS to manage your containers.

upvoted 2 times

 **hyur** 5 months ago

Not C. cluster autoscaler: can also be used to support autoscaling of nodes within an AKS cluster, but it does not specifically support Windows Server containers and it doesn't minimize the time it takes to provision compute resources during scale-out operations as much as Virtual nodes with Virtual Kubelet ACI. Cluster Autoscaler is a Kubernetes controller that automatically adjusts the number of nodes in your cluster based on the resource usage of pods. It does this by checking the resource utilization of pods and adding or removing nodes as necessary to ensure that all pods have sufficient resources. While this can help you automatically scale your cluster, it doesn't provide the same level of fast provisioning and scalability as using Virtual Kubelet with ACI.

Source ChatGPT

upvoted 1 times

 **VBK8579** 5 months ago

Cluster autoscaler

upvoted 1 times

 **PankajKataria** 6 months ago

**Selected Answer: C**

Cluster autoscaler help provision new node

upvoted 1 times

 **A\_GEE** 6 months, 3 weeks ago

**Selected Answer: C**

This is Windows - using autoscaler

For Linux - using virtual node

upvoted 5 times

 **pkkalra** 7 months, 1 week ago

**Selected Answer: B**

Answer is B as we need to reduce time in provisioning the resources during scale out.

<https://learn.microsoft.com/en-us/azure/aks/concepts-scale#burst-to-azure-container-instances>

upvoted 1 times

 **sexyt** 5 months, 2 weeks ago

B would be correct if the requirement was scaling horizontally not out, therefore it's C as proven in your own link.

upvoted 1 times

 **darren888** 7 months, 2 weeks ago

**Selected Answer: C**

Virtual nodes are only supported with Linux pods and nodes.

upvoted 2 times

 **Tanminator** 8 months ago

**Selected Answer: C**

The answer is C.

The incorrect answer is B. Virtual nodes are only supported with Linux pods and nodes <https://learn.microsoft.com/en-us/azure/aks/virtual-nodes>.

upvoted 4 times

 **Galron** 8 months ago

**Selected Answer: C**

<https://learn.microsoft.com/en-us/azure/aks/hybrid/concepts-cluster-autoscaling>

upvoted 4 times

 **Galron** 8 months ago

**Selected Answer: A**

<https://learn.microsoft.com/en-us/azure/aks/learn/quick-windows-container-deploy-cli>  
Beginning in Kubernetes version 1.20 and greater, you can specify containerd as the container runtime for Windows Server 2019 node pools.  
From Kubernetes 1.23, containerd will be the default container runtime for Windows.

upvoted 1 times

 **Galron** 8 months ago

I've changed my mind to the cluster autoscaler C. <https://learn.microsoft.com/en-us/azure/aks/hybrid/concepts-cluster-autoscaling>

upvoted 2 times

 **simonseztech** 8 months, 1 week ago

**Selected Answer: B**

<https://learn.microsoft.com/en-us/azure/aks/concepts-scale#burst-to-azure-container-instances>

ACI lets you quickly deploy container instances without additional infrastructure overhead. When you connect with AKS, ACI becomes a secured, logical extension of your AKS cluster.

upvoted 3 times

**HOTSPOT -**

Your on-premises network contains a file server named Server1 that stores 500 GB of data.

You need to use Azure Data Factory to copy the data from Server1 to Azure Storage.

You add a new data factory.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

From Server1:

- Install an Azure File Sync agent.
- Install a self-hosted integration runtime.
- Install the File Server Resource Manager role service.

From the data factory:

- Create a pipeline.
- Create an Azure Import/Export job.
- Provision an Azure-SQL Server Integration Services (SSIS) integration runtime.

**Correct Answer:**

**Answer Area**

From Server1:

- Install an Azure File Sync agent.
- Install a self-hosted integration runtime.
- Install the File Server Resource Manager role service.

From the data factory:

- Create a pipeline.
- Create an Azure Import/Export job.
- Provision an Azure-SQL Server Integration Services (SSIS) integration runtime.

Box 1: Install a self-hosted integration runtime.

If your data store is located inside an on-premises network, an Azure virtual network, or Amazon Virtual Private Cloud, you need to configure a self-hosted integration runtime to connect to it.

The Integration Runtime to be used to connect to the data store. You can use Azure Integration Runtime or Self-hosted Integration Runtime (if your data store is located in private network). If not specified, it uses the default Azure Integration Runtime.

Box 2: Create a pipeline.

You perform the Copy activity with a pipeline.

Reference:

<https://docs.microsoft.com/en-us/azure/data-factory/connector-file-system>

  **jellybiscuit** Highly Voted 9 months, 1 week ago

Correct

<https://learn.microsoft.com/en-us/azure/data-factory/connector-file-system?tabs=data-factory>

upvoted 12 times

  **GarryK** Highly Voted 9 months, 2 weeks ago

<https://docs.microsoft.com/en-us/azure/data-factory/data-migration-guidance-hdfs-azure-storage>

ou must install the Data Factory self-hosted integration runtime on a Windows VM in your Azure virtual network.

<https://docs.microsoft.com/en-us/azure/data-factory/concepts-pipelines-activities?tabs=data-factory>

A Data Factory or Synapse Workspace can have one or more pipelines. A pipeline is a logical grouping of activities that together perform a task. For example, a pipeline could contain a set of activities that ingest and clean log data, and then kick off a mapping data flow to analyze the log data.

upvoted 5 times

  **NotMeAnyWay** Most Recent 2 months, 2 weeks ago

Correct.

o copy the data from Server1 to Azure Storage using Azure Data Factory, you should do the following next:

1. From Server1: b. Install a self-hosted integration runtime

A self-hosted integration runtime needs to be installed on Server1 to enable secure communication between the on-premises network and Azure Data Factory. This runtime allows Data Factory to access and copy data from the on-premises file server to Azure Storage.

2. From the data factory: a. Create a pipeline

In the Azure Data Factory, create a pipeline that specifies the source (on-premises file server) and destination (Azure Storage). The pipeline will use the self-hosted integration runtime to establish a connection to the on-premises file server and transfer the data to Azure Storage.

upvoted 1 times

 **OPT\_001122** 4 months, 3 weeks ago

Box 1: Install a self-hosted integration runtime.

Box 2: Create a pipeline.

upvoted 3 times

 **FabryDev** 5 months, 1 week ago

As described in link below, you have to install self hosted integration runtime on the Server and create a Pipeline in Data Factory.

<https://www.sqlshack.com/copy-data-from-on-premises-data-store-to-an-azure-data-store-using-azure-data-factory/>

upvoted 1 times

You have an Azure subscription.

You need to recommend an Azure Kubernetes Service (AKS) solution that will use Linux nodes. The solution must meet the following requirements:

- ⇒ Minimize the time it takes to provision compute resources during scale-out operations.
- ⇒ Support autoscaling of Linux containers.
- ⇒ Minimize administrative effort.

Which scaling option should you recommend?

- A. horizontal pod autoscaler
- B. cluster autoscaler
- C. virtual nodes
- D. Virtual Kubelet

**Correct Answer: C**

To rapidly scale application workloads in an AKS cluster, you can use virtual nodes. With virtual nodes, you have quick provisioning of pods, and only pay per second for their execution time. You don't need to wait for Kubernetes cluster autoscaler to deploy VM compute nodes to run the additional pods. Virtual nodes are only supported with Linux pods and nodes.

Reference:

<https://docs.microsoft.com/en-us/azure/aks/virtual-nodes>

*Community vote distribution*

C (90%) 10%

✉️ **OPT\_001122** Highly Voted 4 months, 2 weeks ago

**Selected Answer: C**

cluster autoscaler for windows  
Virtual Nodes for Linux

upvoted 15 times

✉️ **NotMeAnyway** Most Recent 2 months, 2 weeks ago

**Selected Answer: C**

C. virtual nodes

To meet the requirements of minimizing the time it takes to provision compute resources during scale-out operations, supporting autoscaling of Linux containers, and minimizing administrative effort, you should recommend virtual nodes for the Azure Kubernetes Service (AKS) solution with Linux nodes.

Virtual nodes allow you to scale your AKS cluster quickly by offloading the additional compute resources to Azure Container Instances (ACI). This reduces the time it takes to provision resources during scale-out operations, as the resources can be provisioned instantly without having to wait for a new node to be created. Additionally, virtual nodes support autoscaling of Linux containers and require minimal administrative effort compared to other scaling options.

upvoted 1 times

✉️ **VBK8579** 4 months, 3 weeks ago

**Selected Answer: C**

To minimize the time it takes to provision compute resources during scale-out operations in an AKS cluster with Linux nodes, the recommended scaling option would be Virtual Nodes. Virtual Nodes allow the AKS cluster to use Azure Container Instances (ACI) as worker nodes, which can be quickly and easily provisioned, enabling faster scaling compared to traditional AKS worker nodes.

upvoted 1 times

✉️ **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

To rapidly scale application workloads in an AKS cluster, you can use virtual nodes.

upvoted 2 times

✉️ **[Removed]** 5 months, 2 weeks ago

**Selected Answer: C**

Virtual Nodes

upvoted 1 times

✉️ **simonseztech** 8 months, 1 week ago

**Selected Answer: C**

<https://learn.microsoft.com/en-us/azure/aks/virtual-nodes>

The virtual nodes add-on for AKS, is based on the open source project Virtual Kubelet.

So if you need to scale out faster than AKS let you, you need to burst to ACI.

upvoted 1 times

 **jellybiscuit** 9 months, 1 week ago

**Selected Answer: C**

C - because "virtual node" is the name of the Microsoft "product".

In short, it connects kubernetes management to ACI containers.

That said... it uses Virtual Kubelet technology, and probably horizontal pod autoscaler to scale.

upvoted 3 times

 **S\_883** 9 months, 1 week ago

**Selected Answer: C**

<https://docs.microsoft.com/en-us/azure/aks/virtual-nodes>

it should be C then?

upvoted 3 times

 **scottims** 9 months, 2 weeks ago

I believe Kay000001 meant C, virtual nodes

To rapidly scale application workloads in an AKS cluster, you can use virtual nodes. With virtual nodes, you have quick provisioning of pods, and only pay per second for their execution time. You don't need to wait for Kubernetes cluster autoscaler to deploy VM compute nodes to run the additional pods. Virtual nodes are only supported with Linux pods and nodes.

upvoted 4 times

 **kay000001** 9 months, 2 weeks ago

**Selected Answer: B**

B.

<https://docs.microsoft.com/en-us/azure/aks/virtual-nodes>

upvoted 3 times

You are designing an order processing system in Azure that will contain the Azure resources shown in the following table.

Name	Type	Purpose
App1	App Service web app	Processes customer orders
Function1	Function	Checks product availability at vendor 1
Function2	Function	Checks product availability at vendor 2
storage2	Storage account	Stores order processing logs

The order processing system will have the following transaction flow:

- ⇒ A customer will place an order by using App1.
- ⇒ When the order is received, App1 will generate a message to check for product availability at vendor 1 and vendor 2.
- ⇒ An integration component will process the message, and then trigger either Function1 or Function2 depending on the type of order.
- ⇒ Once a vendor confirms the product availability, a status message for App1 will be generated by Function1 or Function2.
- ⇒ All the steps of the transaction will be logged to storage1.

Which type of resource should you recommend for the integration component?

- A. an Azure Service Bus queue
- B. an Azure Data Factory pipeline
- C. an Azure Event Grid domain
- D. an Azure Event Hubs capture

**Correct Answer: B**

Azure Data Factory is the platform is the cloud-based ETL and data integration service that allows you to create data-driven workflows for orchestrating data movement and transforming data at scale. Using Azure Data Factory, you can create and schedule data-driven workflows (called pipelines) that can ingest data from disparate data stores.

Data Factory contains a series of interconnected systems that provide a complete end-to-end platform for data engineers.

Reference:

<https://docs.microsoft.com/en-us/azure/data-factory/introduction>

*Community vote distribution*

B (56%)

A (43%)

✉ **Samko635** Highly Voted 8 months, 1 week ago

**Selected Answer: B**

The given answer is correct.

ADF pipeline can process the message and trigger the appropriate condition. On ADF, you can add a diagnostic setting to send logs to a storage account.

Other possible options would be Event grid subscription & Service bus topic.

Service bus TOPIC can be used with filtering rules on each subscription but not queue.

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-topics-subscriptions#rules-and-actions>

upvoted 29 times

✉ **Snownoodles** Highly Voted 9 months, 3 weeks ago

**Selected Answer: A**

Option A looks correct to me: an Azure Service Bus queue

ADF pipeline is for data ETL/movement only

upvoted 27 times

✉ **Snownoodles** 8 months ago

Sorry, after reading the following link, I think the correct answer should be B

Please note the question is asking to implement "An integration component will process the message". Service Bus definitely is unable to process the message, it's just a message queue.

ADF has a "control activity" which is like IF---Then flow

<https://learn.microsoft.com/en-us/azure/data-factory/control-flow-if-condition-activity>

upvoted 31 times

✉ **lombri** Most Recent 1 month, 3 weeks ago

**Selected Answer: A**

A. An Azure Service Bus queue is the recommended resource for the integration component in this transaction flow. An Azure Service Bus queue provides reliable message delivery between different parts of a distributed system. In this transaction flow, the integration component can use an Azure Service Bus queue to receive messages from App1 and trigger either Function1 or Function2 depending on the type of order. Once a vendor confirms the product availability, a status message can be generated and sent to App1 via the same queue. Additionally, all the steps of the transaction can be logged to storage1 using a separate process.

upvoted 1 times

✉️ NotMeAnyWay 2 months, 2 weeks ago

Selected Answer: A

A. an Azure Service Bus queue

In this scenario, the integration component should be an Azure Service Bus queue. Service Bus queues are a suitable choice for processing messages between App1 and the Azure Functions (Function1 and Function2) in a reliable and efficient manner. They enable communication in a decoupled manner, allowing for better scalability and resilience. Additionally, Service Bus queues support message ordering, duplicate detection, and can handle multiple consumers, making it a good fit for the described order processing system.

Azure Data Factory is primarily designed for data integration, orchestration, and movement scenarios, such as ETL (Extract, Transform, Load) processes, rather than for real-time message processing and triggering functions based on message content.

upvoted 1 times

✉️ AzureMasterChamp 3 months ago

We need pub-sub here, I think correct answer should be Azure Event Grid Domain.  
Azure service Bus Queue will not help, for pub-sub we need Azure Service Bus Topic.

upvoted 1 times

✉️ AzureMasterChamp 3 months ago

<https://learn.microsoft.com/en-us/azure/event-grid/event-domains>

upvoted 1 times

✉️ steel72 3 months, 1 week ago

Selected Answer: B

Correct answer is "Azure Data Factory".  
Service Bus Queues do not support one-to-many, only Service Bus Topics do.

upvoted 2 times

✉️ curtmcgirt 3 months, 1 week ago

Selected Answer: B

"messages" so not C or D.  
"will process the message" so not A.  
B.

upvoted 2 times

✉️ equipowindows 4 months ago

Selected Answer: B

Selected answer: B  
upvoted 1 times

✉️ Rams\_84z06n 4 months, 1 week ago

Selected answer: B  
All the steps of the transaction will be logged to storage1. So ADF could create a data pipeline out of messages in storage account, then trigger Function1 and Function2.

upvoted 1 times

✉️ \_fvt 4 months, 1 week ago

I'm still trying to understand how an ADF pipeline could be a choice.  
How you will easily interface the App message with the ADF pipeline ? using ADF Rest API call / logic app / function ? then you should just directly call the right function from the web app. Or maybe schedule the pipeline every minute to process the message in the logs from the storage and then call the right function ? But even, then you may need to send back the answer from the function to the web app as it generates a message for it. And pipeline / integration runtime would take time to start before running the pipeline for each call, if not being already busy by a previous run so the new run would be canceled, and so on...  
Would be an over-engineered mess to implement.

upvoted 3 times

✉️ \_fvt 4 months, 1 week ago

As we are talking of messages, I would choose Azure Service Bus, the real world answer should be this, but ASB with queue which is specified only allows one consumer, we need use Azure Service Bus topics instead... so not sure it's the right choice (<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-topics-subscriptions>).

Within event grid domain (answer C) we can define topic to trigger our functions but getting the event with the orderType content of the app service message is not easily feasible as event grid purpose is not to deal with messages data (same for Event hub, so discarding answer D also).

<https://learn.microsoft.com/en-us/azure/event-grid/includes/media/event-grid-domain-example-use-case/contoso-construction-example.png#lightbox>

<https://learn.microsoft.com/en-us/azure/event-grid/event-domains>

So I don't have an answer for this question actually, but I would probably choose B, because it seems the only one where we are free to do a hack which could "work".

upvoted 2 times

✉ **jecawi9630** 4 months, 1 week ago

**Selected Answer: B**

<https://learn.microsoft.com/en-us/azure/data-factory/concepts-pipelines-activities>

upvoted 1 times

✉ **Anzus** 4 months, 2 weeks ago

**Selected Answer: A**

Both Service Bus and Data Factory pipeline can be applied to this scenario. Don't forget that functions can also integrate with the queue and process whatever is needed. In this case, I vote A since the app1 says it will send a message, not that it is going to trigger a pipeline.

upvoted 2 times

✉ **GarryK** 4 months, 2 weeks ago

**Selected Answer: A**

Correct answer is A

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-transactions>

Its exactly for this type of scenario.

Messaging service, support filter with Topics, integrate with Azure functions (via triggers), and can log to azure monitor log

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-queues-topics-subscriptions>

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/monitor-service-bus>

upvoted 1 times

✉ **GarryK** 4 months, 2 weeks ago

sorry misread the answer, its service bus TOPIC that we need for the filtering by order type, so answer is B.

upvoted 3 times

✉ **Lu5ck** 4 months, 3 weeks ago

**Selected Answer: A**

There are a lot of possibilities. A, B, C are possible, really. However, we need to understand the "purpose".

Looking at "B", don't you think is too much for this scenario? B is meant for something more complicated and therefore not for real-time basis.

Leaving A and C which is message vs event. We are dealing with a ordering system thus we need a response and FIFO, we can't have two vendors on the same order. A is the only thing that fit the requirement.

upvoted 1 times

✉ **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

Azure Data Factory is the platform is the cloud-based ETL and data integration service that allows you to create data-driven workflows for orchestrating data movement and transforming data at scale. Using Azure Data Factory, you can create and schedule data-driven workflows (called pipelines) that can ingest data from disparate data stores.

upvoted 1 times

✉ **albertoramos** 5 months ago

**Selected Answer: A**

A. An Azure Service Bus queue is the most appropriate resource for the integration component in this scenario. The integration component will need to process messages and trigger different functions based on the type of order, which aligns with the functionality of an Azure Service Bus queue. It allows for the processing of messages in a reliable, scalable, and decoupled manner, making it a good fit for this order processing system.

upvoted 1 times

✉ **user58** 5 months, 1 week ago

**Selected Answer: A**

yep, here's processing

upvoted 1 times

You have 100 Microsoft SQL Server Integration Services (SSIS) packages that are configured to use 10 on-premises SQL Server databases as their destinations.

You plan to migrate the 10 on-premises databases to Azure SQL Database.

You need to recommend a solution to create Azure-SQL Server Integration Services (SSIS) packages. The solution must ensure that the packages can target the

SQL Database instances as their destinations.

What should you include in the recommendation?

- A. Data Migration Assistant (DMA)
- B. Azure Data Factory
- C. Azure Data Catalog
- D. SQL Server Migration Assistant (SSMA)

**Correct Answer: B**

Migrate on-premises SSIS workloads to SSIS using ADF (Azure Data Factory).

When you migrate your database workloads from SQL Server on premises to Azure database services, namely Azure SQL Database or Azure SQL Managed

Instance, your ETL workloads on SQL Server Integration Services (SSIS) as one of the primary value-added services will need to be migrated as well.

Azure-SSIS Integration Runtime (IR) in Azure Data Factory (ADF) supports running SSIS packages. Once Azure-SSIS IR is provisioned, you can then use familiar tools, such as SQL Server Data Tools (SSDT)/SQL Server Management Studio (SSMS), and command-line utilities, such as dtinstall/dtutil/dtexec, to deploy and run your packages in Azure.

Reference:

<https://docs.microsoft.com/en-us/azure/data-factory/scenario-ssis-migration-overview>

*Community vote distribution*

B (100%)

✉️ NotMeAnyWay 2 months, 2 weeks ago

**Selected Answer: B**

Correct:

B. Azure Data Factory

You should include Azure Data Factory in the recommendation to create Azure-SQL Server Integration Services (SSIS) packages. Azure Data Factory supports running SSIS packages in the cloud using Azure-SSIS Integration Runtime, which allows you to target Azure SQL Database instances as the destinations for your SSIS packages. This enables you to continue using your existing SSIS packages while migrating your on-premises databases to Azure SQL Database.

upvoted 3 times

✉️ VBK8579 4 months, 3 weeks ago

**Selected Answer: B**

Azure Data Factory provides a cloud-based platform for the orchestration and management of data transformation and movement. Azure Data Factory supports connecting to and migrating data from on-premises databases, including SQL Server, to Azure SQL Database. Azure Data Factory also supports integrating with SSIS packages, making it possible to continue using your existing SSIS packages while utilizing Azure SQL Database as the target database.

upvoted 4 times

✉️ OPT\_001122 4 months, 3 weeks ago

**Selected Answer: B**

B. Azure Data Factory

upvoted 1 times

✉️ Snownoodles 9 months, 1 week ago

I wonder if there is a typo in this question:

"You need to recommend a solution to CREATE Azure-SQL Server Integration Services (SSIS) packages"  
Should "CREATE" be "REPLACE"?

upvoted 2 times

✉️ sKaiNL 9 months, 1 week ago

Apparently yes

upvoted 2 times

✉️  **kay00001** 9 months, 2 weeks ago

**Selected Answer: B**

B.

<https://docs.microsoft.com/en-us/azure/data-factory/how-to-migrate-ssis-job-ssms>

upvoted 3 times

✉️  **GarryK** 9 months, 2 weeks ago

**Selected Answer: B**

<https://docs.microsoft.com/en-us/azure/data-factory/tutorial-deploy-ssis-packages-azure>

upvoted 4 times

You have an Azure virtual machine named VM1 that runs Windows Server 2019 and contains 500 GB of data files.

You are designing a solution that will use Azure Data Factory to transform the data files, and then load the files to Azure Data Lake Storage.

What should you deploy on VM1 to support the design?

- A. the On-premises data gateway
- B. the Azure Pipelines agent
- C. the self-hosted integration runtime
- D. the Azure File Sync agent

**Correct Answer: C**

The integration runtime (IR) is the compute infrastructure that Azure Data Factory and Synapse pipelines use to provide data-integration capabilities across different network environments.

A self-hosted integration runtime can run copy activities between a cloud data store and a data store in a private network. It also can dispatch transform activities against compute resources in an on-premises network or an Azure virtual network. The installation of a self-hosted integration runtime needs an on-premises machine or a virtual machine inside a private network.

Reference:

<https://docs.microsoft.com/en-us/azure/data-factory/create-self-hosted-integration-runtime>

*Community vote distribution*

C (100%)

  **kay000001**  9 months, 2 weeks ago

**Selected Answer: C**

C.

<https://docs.microsoft.com/en-us/azure/data-factory/connector-file-system>

upvoted 6 times

  **GarryK**  9 months, 2 weeks ago

**Selected Answer: C**

<https://docs.microsoft.com/en-us/azure/data-factory/concepts-integration-runtime>

The Integration Runtime (IR) is the compute infrastructure used by Azure Data Factory and Azure Synapse pipelines to provide the following data integration capabilities across different network environments:

Data Flow: Execute a Data Flow in a managed Azure compute environment.

Data movement: Copy data across data stores in a public or private networks (for both on-premises or virtual private networks). The service provides support for built-in connectors, format conversion, column mapping, and performant and scalable data transfer.

Activity dispatch: Dispatch and monitor transformation activities running on a variety of compute services such as Azure Databricks, Azure HDInsight, ML Studio (classic), Azure SQL Database, SQL Server, and more.

SSIS package execution: Natively execute SQL Server Integration Services (SSIS) packages in a managed Azure compute environment.  
upvoted 5 times

  **VBK8579**  4 months, 3 weeks ago

**Selected Answer: C**

According to the Microsoft documentation, a self-hosted integration runtime is used to move data between on-premises data sources and Azure data stores. In this case, VM1 running Windows Server 2019 could host the self-hosted integration runtime, allowing data files to be transformed and loaded to Azure Data Lake Storage through Azure Data Factory.

upvoted 2 times

  **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

C. the self-hosted integration runtime

upvoted 1 times

You have an Azure Active Directory (Azure AD) tenant that syncs with an on-premises Active Directory domain.

Your company has a line-of-business (LOB) application that was developed internally.

You need to implement SAML single sign-on (SSO) and enforce multi-factor authentication (MFA) when users attempt to access the application from an unknown location.

Which two features should you include in the solution? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Azure AD Privileged Identity Management (PIM)
- B. Azure Application Gateway
- C. Azure AD enterprise applications
- D. Azure AD Identity Protection
- E. Conditional Access policies

**Correct Answer: DE**

D: The signals generated by and fed to Identity Protection, can be further fed into tools like Conditional Access to make access decisions, or fed back to a security information and event management (SIEM) tool for further investigation based on your organization's enforced policies.

Note: Identity Protection is a tool that allows organizations to accomplish three key tasks:

Automate the detection and remediation of identity-based risks.

Investigate risks using data in the portal.

Export risk detection data to your SIEM.

E: The location condition can be used in a Conditional Access policy.

Conditional Access policies are at their most basic an if-then statement combining signals, to make decisions, and enforce organization policies. One of those signals that can be incorporated into the decision-making process is location.

Organizations can use this location for common tasks like:

\* Requiring multi-factor authentication for users accessing a service when they're off the corporate network.

\* Blocking access for users accessing a service from specific countries or regions.

The location is determined by the public IP address a client provides to Azure Active Directory or GPS coordinates provided by the Microsoft Authenticator app.

Conditional Access policies by default apply to all IPv4 and IPv6 addresses.

Incorrect:

Not A: Privileged Identity Management (PIM) is a service in Azure Active Directory (Azure AD) that enables you to manage, control, and monitor access to important resources in your organization. These resources include resources in Azure AD, Azure, and other Microsoft Online Services such as Microsoft 365 or

Microsoft Intune.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/identity-protection/overview-identity-protection> <https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/location-condition>

*Community vote distribution*

CE (100%)

 **bootless**  9 months, 4 weeks ago

**Selected Answer: CE**

Given answer is WRONG.

Correct ist Azure AD enterprise applications and Conditional Access

Enterprise App for SSO

Conditional Access for MFA

upvoted 66 times

 **icklenutter** 9 months, 3 weeks ago

Agree, Should be CE

upvoted 11 times

 **ServerBrain** 5 months, 3 weeks ago

I can't agree with you more..

upvoted 2 times

✉️  **DeeSeeEss**  4 months, 2 weeks ago

Moderator, it's been 5 months with the incorrect answer and reasoning posted. Can we please get this updated for ease of use? The correct answer is obviously C,E.

upvoted 7 times

✉️  **NotMeAnyWay**  2 months, 2 weeks ago

**Selected Answer: CE**

C. Azure AD enterprise applications  
E. Conditional Access policies

C. Azure AD enterprise applications: You need to configure the LOB application as an enterprise application in Azure AD. This will allow you to configure SAML-based SSO for the application, enabling users to sign in using their Azure AD credentials.

E. Conditional Access policies: You can create a Conditional Access policy in Azure AD to enforce MFA when users attempt to access the application from an unknown location. Conditional Access policies allow you to set specific conditions, such as location or device state, and apply security requirements, like MFA, when those conditions are met.

upvoted 2 times

✉️  **JohnPhan** 3 months, 1 week ago

**Selected Answer: CE**

Answer : C&E

upvoted 1 times

✉️  **curtmcgirt** 3 months, 1 week ago

**Selected Answer: CE**

Enterprise App for SSO  
Conditional Access for MFA

upvoted 1 times

✉️  **omerc061** 4 months, 1 week ago

**Selected Answer: CE**

Answer so clearly > Azure AD enterprise app - CAP

upvoted 1 times

✉️  **VBK8579** 4 months, 3 weeks ago

**Selected Answer: CE**

C. Azure AD enterprise applications  
E. Conditional Access policies

upvoted 1 times

✉️  **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: CE**

C and E

upvoted 1 times

✉️  **OPT\_001122** 4 months, 2 weeks ago

Remember the key words LOB SSO MFA

upvoted 1 times

✉️  **albertoramos** 5 months ago

**Selected Answer: CE**

Given answer is WRONG.

upvoted 1 times

✉️  **Visakhjs** 5 months ago

**Selected Answer: CE**

Answer : C&E

upvoted 1 times

✉️  **ganetflix333** 5 months, 2 weeks ago

Should be C&E. MFA wont work without condition access policy

upvoted 1 times

✉️  **rehanalalam** 5 months, 2 weeks ago

I think CDE:

Enterprise App: For SSO

Conditional Access for MFA and Identity protection for unknown Location (Sing-in Risk)

upvoted 1 times

✉️  **FabrityDev** 5 months, 1 week ago

You have to pick two, not three.

upvoted 2 times

 **Mo22** 5 months, 3 weeks ago

**Selected Answer: CE**

Should be C&E.

upvoted 2 times

 **ServerBrain** 5 months, 3 weeks ago

**Selected Answer: CE**

You can't do MFA without Conditional Access.

The LOB App has to be registered with Azure AD Enterprise App for SSO

How do you does Azure AD Identity Protection do MFA or SSO????

upvoted 2 times

 **Villa76** 6 months, 1 week ago

conditional access is a must here as per requirement

But for SSO you must use enterprise app feature

Enable single sign-on

To enable SSO for an application:

<https://learn.microsoft.com/en-us/azure/active-directory/manage-apps/add-application-portal-setup-sso>

Go to the Azure Active Directory Admin Center and sign in using one of the roles listed in the prerequisites.

In the left menu, select Enterprise applications. The All applications pane opens and displays a list of the applications in your Azure AD tenant.

Search for and select the application that you want to use. For example, Azure AD SAML Toolkit 1.

upvoted 2 times

 **Villa76** 6 months, 1 week ago

conditional access is a must here as per requirement

But for SSO you must use enterprise app feature

Enable single sign-on

To enable SSO for an application:

Go to the Azure Active Directory Admin Center and sign in using one of the roles listed in the prerequisites.

In the left menu, select Enterprise applications. The All applications pane opens and displays a list of the applications in your Azure AD tenant.

Search for and select the application that you want to use. For example, Azure AD SAML Toolkit 1.

upvoted 1 times

 **rshinh** 6 months, 2 weeks ago

**Selected Answer: CE**

<https://learn.microsoft.com/en-us/azure/active-directory/app-proxy/application-proxy-configure-single-sign-on-on-premises-apps>

upvoted 1 times

You plan to automate the deployment of resources to Azure subscriptions.

What is a difference between using Azure Blueprints and Azure Resource Manager (ARM) templates?

- A. ARM templates remain connected to the deployed resources.
- B. Only blueprints can contain policy definitions.
- C. Only ARM templates can contain policy definitions.
- D. Blueprints remain connected to the deployed resources.

**Correct Answer: D**

With Azure Blueprints, the relationship between the blueprint definition (what should be deployed) and the blueprint assignment (what was deployed) is preserved.

This connection supports improved tracking and auditing of deployments.

Incorrect:

Not A: An ARM template is a document that doesn't exist natively in Azure - each is stored either locally or in source control or in Templates (preview). The template gets used for deployments of one or more Azure resources, but once those resources deploy there's no active connection or relationship to the template.

Not C: Blueprints are a declarative way to orchestrate the deployment of various resource templates and other artifacts such as:

Role Assignments -

Policy Assignments -

Azure Resource Manager templates (ARM templates)

Resource Groups -

Reference:

<https://docs.microsoft.com/en-us/azure/governance/blueprints/overview#how-its-different-from-resource-manager-templates>

*Community vote distribution*

D (100%)

✉  **Davin0406** Highly Voted 8 months, 2 weeks ago

**Selected Answer: D**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 12 times

✉  **Teab91** Highly Voted 8 months, 3 weeks ago

Answer is D

The Blueprint preserves the relationship between the deployed application and blueprint components. Whereas in the case of the ARM template, there remains no active relationship between your deployed application and template. This connection helps in tracking and auditing the resources.

upvoted 7 times

✉  **yonie** Most Recent 2 months ago

**Selected Answer: D**

Correct

Answer is D

upvoted 1 times

✉  **azkumar305** 2 months, 2 weeks ago

Got it on 14-APR-2023

upvoted 2 times

✉  **NotMeAnyWay** 2 months, 2 weeks ago

**Selected Answer: D**

D. Blueprints remain connected to the deployed resources.

The main difference between using Azure Blueprints and Azure Resource Manager (ARM) templates is that Azure Blueprints remain connected to the deployed resources, enabling you to track and audit the compliance of those resources with the original blueprint definition. Azure Blueprints allow you to manage and monitor the deployed resources over time, whereas ARM templates are a one-time deployment tool that does not maintain a connection to the resources after deployment.

upvoted 1 times

 **OPT\_001122** 4 months, 3 weeks ago

Thanks to all who have mentioned the examdates

upvoted 3 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: D**

D. Blueprints remain connected to the deployed resources.

upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: D**

D makes the most sense.

upvoted 1 times

 **Q12346** 5 months, 1 week ago

shown on 1/14/23

upvoted 4 times

 **ExamTopicsTST** 8 months, 3 weeks ago

**Selected Answer: D**

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#how-its-different-from-arm-templates>

upvoted 6 times

HOTSPOT -

You have the resources shown in the following table.

Name	Type	Resource group
VM1	Azure virtual machine	RG1
VM2	On-premises virtual machine	Not applicable

You create a new resource group in Azure named RG2.

You need to move the virtual machines to RG2.

What should you use to move each virtual machine? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

## Answer Area

VM1

Azure Arc
Azure Lighthouse
Azure Migrate
Azure Resource Mover
The Data Migration Assistant (DMA)

VM2

Azure Arc
Azure Lighthouse
Azure Migrate
Azure Resource Mover
The Data Migration Assistant (DMA)

## Answer Area

VM1

Azure Arc
Azure Lighthouse
Azure Migrate
Azure Resource Mover
The Data Migration Assistant (DMA)

Correct Answer:

VM2

Azure Arc
Azure Lighthouse
Azure Migrate
Azure Resource Mover
The Data Migration Assistant (DMA)

Box 1: Azure Resource Mover -

To move Azure VMs to another region, Microsoft now recommends using Azure Resource Mover.

Incorrect:

Not Azure Migrate: We are not migrating, only moving a VM between resource groups.

Box 2: Azure Migrate -

Azure Migrate provides a centralized hub to assess and migrate on-premises servers, infrastructure, applications, and data to Azure.

Azure migrate includes Azure Migrate Server Migration: Migrate VMware VMs, Hyper-V VMs, physical servers, other virtualized servers, and public cloud VMs to

Azure.

Incorrect:

Not Arc: Azure Migrate is adequate. No need to use Azure Arc.

Not Data Migration Assistant: Data Migration Assistant is a stand-alone tool to assess SQL Servers.

It is used to assess SQL Server databases for migration to Azure SQL Database, Azure SQL Managed Instance, or Azure VMs running SQL Server.

Not Lighthouse: Azure Lighthouse enables multi-tenant management with scalability, higher automation, and enhanced governance across resources.

With Azure Lighthouse, service providers can deliver managed services using comprehensive and robust tooling built into the Azure platform. Customers maintain control over who has access to their tenant, which resources they can access, and what actions can be taken.

Reference:

<https://docs.microsoft.com/en-us/azure/resource-mover/overview> <https://docs.microsoft.com/en-us/azure/migrate/migrate-services-overview>

<https://docs.microsoft.com/en-us/azure/site-recovery/azure-to-azure-tutorial-migrate>

✉  **juanvepe** Highly Voted 8 months, 1 week ago

BOX one Correct. Azure Resource Mover, for moving resources between subscriptions, regions, resource groups.

BOX Two: Correct Azure migrate for moving the resource on-premises to a resource group.

upvoted 22 times

✉  **kay000001** Highly Voted 9 months, 2 weeks ago

Given answer is correct.

VM1 - Azure Resource Mover.

VM2 - Azure Migrate.

upvoted 7 times

✉  **King\_Laps** Most Recent 2 months, 1 week ago

VM1 - Azure Resource Mover.

VM2 - Azure Migrate.

upvoted 1 times

✉  **SedateBlogs** 2 months, 3 weeks ago

Azure Resource Mover and box 2 is Azure Arc. When you generate the script in the Azure Portal to add a onpremises server to Azure, the script allows you to configure the subscription, Resource Group and region where the server is going to be added

upvoted 1 times

✉  **GuyForget** 3 weeks, 6 days ago

Azure Arc is not used for moving a VM into Azure, it allows you to manage a VM that's outside of Azure (On-Prem, AWS, GCP, etc...), as if it were an Azure VM. The VM still resides outside of Azure though.

upvoted 1 times

✉  **OPT\_001122** 4 months, 3 weeks ago

Box 1: Azure Resource Mover

Box 2: Azure Migrate

upvoted 1 times

✉  **RandomNickname** 5 months, 2 weeks ago

Given answer is correct

upvoted 1 times

✉  **Wolf** 6 months, 3 weeks ago

1: Azure resource Mover

2: Azure ARC: you just need to move it to a resource group, you are not requested to migrate the vm

upvoted 2 times

✉  **SilverFox22** 5 months, 4 weeks ago

Azure ARC is for projecting an on-premise VM to Azure, managing it, but it does not actually move it. To move it you would use Azure Migrate.

<https://learn.microsoft.com/en-us/azure/azure-arc/overview>

upvoted 2 times

✉  **RandomNickname** 7 months ago

Given answer appears correct since the questions does imply move rather than manage.

Question states:

"You need to move the virtual machines to RG2."

upvoted 2 times

✉️ **Dudulle** 7 months ago

VM1 = Azure Resource Mover

VM2 = Azure ARC

Explanation: the hint is VM2 being on-prem, has N/A as RG. to put it in an RG as was requested, you definitely need ARC.

It is never requested to migrate VM2 to Azure ! Just move the ressource to the RG ...

upvoted 3 times

✉️ **jellybiscuit** 9 months, 1 week ago

I agree that Resource Mover and Migrate is the "microsoft answer"

And it's BullShit.

In a production environment, when have you ever been able to move a VM with this tool?  
The only time you're ever going to get it to work is in some test sub with one VM on the vnet.

I wish they would stop acting like this is realistically possible.

upvoted 3 times

✉️ **jellybiscuit** 9 months, 1 week ago

Resource Mover is the tool that doesn't work for VMs if that wasn't clear.

upvoted 1 times

✉️ **Elton\_Bicalho** 9 months, 1 week ago

They didn't asked to move VM2 from on-premisses to Azure VM.

They just asked to move VM2 to Resource group.

Azure Arc provides a centralized, unified way to manage entire environment together by projecting your existing non-Azure and/or on-premises resources into Azure Resource Manager. Azure Arc simplifies governance and management by delivering a consistent multi-cloud and on-premises management platform.

VM2 = Azure Arc

<https://learn.microsoft.com/en-us/azure/azure-arc/overview>

upvoted 4 times

✉️ **Elton\_Bicalho** 9 months, 1 week ago

<https://techcommunity.microsoft.com/t5/itops-talk-blog/how-to-add-a-server-to-azure-arc/ba-p/1139049>

upvoted 2 times

✉️ **scottims** 8 months, 3 weeks ago

Agree with Elton as it does not state to move the server into Azure but rather into an Azure Resource Group. This is from Elton's provided link.

"To onboard a server which can run Linux or Windows, physical or virtual, and can run on-premises or at another service provider, you open Azure Arc in the Azure Portal. There you can select manage servers."

upvoted 1 times

You plan to deploy an Azure App Service web app that will have multiple instances across multiple Azure regions.

You need to recommend a load balancing service for the planned deployment. The solution must meet the following requirements:

- ⇒ Maintain access to the app in the event of a regional outage.
- ⇒ Support Azure Web Application Firewall (WAF).
- ⇒ Support cookie-based affinity.
- ⇒ Support URL routing.

What should you include in the recommendation?

- A. Azure Front Door
- B. Azure Traffic Manager
- C. Azure Application Gateway
- D. Azure Load Balancer

**Correct Answer: A**

Azure Front Door works across regions and support URL routing (HTTP(S)).

Note: HTTP(S) load-balancing services are Layer 7 load balancers that only accept HTTP(S) traffic. They are intended for web applications or other HTTP(S) endpoints. They include features such as SSL offload, web application firewall, path-based load balancing, and session affinity.

Service	Global/regional	Recommended traffic
Azure Front Door	Global	HTTP(S)
Traffic Manager	Global	non-HTTP(S)
Application Gateway	Regional	HTTP(S)
Azure Load Balancer	Regional	non-HTTP(S)

Incorrect:

Application Gateway and Azure Load Balancer only work within one single region.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/load-balancing-overview>

*Community vote distribution*

A (93%) 7%

✉  **kay00001** Highly Voted 9 months, 2 weeks ago

**Selected Answer: A**

A.

Azure Front Door = Supports URL routing.

upvoted 16 times

✉  **NotMeAnyWay** Most Recent 2 months, 2 weeks ago

**Selected Answer: A**

A. Azure Front Door

Azure Front Door is the recommended load balancing service for the planned deployment as it meets all the specified requirements:

- ✓ Maintains access to the app in the event of a regional outage, as it is a global load balancer with instant failover capabilities.
- ✓ Supports Azure Web Application Firewall (WAF) integration for security.
- ✓ Supports cookie-based affinity for session stickiness.
- ✓ Supports URL routing for directing traffic to different backend pools based on URL patterns.

upvoted 1 times

✉  **rex303** 2 months, 3 weeks ago

**Selected Answer: A**

Azure front door.

While both azure application gateway and azure front door hit most of the requirements, the key requirement is the cross-region support.

Azure Application Gateway is a regional service that distributes traffic within a region, while Azure Front Door is a global service that distributes traffic across regions.

<https://learn.microsoft.com/en-us/azure/frontdoor/standard-premium/faq#what-is-the-difference-between-azure-front-door-and-azure-application-gateway>

upvoted 1 times

✉ **zellck** 4 months ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/frontdoor/routing-methods#affinity>

Session affinity can be enabled at the origin group level in Azure Front Door Standard and Premium tier and front end host level in Azure Front Door (classic) for each of your configured domains (or subdomains). Once enabled, Azure Front Door adds a cookie to the user's session. The cookies are called ASLBSA and ASLBSACORS. Cookie-based session affinity allows Front Door to identify different users even if behind the same IP address, which in turn allows a more even distribution of traffic between your different origins.

upvoted 3 times

✉ **zellck** 4 months ago

<https://learn.microsoft.com/en-us/azure/web-application-firewall/afds/afds-overview>

Azure Web Application Firewall (WAF) on Azure Front Door provides centralized protection for your web applications. WAF defends your web services against common exploits and vulnerabilities. It keeps your service highly available for your users and helps you meet compliance requirements.

WAF on Front Door is a global and centralized solution. It's deployed on Azure network edge locations around the globe. WAF enabled web applications inspect every incoming request delivered by Front Door at the network edge.

WAF prevents malicious attacks close to the attack sources, before they enter your virtual network. You get global protection at scale without sacrificing performance. A WAF policy easily links to any Front Door profile in your subscription. New rules can be deployed within minutes, so you can respond quickly to changing threat patterns.

upvoted 1 times

✉ **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: A**

A. Azure Front Door

upvoted 1 times

✉ **OPT\_001122** 4 months, 3 weeks ago

A. Azure Front Door

upvoted 1 times

✉ **testtaker13** 4 months, 4 weeks ago

**Selected Answer: A**

Given answer is correct. Global service with WAF.

upvoted 1 times

✉ **tfulanchan** 5 months ago

WAF is a feature of Azure Front Door

upvoted 1 times

✉ **RandomNickname** 7 months ago

**Selected Answer: A**

As per article provided in answer section, given answer is correct

upvoted 3 times

✉ **LaithTech** 8 months, 2 weeks ago

**Selected Answer: A**

URL Routing is supported by AFD

upvoted 1 times

✉ **mufflon** 9 months, 2 weeks ago

**Selected Answer: B**

I believe that the correct answer is B.

Traffic Manager.

It supports Multi-region load balancing, WAF, Cookie-based session affinity and URL path

<https://docs.microsoft.com/en-us/azure/architecture/high-availability/reference-architecture-traffic-manager-application-gateway>

upvoted 2 times

✉ **ServerBrain** 5 months, 3 weeks ago

Traffic manager does not support WAF

upvoted 2 times

✉️ **Wolviet7** 9 months, 1 week ago

Traffic Manager is a DNS resolver ... used with Application Gateway may cover session affinity but on its own only Front Door meets the requirements.

upvoted 5 times

✉️ **scottims** 9 months, 2 weeks ago

Answer is correct, I was leaning towards C however AAG is regional and doesn't support path based routing

Front Door is an application delivery network that provides global load balancing and site acceleration service for web applications. It offers Layer 7 capabilities for your application like SSL offload, path-based routing, fast failover, caching, etc. to improve performance and high-availability of your applications.

upvoted 3 times

✉️ **heero** 9 months, 2 weeks ago

I think the right answer is : C. Azure Application Gateway

upvoted 1 times

✉️ **ajayasa** 5 months, 4 weeks ago

Azure Application Gateway is regional service and hence answer should be AFD

upvoted 1 times

**HOTSPOT -**

You have the Azure resources shown in the following table.

Name	Type	Description
VNET1	Virtual network	Connected to an on-premises network by using ExpressRoute
VM1	Virtual machine	Configured as a DNS server
SQLDB1	Azure SQL Database	Single instance
PE1	Private endpoint	Provides connectivity to SQLDB1
contoso.com	Private DNS zone	Linked to VNET1 and contains an A record for PE1
contoso.com	Public DNS zone	Contains a C NAME record for SQLDB1

You need to design a solution that provides on-premises network connectivity to SQLDB1 through PE1.

How should you configure name resolution? To answer select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

## Azure configuration

- Configure VM1 to forward contoso.com to the public DNS zone
- Configure VM1 to forward contoso.com to the Azure-provided DNS at 168.63.129.16
- In VNet1, configure a custom DNS server set to the Azure provided DNS at 168.63.129.16

## On-premises DNS configuration

- Forward contoso.com to VM1
- Forward contoso.com to the public DNS zone
- Forward contoso.com to the Azure-provisioned DNS at 168.63.129.16

**Correct Answer:****Answer Area**

## Azure configuration

- Configure VM1 to forward contoso.com to the public DNS zone
- Configure VM1 to forward contoso.com to the Azure-provided DNS at 168.63.129.16
- In VNet1, configure a custom DNS server set to the Azure provided DNS at 168.63.129.16

## On-premises DNS configuration

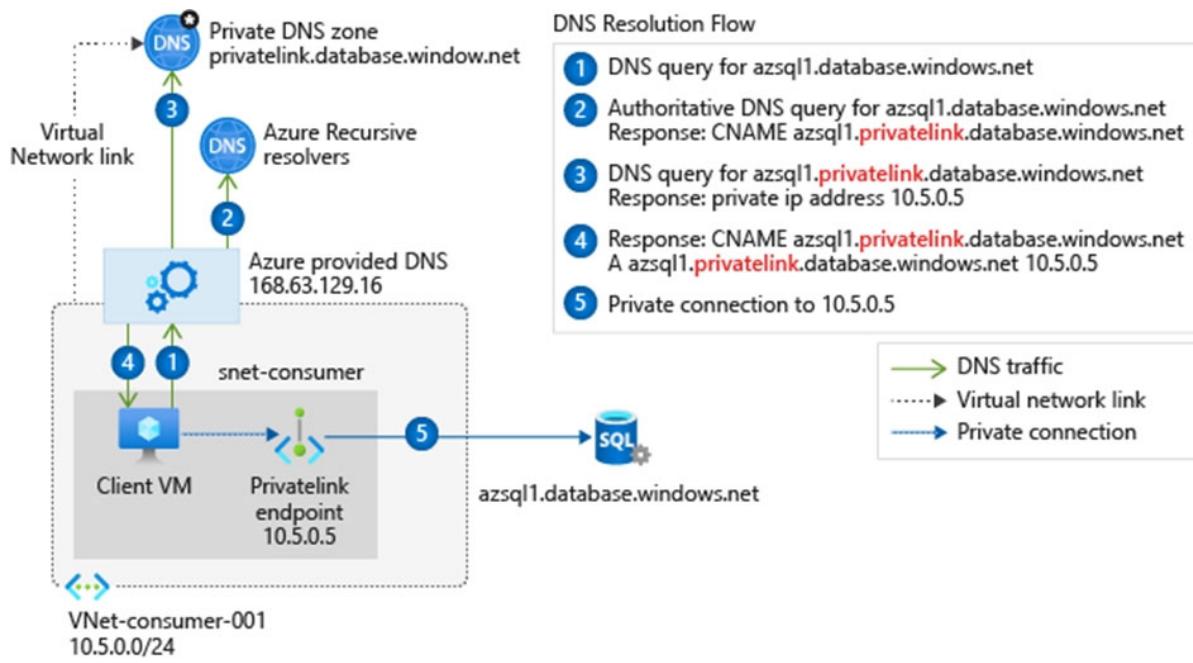
- Forward contoso.com to VM1
- Forward contoso.com to the public DNS zone
- Forward contoso.com to the Azure-provisioned DNS at 168.63.129.16

Box 1: In VNET1, configure a custom DNS server set to the Azure provided DNS at 168.63.129.16

Virtual network workloads without custom DNS server.

This configuration is appropriate for virtual network workloads without a custom DNS server. In this scenario, the client queries for the private endpoint IP address to the Azure-provided DNS service 168.63.129.16. Azure DNS will be responsible for DNS resolution of the private DNS zones.

The following screenshot illustrates the DNS resolution sequence from virtual network workloads using the private DNS zone:



Box 2: Forward contoso.com to VM1

Forward to the DNS server VM1.

Note: You can use the following options to configure your DNS settings for private endpoints:

- \* Use the host file (only recommended for testing). You can use the host file on a virtual machine to override the DNS.
- \* Use a private DNS zone. You can use private DNS zones to override the DNS resolution for a private endpoint. A private DNS zone can be linked to your virtual network to resolve specific domains.
- \* Use your DNS forwarder (optional). You can use your DNS forwarder to override the DNS resolution for a private link resource. Create a DNS forwarding rule to use a private DNS zone on your DNS server hosted in a virtual network.

Reference:

<https://docs.microsoft.com/en-us/azure/private-link/private-endpoint-dns>

✉️ **Babonamaki** Highly Voted 9 months, 3 weeks ago

Box 1 is wrong, VNET default configuration is to use azure DNS.

The correct answer for box 1 should be "configure vm1 to forward contoso.com to the azure provided dns at 168.63.129.16" to convert VM1 to a DNS forwarder.

upvoted 59 times

✉️ **steel72** 3 months, 1 week ago

Agreed, I have a production deployment configured like this.

upvoted 1 times

✉️ **[Removed]** Highly Voted 6 months, 3 weeks ago

For anyone else struggling, I found this helpful:

<https://learn.microsoft.com/en-us/azure/architecture/example-scenario/networking/azure-dns-private-resolver>

upvoted 14 times

✉️ **din4venti** Most Recent 5 days, 14 hours ago

Azure configuration:

In VNet1, configure a custom DNS server set to Azure provided DNS at 168.63.129.16

On-premises DNS configuration:

Forward contoso.com to VM1

Here's the flow

1. on-premise client machine queries for SQLDB1
2. on-premise DNS forward to VM1
3. VM1 query for SQLDB1 to public DNS
4. VM1 receives CNAME for SQLDB1
5. VM1 query for CNAME of SQLDB1, which resided on Private DNS zone  
(In order to query Private DNS zone, you need to forward to Azure provided internal DNS)
6. VM1 receives A record from Private DNS zone
7. VM1 returns to on-premise client

<https://learn.microsoft.com/en-us/azure/architecture/example-scenario/networking/azure-dns-private-resolver#use-a-dns-forwarder-vm>

upvoted 1 times

✉️ **VBK8579** 4 months, 3 weeks ago

Azure configuration:

c. In VNet1, configure a custom DNS server set to the Azure provided DNS at 168.63.129.16

On-premises DNS configuration:

a. Forward contoso.com to VM1

upvoted 1 times

✉ **OPT\_001122** 4 months, 3 weeks ago

1. configure vm1 to forward contoso.com to the azure provided dns at 168.63.129.16

2. Forward contoso.com to VM1

upvoted 5 times

✉ **vicks1x** 6 months, 3 weeks ago

Carefully look at the Green arrows in the diagram.

Its "configure vm1 to forward contoso.com to the azure provided dns at 168.63.129.16"

upvoted 2 times

✉ **MountainW** 8 months, 1 week ago

Babonamaki is right. The correct answer for box 1 should be "configure vm1 to forward contoso.com to the azure provided dns at 168.63.129.16" to convert VM1 to a DNS forwarder.

That's what I am using in our production environment!

upvoted 7 times

✉ **scottims** 8 months, 3 weeks ago

I think it should be

configure VM1 to forward Contoso.com to Public DNS as that is where the CNAME record exists

on premises should forward to VM1 since VM1 has the A record for PE1

upvoted 2 times

✉ **scottims** 8 months, 3 weeks ago

Update after looking at the table again, the public DNS zone is in Azure so VM1 should forward to the Azure-provided DNS

upvoted 2 times

✉ **Paimon** 7 months, 2 weeks ago

Public DNS does not come into play because of the private endpoint.

upvoted 1 times

✉ **codefries** 8 months, 3 weeks ago

Coz they did NOT say VM1(DNS) is in VNET1

upvoted 1 times

✉ **Guest** 6 months, 1 week ago

That does not really matter. A DNS server uses its internal forwarders, not the network settings to resolve DNS queries

upvoted 1 times

✉ **examerr** 9 months ago

Interestingly done this config at work and we use the AFWs as a DNS proxies and conditionally forward DNS requests from on-prem for stuff like Keyvault and Servicebus to the AFWs which then return the privatelink addresses.

upvoted 2 times

✉ **mufflon** 9 months, 1 week ago

"For on-premises workloads to resolve the FQDN of a private endpoint, use a DNS forwarder to resolve the Azure service public DNS zone in Azure" So configure VM1 to forward contoso.com to the public DNS zone should be first selection ?

"The following scenario is for an on-premises network that has a DNS forwarder in Azure. This forwarder resolves DNS queries via a server-level forwarder to the Azure provided DNS 168.63.129.16" so forward contoso.com to the Azure provisioned DNS at 168.63.129.16 should be second answer ?

<https://learn.microsoft.com/en-us/azure/private-link/private-endpoint-dns#on-premises-workloads-using-a-dns-forwarder>

upvoted 2 times

✉ **baptista** 9 months, 1 week ago

whats the correct answer moderator?

upvoted 3 times

✉ **Snownoodles** 9 months, 1 week ago

168.63.129.16 is a virtual IP of DNS server within for a vnet.

The following link explains the DNS forwarder solution very clearly:

<https://learn.microsoft.com/en-us/azure/virtual-network/virtual-networks-name-resolution-for-vms-and-role-instances#name-resolution-that-uses-your-own-dns-server>

Please note the forwarder solution might be replaced by Azure DNS private Resolver which is in preview now.

upvoted 2 times

✉ **Xinx** 9 months, 1 week ago

Question 1, why not configure VM1 to forward contoso.com to the public dns zone  
upvoted 1 times

✉️ 🚩 **Snownoodles** 8 months ago

Because the question asks to "You need to design a solution that provides on-premises network connectivity to SQLDB1 through PE1". PE1 is resolved by private DNS, not public DNS

upvoted 1 times

✉️ 🚩 **Paimon** 7 months, 2 weeks ago

This ^^^^^^

upvoted 1 times

You are designing a microservices architecture that will support a web application.

The solution must meet the following requirements:

⇒ Deploy the solution on-premises and to Azure.

Support low-latency and hyper-scale operations.

▪

⇒ Allow independent upgrades to each microservice.

⇒ Set policies for performing automatic repairs to the microservices.

You need to recommend a technology.

What should you recommend?

- A. Azure Container Instance
- B. Azure Logic App
- C. Azure Service Fabric
- D. Azure virtual machine scale set

**Correct Answer: C**

Azure Service Fabric enables you to create Service Fabric clusters on premises or in other clouds.

Azure Service Fabric is low-latency and scales up to thousands of machines.

Reference:

<https://azure.microsoft.com/en-us/services/service-fabric/>

*Community vote distribution*

C (100%)

 **NotMeAnyWay** 2 months, 2 weeks ago

**Selected Answer: C**

C. Azure Service Fabric

Azure Service Fabric is the recommended technology for the microservices architecture you are designing, as it meets all the specified requirements:

✓ Supports deployment both on-premises and to Azure, providing a consistent platform for managing and deploying microservices.

✓ Enables low-latency and hyper-scale operations, as it is designed for building scalable and reliable applications.

✓ Allows independent upgrades to each microservice, as it supports versioning and rolling upgrades.

✓ Provides built-in health monitoring and automatic repairs for the microservices with configurable policies.

upvoted 4 times

 **rex303** 2 months, 3 weeks ago

**Selected Answer: C**

C. Azure Service Fabric.

As this is the only option that has on-premise deployment options.

upvoted 1 times

 **zellck** 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/service-fabric/service-fabric-overview#any-os-any-cloud>

You can create clusters for Service Fabric in many environments, including Azure or on premises, on Windows Server or Linux. You can even create clusters on other public clouds. The development environment in the Service Fabric SDK is identical to the production environment, with no emulators involved. In other words, what runs on your local development cluster is what deploys to your clusters in other environments.

upvoted 4 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: C**

C. Azure Service Fabric

upvoted 1 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

C. Azure Service Fabric

upvoted 1 times

 **Snownoodles** 8 months ago

**Selected Answer: C**

Azure service Fabric

upvoted 3 times

 **GarryK** 9 months, 1 week ago

**Selected Answer: C**

<https://learn.microsoft.com/en-us/azure/service-fabric/service-fabric-overview>

Azure Service Fabric is a distributed systems platform that makes it easy to package, deploy, and manage scalable and reliable microservices and containers.

upvoted 4 times

 **kay00001** 9 months, 2 weeks ago

**Selected Answer: C**

C. is correct.

upvoted 3 times

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 plan to deploy multiple instances of an Azure web app across several Azure regions.

You need to design an access solution for the app. The solution must meet the following replication requirements:

- Support rate limiting.
- Balance requests between all instances.
- Ensure that users can access the app in the event of a regional outage.

Solution: You use Azure Front Door to provide access to the app.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: A**

Azure Front Door meets the requirements. The Azure Web Application Firewall (WAF) rate limit rule for Azure Front Door controls the number of requests allowed from clients during a one-minute duration.

Reference:

<https://www.nginx.com/blog/nginx-plus-and-azure-load-balancers-on-microsoft-azure/> <https://docs.microsoft.com/en-us/azure/web-application-firewall/afds/waf-front-door-rate-limit-powershell>

*Community vote distribution*

A (100%)

 **Snownoodles** Highly Voted 9 months, 3 weeks ago

Azure front door + WAF  
upvoted 11 times

 **NotMeAnyWay** Most Recent 2 months, 2 weeks ago

**Selected Answer: A**

Yes, using Azure Front Door to provide access to the app meets the goal. Azure Front Door is a global, scalable entry-point that uses the Microsoft global edge network to create fast, secure, and widely distributed web applications. It supports the following requirements:

Rate limiting: Azure Front Door, when combined with Azure Web Application Firewall (WAF), supports rate limiting to protect your web applications from malicious attacks or excessive request rates.

Load balancing: Azure Front Door provides global load balancing to distribute incoming traffic across multiple instances of your web app, improving availability and responsiveness.

Regional outage resilience: In the event of a regional outage, Azure Front Door can automatically route users to the closest available instance of your web app, ensuring continued access.

upvoted 1 times

 **fishx12** 3 months, 2 weeks ago

**Selected Answer: A**

A is correct  
upvoted 1 times

 **zellck** 4 months ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/frontdoor/front-door-overview>

Azure Front Door is Microsoft's modern cloud Content Delivery Network (CDN) that provides fast, reliable, and secure access between your users and your applications' static and dynamic web content across the globe. Azure Front Door delivers your content using the Microsoft's global edge network with hundreds of global and local points of presence (PoPs) distributed around the world close to both your enterprise and consumer end users.

upvoted 1 times

 **zellck** 4 months ago

<https://learn.microsoft.com/en-us/azure/web-application-firewall/afds/waf-front-door-rate-limit>  
Rate limiting enables you to detect and block abnormally high levels of traffic from any socket IP address. The socket IP address is the address of the client that initiated the TCP connection to Front Door. Typically, the socket IP address is the IP address of the user, but it might also be the IP address of a proxy server or another device that sits between the user and Front Door. By using the web application firewall (WAF) with Azure Front Door, you can mitigate some types of denial of service attacks. Rate limiting also protects you against clients that have

accidentally been misconfigured to send large volumes of requests in a short time period.

Rate limits are applied at the socket IP address level. If you have multiple clients accessing your Front Door from different socket IP addresses, they'll each have their own rate limits applied. The socket IP address is the source IP address WAF sees. If your user is behind a proxy, socket IP address is often the proxy server address.

upvoted 1 times

✉️ **Alessandro365** 4 months, 1 week ago

**Selected Answer: A**

Front door

upvoted 2 times

✉️ **VBK8579** 4 months, 3 weeks ago

**Selected Answer: A**

A. Yes. Azure Front Door supports rate limiting and request load balancing between instances of an Azure web app across multiple regions. Additionally, it can provide failover capabilities in the event of a regional outage, ensuring users can continue to access the app.

upvoted 2 times

✉️ **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: A**

The Azure Web Application Firewall (WAF) rate limit rule for Azure Front Door controls the number of requests allowed from clients during a one-minute duration.

upvoted 2 times

✉️ **janvandermerwer** 5 months, 1 week ago

**Selected Answer: A**

<https://learn.microsoft.com/en-us/azure/web-application-firewall/afds/waf-front-door-rate-limit>

What is the difference between Azure Front Door and Azure Application Gateway?

While both Front Door and Application Gateway are layer 7 (HTTP/HTTPS) load balancers, the primary difference is that Front Door is a non-regional service whereas Application Gateway is a regional service. While Front Door can load balance between your different scale units/clusters/stamp units across regions, Application Gateway allows you to load balance between your VMs/containers etc. that is within the scale unit.

upvoted 1 times

✉️ **RouterWifi443** 5 months, 1 week ago

**Selected Answer: A**

A is correct

upvoted 1 times

✉️ **mVic** 5 months, 3 weeks ago

**Selected Answer: A**

A is correct

upvoted 1 times

✉️ **Born\_Again** 6 months, 3 weeks ago

**Selected Answer: A**

100% AZ Front Door w/ WAF

upvoted 1 times

✉️ **az4o2n** 7 months, 1 week ago

Agreed

upvoted 3 times

You need to recommend a solution to generate a monthly report of all the new Azure Resource Manager (ARM) resource deployments in your Azure subscription.

What should you include in the recommendation?

- A. Azure Activity Log
- B. Azure Arc
- C. Azure Analysis Services
- D. Azure Monitor action groups

**Correct Answer: A**

Activity logs are kept for 90 days. You can query for any range of dates, as long as the starting date isn't more than 90 days in the past.

Through activity logs, you can determine:

- ⇒ what operations were taken on the resources in your subscription
- ⇒ who started the operation
- when the operation occurred
- 
- ⇒ the status of the operation
- ⇒ the values of other properties that might help you research the operation

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/view-activity-logs>

*Community vote distribution*

A (100%)

✉️  **NotMeAnyWay** 2 months, 2 weeks ago

**Selected Answer: A**

A. Azure Activity Log

Azure Activity Log provides insight into the operations performed on resources in your Azure subscription. It can help you determine the 'who, what, when, and where' of any write operations (PUT, POST, DELETE) on your resources. By monitoring and analyzing the activity logs, you can generate a monthly report of all new Azure Resource Manager (ARM) resource deployments in your Azure subscription. Additionally, you can export the logs to a storage account, Event Hubs, or Azure Monitor logs for further processing or analysis.

upvoted 1 times

✉️  **zellck** 4 months ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/azure-monitor/essentials/activity-log?tabs=powershell>

The Azure Monitor activity log is a platform log in Azure that provides insight into subscription-level events. The activity log includes information like when a resource is modified or a virtual machine is started.

upvoted 2 times

✉️  **VBK8579** 4 months, 3 weeks ago

**Selected Answer: A**

A. Azure Activity Log

upvoted 1 times

✉️  **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: A**

A. Azure Activity Log

upvoted 1 times

✉️  **ryuta** 6 months ago

Same with topic1 - question 13

upvoted 2 times

✉️  **lmy** 6 months, 3 weeks ago

same question in topic 1

upvoted 2 times

 **Born\_Again** 6 months, 3 weeks ago

**Selected Answer: A**

A is the Answer

upvoted 1 times

 **haazybanj** 7 months, 2 weeks ago

**Selected Answer: A**

Answer is A

upvoted 1 times

 **Davin0406** 8 months, 2 weeks ago

**Selected Answer: A**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.

upvoted 4 times

 **Darkx** 8 months, 2 weeks ago

appeared on 11th Oct 2022

upvoted 2 times

 **GarryK** 9 months, 1 week ago

**Selected Answer: A**

The Azure Monitor activity log is a platform log in Azure that provides insight into subscription-level events. The activity log includes information like when a resource is modified or a virtual machine is started.

<https://learn.microsoft.com/en-us/azure/azure-monitor/essentials/activity-log?tabs=powershell>

upvoted 3 times

 **ServerBrain** 5 months, 3 weeks ago

Required is monthly report not a monthly log.

upvoted 1 times

You have an Azure subscription.

You need to recommend a solution to provide developers with the ability to provision Azure virtual machines. The solution must meet the following requirements:

- ⇒ Only allow the creation of the virtual machines in specific regions.
- ⇒ Only allow the creation of specific sizes of virtual machines.

What should you include in the recommendation?

- A. Attribute-based access control (ABAC)
- B. Azure Policy
- C. Conditional Access policies
- D. role-based access control (RBAC)

**Correct Answer: B**

Azure Policies allows you to specify allowed locations, and allowed VM SKUs.

Reference:

<https://docs.microsoft.com/en-us/azure/governance/policy/tutorials/create-and-manage>

*Community vote distribution*

B (100%)

✉️  **NotMeAnyWay** 2 months, 2 weeks ago

**Selected Answer: B**

B. Azure Policy

Azure Policy is the right choice to address these requirements. Azure Policy allows you to create custom policies that define rules and effects for resource management in Azure. In this case, you can create policies that restrict the creation of virtual machines to specific regions and specific sizes. By assigning these policies to your subscription, you can ensure that developers can only provision Azure virtual machines in the allowed regions and with the allowed sizes.

upvoted 1 times

✉️  **zelick** 4 months ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/cloud-adoption-framework/manage/azure-server-management/common-policies#restrict-resource-regions>

Regulatory and policy compliance often depends on control of the physical location where resources are deployed. You can use a built-in policy to allow users to create resources only in certain allowed Azure regions.

<https://learn.microsoft.com/en-us/azure/virtual-machines/policy-reference>

Allowed virtual machine size SKUs

- This policy enables you to specify a set of virtual machine size SKUs that your organization can deploy.

upvoted 2 times

✉️  **VBK8579** 4 months, 3 weeks ago

**Selected Answer: B**

B. Azure Policy

upvoted 1 times

✉️  **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

B. Azure Policy

upvoted 1 times

✉️  **ryuta** 6 months ago

Same with topic4 - question 23

upvoted 3 times

✉️  **haazybanj** 7 months, 2 weeks ago

**Selected Answer: B**

B Azure Policy

upvoted 1 times

 **Davin0406** 8 months, 2 weeks ago

**Selected Answer: B**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 4 times

 **jellybiscuit** 9 months, 1 week ago

**Selected Answer: B**

correct - duplicate question  
upvoted 4 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages. What should you include in the recommendation?

- A. Azure Notification Hubs
- B. Azure Data Lake
- C. Azure Service Bus
- D. Azure Blob Storage

**Correct Answer: C**

Asynchronous messaging options.

There are different types of messages and the entities that participate in a messaging infrastructure. Based on the requirements of each message type, Microsoft recommends Azure messaging services. The options include Azure Service Bus, Event Grid, and Event Hubs.

Azure Service Bus queues are well suited for transferring commands from producers to consumers.

Data is transferred between different applications and services using messages. A message is a container decorated with metadata, and contains data. The data can be any kind of information, including structured data encoded with the common formats such as the following ones: JSON, XML, Apache Avro, Plain Text.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/messaging> <https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

*Community vote distribution*

C (100%)

✉  **zellck** 4 months ago

Same as Question 82.

<https://www.examtopics.com/discussions/microsoft/view/99749-exam-az-305-topic-4-question-82-discussion>

upvoted 2 times

✉  **zellck** 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

Azure Service Bus is a fully managed enterprise message broker with message queues and publish-subscribe topics (in a namespace). Service Bus is used to decouple applications and services from each other, providing the following benefits:

- Load-balancing work across competing workers
- Safely routing and transferring data and control across service and application boundaries
- Coordinating transactional work that requires a high-degree of reliability

upvoted 2 times

✉  **VBK8579** 4 months, 3 weeks ago

**Selected Answer: C**

C. Azure Service Bus

upvoted 1 times

✉  **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

C. Azure Service Bus

upvoted 1 times

✉  **ryuta** 6 months ago

Same with topic4 - question 13

upvoted 3 times

✉  **haazybanj** 7 months, 2 weeks ago

**Selected Answer: C**

C.. Azure service Bus

upvoted 2 times

✉ **juanvepe** 8 months, 1 week ago

Data is transferred between different applications and services using messages. A message is a container decorated with metadata, and contains data. The data can be any kind of information, including structured data encoded with the common formats such as the following ones: JSON, XML, Apache Avro, Plain Text.

upvoted 2 times

✉ **juanvepe** 8 months, 1 week ago

C is Correct: <https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

upvoted 1 times

✉ **Darkx** 8 months, 2 weeks ago

appeared on 11th Oct 2022

upvoted 4 times

✉ **Davin0406** 9 months ago

**Selected Answer: C**

Duplicate with Q82.

upvoted 4 times

✉ **kay00001** 9 months, 2 weeks ago

**Selected Answer: C**

... The data can be any kind of information, including structured data encoded with the common formats such as the following ones: JSON, XML, Apache Avro, Plain Text.

<https://docs.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

upvoted 3 times

You have 100 devices that write performance data to Azure Blob Storage.  
You plan to store and analyze the performance data in an Azure SQL database.  
You need to recommend a solution to continually copy the performance data to the Azure SQL database.  
What should you include in the recommendation?

- A. Azure Data Factory
- B. Data Migration Assistant (DMA)
- C. Azure Data Box
- D. Azure Database Migration Service

**Correct Answer: A***Community vote distribution*

A (100%)

✉ **kay000001** Highly Voted 9 months, 2 weeks ago

A. Azure Data Factory - is correct.  
upvoted 8 times

✉ **King\_Laps** Most Recent 2 months, 1 week ago

The correct answer is Azure Data Factory  
upvoted 1 times

✉ **zellick** 4 months ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/data-factory/introduction>

Big data requires a service that can orchestrate and operationalize processes to refine these enormous stores of raw data into actionable business insights. Azure Data Factory is a managed cloud service that's built for these complex hybrid extract-transform-load (ETL), extract-load-transform (ELT), and data integration projects.

upvoted 2 times

✉ **np2021** 4 months, 1 week ago

AZ Functions could also do this as I understand it, if this came up as an option on a future question?  
upvoted 1 times

✉ **VBK8579** 4 months, 3 weeks ago

**Selected Answer: A**

Azure Data Factory is a cloud-based data integration service that allows you to move, store, and transform data between different sources and sinks. It provides a scalable and flexible solution to copy large amounts of data between Azure Blob Storage and Azure SQL Database in a reliable and repeatable manner, making it an appropriate recommendation for continuously copying performance data to the Azure SQL database.

upvoted 2 times

✉ **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: A**

A. Azure Data Factory  
upvoted 1 times

✉ **RouterWifi443** 5 months, 2 weeks ago

**Selected Answer: A**

A is correct  
upvoted 1 times

✉ **mVic** 6 months ago

**Selected Answer: A**

ADF - correct  
upvoted 1 times

✉ **haazybanj** 7 months, 2 weeks ago

**Selected Answer: A**

A is correct

upvoted 2 times

 **PXAbstraction** 8 months, 1 week ago

**Selected Answer: A**

Correct answer is A.

upvoted 2 times

 **juanvepe** 8 months, 1 week ago

A is correct: Azure Data Factory is the platform that solves such data scenarios. It is the cloud-based ETL and data integration service that allows you to create data-driven workflows for orchestrating data movement and transforming data at scale. Using Azure Data Factory, you can create and schedule data-driven workflows (called pipelines) that can ingest data from disparate data stores. You can build complex ETL processes that transform data visually with data flows or by using compute services such as Azure HDInsight Hadoop, Azure Databricks, and Azure SQL Database.

<https://learn.microsoft.com/en-us/azure/data-factory/introduction>

upvoted 2 times

 **Jeffab** 8 months, 2 weeks ago

A. Azure Data Factory - using Data Factory pipelines. Data Factory pipelines can copy data from Azure Blob Storage to an Azure SQL Database. The configuration pattern applies to copying from a file- based data store to a relational data store.

<https://learn.microsoft.com/en-us/azure/data-factory/tutorial-copy-data-dot-net>

upvoted 4 times

You need to recommend a storage solution for the records of a mission critical application. The solution must provide a Service Level Agreement (SLA) for the latency of write operations and the throughput.

What should you include in the recommendation?

- A. Azure Data Lake Storage Gen2
- B. Azure Blob Storage
- C. Azure SQL
- D. Azure Cosmos DB

**Correct Answer: D**

Azure Cosmos DB is Microsoft's fast NoSQL database with open APIs for any scale. It offers turnkey global distribution across any number of Azure regions by transparently scaling and replicating your data wherever your users are. The service offers comprehensive 99.99% SLAs which covers the guarantees for throughput, consistency, availability and latency for the Azure Cosmos DB Database Accounts scoped to a single Azure region configured with any of the five

Consistency Levels or Database Accounts spanning multiple Azure regions, configured with any of the four relaxed Consistency Levels. Azure Cosmos DB allows configuring multiple Azure regions as writable endpoints for a Database Account. In this configuration, Azure Cosmos DB offers 99.999% SLA for both read and write availability.

Reference:

[https://azure.microsoft.com/en-us/support/legal/sla/cosmos-db/v1\\_3/](https://azure.microsoft.com/en-us/support/legal/sla/cosmos-db/v1_3/)

*Community vote distribution*

D (100%)

 **Davin0406** Highly Voted 8 months, 2 weeks ago

**Selected Answer: D**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 13 times

 **OPT\_001122** 4 months, 3 weeks ago

Thanks for mentioning the date  
upvoted 1 times

 **azkumar305** Most Recent 2 months, 2 weeks ago

Got this on 14-Apr-2023  
upvoted 3 times

 **zellck** 4 months ago

**Selected Answer: D**  
D is the answer.

<https://learn.microsoft.com/en-us/azure/cosmos-db/introduction#guaranteed-speed-at-any-scale>

Gain unparalleled SLA-backed speed and throughput, fast global access, and instant elasticity.

- Real-time access with fast read and write latencies globally, and throughput and consistency all backed by SLAs
- Multi-region writes and data distribution to any Azure region with just a button.
- Independently and elastically scale storage and throughput across any Azure region – even during unpredictable traffic bursts – for unlimited scale worldwide.

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: D**

zure Cosmos DB provides a comprehensive SLA for write latency and throughput. Additionally, it is a highly scalable and globally distributed database designed for mission critical applications. It provides low-latency, highly available, and scalable access to data. Cosmos DB also supports multiple data models, including document, key-value, graph, and column-family data models, which can be used to store structured and unstructured data.

upvoted 1 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: D**

D. Azure Cosmos DB

upvoted 1 times

 **haazybanj** 7 months, 2 weeks ago

**Selected Answer: D**

D is correct  
upvoted 1 times

 **PXAbstraction** 8 months, 1 week ago

**Selected Answer: D**

D is correct. Cosmos includes the SLA guarantees.  
upvoted 1 times

 **juanvepe** 8 months, 1 week ago

D. Is correct:

Guaranteed speed at any scale  
Gain unparalleled SLA-backed speed and throughput, fast global access, and instant elasticity.

Real-time access with fast read and write latencies globally, and throughput and consistency all backed by SLAs  
Multi-region writes and data distribution to any Azure region with just a button.  
Independently and elastically scale storage and throughput across any Azure region – even during unpredictable traffic bursts – for unlimited scale worldwide.

<https://learn.microsoft.com/en-us/azure/cosmos-db/introduction>

upvoted 2 times

 **jellybiscuit** 9 months, 1 week ago

**Selected Answer: D**

The SLA terms are the only thing that make it Cosmos over SQL.  
upvoted 1 times

 **kay00001** 9 months, 2 weeks ago

**Selected Answer: D**

D. Azure Cosmos DB

- Mission Critical
- Low latency
- High throughput

<https://docs.microsoft.com/en-us/azure/cosmos-db/introduction>

upvoted 3 times

You are planning a storage solution. The solution must meet the following requirements:

- ⇒ Support at least 500 requests per second.
- ⇒ Support a large image, video, and audio streams.

Which type of Azure Storage account should you provision?

- A. standard general-purpose v2
- B. premium block blobs
- C. premium page blobs
- D. premium file shares

**Correct Answer: B**

Use Azure Blobs if you want your application to support streaming and random access scenarios.

It's ideal for applications that require high transaction rates or consistent low-latency storage.

Incorrect:

Not A: Standard storage accounts has a default maximum request rate per storage account 20,000 requests per second<sup>1</sup>, but is not optimized for video and audio streams.

Not C: Page blobs is best suited for random reads and random writes.

Not D: FileStorage storage accounts (premium) has a maximum concurrent request rate of 100,000 IOPS.

Maximum file size is 4 TB, but is not optimized for video and audio streams.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/common/storage-introduction> <https://docs.microsoft.com/en-us/azure/storage/files/storage-files-scale-targets>

*Community vote distribution*

A (53%)

B (47%)

 **JaQua**  8 months, 3 weeks ago

premium block blobs is indeed correct

- supports hundreds of thousands of requests per second
- video "streaming" requires lots of small data packets to be sent in a short time interval (and thus requires high transaction rates & consistent low-latency)

upvoted 48 times

 **OPT\_001122** 4 months, 2 weeks ago

This should be highly selected however not because even though it is upvoted 32 times it was not with voting comments i.e Selected Answer : B

upvoted 2 times

 **Davin0406**  8 months, 2 weeks ago

**Selected Answer: A**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.

upvoted 24 times

 **MeysamBayani**  1 month ago

standard general-purpose v2 A premium-performance block blob storage account is optimized for applications that use smaller, kilobyte-range objects. It's ideal for applications that require high transaction rates or consistent low-latency storage. Premium performance block blob storage is designed to scale with your applications. If your scenario requires that you deploy application(s) that require hundreds of thousands of requests per second or petabytes of storage capacity, contact Microsoft by submitting a support request in the

AA premium-performance block blob storage account is optimized for applications that use smaller, kilobyte-range objects. It's ideal for applications that require high transaction rates or consistent low-latency storage. Premium performance block blob storage is designed to scale with your applications. If your scenario requires that you deploy application(s) that require hundreds of thousands of requests per second or petabytes of storage capacity, contact Microsoft by submitting a support request in the

upvoted 1 times

 **lvz** 1 month ago

**Selected Answer: A**

the block blob support max 500, whereas questions says at least 500, hence answer should be, as A support max 20,000.

upvoted 3 times

 **lombri** 1 month, 3 weeks ago

**Selected Answer: B**

premium block blobs storage account is the recommended type of Azure Storage account to provision for this scenario.

Premium block blobs storage accounts are designed to support high-performance scenarios with high IOPS and throughput, which makes them ideal for supporting at least 500 requests per second.

They are optimized for storing large files, such as images, video, and audio streams, and offer low latency for read and write operations.

A standard general-purpose v2 storage account

can also support at least 500 requests per second, but it may not provide the same level of performance as a premium block blobs storage account, especially for storing and accessing large files.

upvoted 1 times

 **Roblearns** 3 months ago

**Selected Answer: B**

B is the correct answer

upvoted 1 times

 **JohnPhan** 3 months, 1 week ago

**Selected Answer: B**

Premium Block Blob

upvoted 1 times

 **steel72** 3 months, 1 week ago

Correct answer is "Standard General Purpose v2".

Target request rate for a single blob: Up to 500 requests per second.

<https://learn.microsoft.com/en-us/azure/storage/blobs/scalability-targets#scale-targets-for-blob-storage>

upvoted 1 times

 **mmaher71190** 2 months, 2 weeks ago

Questions says at least NOT "up to" so 500 and above

upvoted 2 times

 **betterthanlife** 2 months ago

A Standard General Purpose v2 storage account has a maximum request rate per storage account of 20,000 requests per second, which can be increased by requesting through Azure Support.

<https://learn.microsoft.com/en-us/azure/storage/common/scalability-targets-standard-account?toc=%2Fazur...%2Fblobs%2Ftoc.json&bc=%2Fazur...%2Fstorage%2Fblobs%2Fbreadcrumb%2Ftoc.json>

Block blobs have everything to do with large file upload & I find nothing about being optimized for streaming.

"Block blobs are optimized for uploading large amounts of data efficiently."

<https://learn.microsoft.com/en-us/rest/api/storageservices/understanding-block-blobs--append-blobs--and-page-blobs#about-block-blobs>

upvoted 2 times

 **betterthanlife** 2 months ago

Cannot be Block Blob.

If your applications and workloads execute a large number of transactions, premium block blob storage can be cost-effective,  
<>especially if the workload is write-heavy>>.

Block blob read transactions per second =  $500,000,000 / (30 \times 24 \times 60 \times 60) = 193$  << ONLY 193 for reads

<https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-block-blob-premium>

upvoted 1 times

 **memyself2** 4 months ago

**Selected Answer: A**

This was a question was on my exam today (2/26/23) - Scored 844

Premium Block blob was not even a selection on the exam

upvoted 6 times

 **yonie** 2 months ago

Wow, that ends this debate.. So what options were given?

upvoted 2 times

 **zellck** 4 months ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-block-blob-premium>

Premium block blob storage accounts make data available via high-performance hardware. Data is stored on solid-state drives (SSDs) which are optimized for low latency. SSDs provide higher throughput compared to traditional hard drives. File transfer is much faster because data is stored

on instantly accessible memory chips. All parts of a drive accessible at once. By contrast, the performance of a hard disk drive (HDD) depends on the proximity of data to the read/write heads.

upvoted 6 times

✉ **equipowindows** 4 months ago

**Selected Answer: B**

premium block blobs

upvoted 2 times

✉ **SH\_22** 4 months ago

**Selected Answer: B**

sure B

upvoted 2 times

✉ **Jacky\_exam** 4 months, 1 week ago

**Selected Answer: B**

It is possible that a Standard general-purpose v2 Azure Storage account could meet the requirements of supporting at least 500 requests per second and storing large image, video, and audio streams, depending on the specifics of the workload.

Standard general-purpose v2 storage accounts support high throughput and scalability, so they can handle a significant amount of requests per second. They also provide a range of storage services, including blobs, files, queues, and tables, which makes them a versatile storage option. However, they may not provide the same level of performance as Premium Block Blob storage accounts, particularly for workloads that require very low latency or very high levels of throughput.

In summary, while a Standard general-purpose v2 Azure Storage account could meet the requirements, a Premium Block Blob storage account would be a better fit for workloads that require the highest levels of performance and scalability.

upvoted 2 times

✉ **Bigbluee** 2 months ago

Sounds like Chatbot. Please write that You paste chatbot answers as AI is not everytime correct.

upvoted 1 times

✉ **jecawi9630** 4 months, 1 week ago

**Selected Answer: B**

Premium Block Blob

upvoted 2 times

✉ **Blues99** 4 months, 2 weeks ago

**Selected Answer: B**

Premium block blob storage accounts have a higher storage cost but a lower transaction cost as compared to standard general-purpose v2 accounts. If your applications and workloads execute a large number of transactions, premium block blob storage can be cost-effective, especially if the workload is write-heavy.

upvoted 2 times

✉ **Eusouzati** 4 months, 2 weeks ago

Premium Block Blob

upvoted 1 times

✉ **Lu5ck** 4 months, 3 weeks ago

**Selected Answer: B**

People seem to miss out the word "stream". You are STREAMING those files. Since there is no budget constraint, no reason not to go for block blob.

upvoted 3 times

You need to recommend a data storage solution that meets the following requirements:

- ⇒ Ensures that applications can access the data by using a REST connection
- ⇒ Hosts 20 independent tables of varying sizes and usage patterns
- ⇒ Automatically replicates the data to a second Azure region
- ⇒ Minimizes costs

What should you recommend?

- A. an Azure SQL Database elastic pool that uses active geo-replication
- B. tables in an Azure Storage account that use geo-redundant storage (GRS)
- C. tables in an Azure Storage account that use read-access geo-redundant storage (RA-GRS)
- D. an Azure SQL database that uses active geo-replication

**Correct Answer: B**

The Table service offers structured storage in the form of tables. The Table service API is a REST API for working with tables and the data that they contain.

Geo-redundant storage (GRS) has a lower cost than read-access geo-redundant storage (RA-GRS).

Reference:

<https://docs.microsoft.com/en-us/rest/api/storageservices/table-service-rest-api> <https://docs.microsoft.com/en-us/azure/storage/common/geo-redundant-design>

*Community vote distribution*

B (92%)      8%

✉️  **Davin0406** Highly Voted 8 months, 2 weeks ago

**Selected Answer: B**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 10 times

✉️  **Jacky\_exam** 4 months, 1 week ago

no need for AZ-304 dump ?  
upvoted 1 times

✉️  **dubuser** Highly Voted 4 months, 4 weeks ago

Got this question in todays exam (29/01/23)  
Answered B  
Scored 903  
upvoted 8 times

✉️  **OPT\_001122** 4 months, 3 weeks ago

Thanks for the date  
upvoted 1 times

✉️  **alexander\_panfilenok** Most Recent 1 week, 2 days ago

I don't know why table storage is considered as correct. It does not provide flexibility of "usage pattern". There is only a primary key (partition key and row key).  
upvoted 1 times

✉️  **Sanjeevsn** 1 month, 1 week ago

**Selected Answer: C**

C. Tables in an Azure Storage account that use read-access geo-redundant storage (RA-GRS).

Explanation:

Azure Storage tables provide REST-based access to data, which meets the requirement of accessing the data using a REST connection.  
Azure Storage tables can accommodate multiple tables of varying sizes and usage patterns.

Read-access geo-redundant storage (RA-GRS) ensures automatic replication of data to a second Azure region, providing data redundancy and disaster recovery capabilities.

Azure Storage tables are typically more cost-effective compared to Azure SQL Database, making it a suitable choice for minimizing costs.

Option B (Tables in an Azure Storage account that use geo-redundant storage) is not the optimal choice as it does not provide read-access to the replicated data in the second Azure region, which is a requirement in this scenario.

upvoted 2 times

 **morito** 3 weeks, 1 day ago

Read Access to the replica is not a requirement! Quite the opposite is the case. It asks for a backup, but with minimized costs, therefore RA-GRS does not meet the scope of the requirement.

upvoted 1 times

 **techrat** 1 month, 4 weeks ago

**Selected Answer: B**

Passed exam today with 979, all questions were in this dump. My answer to this question on the exam was B

upvoted 1 times

 **zellick** 4 months ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/storage/tables/table-storage-overview>

Azure Table storage is a service that stores non-relational structured data (also known as structured NoSQL data) in the cloud, providing a key/attribute store with a schemaless design. Because Table storage is schemaless, it's easy to adapt your data as the needs of your application evolve. Access to Table storage data is fast and cost-effective for many types of applications, and is typically lower in cost than traditional SQL for similar volumes of data.

<https://learn.microsoft.com/en-us/azure/storage/common/storage-redundancy#geo-redundant-storage>

Geo-redundant storage (GRS) copies your data synchronously three times within a single physical location in the primary region using LRS. It then copies your data asynchronously to a single physical location in a secondary region that is hundreds of miles away from the primary region. GRS offers durability for storage resources of at least 99.999999999999% (16 9's) over a given year.

upvoted 3 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

B. tables in an Azure Storage account that use geo-redundant storage (GRS)

upvoted 1 times

 **Born\_Again** 6 months, 3 weeks ago

**Selected Answer: B**

: minimize cost GRS!

upvoted 1 times

 **DikSoft** 8 months, 3 weeks ago

"20 independent tables of varying sizes and usage patterns" - why is it not an elastic pool ?

upvoted 1 times

 **Snownoodles** 8 months ago

SQL DB(include elastic pool) doesn't support REST

upvoted 4 times

 **tfulanchan** 5 months ago

Confused here. <https://learn.microsoft.com/en-us/rest/api/sql/>

upvoted 1 times

 **Jeffab** 8 months, 2 weeks ago

I'm a novice in this space, but as I understand, Elastic pools are used for SQL database. Azure Tables refer to NoSQL or structured, non-relational data. This may explain it <https://learn.microsoft.com/en-us/azure/storage/tables/table-storage-overview>

upvoted 1 times

 **jellybiscuit** 9 months, 1 week ago

**Selected Answer: B**

B - tables in an Azure Storage account that use geo-redundant storage (GRS)

GRS - read from the secondary only in the event of a failover

is cheaper than

RA GRS - read from the secondary at all times

<https://azure.microsoft.com/en-us/pricing/details/storage/tables/#pricing>

upvoted 5 times

 **kay00001** 9 months, 2 weeks ago

**Selected Answer: B**

B. tables in an Azure Storage account that use geo-redundant storage (GRS) - is correct.

\*\*Automatically replicates the data to a second Azure region - both GRS and RA-GRS do this, but GRS costs LESS than RA-GRS.

upvoted 3 times

**HOTSPOT -**

You are designing a software as a service (SaaS) application that will enable Azure Active Directory (Azure AD) users to create and publish online surveys. The

SaaS application will have a front-end web app and a back-end web API. The web app will rely on the web API to handle updates to customer surveys.

You need to design an authorization flow for the SaaS application. The solution must meet the following requirements:

☞ To access the back-end web API, the web app must authenticate by using OAuth 2 bearer tokens.

☞ The web app must authenticate by using the identities of individual users.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

The access tokens will be generated by:

Azure AD  
A web app  
A web API

Authorization decisions will be performed by:

Azure AD  
A web app  
A web API

**Answer Area**

The access tokens will be generated by:

Azure AD  
A web app  
A web API

Correct Answer:

Authorization decisions will be performed by:

Azure AD  
A web app  
A web API

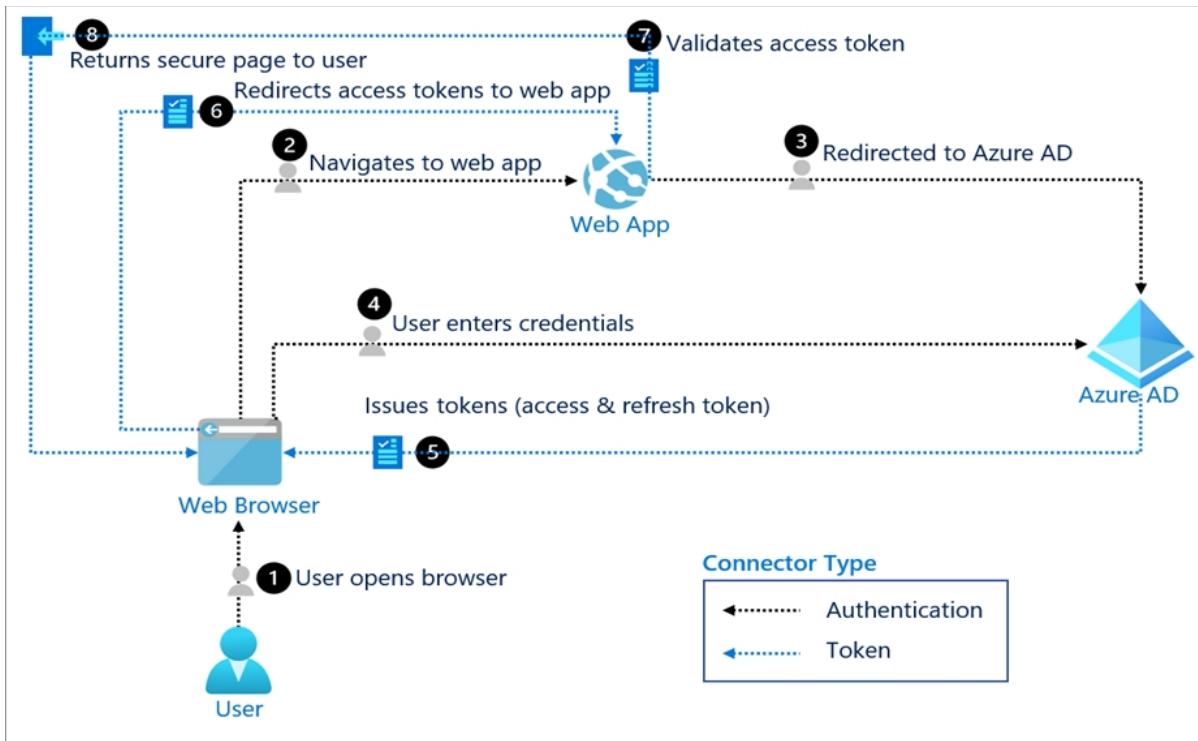
Box 1: Azure AD -

The Azure AD server issues tokens (access & refresh token). See step 5 below in graphic.

OAuth 2.0 authentication with Azure Active Directory.

The OAuth 2.0 is the industry protocol for authorization. It allows a user to grant limited access to its protected resources. Designed to work specifically with

Hypertext Transfer Protocol (HTTP), OAuth separates the role of the client from the resource owner. The client requests access to the resources controlled by the resource owner and hosted by the resource server (here the Azure AD server). The resource server issues access tokens with the approval of the resource owner. The client uses the access tokens to access the protected resources hosted by the resource server.



Box 2: A web API -

Delegated access is used.

The bearer token sent to the web API contains the user identity.

The web API makes authorization decisions based on the user identity.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/auth-oauth2> <https://docs.microsoft.com/lu/azure/architecture/multitenant-identity/web-api>

✉️ **Davin0406** Highly Voted 8 months, 2 weeks ago

Azure AD and A web API. appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.

upvoted 34 times

✉️ **Mwavey** 8 months, 2 weeks ago

What's the reason for coming back to go through the dump when you have already passed the exam?

upvoted 15 times

✉️ **ExamTaker1995** 6 months, 3 weeks ago

Why do i keep seeing comments like this? Davin is doing us all a favour by telling us what he chose, and if he scored high then you can be confident in his answers. Appreciate it!

upvoted 27 times

✉️ **ZakySama** 5 months, 3 weeks ago

He is everywhere with the same message

upvoted 4 times

✉️ **mrjeet** 3 months, 2 weeks ago

Perhaps be more grateful rather than asking dumb questions

upvoted 11 times

✉️ **giancarlos29** 8 months, 2 weeks ago

Sign of good will and telling others what to expect, I hope.

upvoted 20 times

✉️ **mrjventer** 6 months, 2 weeks ago

Lol this is probably a fake account for marketing purposes. "Good will" I doubt.

upvoted 8 times

✉️ **r3nenge** 4 months, 1 week ago

Not rly, I just passed AZ-104 with dump from Exam Topics, and was wondering to do same to ensure others that dumps are indeed valid

upvoted 3 times

 **AzureJobsTillRetire** 6 months ago

Thanks Davin0406 for your kindness  
upvoted 4 times

 **willybsmith** Most Recent 4 weeks, 1 day ago

Not sure if 2/ Web API is correct. According to <https://learn.microsoft.com/en-us/azure/active-directory/fundamentals/auth-oauth2>:

Web app: The web app, or resource server, is where the resource or data resides. It trusts the authorization server to securely authenticate and authorize the OAuth client.

Azure AD: Azure AD is the authorization server, also known as the Identity Provider (IdP). It securely handles anything to do with the user's information, their access, and the trust relationship. It's responsible for issuing the tokens that grant and revoke access to resources.

upvoted 1 times

 **King\_Laps** 2 months, 1 week ago

Azure AD  
and Web API  
upvoted 1 times

 **azkumar305** 2 months, 2 weeks ago

Got this on 14-Apr-2023  
upvoted 2 times

 **zellick** 4 months ago

1. Azure AD  
2. Web API

<https://learn.microsoft.com/en-us/azure/active-directory/fundamentals/auth-oauth2>

upvoted 4 times

 **GarryK** 4 months, 2 weeks ago

correct. check the video  
<https://learn.microsoft.com/en-us/azure/active-directory/develop/authentication-vs-authorization>  
upvoted 2 times

 **OPT\_001122** 4 months, 3 weeks ago

AAD  
Web API  
upvoted 1 times

 **ORRRRR98** 8 months, 1 week ago

Davin0406 Thanks for your feedback  
upvoted 3 times

 **kay00001** 9 months, 2 weeks ago

Answer is correct.

The web API makes authorization decisions based on the user identity.

The bearer token sent to the web API contains the user identity.

<https://docs.microsoft.com/en-us/azure/architecture/multitenant-identity/web-api>  
upvoted 4 times

**HOTSPOT -**

You plan to create an Azure environment that will contain a root management group and 10 child management groups. Each child management group will contain five Azure subscriptions. You plan to have between 10 and 30 resource groups in each subscription.

You need to design an Azure governance solution. The solution must meet the following requirements:

- ⇒ Use Azure Blueprints to control governance across all the subscriptions and resource groups.
- ⇒ Ensure that Blueprints-based configurations are consistent across all the subscriptions and resource groups.
- ⇒ Minimize the number of blueprint definitions and assignments.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Level at which to define the blueprints:

The child management groups
The root management group
The subscriptions

Level at which to create the blueprint assignments:

The child management groups
The root management group
The subscriptions

Correct Answer:

**Answer Area**

Level at which to define the blueprints:

The child management groups
The root management group
The subscriptions

Level at which to create the blueprint assignments:

The child management groups
The root management group
The subscriptions

Box 1. The root management group

When creating a blueprint definition, you'll define where the blueprint is saved. Blueprints can be saved to a management group or subscription that you have

Contributor access to. If the location is a management group, the blueprint is available to assign to any child subscription of that management group.

The root management group is built into the hierarchy to have all management groups and subscriptions fold up to it. This root management group allows for global policies and Azure role assignments to be applied at the directory level.

Box 2. The root management group

Reference:

<https://docs.microsoft.com/en-us/azure/governance/management-groups/overview> <https://docs.microsoft.com/en-us/azure/governance/blueprints/overview>

Define: Root Management Groups  
Assignments: Subscriptions.

In the dark MS language: "Assigning a blueprint definition to a management group means the assignment object exists at the management group. The deployment of artifacts still targets a subscription."

<https://docs.microsoft.com/en-us/azure/governance/blueprints/overview#blueprint-assignment>

upvoted 35 times

✉️ **DeBoer** 4 months, 1 week ago

just to support this: "Blueprints can be saved to a management group or subscription that you have Contributor access to. If the location is a management group, the blueprint is available to assign to any child subscription of that management group."

<https://docs.microsoft.com/en-us/azure/governance/blueprints/overview>

upvoted 1 times

✉️ **Davin0406** Highly Voted 8 months, 2 weeks ago

root management groups and subscriptions. appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.

upvoted 24 times

✉️ **alexander\_panfilenok** Most Recent 1 week, 2 days ago

Each Published Version of a blueprint can be assigned (with a max name length of 90 characters) to an existing management group or subscription.

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#blueprint-assignment>

upvoted 1 times

✉️ **dave22339** 1 week, 4 days ago

Each Published Version of a blueprint can be assigned (with a max name length of 90 characters) to an existing management group or subscription (From the link given in the answer). So i think given answer is supported by MS documentation (although I've not tried it to be fair).

upvoted 1 times

✉️ **betterthanlife** 1 month, 3 weeks ago

In my lab with 1 Root MG (duh), 3 Child MGs, each Child MG has 1 Subscription each.

- When creating a BP I can only DEFINE it on a SINGLE Child MG, NOT the Root MG (it is greyed out), even if the Root MG has a subscription I still cannot DEFINE the BP on the Root MG. Also, tired in PS & also cannot DEFINE on the Root MG "scope is invalid".

NOTE: Once a BP is DEFINED during creation it CANNOT be re-DEFINED (greyed out).

Ø A BP CANNOT be DEFINED on the Root MG or on more than a SINGLE Child MG, I need 3 BPs, 1 for each Child MG

- During creating of the BP I can optionally DEFINE it on any of the individual Subscriptions (but I don't because I'm pretending my MGs have multiple Subscriptions)

- I publish the BP & then can ASSIGN it ONLY to any or all of the Subscriptions below that MG.

Ø A BP can ONLY be ASSIGNED to a Subscription(s), a BP cannot be ASSIGNED to MGs

upvoted 1 times

✉️ **betterthanlife** 1 month, 3 weeks ago

Option 1: Child Management Groups

Option 2: The subscriptions

<https://learn.microsoft.com/en-us/azure/governance/blueprints/create-blueprint-portal>

<https://learn.microsoft.com/en-us/azure/governance/blueprints/create-blueprint-powershell>

upvoted 1 times

✉️ **betterthanlife** 1 month, 2 weeks ago

I WAS WRONG! I hope you can find it in your heart to forgive me for doing all this work for you. Studying back through, checking YOU PEEPS (& myself of course)... you can indeed assign a BP to the Root Management Group, I just did it after granting Contributor to my cloud-only default GA account I'm using on the Root Management Group. However the only option is to assign it to subscriptions, any subordinate to the MG where it is defined, I cannot assign it to other sub management groups (that's just how it is).

Option 1: Root Management Groups

Option 2: The subscriptions

So, thus, therefore, without a doubt, unless MS changes something in the next 24 hours, which is entirely possible.

upvoted 3 times

✉️ **lvz** 1 month ago

exactly what i thought, i.e. you need to have GA to work with root management group. thanks for the update though. really helps.

upvoted 1 times

✉️ **azkumar305** 2 months, 2 weeks ago

Got this on 14-Apr-2023

upvoted 2 times

✉️ **steel72** 3 months, 1 week ago

I think the provided answer is correct, blueprints can be assigned at management group level:

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#blueprint-assignment>

upvoted 1 times

✉️ **zellck** 4 months ago

1. Root MG
2. Subscriptions

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#blueprint-definition-locations>

When creating a blueprint definition, you'll define where the blueprint is saved. Blueprints can be saved to a management group or subscription that you have Contributor access to. If the location is a management group, the blueprint is available to assign to any child subscription of that management group.

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#blueprint-assignment>

Assigning a blueprint definition to a management group means the assignment object exists at the management group. The deployment of artifacts still targets a subscription.

<https://learn.microsoft.com/en-us/azure/governance/blueprints/overview#permissions-in-azure-blueprints>

As blueprint assignments are created on a subscription, the blueprint assign and unassign permissions must be granted on a subscription scope or be inherited onto a subscription scope.

upvoted 3 times

✉️ **Cris13** 3 months, 2 weeks ago

The 2nd question is "The level at which to create the blueprint assignment", so you can assign the blueprint at the management group level but the assignments will still be made at the subscription level. You only make 1 assignment but 50 will be visible (1 for each subscription). At least that is how I see it.

upvoted 1 times

✉️ **Jacky\_exam** 4 months, 1 week ago

ChatGPT:

To meet the requirements, you should include the following in the solution:

Define the Blueprints at the root management group level to ensure that the configurations are consistent across all the subscriptions and resource groups.

Create the blueprint assignments at the child management group level to apply the blueprint to all the subscriptions and resource groups under each child management group.

Therefore, you should select:

b. The root management group for "Level at which to define the blueprints?"

a. The child management groups for "Level at which to create the blueprint assignments?"

upvoted 1 times

✉️ **SomeCert** 4 months ago

Wrong again

upvoted 5 times

✉️ **OPT\_001122** 4 months, 3 weeks ago

Define: Root Management Groups

Assignments: Subscriptions.

Thanks all who have mentioned the date

upvoted 1 times

✉️ **PankajKataria** 6 months ago

<https://learn.microsoft.com/en-us/answers/questions/420039/blueprint-assignment-at-management-group-level.html>

Define: Root Management Groups

Assignments: Subscriptions.

upvoted 4 times

✉️ **Ravi1383** 7 months ago

Define: Root Management Groups

Assignments: Root Management Groups

upvoted 4 times

✉️ **jellybiscuit** 9 months, 1 week ago

Define: Root Management Groups

Assignments: Subscriptions

The fact that you can "assign" a blueprint to a management group via code is just MS confusing the situation. If you're doing it through the portal, you're going to assign it to the subscription. To assign one blueprint to ten subscriptions, you're going to have ten assignments. There's no way around that.

BTW, does anyone actually use blueprints? I've yet to find anyone with them in production. If you're at this point, you're already using terraform or bicep right?

upvoted 12 times

✉️ **MartyMart** 8 months, 2 weeks ago

Yep we are using blueprints hence providing scaffold for internal customers.

upvoted 2 times

✉️ **lupass93** 7 months, 1 week ago

Terraform is the answer!

upvoted 5 times

✉️ **RJMP** 9 months, 2 weeks ago

Define: Root Management Groups  
Assignments: Subscriptions.

<https://docs.microsoft.com/en-us/azure/governance/blueprints/create-blueprint-portal>  
upvoted 4 times

 **One111** 9 months, 3 weeks ago

Blueprint definition locations

When creating a blueprint definition, you'll define where the blueprint is saved. Blueprints can be saved to a management group or subscription that you have Contributor access to. If the location is a management group, the blueprint is available to assign to any child subscription of that management group.

upvoted 4 times

 **mse89** 9 months, 4 weeks ago

Define: Root Management Groups

Assignments: Subscriptions

upvoted 5 times

**DRAG DROP -**

You are designing a virtual machine that will run Microsoft SQL Server and contain two data disks. The first data disk will store log files, and the second data disk will store data. Both disks are P40 managed disks.

You need to recommend a host caching method for each disk. The method must provide the best overall performance for the virtual machine while preserving the integrity of the SQL data and logs.

Which host caching method should you recommend for each disk? To answer, drag the appropriate methods to the correct disks. Each method may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

**Methods** None ReadOnly ReadWrite**Answer Area**Log:  MethodData:  Method**Correct Answer:****Methods** None ReadOnly ReadWrite**Answer Area**Log:  NoneData:  ReadOnly

Box 1: None -

No data disk caching for the Log files.

Box 2: ReadOnly -

Guidelines to optimize performance for your SQL Server on Azure Virtual Machines (VMs) include:

Set host caching to read-only for data file disks.

Set host caching to none for log file disks.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/performance-guidelines-best-practices-storage>

 **Davin0406** Highly Voted 8 months, 2 weeks ago

None and ReadOnly. appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.

upvoted 28 times

 **dimsoek** 5 months ago

This question is in the contribution area so we bought it already, no need for spam.

upvoted 7 times

 **Velidot100** Highly Voted 9 months, 2 weeks ago

Got this on my exam - 12. September 2022  
upvoted 7 times

✉ **Tr619899** Most Recent 1 month, 1 week ago

Data disk: Enable Read-only caching for the disks hosting SQL Server data files.  
Reads from cache will be faster than the uncached reads from the data disk.  
Uncached IOPS and throughput plus Cached IOPS and throughput yield the total possible performance available from the virtual machine within the VMs limits, but actual performance varies based on the workload's ability to use the cache (cache hit ratio).

Transaction log disk: Set the caching policy to None for disks hosting the transaction log. There is no performance benefit to enabling caching for the Transaction log disk, and in fact having either Read-only or Read/Write caching enabled on the log drive can degrade performance of the writes against the drive and decrease the amount of cache available for reads on the data drive.

upvoted 2 times

✉ **zellck** 4 months ago

Log: None  
Data: ReadOnly

<https://learn.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/performance-guidelines-best-practices-storage?view=azuresql#data-file-caching-policies>  
Your storage caching policy varies depending on the type of SQL Server data files that are hosted on the drive.

The following table provides a summary of the recommended caching policies based on the type of SQL Server data:

- Data disk

Enable Read-only caching for the disks hosting SQL Server data files.

Reads from cache will be faster than the uncached reads from the data disk.

Uncached IOPS and throughput plus Cached IOPS and throughput will yield the total possible performance available from the virtual machine within the VMs limits, but actual performance will vary based on the workload's ability to use the cache (cache hit ratio).

upvoted 6 times

✉ **zellck** 4 months ago

-Transaction log disk

Set the caching policy to None for disks hosting the transaction log. There is no performance benefit to enabling caching for the Transaction log disk, and in fact having either Read-only or Read/Write caching enabled on the log drive can degrade performance of the writes against the drive and decrease the amount of cache available for reads on the data drive.

upvoted 3 times

✉ **OPT\_001122** 4 months, 3 weeks ago

Log - none  
Data - Read Only  
upvoted 3 times

✉ **leoletopic** 6 months, 1 week ago

Data file caching policies  
<https://learn.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/performance-guidelines-best-practices-storage?view=azuresql#data-file-caching-policies>  
upvoted 3 times

✉ **ExamTopicsTST** 7 months, 2 weeks ago

Set host caching to read-only for data file disks.  
Set host caching to none for log file disks.  
upvoted 1 times

✉ **Balaji\_c\_s** 9 months, 2 weeks ago

Answer is right

<https://docs.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/performance-guidelines-best-practices-storage?view=azuresql#checklist>  
upvoted 5 times

✉ **pkkalra** 7 months, 1 week ago

relevant section from above link

<https://learn.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/performance-guidelines-best-practices-storage?view=azuresql#data-file-caching-policies>  
upvoted 2 times

✉ **Neo2c** 9 months, 3 weeks ago

The Given answer is correct  
upvoted 2 times

You are designing a solution that calculates 3D geometry from height-map data.

You need to recommend a solution that meets the following requirements:

- ⇒ Performs calculations in Azure.
- ⇒ Ensures that each node can communicate data to every other node.
- ⇒ Maximizes the number of nodes to calculate multiple scenes as fast as possible.
- Minimizes the amount of effort to implement the solution.

Which two actions should you include in the recommendation? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Enable parallel file systems on Azure.
- B. Create a render farm that uses virtual machines.
- C. Create a render farm that uses virtual machine scale sets.
- D. Create a render farm that uses Azure Batch.
- E. Enable parallel task execution on compute nodes.

**Correct Answer: DE**

Multi-instance tasks allow you to run an Azure Batch task on multiple compute nodes simultaneously. These tasks enable high performance computing scenarios like Message Passing Interface (MPI) applications in Batch.

You configure compute nodes for parallel task execution at the pool level.

Azure Batch allows you to set task slots per node up to (4x) the number of node cores.

Reference:

<https://docs.microsoft.com/en-us/azure/batch/batch-mpi>

<https://docs.microsoft.com/en-us/azure/batch/batch-parallel-node-tasks#enable-parallel-task-execution>

*Community vote distribution*

DE (97%)

✉️  **Davin0406**  8 months, 2 weeks ago

**Selected Answer: DE**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 15 times

✉️  **OPT\_001122** 4 months, 3 weeks ago

Thanks for the exam date.

upvoted 1 times

✉️  **ServerBrain** 5 months, 3 weeks ago

Thank you for the heads up Davin. You're a good soul..

upvoted 7 times

✉️  **GarryK**  9 months, 1 week ago

**Selected Answer: DE**

How it works

A common scenario for Batch involves scaling out intrinsically parallel work, such as the rendering of images for 3D scenes, on a pool of compute nodes. This pool can be your "render farm" that provides tens, hundreds, or even thousands of cores to your rendering job.

<https://learn.microsoft.com/en-us/azure/batch/batch-technical-overview>

<https://learn.microsoft.com/en-us/azure/batch/batch-parallel-node-tasks>  
You configure compute nodes for parallel task execution at the pool level

upvoted 8 times

✉️  **techrat**  1 month, 4 weeks ago

**Selected Answer: DE**

I passed exam today with 979, and this question was on the exam, I am confident the correct answer is DE  
upvoted 1 times

✉️  **globby118** 4 months, 1 week ago

appeared in exam 02/15/2023

upvoted 4 times

✉️ EngAbood 4 months, 1 week ago

thank u for mentioned exam date , was all the questions from here , examtopics ?

upvoted 1 times

✉️ Eusouzati 4 months, 1 week ago

Selected Answer: CD

ChatGPT

The two actions that should be included in the recommendation are:

C. Create a render farm that uses virtual machine scale sets, which will enable the deployment and management of a large number of identical virtual machines, and allow for automatic scaling based on the workload.

D. Create a render farm that uses Azure Batch, which provides a platform for running large-scale parallel and high-performance computing (HPC) batch jobs. It can also automatically scale the number of nodes based on the workload and provides easy integration with Azure storage.

Therefore, the recommended solution would be to create a render farm that uses virtual machine scale sets and Azure Batch in Azure to perform the 3D geometry calculations. This solution will ensure that each node can communicate with every other node, maximize the number of nodes to calculate multiple scenes as fast as possible, and minimize the amount of effort to implement the solution.

upvoted 1 times

✉️ OPT\_001122 4 months, 3 weeks ago

Selected Answer: DE

D. Create a render farm that uses Azure Batch.

E. Enable parallel task execution on compute nodes.

upvoted 3 times

✉️ dubuser 4 months, 4 weeks ago

Appeared in 29/01/2023 exam. Passed with 903/1000

upvoted 6 times

✉️ EngAbood 4 months, 1 week ago

thank u for mentioned exam date , was all the questions from here , examtopics ?

upvoted 1 times

✉️ OPT\_001122 4 months, 3 weeks ago

Thanks for the exam date.

upvoted 1 times

✉️ kay000001 9 months, 2 weeks ago

Selected Answer: DE

D and E - correct.

Both Render A Farm & Parallel Task Execution are Batch features.

<https://docs.microsoft.com/en-us/azure/batch/batch-technical-overview>

upvoted 3 times

You have an on-premises application that consumes data from multiple databases. The application code references database tables by using a combination of the server, database, and table name.

You need to migrate the application data to Azure.

To which two services can you migrate the application data to achieve the goal? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. SQL Server Stretch Database
- B. SQL Server on an Azure virtual machine
- C. Azure SQL Database
- D. Azure SQL Managed Instance

**Correct Answer: BD**

Cross-database queries are supported by SQL Server, for example on an Azure virtual machine, and also supported by an Azure SQL Managed Instance.

Reference:

<https://techcommunity.microsoft.com/t5/azure-database-support-blog/cross-database-queries-between-azure-sql-database-and-managed/ba-p/2706670>

*Community vote distribution*

BD (100%)

✉️  **GK81**  9 months ago

where is cross-database query mentioned in the question?

upvoted 9 times

✉️  **ServerBrain** 5 months, 3 weeks ago

cross-database query mentioned in the question >>>>> "application that consumes data from multiple databases"

upvoted 2 times

✉️  **key000001**  9 months, 2 weeks ago

**Selected Answer: BD**

B and D.

upvoted 6 times

✉️  **Sanjeevsn**  1 month, 1 week ago

Why not C: AZ SQL?

upvoted 1 times

✉️  **zellck** 4 months ago

**Selected Answer: BD**

BD is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql#features-of-sql-database-and-sql-managed-instance>

Azure SQL Managed Instance

- Cross-database/three-part name queries - Yes

upvoted 2 times

✉️  **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: BD**

B and D

upvoted 1 times

✉️  **Snownoodles** 9 months, 3 weeks ago

Azure SQL Database also has (virtual) sql server which is global unique.

We can also refer a Azure SQL database table by server/database/table.

Or the ask of this question is actually about instance features?

upvoted 4 times

✉️  **Snownoodles** 9 months, 3 weeks ago

Now Azure SQL database also supports cross-database query:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/elastic-query-getting-started-vertical?view=azuresql>

upvoted 3 times

 **Fal9911** 8 months ago

question is "The application code references database tables by using a combination of the server, database, and table name"  
upvoted 1 times

 **One111** 9 months, 3 weeks ago

How do we know if there are asking for cross-database queries? Why explanation to given answer is relevant?  
upvoted 4 times

 **Jeffab** 8 months, 2 weeks ago

As GK81 also asked, We just don't f..... know! These more recent questions are getting even more ridiculous. If questions like these, which only partially reference published material appear in real exam, then expect us to read between the lines, we have no hope of passing this exam.  
upvoted 4 times

 **Born\_Again** 6 months, 3 weeks ago

"The application code references database tables by using a combination of the server, database, and table name"  
upvoted 1 times

**HOTSPOT -**

You plan to migrate on-premises Microsoft SQL Server databases to Azure.

You need to recommend a deployment and resiliency solution that meets the following requirements:

- ⇒ Supports user-initiated backups
- ⇒ Supports multiple automatically replicated instances across Azure regions
- ⇒ Minimizes administrative effort to implement and maintain business continuity

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Deployment solution:

Azure SQL Managed Instance
SQL Server on Azure Virtual Machines
An Azure SQL Database single database

Resiliency solution:

Auto-failover group
Active geo-replication
Zone-redundant deployment

**Answer Area**

Deployment solution:

Azure SQL Managed Instance
SQL Server on Azure Virtual Machines
An Azure SQL Database single database

Correct Answer:

Resiliency solution:

Auto-failover group
Active geo-replication
Zone-redundant deployment

Box 1: an Azure SQL database -

Incorrect answers:

User imitated backups are not supported by Azure SQL Managed instance.

Box 2: Active geo-replication -

Active geo-replication required to multiple automatically replicated instances across Azure regions.

You can manage Azure SQL Database security for geo-restore. SQL database cannot be used for geo-restore.

Incorrect:

Not SQL Server: Active geo-replication requires Azure SQL database.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/active-geo-replication-overview>

- ✉ **Balaji\_c\_s** Highly Voted 9 months, 2 weeks ago  
Managed Instance + Auto Failover Group  
upvoted 60 times
- ✉ **kay00001** Highly Voted 9 months, 2 weeks ago  
Azure SQL Managed instances & Auto Failover Group  
- supports User Initiated Backups and minimizes administrative effort for business continuity.  
<https://docs.microsoft.com/en-us/azure/azure-sql/managed-instance/sql-managed-instance-paas-overview?view=azuresql>
- Auto failover groups  
<https://docs.microsoft.com/en-us/azure/architecture/framework/services/data/azure-sql-managed-instance/reliability>  
upvoted 19 times
- ✉ **heero** 9 months, 2 weeks ago  
but Active geo-replication is not supported by Azure SQL Managed Instance.  
upvoted 1 times
- ✉ **GarryK** 9 months, 1 week ago  
It said Auto Failover groups not active geo replication  
upvoted 3 times
- ✉ **Tr619899** Most Recent 2 weeks, 3 days ago  
The recommended deployment solution is Azure SQL Managed Instance and the recommended resiliency solution is Auto-failover groups. This combination supports user-initiated backups, multiple automatically replicated instances across Azure regions, and minimizes administrative effort to implement and maintain business continuity.  
upvoted 1 times
- ✉ **techrat** 1 month, 4 weeks ago  
Passed the exam with 979 today, this question was on the exam. I answered Managed Instance and Auto Failover Group  
upvoted 7 times
- ✉ **couldbeme** 2 months, 2 weeks ago  
↳ Supports user-initiated backups  
↳ Supports multiple automatically replicated instances across Azure regions  
these are mutually exclusive, if "multiple automatically replicated instances" said " multiple automatically replicated databases", then "Managed Instance + Auto Fail-over Group" would be correct.  
upvoted 1 times
- ✉ **EXzw** 3 months ago  
I think Answer is correct, I can manually Export DB from Azure portal. and I can configure replica group in the portal. have you guys tested Auto Failover to multi replicas?  
upvoted 1 times
- ✉ **EXzw** 3 months ago  
please refer to below link  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/business-continuity-high-availability-disaster-recover-hadr-overview?view=azuresql#compare-geo-replication-with-failover-groups>  
upvoted 1 times
- ✉ **zellck** 4 months ago  
1. Azure SQL Managed Instance  
2. Auto-failover group  
  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql#features-of-sql-database-and-sql-managed-instance>  
Azure SQL Managed Instance  
BACKUP command  
- Yes, user initiated copy-only backups to Azure Blob storage  
  
<https://learn.microsoft.com/en-us/azure/azure-sql/managed-instance/auto-failover-group-sql-mi?view=azuresql&tabs=azure-powershell>  
The auto-failover groups feature allows you to manage the replication and failover of all user databases in a managed instance to another Azure region.  
upvoted 6 times
- ✉ **Jamesat** 4 months ago  
I'm pretty sure this should be  
  
SQL Managed Instance and Auto-Failover Group  
  
A Single SQL Database definitely wouldn't be right.  
upvoted 2 times
- ✉ **Libanhous** 3 months, 3 weeks ago

SQL managed instance doesn't user initiated backup, that is one of the requirements in question.  
upvoted 1 times

✉️ **MeerKatZA** 2 months, 3 weeks ago  
SQL MI Does, AZ SQL DB only supports system initiated backed up requests.  
upvoted 1 times

✉️ **VBK8579** 4 months, 3 weeks ago  
For deployment solution: Azure SQL Managed Instance.  
For resiliency solution: Auto-failover group.  
upvoted 2 times

✉️ **clueless888** 4 months, 3 weeks ago  
Still unsure on this one.  
Azure Manage Instance is required for User initiated backups  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql#features-of-sql-database-and-sql-managed-instance>

However, according to this link Auto-Failover groups do not support multiple replica's which is one of the requirements.  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/business-continuity-high-availability-disaster-recover-hadr-overview?view=azuresql>  
upvoted 2 times

✉️ **juanvepe** 8 months, 1 week ago  
The correct answer are: Azure SQL Managed instances & Auto Failover Group

<https://learn.microsoft.com/en-us/azure/azure-sql/managed-instance/auto-failover-group-sql-mi?view=azuresql&tabs=azure-powershell>  
upvoted 3 times

✉️ **Davin0406** 8 months, 2 weeks ago  
Azure SQL Managed Instance and Auto Failover Group. appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 14 times

✉️ **jellybiscuit** 9 months, 1 week ago  
SQL MI  
auto-failover

SQL Database doesn't support user-initiated backups  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql#features-of-sql-database-and-sql-managed-instance>

and SQL on VM has more overhead (and is never going to be the answer on one of these)  
upvoted 3 times

✉️ **Elton\_Bicalho** 9 months, 1 week ago  
The answer is incorrect:  
...plan to migrate on-premises Microsoft SQL Server databaseS to Azure. (SEVERAL database). The answer said SINGLE database.  
upvoted 5 times

✉️ **Elton\_Bicalho** 9 months, 1 week ago  
The correct is Azure SQL Managed instances & Auto Failover Group

<https://learn.microsoft.com/en-us/azure/azure-sql/managed-instance/failover-group-add-instance-tutorial?view=azuresql&tabs=azure-portal>  
upvoted 3 times

✉️ **Snownoodles** 9 months, 3 weeks ago  
Azure SQL Database doesn't support user-initiated backup either:  
<https://docs.microsoft.com/en-us/azure/azure-sql/database/automated-backups-overview?view=azuresql>  
upvoted 4 times

✉️ **RandomNickname** 4 months, 3 weeks ago  
Seems like it does.  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql#features-of-sql-database-and-sql-managed-instance>  
upvoted 1 times

✉️ **RandomNickname** 4 months, 2 weeks ago  
Above with reference to SQL MI  
upvoted 1 times

You need to design a highly available Azure SQL database that meets the following requirements:

- ⇒ Failover between replicas of the database must occur without any data loss.
- ⇒ The database must remain available in the event of a zone outage.
- ⇒ Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Managed Instance Business Critical
- B. Azure SQL Managed Instance General Purpose
- C. Azure SQL Database Business Critical
- D. Azure SQL Database Serverless

**Correct Answer: D**

Azure SQL Database Serverless meets the requirements and is less expensive than Azure SQL Database Business Critical.

Note: General Purpose service tier zone redundant availability.

Zone-redundant configuration for the general purpose service tier is offered for both serverless and provisioned compute.

This configuration utilizes Azure Availability Zones to replicate databases across multiple physical locations within an Azure region. By selecting zone-redundancy, you can make your new and existing serverless and provisioned general-purpose single databases and elastic pools resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes of the application logic.

Incorrect:

Not A, not B: Zone-redundant configuration is not available in SQL Managed Instance.

Not C: Azure SQL Database Business Critical is more expensive than Azure SQL Database Serverless.

Note: Premium and Business Critical service tiers use the Premium availability model, which integrates compute resources (sq|servr.exe process) and storage

(locally attached SSD) on a single node. High availability is achieved by replicating both compute and storage to additional nodes creating a three to four-node cluster.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla>

*Community vote distribution*

D (89%)	11%
---------	-----

✉  **yonie**  2 months ago

**Selected Answer: D**

There are \*16\* variations of this question. Each of them offering different possible answers.

The answer priority is as follows. If it exists then choose it. If it doesn't, proceed to the next priority. Sometimes both appear in the same question, so make sure to select the higher priority.

1. Azure SQL Database Premium
2. Azure SQL Database Serverless
3. Azure SQL Database Business Critical

upvoted 15 times

✉  **Snownoodles**  9 months, 2 weeks ago

**Selected Answer: D**

The given answer is correct

upvoted 10 times

✉  **Bertmeister**  1 week, 5 days ago

**Selected Answer: C**

Failover without data loss: Azure SQL Database Serverless does not provide the same level of high availability as Azure SQL Database Business Critical. With Serverless, automatic failover is not guaranteed, and there may be a risk of data loss during failover.

Availability in the event of a zone outage: Azure SQL Database Serverless does not support the ability to span multiple availability zones. In the event of a zone outage, there is a possibility of downtime or unavailability of the database.

Cost optimization: Azure SQL Database Serverless offers cost optimization benefits as it automatically pauses and scales based on usage. It is a suitable option for databases with unpredictable or intermittent workloads. However, cost optimization should not be the sole factor in choosing a deployment option if meeting high availability and data integrity requirements is crucial.

upvoted 1 times

 lvz 1 month ago

**Selected Answer: C**

It should be C, this is an important concept for understanding business continuity from the perspective of Azure SQL.  
"The Basic, Standard, and General Purpose service tiers use the remote storage availability model for both serverless and provisioned compute." Meaning if the remote storage is down then there will be loss of data before you can provision/attach new storage. Hence it has to be business critical, reference link given below.  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#:~:text=The%20Basic%2C%20Standard%2C%20General%20Purpose%20service%20tiers%20use%20the%20remote%20storage%20availability%20model%20for%20both%20serverless%20and%20provisioned%20compute>

upvoted 1 times

 EXzw 3 months ago

**Selected Answer: C**

i think should be C, when talking about zero data loss during failover, shouldn't we use premium tier ? i've checked from the portal , cost from lowest to highest is SQL Preium < SQL BC < SQL MI BC.

upvoted 2 times

 marvicqui 3 months, 2 weeks ago

Azure SQL Database Business Critical provides high availability with the capability to automatically replicate data to a secondary replica within the same region, ensuring zero data loss in the event of a failover.  
The deployment option also provides cross-region replication to ensure availability in case of a zone outage.  
Azure SQL Managed Instance Business Critical also provides high availability, but it is more expensive than Azure SQL Database Business Critical.  
Azure SQL Managed Instance General Purpose and Azure SQL Database Serverless do not provide the required level of high availability for this scenario.  
Therefore, Azure SQL Database Business Critical meets all the requirements while keeping costs minimized.

upvoted 3 times

 zellick 4 months ago

**Selected Answer: D**

D is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/serverless-tier-overview?view=azuresql&tabs=general-purpose>  
Serverless is a compute tier for single databases in Azure SQL Database that automatically scales compute based on workload demand and bills for the amount of compute used per second. The serverless compute tier also automatically pauses databases during inactive periods when only storage is billed and automatically resumes databases when activity returns.

upvoted 3 times

 zellick 4 months ago

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#general-purpose-service-tier-zone-redundant-availability>  
Zone-redundant configuration for the General Purpose service tier is offered for both serverless and provisioned compute. This configuration utilizes Azure Availability Zones to replicate databases across multiple physical locations within an Azure region. By selecting zone-redundancy, you can make your new and existing serverless and provisioned general purpose single databases and elastic pools resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes of the application logic.

upvoted 2 times

 OPT\_001122 4 months, 3 weeks ago

**Selected Answer: D**

D. Azure SQL Database Serverless

upvoted 1 times

 ed79 4 months, 4 weeks ago

it says no data loss... active geo replication is asynch, so would Serverless still count?

upvoted 1 times

 testtaker13 4 months, 4 weeks ago

So reading the provided HA link for SQL DB it seems all four support Zone redundancy. The provided answer is the cheapest one. Is indeed Managed instance General purpose more expensive than SQL DB serverless?

upvoted 2 times

 \_fvt 4 months, 1 week ago

Depends on the workloads but serverless automatically pause / resume so then you are not charged for Compute during this time. So when kind of workload is not specified we generally consider Serverless as the cheapest one.

upvoted 1 times

 simonseztech 8 months, 1 week ago

**Selected Answer: D**

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#general-purpose-service-tier-zone-redundant-availability>

Zone-redundant configuration for the General Purpose service tier is offered for both serverless and provisioned compute.

upvoted 4 times

You have an Azure web app that uses an Azure key vault named KeyVault1 in the West US Azure region.

You are designing a disaster recovery plan for KeyVault1.

You plan to back up the keys in KeyVault1.

You need to identify to where you can restore the backup.

What should you identify?

- A. any region worldwide
- B. the same region only
- C. KeyVault1 only
- D. the same geography only

**Correct Answer: D**

Using the backup and restore commands has two limitations:

- \* You can't back up a key vault in one geography and restore it into another geography.

- \* The backup command backs up all versions of each secret.

Incorrect:

Not A: Azure Key Vault does not allow you to move a key vault from one region to another. You can, however, create a key vault in the new region, manually copy each individual key, secret, or certificate from your existing key vault to the new key vault, and then remove the original key vault.

Reference:

<https://docs.microsoft.com/en-us/azure/key-vault/general/move-region>

*Community vote distribution*

D (100%)

 **Davin0406** Highly Voted 8 months, 2 weeks ago

**Selected Answer: D**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 13 times

 **Teab91** Highly Voted 8 months, 3 weeks ago

**Selected Answer: D**

When you back up a key vault object, such as a secret, key, or certificate, the backup operation will download the object as an encrypted blob. This blob can't be decrypted outside of Azure. To get usable data from this blob, you must restore the blob into a key vault within the same Azure subscription and Azure geography

upvoted 7 times

 **yonie** Most Recent 2 months ago

**Selected Answer: D**

The contents of your key vault can be replicated within the region and to a secondary region at least 150 miles away, but within the same geography to maintain high durability of your keys and secrets

upvoted 1 times

 **ninjagatti** 3 months, 4 weeks ago

**Selected Answer: D**

D is the right answer

upvoted 1 times

 **zellick** 4 months ago

**Selected Answer: D**

D is the answer.

<https://learn.microsoft.com/en-us/azure/key-vault/general/backup?tabs=azure-cli#design-considerations>

When you back up a key vault object, such as a secret, key, or certificate, the backup operation will download the object as an encrypted blob. This blob can't be decrypted outside of Azure. To get usable data from this blob, you must restore the blob into a key vault within the same Azure subscription and Azure geography.

upvoted 2 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: D**

D. the same geography only  
upvoted 1 times

 **Tarni** 5 months, 2 weeks ago

This blob can't be decrypted outside of Azure. To get usable data from this blob, you must restore the blob into a key vault within the same Azure subscription and Azure geography.  
<https://learn.microsoft.com/en-us/azure/key-vault/general/backup?tabs=azure-cli>  
Answer: D  
upvoted 1 times

 **MarkMac** 6 months, 2 weeks ago

So 'geography' doesn't mean region or even region peers, correct? For example United States would be 'a geography'?  
upvoted 5 times

 **Mitytskr** 5 months, 4 weeks ago

I was confused by this as well. According to <https://azure.microsoft.com/en-us/explore/global-infrastructure/geographies/#overview> it seems you are correct that the 'geography' is at the county level, above the region.  
upvoted 4 times

 **neeraj26** 9 months ago

**Selected Answer: D**

The Given answer is correct  
upvoted 2 times

 **RJMP** 9 months, 2 weeks ago

**Selected Answer: D**  
<https://docs.microsoft.com/en-us/azure/key-vault/general/backup?tabs=azure-cli>  
upvoted 2 times

 **Neo2c** 9 months, 3 weeks ago

**Selected Answer: D**

The Given answer is correct  
upvoted 2 times

You have an on-premises line-of-business (LOB) application that uses a Microsoft SQL Server instance as the backend.

You plan to migrate the on-premises SQL Server instance to Azure virtual machines.

You need to recommend a highly available SQL Server deployment that meets the following requirements:

- ⇒ Minimizes costs
- Minimizes failover time if a single server fails

What should you include in the recommendation?

- A. an Always On availability group that has premium storage disks and a virtual network name (VNN)
- B. an Always On Failover Cluster Instance that has a virtual network name (VNN) and a standard file share
- C. an Always On availability group that has premium storage disks and a distributed network name (DNN)
- D. an Always On Failover Cluster Instance that has a virtual network name (VNN) and a premium file share

**Correct Answer: C**

Always On availability groups on Azure Virtual Machines are similar to Always On availability groups on-premises, and rely on the underlying Windows Server Failover Cluster.

If you deploy your SQL Server VMs to a single subnet, you can configure a virtual network name (VNN) and an Azure Load Balancer, or a distributed network name (DNN) to route traffic to your availability group listener.

There are some behavior differences between the functionality of the VNN listener and DNN listener that are important to note:

\* Failover time: Failover time is faster when using a DNN listener since there is no need to wait for the network load balancer to detect the failure event and change its routing.

\* Etc.

Incorrect:

Not B, not D: Migrate to an Always On availability group, not an Always on Failover cluster Instance.

Reference:

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

*Community vote distribution*

C (75%)

B (25%)

✉️  **Davin0406**  8 months, 2 weeks ago

**Selected Answer: C**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 18 times

✉️  **OPT\_001122** 4 months, 3 weeks ago

Thanks for the exam date

upvoted 1 times

✉️  **GarryK**  9 months, 1 week ago

**Selected Answer: B**

I prefer B.

Costs must be minimized.

Failover must be provided if a single server fails.

> No information is given that would recommend to use premium storage.

> We need protection if a server fails, Failover Cluster provides availability at the instance level whereas Availability Groups provides failover at the Database Level.

About AG.

Because availability groups only provide database-level, and not instance-level, protection, anything not captured in the transaction log or configured in the database will need to be manually synchronized for each secondary replica. Some examples of objects that must be synchronized manually are logins at the instance level, linked servers, and SQL Server Agent jobs.

About FC

Databases are only available after recovery is complete, so recovery time will depend on many factors, and will generally be longer than failing over an availability group. The tradeoff is that when you fail over an availability group, there may be additional tasks required to make a database usable, such as enabling a SQL Server Agent job.

upvoted 10 times

✉️  **jellybiscuit** 9 months, 1 week ago

Yea, it depends on if you start with cost, or you start with time.  
I think I'd personally go with C, but I see your point.

upvoted 2 times

✉️  **GarryK** 4 months, 2 weeks ago

And I dont understand C as DNN is used with failover clusters, not AG.  
The distributed network name (DNN) replaces the virtual network name (VNN) as the connection point when used with an Always On failover cluster instance on SQL Server VMs.  
<https://learn.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/failover-cluster-instance-distributed-network-name-dnn-configure?view=azuresql>

upvoted 2 times

✉️  **zellick** 4 months ago

You can use DNN with AG.

<https://learn.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/availability-group-distributed-network-name-dnn-listener-configure?view=azuresql>

With SQL Server on Azure VMs in a single subnet, the distributed network name (DNN) routes traffic to the appropriate clustered resource. It provides an easier way to connect to an Always On availability group (AG) than the virtual network name (VNN) listener, without the need for an Azure Load Balancer.

upvoted 1 times

✉️  **techrat** [Most Recent] 1 month, 4 weeks ago

**Selected Answer: C**

Passed exam today with 979, and this question was on the exam, I am confident the correct answer is C.

upvoted 2 times

✉️  **zellick** 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/availability-group-distributed-network-name-dnn-listener-configure?view=azuresql>

With SQL Server on Azure VMs in a single subnet, the distributed network name (DNN) routes traffic to the appropriate clustered resource. It provides an easier way to connect to an Always On availability group (AG) than the virtual network name (VNN) listener, without the need for an Azure Load Balancer.

upvoted 4 times

✉️  **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

C. an Always On availability group that has premium storage disks and a distributed network name (DNN)

upvoted 2 times

✉️  **dubuser** 4 months, 4 weeks ago

This question appeared in todays exam (29/01/23)

Answered C

Scored 903

upvoted 6 times

✉️  **diego\_alejandro** 7 months, 2 weeks ago

answer is C

upvoted 2 times

✉️  **Snownoodles** 8 months ago

**Selected Answer: C**

DNN is recommended by MS

upvoted 4 times

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 plans to deploy various Azure App Service instances that will use Azure SQL databases. The App Service instances will be deployed at the same time as the Azure SQL databases.

The company has a regulatory requirement to deploy the App Service instances only to specific Azure regions. The resources for the App Service instances must reside in the same region.

You need to recommend a solution to meet the regulatory requirement.

Solution: You recommend creating resource groups based on locations and implementing resource locks on the resource groups.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: B**

Instead; you should recommend using an Azure Policy initiative to enforce the location

Note: Azure Resource Policy Definitions can be used which can be applied to a specific Resource Group with the App Service instances.

In Azure Policy, we offer several built-in policies that are available by default. For example:

\* Allowed Locations (Deny): Restricts the available locations for new resources. Its effect is used to enforce your geo-compliance requirements.

Reference:

<https://docs.microsoft.com/en-us/azure/governance/policy/overview>

*Community vote distribution*

B (100%)

 **zelick** 4 months ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/azure-resource-manager/management/lock-resources?tabs=json>

As an administrator, you can lock an Azure subscription, resource group, or resource to protect them from accidental user deletions and modifications. The lock overrides any user permissions.

You can set locks that prevent either deletions or modifications. In the portal, these locks are called Delete and Read-only. In the command line, these locks are called CanNotDelete and ReadOnly.

- CanNotDelete means authorized users can read and modify a resource, but they can't delete it.
- ReadOnly means authorized users can read a resource, but they can't delete or update it. Applying this lock is similar to restricting all authorized users to the permissions that the Reader role provides.

upvoted 2 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

Azure Policy is the correct ans

upvoted 1 times

 **lolol13698** 8 months, 2 weeks ago

**Selected Answer: B**

Correst, it is wrong

upvoted 2 times

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 plans to deploy various Azure App Service instances that will use Azure SQL databases. The App Service instances will be deployed at the same time as the Azure SQL databases.

The company has a regulatory requirement to deploy the App Service instances only to specific Azure regions. The resources for the App Service instances must reside in the same region.

You need to recommend a solution to meet the regulatory requirement.

Solution: You recommend using the Regulatory compliance dashboard in Microsoft Defender for Cloud.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: B**

Instead; you should recommend using an Azure Policy initiative to enforce the location

Note: Azure Resource Policy Definitions can be used which can be applied to a specific Resource Group with the App Service instances.

In Azure Policy, we offer several built-in policies that are available by default. For example:

\* Allowed Locations (Deny): Restricts the available locations for new resources. Its effect is used to enforce your geo-compliance requirements.

Reference:

<https://docs.microsoft.com/en-us/azure/governance/policy/overview>

*Community vote distribution*

B (100%)

 **zelick** 4 months ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/defender-for-cloud/regulatory-compliance-dashboard>

Microsoft Defender for Cloud helps streamline the process for meeting regulatory compliance requirements, using the regulatory compliance dashboard. Defender for Cloud continuously assesses your hybrid cloud environment to analyze the risk factors according to the controls and best practices in the standards that you've applied to your subscriptions. The dashboard reflects the status of your compliance with these standards.

The regulatory compliance dashboard shows the status of all the assessments within your environment for your chosen standards and regulations. As you act on the recommendations and reduce risk factors in your environment, your compliance posture improves.

upvoted 1 times

 **OPT\_001122** 4 months, 2 weeks ago

**Selected Answer: B**

Azure Policy initiative to enforce the location - so given ans is not correct

upvoted 1 times

 **Clarkszw** 5 months, 3 weeks ago

good luck with exam to all reach here:)

upvoted 3 times

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 plans to deploy various Azure App Service instances that will use Azure SQL databases. The App Service instances will be deployed at the same time as the Azure SQL databases.

The company has a regulatory requirement to deploy the App Service instances only to specific Azure regions. The resources for the App Service instances must reside in the same region.

You need to recommend a solution to meet the regulatory requirement.

Solution: You recommend using an Azure Policy initiative to enforce the location.

Does this meet the goal?

A. Yes

B. No

**Correct Answer: A**

Azure Resource Policy Definitions can be used which can be applied to a specific Resource Group with the App Service instances.

In Azure Policy, we offer several built-in policies that are available by default. For example:

\* Allowed Locations (Deny): Restricts the available locations for new resources. Its effect is used to enforce your geo-compliance requirements.

Reference:

<https://docs.microsoft.com/en-us/azure/governance/policy/overview>

*Community vote distribution*

A (100%)

✉️  **Davin0406** Highly Voted 8 months, 2 weeks ago

**Selected Answer: A**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 8 times

✉️  **zellck** Most Recent 4 months ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/cloud-adoption-framework/manage/azure-server-management/common-policies#restrict-resource-regions>

Regulatory and policy compliance often depends on control of the physical location where resources are deployed. You can use a built-in policy to allow users to create resources only in certain allowed Azure regions.

upvoted 2 times

✉️  **Visakhjs** 5 months ago

Answer : A

upvoted 1 times

✉️  **dmytroslotv** 7 months, 2 weeks ago

**Selected Answer: A**

Correct

upvoted 1 times

You plan to move a web app named App1 from an on-premises datacenter to Azure.

App1 depends on a custom COM component that is installed on the host server.

You need to recommend a solution to host App1 in Azure. The solution must meet the following requirements:

- ⇒ App1 must be available to users if an Azure datacenter becomes unavailable.
- ⇒ Costs must be minimized.

What should you include in the recommendation?

- A. In two Azure regions, deploy a load balancer and a web app.
- B. In two Azure regions, deploy a load balancer and a virtual machine scale set.
- C. Deploy a load balancer and a virtual machine scale set across two availability zones.
- D. In two Azure regions, deploy an Azure Traffic Manager profile and a web app.

**Correct Answer: C**

Need to use a virtual machine as Azure App service does not allow COM components.

Need two availability zones to protect against an Azure datacenter failure.

Incorrect:

Not A, Not D: Cannot use a web app.

Azure App Service does not allow the registration of COM components on the platform. If your app makes use of any COM components, these need to be rewritten in managed code and deployed with the site or application.

Reference:

<https://docs.microsoft.com/en-us/dotnet/azure/migration/app-service#com-and-com-components>

*Community vote distribution*

C (100%)

✉  **Eltooth**  1 year, 6 months ago

**Selected Answer: C**

Question states "data centre unavailable" not region and minimise cost. This only leaves option C.  
upvoted 37 times

✉  **bkrich**  1 year, 6 months ago

**Selected Answer: C**

I think C is correct, once it said "App1 depends on a custom COM component that is installed on the host server" that sounds like you will need an actual VM.

upvoted 19 times

✉  **\_Noe\_** 1 year, 4 months ago

Yes, I agree

upvoted 4 times

✉  **AKA1987**  2 months, 2 weeks ago

Sorry, update:

Option C, which is to deploy a load balancer and a virtual machine scale set across two availability zones, is a valid solution to ensure high availability and meet the requirement of App1 being available to users if an Azure datacenter becomes unavailable.

Using Availability Zones ensures that the web app and its components are spread across multiple datacenters within the same region, which provides a high level of resiliency and fault tolerance. In the event of a localized infrastructure failure within a region, the web app would continue to be available from the other availability zone.

Therefore, in this scenario, Option C is a better answer as it meets the requirement of ensuring high availability of the web app in case of a datacenter failure, while also being more cost-effective than deploying across multiple regions.

upvoted 1 times

✉  **AKA1987** 2 months, 2 weeks ago

ChatGPT says:

The correct answer for this scenario would be D. In two Azure regions, deploy an Azure Traffic Manager profile and a web app.

Using Azure Traffic Manager, you can route incoming traffic to different Azure regions hosting the web app, ensuring that the app remains available even if one region becomes unavailable. You can choose from a range of traffic-routing methods, including priority, performance, and geographic, based on your requirements.

Deploying a load balancer and a virtual machine scale set (Options A and B) is not recommended for hosting web apps that rely on COM components. Also, a virtual machine scale set may require additional maintenance and management overhead.

Deploying a load balancer and a virtual machine scale set across two availability zones (Option C) may provide high availability, but it may not meet the requirement to minimize costs.

Therefore, the correct answer is D. In two Azure regions, deploy an Azure Traffic Manager profile and a web app.

upvoted 1 times

 **betterthanlife** 1 month, 2 weeks ago

Therefore your brain is jello.

upvoted 1 times

 **malcubierre** 2 months, 4 weeks ago

**Selected Answer: C**

A -> webapp -> No COM  
B -> LB cannot be in two regions

C -> OK

D -> webapp -> No COM

upvoted 2 times

 **zellick** 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/virtual-machines/availability#virtual-machines-scale-sets>

Azure virtual machine scale sets let you create and manage a group of load balanced VMs. The number of VM instances can automatically increase or decrease in response to demand or a defined schedule. Scale sets provide high availability to your applications, and allow you to centrally manage, configure, and update many VMs. There is no cost for the scale set itself, you only pay for each VM instance that you create.

<https://learn.microsoft.com/en-us/azure/virtual-machines/availability#load-balancer>

Combine the Azure Load Balancer with availability zones and scale sets to get the most application resiliency. The Azure Load Balancer distributes traffic between multiple virtual machines.

upvoted 3 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

C. Deploy a load balancer and a virtual machine scale set across two availability zones.

upvoted 1 times

 **OPT\_001122** 4 months, 2 weeks ago

data centre unavailable + Com component leads to C

upvoted 1 times

 **Malik007** 5 months, 2 weeks ago

Appear in exam.

upvoted 3 times

 **AzureJobsTillRetire** 6 months ago

**Selected Answer: C**

To help me to remember, availability zone = data center

upvoted 1 times

 **Dudulle** 7 months, 1 week ago

**Selected Answer: C**

Quite obvious: custom COM + reduced costs + zone (or more) redundancy = C

upvoted 2 times

 **Darkx** 8 months, 2 weeks ago

appeared on 11th Oct 2022

upvoted 3 times

 **AubinBakana** 11 months, 1 week ago

**Selected Answer: C**

Pretty straight forward. If you need access to the OS, you can't use webApp or ACI.

upvoted 1 times

 **jj0097** 11 months, 1 week ago

**Selected Answer: C**

C is good

upvoted 1 times

 **Vijayaprabu** 12 months ago

**Selected Answer: C**

Yes I agree with the answer C

upvoted 1 times

 **Gor** 1 year, 1 month ago

**Selected Answer: C**

Correct Answer - C. custom COM component, “data centre unavailable” not region and minimise cost.

upvoted 1 times

 **datafypk** 1 year, 1 month ago

was in exam 8 May 22

upvoted 2 times

 **Teringzooi** 1 year, 2 months ago

**Selected Answer: C**

Correct answer: C

“data centre unavailable” not region and minimise cost.

upvoted 1 times

You plan to deploy an application named App1 that will run in containers on Azure Kubernetes Service (AKS) clusters. The AKS clusters will be distributed across four Azure regions.

You need to recommend a storage solution to ensure that updated container images are replicated automatically to all the Azure regions hosting the AKS clusters.

Which storage solution should you recommend?

- A. geo-redundant storage (GRS) accounts
- B. Premium SKU Azure Container Registry
- C. Azure Content Delivery Network (CDN)
- D. Azure Cache for Redis

**Correct Answer: B**

Enable geo-replication for container images.

Best practice: Store your container images in Azure Container Registry and geo-replicate the registry to each AKS region.

To deploy and run your applications in AKS, you need a way to store and pull the container images. Container Registry integrates with AKS, so it can securely store your container images or Helm charts. Container Registry supports multimaster geo-replication to automatically replicate your images to Azure regions around the world.

Geo-replication is a feature of Premium SKU container registries.

Note:

When you use Container Registry geo-replication to pull images from the same region, the results are:

Faster: You pull images from high-speed, low-latency network connections within the same Azure region.

More reliable: If a region is unavailable, your AKS cluster pulls the images from an available container registry.

Cheaper: There's no network egress charge between datacenters.

Reference:

<https://docs.microsoft.com/en-us/azure/aks/operator-best-practices-multi-region>

*Community vote distribution*

B (100%)

✉  **kay000001**  9 months, 2 weeks ago

**Selected Answer: B**

B.

Geo-Replication is a premium SKU container registry feature.

upvoted 9 times

✉  **zellck**  4 months ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/container-registry/container-registry-skus>

Premium registries provide the highest amount of included storage and concurrent operations, enabling high-volume scenarios. In addition to higher image throughput, Premium adds features such as geo-replication for managing a single registry across multiple regions, content trust for image tag signing, private link with private endpoints to restrict access to the registry.

upvoted 2 times

✉  **helljzm** 4 months, 3 weeks ago

agree azure container register

upvoted 1 times

✉  **VBK8579** 4 months, 3 weeks ago

**Selected Answer: B**

Premium SKU Azure Container Registry is the most appropriate solution because it is specifically designed for container images and has features that make it ideal for this use case. It provides features such as automatic replication of images to multiple regions, integrated security, and management capabilities that make it easier to manage and deploy the images across multiple AKS clusters.

upvoted 2 times

✉  **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

B. Premium SKU Azure Container Registry

upvoted 1 times

 **OPT\_001122** 4 months, 2 weeks ago

Geo-replication is a feature of Premium SKU container registries.

upvoted 1 times

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

You plan to deploy Azure Cosmos DB databases that will use the SQL API.

You need to recommend a solution to provide specific Azure AD user accounts with read access to the Cosmos DB databases.

What should you include in the recommendation?

- A. shared access signatures (SAS) and Conditional Access policies
- B. certificates and Azure Key Vault
- C. master keys and Azure Information Protection policies
- D. a resource token and an Access control (IAM) role assignment

**Correct Answer: D**

The Access control (IAM) pane in the Azure portal is used to configure role-based access control on Azure Cosmos resources. The roles are applied to users, groups, service principals, and managed identities in Active Directory. You can use built-in roles or custom roles for individuals and groups. The following screenshot shows Active Directory integration (RBAC) using access control (IAM) in the Azure portal:

NAME	TYPE	ROLE	SCOPE
MI jyashni@contoso.com	User	DocumentDB Account Contributor	Assigned
MI miowx@contoso.com	User	Reader	Assigned
Subscription admins	Group	Owner	Inherited (Subscription)

Note: To use the Azure Cosmos DB RBAC in your application, you have to update the way you initialize the Azure Cosmos DB SDK. Instead of passing your account's primary key, you have to pass an instance of a TokenCredential class. This instance provides the Azure Cosmos DB SDK with the context required to fetch an Azure AD (AAD) token on behalf of the identity you wish to use.

Reference:

<https://docs.microsoft.com/en-us/azure/cosmos-db/role-based-access-control> <https://docs.microsoft.com/en-us/azure/cosmos-db/how-to-setup-rbac>

*Community vote distribution*

D (100%)

**key000001** Highly Voted 9 months, 2 weeks ago

**Selected Answer: D**

D. a resource token and an Access control (IAM) role assignment - correct.  
upvoted 8 times

**Darkx** Highly Voted 8 months, 2 weeks ago

appeared on 11th Oct 2022  
upvoted 6 times

**zellick** Most Recent 4 months ago

**Selected Answer: D**

D is the answer.

<https://learn.microsoft.com/en-us/azure/cosmos-db/secure-access-to-data?tabs=using-primary-key#resource-tokens>

You can use a resource token (by creating Azure Cosmos DB users and permissions) when you want to provide access to resources in your Azure Cosmos DB account to a client that cannot be trusted with the primary key.

Azure Cosmos DB resource tokens provide a safe alternative that enables clients to read, write, and delete resources in your Azure Cosmos DB account according to the permissions you've granted, and without need for either a primary or read only key.

upvoted 2 times

 **ITboy8** 4 months, 1 week ago

**Selected Answer: D**

Yes D is the one

upvoted 1 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: D**

D. a resource token and an Access control (IAM) role assignment

upvoted 1 times

 **OPT\_001122** 4 months, 2 weeks ago

The Access control (IAM) pane in the Azure portal is used to configure role-based access control on Azure Cosmos resources.

upvoted 1 times

 **Born\_Again** 6 months, 3 weeks ago

**Selected Answer: D**

D IAM and Resource Token

upvoted 1 times

You need to recommend an Azure Storage solution that meets the following requirements:

- ⇒ The storage must support 1 PB of data.
- ⇒ The data must be stored in blob storage.
- ⇒ The storage must support three levels of subfolders.
- ⇒ The storage must support access control lists (ACLs).

What should you include in the recommendation?

- A. a premium storage account that is configured for block blobs
- B. a general purpose v2 storage account that has hierarchical namespace enabled
- C. a premium storage account that is configured for page blobs
- D. a premium storage account that is configured for file shares and supports large file shares

**Correct Answer: B**

Default limits for Azure general-purpose v2 (GPv2), general-purpose v1 (GPv1), and Blob storage accounts include:

\* Default maximum storage account capacity: 5 PiB

Blob storage supports Azure Data Lake Storage Gen2, Microsoft's enterprise big data analytics solution for the cloud. Azure Data Lake Storage Gen2 offers a hierarchical file system as well as the advantages of Blob storage.

Blob storage supports Azure Data Lake Storage Gen2, Microsoft's enterprise big data analytics solution for the cloud. Azure Data Lake Storage Gen2 offers a hierarchical file system as well as the advantages of Blob storage

Incorrect:

Not D: In a Premium FileStorage account, storage size is limited to 100 TB.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blobs-introduction> <https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/azure-subscription-service-limits#storage-limits>

*Community vote distribution*

B (100%)

✉ **Davin0406** Highly Voted 8 months, 2 weeks ago

**Selected Answer: B**

appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.  
upvoted 16 times

✉ **kay000001** Highly Voted 9 months, 2 weeks ago

**Selected Answer: B**

B. a general purpose v2 storage account that has hierarchical namespace enabled.

GPv2 with hierarchical structure gives you the following provisions:

- The storage must support three levels of subfolders.
- The storage must support access control lists (ACLs).
- The storage must support 1 PB of data.
- The data must be stored in blob storage.

upvoted 9 times

✉ **rex303** Most Recent 2 months, 3 weeks ago

**Selected Answer: B**

The answer is B: general purpose v2 storage account.

The first reason is that we require Access Control lists, which require either block blob storage or general v2. Then we narrow it down even more because we require three levels of subfolders which mean we need hierarchical name spaces enabled which only option B has.

upvoted 5 times

✉ **zellck** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/storage/blobs/data-lake-storage-namespace>

With a hierarchical namespace enabled, a storage account becomes capable of providing the scalability and cost-effectiveness of object storage, with file system semantics that are familiar to analytics engines and frameworks.

upvoted 4 times

 **globy118** 4 months, 1 week ago

appeared in exam 02/15/2023

upvoted 2 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

B. a general purpose v2 storage account that has hierarchical namespace enabled

upvoted 1 times

**HOTSPOT -**

You manage a database environment for a Microsoft Volume Licensing customer named Contoso, Ltd. Contoso uses License Mobility through Software Assurance.

You need to deploy 50 databases. The solution must meet the following requirements:

- ⇒ Support automatic scaling.
- ⇒ Minimize Microsoft SQL Server licensing costs.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

Purchase model:

- |  |
|--|
| DTU                                      |
| vCore                                    |
| Azure reserved virtual machine instances |

Deployment option:

- |   |
|---|
| An Azure SQL managed instance             |
| An Azure SQL Database elastic pool        |
| A SQL Server Always On availability group |

**Answer Area**

Purchase model:

- |  |
|--|
| DTU                                      |
| vCore                                    |
| Azure reserved virtual machine instances |

Correct Answer:

Deployment option:

- |   |
|---|
| An Azure SQL managed instance             |
| An Azure SQL Database elastic pool        |
| A SQL Server Always On availability group |

Box 1: vCore -

You can only apply the Azure Hybrid licensing model when you choose a vCore-based purchasing model and the provisioned compute tier for your Azure SQL

Database. Azure Hybrid Benefit isn't available for service tiers under the DTU-based purchasing model or for the serverless compute tier.

Box 2: An Azure SQL Database elastic pool

Azure SQL Database elastic pools are a simple, cost-effective solution for managing and scaling multiple databases that have varying and unpredictable usage demands. The databases in an elastic pool are on a single server and share a set number of resources at a set price. Elastic pools in SQL Database enable software as a service (SaaS) developers to optimize the price performance for a group of databases within a prescribed budget while delivering performance elasticity for each database.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/azure-hybrid-benefit> <https://docs.microsoft.com/ko-kr/azure/azure-sql/database/elastic-pool-overview>

✉️  **Malik007** Highly Voted 5 months, 2 weeks ago

Appear in exam.

Answer is correct

upvoted 11 times

✉️  **kay000001** Highly Voted 9 months, 2 weeks ago

Answers are correct.

VCore - With the provisioned compute, you can choose the amount of compute resources that are always provisioned for your workload. With the serverless compute you can specify the autoscaling of the compute resources over a configurable compute range.

Support automatic scaling - elastic pool.

upvoted 10 times

 **lombri** Most Recent 3 weeks ago

License Mobility through Software Assurance enhances the value of volume licenses with Software Assurance by extending their use to the cloud. This benefit can also help you lower your operating costs by using an Authorized Mobility Partner's shared infrastructure.

upvoted 1 times

 **zellck** 4 months ago

1. vCore
2. An Azure SQL DB elastic pool

<https://learn.microsoft.com/en-us/azure/azure-sql/database/purchasing-models?view=azuresql#purchasing-models>

vCore-based

- This model allows you to independently choose compute and storage resources. The vCore-based purchasing model also allows you to use Azure Hybrid Benefit for SQL Server to save costs.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/elastic-pool-overview?view=azuresql>

Azure SQL Database elastic pools are a simple, cost-effective solution for managing and scaling multiple databases that have varying and unpredictable usage demands. The databases in an elastic pool are on a single server and share a set number of resources at a set price. Elastic pools in SQL Database enable software as a service (SaaS) developers to optimize the price performance for a group of databases within a prescribed budget while delivering performance elasticity for each database.

upvoted 4 times

 **OPT\_001122** 4 months, 2 weeks ago

The answer is correct

Box 1: vCore -

Azure Hybrid Benefit isn't available for service tiers under the DTU-based purchasing model or for the serverless compute tier.

Box 2: An Azure SQL Database elastic pool

MI does not support auto scaling

upvoted 2 times

 **darthfodio** 5 months ago

The answer is correct, but I'm still trying to understand why an Azure Solutions Architect would be "managing" a database, or any resources for that matter. This common across MSFT cert exams. Much overlap in role responsibilities in these specialty exams.

upvoted 3 times

 **kastanov** 5 months, 1 week ago

You cant use your licenses in Azure SQL Database. It should be managed instance

upvoted 1 times

 **testtaker13** 4 months, 2 weeks ago

Doesn't look to be true.

<https://learn.microsoft.com/en-us/azure/azure-sql/azure-hybrid-benefit?view=azuresql&tabs=azure-portal>

upvoted 1 times

 **arska** 7 months ago

vCore and elastic pool. This link explains it all:

<https://www.microsoft.com/en-us/licensing/news/expanded-ahb-rights-for-microsoft-sql-server>

upvoted 1 times

 **Snownoodles** 8 months ago

Given answer is correct

MI doesn't support auto-scale

upvoted 2 times

 **Dinima** 9 months ago

I feel the answer for this is managed instance, as only that supports bring your own licensing. Elastic pool is an option with azure sql which doesn't provide the option use the existing licensing.

upvoted 4 times

 **codefries** 8 months, 3 weeks ago

managed instance does not support auto-scale: No, you need to choose reserved compute and storage. The change of service tier (vCore or max storage) is online and requires minimal or no downtime. <https://learn.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql>

upvoted 1 times

 **Marciojsilva** 8 months, 4 weeks ago

that's true, I check on website

"To set or update the license type using the Azure portal:

For new managed instances, during creation, select Configure Managed Instance on the Basics tab and select the option for Azure Hybrid Benefit.

For existing managed instances, select Compute + storage in the Settings menu and select the option for Azure Hybrid Benefit."

<https://learn.microsoft.com/en-us/azure/azure-sql/azure-hybrid-benefit?view=azuresql&tabs=azure-portal>

upvoted 1 times

 **ronsav80** 8 months, 3 weeks ago

See <https://learn.microsoft.com/en-us/azure/azure-sql/azure-hybrid-benefit?view=azuresql&tabs=azure-portal> ... "You can only apply the Azure Hybrid licensing model when you choose a vCore-based purchasing model and the provisioned compute tier for your Azure SQL Database."

upvoted 1 times

You have an on-premises application named App1 that uses an Oracle database.

You plan to use Azure Databricks to transform and load data from App1 to an Azure Synapse Analytics instance.

You need to ensure that the App1 data is available to Databricks.

Which two Azure services should you include in the solution? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Azure Data Box Gateway
- B. Azure Import/Export service
- C. Azure Data Lake Storage
- D. Azure Data Box Edge
- E. Azure Data Factory

**Correct Answer: BE**

Data Factory is a data integration service that provides a low-code or no-code approach to construct extract, transform, and load (ETL) processes within a visual environment or by writing your own code.

Exporting data, either to another data technology or to another Dataverse environment, can use any of the same technologies for importing data, such as dataflows, Data Factory, Power Query, and Power Automate.

Reference:

<https://docs.microsoft.com/en-us/power-apps/maker/data-platform/import-export-data>

*Community vote distribution*

CE (81%)

BE (19%)

✉️  **Snownoodles**  9 months, 2 weeks ago

**Selected Answer: CE**

The correct answer should be C and E

ADF moves data from on-prem Oracle to Data Lake storage, which makes data ready for DataBrick

<https://docs.microsoft.com/en-us/azure/data-factory/load-azure-data-lake-storage-gen2>

DataBricks "ETL" data to Synapse:

<https://docs.microsoft.com/en-us/azure/databricks/scenarios/databricks-extract-load-sql-data-warehouse>

upvoted 26 times

✉️  **np2021** 4 months, 1 week ago

I thought this also at first, but the first line of the question indicates on-premises Oracle data. So i think the question is suggesting "getting the data to Azure/into a lake so DataBricks can process it". In which case this is Import/DataFactory requirement.

This is very difficult call to make, i think when sitting the test just assume you will get 1/2 points on this one.

upvoted 2 times

✉️  **mufflon** 9 months ago

yes, this is the only answer if they dont ask for how to get the data to azure

upvoted 3 times

✉️  **d365ppp**  6 months, 1 week ago

**Selected Answer: BE**

Two Services not storage

upvoted 7 times

✉️  **pkkalra** 4 months, 1 week ago

Azure lake storage is a cloud "service" offered by MS

upvoted 2 times

✉️  **wpestan**  1 month, 1 week ago

**Selected Answer: BE**

B and E, teacher correct in question in Azure Course

upvoted 1 times

✉️  **Tr619899** 1 month, 1 week ago

Azure Data Lake Storage (Option C): Azure Data Lake Storage provides a scalable and secure repository for storing large amounts of data. You can ingest data from App1 into Azure Data Lake Storage, and then make it available for processing in Azure Databricks.

Azure Data Factory (Option E): Azure Data Factory is a fully managed data integration service that allows you to orchestrate and automate data

movement and data transformation workflows. You can use Azure Data Factory to extract data from App1, transform it using Azure Databricks, and then load it into Azure Synapse Analytics.

upvoted 1 times

✉ **yonie** 2 months ago

**Selected Answer: CE**

In AZ-304 it was ADL and ADF meaning CE

<https://www.examtopics.com/discussions/microsoft/view/51579-exam-az-304-topic-3-question-20-discussion/>

upvoted 2 times

✉ **rex303** 2 months, 3 weeks ago

**Selected Answer: CE**

This scenario should be consistent with using C and E.

Azure Data Factory is a recommended solution for migrating Oracle data.

Azure Data Lake storage can then hold the data in a useable format for the chosen solution: Azure Databricks.

Azure Data Box Gateway does not natively support Oracle. Azure Data Box Edge is an appliance not a service. And the azure import/export service is for one-shot migrations not really suitable for this scenario.

upvoted 1 times

✉ **cp2323** 4 months ago

**Selected Answer: CE**

CE should be the answer, why somone want to use Azure Import/Export service!

upvoted 1 times

✉ **zellck** 4 months, 1 week ago

**Selected Answer: CE**

CE is the answer.

<https://learn.microsoft.com/en-us/azure/storage/blobs/data-lake-storage-introduction#designed-for-enterprise-big-data-analytics>

Data Lake Storage Gen2 makes Azure Storage the foundation for building enterprise data lakes on Azure. Designed from the start to service multiple petabytes of information while sustaining hundreds of gigabits of throughput, Data Lake Storage Gen2 allows you to easily manage massive amounts of data.

<https://learn.microsoft.com/en-us/azure/data-factory/introduction>

Big data requires a service that can orchestrate and operationalize processes to refine these enormous stores of raw data into actionable business insights. Azure Data Factory is a managed cloud service that's built for these complex hybrid extract-transform-load (ETL), extract-load-transform (ELT), and data integration projects.

upvoted 3 times

✉ **zellck** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/synapse-analytics/migration-guides/oracle/7-beyond-data-warehouse-migration>

A key reason to migrate your existing data warehouse to Azure Synapse Analytics is to utilize a globally secure, scalable, low-cost, cloud-native, pay-as-you-use analytical database. With Azure Synapse, you can integrate your migrated data warehouse with the complete Microsoft Azure analytical ecosystem to take advantage of other Microsoft technologies and modernize your migrated data warehouse. Those technologies include:

- Azure Data Lake Storage for cost effective data ingestion, staging, cleansing, and transformation. Data Lake Storage can free up the data warehouse capacity occupied by fast-growing staging tables.
- Azure Data Factory for collaborative IT and self-service data integration with connectors to cloud and on-premises data sources and streaming data.

upvoted 2 times

✉ **Rams\_84z06n** 4 months, 1 week ago

**Selected Answer: BE**

I remember answering another question Topic 1 Q26 <https://www.examtopics.com/exams/microsoft/az-305/view/6/>

The solution suggests import/export might be good option to ingest on-premise data continuously upstream to processing the data with ADF pipeline.

upvoted 1 times

✉ **Rams\_84z06n** 4 months, 1 week ago

**Selected Answer: BE**

on-premise data => Azure Synapse Link for dataverse (import/export) => Data Factory (data pipeline) => data bricks

upvoted 1 times

✉ **Eusouzati** 4 months, 1 week ago

**Selected Answer: CE**

Is Correct

C. Azure Data Lake Storage

E. Azure Data Factory

upvoted 1 times

✉ **VBK8579** 4 months, 1 week ago

**Selected Answer: CE**

Azure Data Lake Storage can be used to store the transformed data from App1 to be loaded into Azure Synapse Analytics instance.  
Azure Data Factory can be used to extract the data from the Oracle database and load it into Azure Data Lake Storage. The transformed data can then be loaded into Azure Synapse Analytics using Databricks

upvoted 1 times

**SvenHorsheim** 4 months, 2 weeks ago

I guess the question is what is MSFT asking with this question? Are they asking what services you would use to actually get the data to an Azure storage account? Or are they asking for a complete package of what you would use to get it to an Azure storage account and what kind of storage account to use? Very tricky and I don't have a good feel for it.

Obviously, if the former, then it will be Import/Export & ADF.

If the latter then technically you could use either import/export or ADF for the mechanism to get the data up and then Data lake as the storage type.

As a side note there is a very similar question to this earlier in the dump where import/export is the consensus.

upvoted 1 times

**OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: CE**

C. Azure Data Lake Storage

E. ADF

upvoted 1 times

**d365ppp** 6 months, 1 week ago

The question is two services. So, definitely imp/exp & ADF

upvoted 2 times

**Xinx** 9 months, 1 week ago

To be honest, databricks can directly inject data from oracle.

upvoted 3 times

**kay000001** 9 months, 2 weeks ago

**Selected Answer: CE**

C & E.

upvoted 6 times

**HOTSPOT -**

You are designing a cost-optimized solution that uses Azure Batch to run two types of jobs on Linux nodes. The first job type will consist of short-running tasks for a development environment. The second job type will consist of long-running Message Passing Interface (MPI) applications for a production environment that requires timely job completion.

You need to recommend the pool type and node type for each job type. The solution must minimize compute charges and leverage Azure Hybrid Benefit whenever possible.

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

NOTE: Each correct selection is worth one point.

Hot Area:

**Answer Area**

First job:

Batch service and dedicated virtual machines
User subscription and dedicated virtual machines
User subscription and low-priority virtual machines

Second job:

Batch service and dedicated virtual machines
User subscription and dedicated virtual machines
User subscription and low-priority virtual machines

**Answer Area**

First job:

Batch service and dedicated virtual machines
User subscription and dedicated virtual machines
User subscription and low-priority virtual machines

Correct Answer:

Second job:

Batch service and dedicated virtual machines
User subscription and dedicated virtual machines
User subscription and low-priority virtual machines

Box 1: User subscription and low-priority virtual machines

The first job type will consist of short-running tasks for a development environment.

Among the many ways to purchase and consume Azure resources are Azure low priority VMs and Spot VMs. These virtual machines are compute instances allocated from spare capacity, offered at a highly discounted rate compared to "on demand" VMs. This means they can be a great option for cost savings for the right workloads.

Box 2: Batch service and dedicated virtual machines

The second job type will consist of long-running Message Passing Interface (MPI) applications for a production environment that requires timely job completion.

Azure Batch Service is a cloud based job scheduling and compute management platform that enables running large-scale parallel and high performance computing applications efficiently in the cloud. Azure Batch Service provides job scheduling and automatically scaling and managing virtual machines running those jobs.

Reference:

<https://www.parkmycloud.com/blog/azure-low-priority-vms>  
<https://azure.microsoft.com/en-us/pricing/details/batch/>

✉️  **jellybiscuit**  9 months, 1 week ago

I agree with the given answer.  
- Low Priority VMs  
- batch service and dedicated VMs

Low priority VMs are being phased out by Spot VMs, but it does exist.  
<https://learn.microsoft.com/en-us/azure/batch/batch-spot-vms>

I feel like the mention of Hybrid Benefit is a red herring here. Without knowing your linux variant, that may not even factor into the decision. You can enable it on RHEL or SUSE on a VM.

I'm not entirely clear how licensing factors into batch, but the functionality of the batch pool is the most important thing here.

upvoted 18 times

✉️  **Nicklaas** 8 months, 4 weeks ago

Good point about the licensing, also uncertain how it factors (if at all).

upvoted 1 times

✉️  **Snownoodles** 8 months ago

Low Priority VM can only be supported in Batch Service  
Spot VMs can only be supported in user subscription  
upvoted 3 times

✉️  **Snownoodles**  9 months, 2 weeks ago

The answer should be:  
"User Subscription and Dedicated virtual machines"  
"User Subscription and Dedicated virtual machines"

1. To use "Azure Hybrid Benefit", the pool allocation mode has to be "User Subscription"
2. "User Subscription" doesn't support low-priority VMs(Batch service does)

upvoted 8 times

✉️  **Galron** 8 months, 1 week ago

But there is not Hybrid Benefit as OS is Linux and needs to be Windows OS.

upvoted 1 times

✉️  **Villa76** 6 months ago

There is Hybrid benefits for Linux :  
<https://learn.microsoft.com/en-us/azure/virtual-machines/linux/azure-hybrid-benefit-byos-linux>  
Low priority virtual machines is an Azure Batch concept (Batch computing at a fraction of the price). Low priority virtual machines get allocated from the surplus of compute capacity in each region and are offered at a substantially reduced price. This comes with the understanding that there may not be capacity available to satisfy your request. In some rare cases, Azure may have to take some of this capacity back to satisfy other compute allocation requests.

Low priority virtual machines are well suited for batch activities like media processing / encoding

If you are looking at deploying an A-Series virtual machine in Azure then there are two tiers to choose from:

Basic  
Standard  
upvoted 1 times

✉️  **Snownoodles** 8 months ago

"Azure Hybrid Benefit now provides software updates and integrated support directly from Azure infrastructure for Red Hat Enterprise Linux (RHEL) and SUSE Linux Enterprise Server (SLES) virtual machines"  
<https://learn.microsoft.com/en-us/azure/virtual-machines/linux/azure-hybrid-benefit-byos-linux>

upvoted 2 times

✉️  **lombri**  1 month, 3 weeks ago

Short-running tasks for development environment:

Pool type: On-demand

Node type: Low-priority VMs

Explanation: Since the job type consists of short-running tasks for a development environment, it's recommended to use On-demand pool type and Low-priority VMs as they are the most cost-effective option.

Long-running MPI applications for production environment:

Pool type: Batch service

Node type: Dedicated VMs

Explanation: Since the job type consists of long-running MPI applications for a production environment, it's recommended to use Batch service

pool type and Dedicated VMs as they provide better performance and reliability. Using Azure Hybrid Benefit will help to minimize compute charges.

upvoted 1 times

✉ **zellck** 4 months ago

1. User subscription and low-priority virtual machines
2. Batch service and dedicated virtual machines

<https://learn.microsoft.com/en-us/azure/machine-learning/how-to-use-low-priority-batch?tabs=cli>

Azure Batch Deployments supports low priority VMs to reduce the cost of batch inference workloads. Low priority VMs enable a large amount of compute power to be used for a low cost. Low priority VMs take advantage of surplus capacity in Azure. When you specify low priority VMs in your pools, Azure can use this surplus, when available.

The tradeoff for using them is that those VMs may not always be available to be allocated, or may be preempted at any time, depending on available capacity. For this reason, they are most suitable for batch and asynchronous processing workloads where the job completion time is flexible and the work is distributed across many VMs.

Low priority VMs are offered at a significantly reduced price compared with dedicated VMs.

upvoted 4 times

✉ **zellck** 3 months, 4 weeks ago

Got this in Feb 2023 exam.

upvoted 5 times

✉ **zellck** 4 months ago

<https://learn.microsoft.com/en-us/azure/batch/best-practices#pool-configuration-and-naming>

Pool allocation mode: When creating a Batch account, you can choose between two pool allocation modes: Batch service or user subscription. For most cases, you should use the default Batch service mode, in which pools are allocated behind the scenes in Batch-managed subscriptions. In the alternative user subscription mode, Batch VMs and other resources are created directly in your subscription when a pool is created. User subscription accounts are primarily used to enable a small but important subset of scenarios.

upvoted 5 times

✉ **VBK8579** 4 months, 3 weeks ago

For the first job type: User subscription and low-priority virtual machines

For the second job type: Batch service and dedicated virtual machines

upvoted 4 times

✉ **RandomNickname** 4 months, 3 weeks ago

Given answer looks correct to me.

First questions fairly straight forward

Second see article;

<https://learn.microsoft.com/en-us/azure/batch/batch-mpi>

upvoted 1 times

✉ **LeeVee** 5 months, 1 week ago

The key here states that "The solution must minimize compute charges and leverage Azure Hybrid Benefit \*\*whenever\*\* possible. So Job1= low prio VMs, Job2 Batchw/dedicatedVMs. It's pointless to have dedicated VMs for a short-run job1."

upvoted 1 times

✉ **Malik007** 5 months, 2 weeks ago

Appear in exam.

Answer is correct

upvoted 3 times

✉ **rocroberto** 6 months, 2 weeks ago

Probably because it is talking about dev rather prod, low priority/spot instances are not a bad idea ?

upvoted 1 times

✉ **in\_da\_cloud** 6 months, 3 weeks ago

I guess - the question is not complete, that's why - the answers are not logical:

The first job type will consist of short-running tasks for a development environment:

batch service and low-priority virtual machines

You don't need reserved instances and can go for this option.

the second productive job is a long runner and needs relatively much compute power

Therefore you need user sub dedicated prio virtual machines:

This option gives you the ability to reserve instances with relatively strong compute power.

upvoted 1 times

✉ **randomaccount123** 7 months, 3 weeks ago

"User Subscription and Dedicated virtual machines"

"User Subscription and Dedicated virtual machines"

upvoted 1 times

✉ **kay000001** 9 months, 2 weeks ago

Answer should be -

First Job:

User Subscription and dedicated virtual machines.

Second Job:

Batch service and dedicated virtual machines.

<https://docs.microsoft.com/en-us/azure/batch/batch-quota-limit>

upvoted 6 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages. What should you include in the recommendation?

- A. Azure Notification Hubs
- B. Azure Service Fabric
- C. Azure Queue Storage
- D. Azure Data Lake

**Correct Answer: C**

Queue Storage delivers asynchronous messaging between application components, whether they are running in the cloud, on the desktop, on an on-premises server, or on a mobile device.

The maximum message size supported by Azure Storage Queues is 64KB while Azure Service Bus Queues support messages up to 256KB. This becomes an important factor especially when the message format is padded (such as XML).

Reference:

<https://docs.microsoft.com/en-us/azure/storage/queues/storage-dotnet-how-to-use-queues> <https://blog.kloud.com.au/2016/03/01/cloud-cushioning-using-azure-queues/>

*Community vote distribution*

C (88%) 13%

✉  **shubhary25**  9 months, 3 weeks ago

**Selected Answer: C**

Azure Queue Storage is the correct answer

upvoted 9 times

✉  **Teab91** 8 months, 2 weeks ago

Not so sure about that

upvoted 1 times

✉  **yonie**  2 months ago

**Selected Answer: C**

There are 15 variations of this question, each offering different answers. In all 15 questions, there is always only one out of two answers: either its Azure Queue Storage or its Azure Service Bus.

I havent seen a question where both of them are a possibility.

upvoted 5 times

✉  **lombri**  1 month, 3 weeks ago

**Selected Answer: C**

Azure Queue Storage is a messaging service that allows decoupling of components in an application by providing a reliable way to pass messages between them asynchronously. It can handle messages in a first-in-first-out (FIFO) order and can scale to handle millions of messages per second.

By using Azure Queue Storage, each component of the transaction process can push messages to the queue with relevant transaction information in XML format, which can be retrieved by the receiving component. This allows for loose coupling between the components, as they do not need to know about each other to communicate.

Azure Notification Hubs and Azure Service Fabric are not messaging services but rather services for pushing notifications and deploying microservices, respectively. Azure Data Lake is a storage service for big data processing and analytics and does not provide messaging capabilities.

upvoted 1 times

✉  **zellck** 4 months ago

Same as Question 83.

<https://www.examtopics.com/discussions/microsoft/view/99750-exam-az-305-topic-4-question-83-discussion>

upvoted 2 times

✉  **zellck** 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/storage/queues/storage-queues-introduction>  
Azure Queue Storage is a service for storing large numbers of messages. You access messages from anywhere in the world via authenticated calls using HTTP or HTTPS. A queue message can be up to 64 KB in size. A queue may contain millions of messages, up to the total capacity limit of a storage account. Queues are commonly used to create a backlog of work to process asynchronously.

upvoted 2 times

✉ cp2323 4 months, 1 week ago

**Selected Answer: B**

ASB. this is repeated question

upvoted 1 times

✉ Bigbluee 2 months ago

There is no ASB in answers. Think!

upvoted 1 times

✉ moshos 4 months, 2 weeks ago

**Selected Answer: C**

Correct Answer: C

upvoted 1 times

✉ VBK8579 4 months, 3 weeks ago

**Selected Answer: C**

C. Azure Queue Storage

upvoted 1 times

✉ OPT\_001122 4 months, 3 weeks ago

**Selected Answer: C**

C. Azure Queue Storage

upvoted 1 times

✉ VBK8579 5 months ago

C. Azure Queue Storage

upvoted 1 times

✉ LeeVee 5 months, 1 week ago

In absence of ASB in the choose, next solution to be look at is Azure Storage Queue. In my opinion though, ASB is more durable than a Storage queue.

upvoted 3 times

✉ janvandermerwer 5 months, 1 week ago

**Selected Answer: C**

I'm going to have to go with C on this one.

upvoted 1 times

✉ yeanlingmedal71 5 months, 1 week ago

**Selected Answer: B**

Asynchronous messaging options.

There are different types of messages and the entities that participate in a messaging infrastructure. Based on the requirements of each message type, Microsoft recommends Azure messaging services. The options include Azure Service Bus, Event Grid, and Event Hubs.

Azure Service Bus queues are well suited for transferring commands from producers to consumers.

Data is transferred between different applications and services using messages. A message is a container decorated with metadata, and contains data. The data can be any kind of information, including structured data encoded with the common formats such as the following ones: JSON, XML, Apache Avro, Plain Text.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/messaging>

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

upvoted 2 times

✉ Tash95 5 months, 1 week ago

Azure Service Fabric is a distributed systems platform that makes it easy to package, deploy, and manage scalable and reliable microservices and containers. Azure Service Fabric enables you to create Service Fabric clusters on premises or in other clouds. Azure Service Fabric is low-latency and scales up to thousands of machines.

So nothing to do with messaging

upvoted 1 times

✉ honzar 5 months, 3 weeks ago

Appeared 2023/01/03 in the exam

upvoted 4 times

✉ Teab91 8 months, 2 weeks ago

Duplicate question with wrong answer.

Topic 4 and question 13

upvoted 3 times

 **gg112022** 8 months, 1 week ago

Topic 4 and Question 13 choices are different and the answer there is "Azure Service Bus". For this question "Azure Queue Storage" is the answer.

upvoted 9 times

 **lvz** 1 month ago

how can azure queue storage be an answer? as AQS doesnt support First in first out and doesnt guarantee non duplication either.

upvoted 1 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages. What should you include in the recommendation?

- A. Azure Notification Hubs
- B. Azure Service Fabric
- C. Azure Queue Storage
- D. Azure Application Gateway

**Correct Answer: C**

Queue storage is often used to create a backlog of work to process asynchronously.

A queue message must be in a format compatible with an XML request using UTF-8 encoding.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/queues/storage-tutorial-queues>

*Community vote distribution*

C (88%) 13%

✉️  **lolo13698**  8 months, 2 weeks ago

Seriously, duplicate question again. What is the contributor access advantage exactly ?!

upvoted 11 times

✉️  **luke996** 7 months, 2 weeks ago

Monello

upvoted 2 times

✉️  **meinekarte** 7 months, 3 weeks ago

The answers are different, read again

upvoted 2 times

✉️  **Guest** 6 months, 1 week ago

As far as I see only option D is different, the rest looks identical

upvoted 1 times

✉️  **ServerBrain** 5 months, 3 weeks ago

Therefore, it's not duplicate..

upvoted 3 times

✉️  **lombri**  1 month, 3 weeks ago

**Selected Answer: C**

Answer: Azure Queue Storage

Reasons:

- Azure Queue Storage is a messaging solution that enables asynchronous communication between different components of a distributed system.
- It supports message-based communication using XML and other formats.
- It is a cost-effective solution for managing message queues, and it scales automatically based on demand.

upvoted 1 times

✉️  **zellck** 4 months ago

Same as Question 83.

<https://www.examtopics.com/discussions/microsoft/view/99750-exam-az-305-topic-4-question-83-discussion>

upvoted 1 times

✉️  **zellck** 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/storage/queues/storage-queues-introduction>

Azure Queue Storage is a service for storing large numbers of messages. You access messages from anywhere in the world via authenticated calls using HTTP or HTTPS. A queue message can be up to 64 KB in size. A queue may contain millions of messages, up to the total capacity limit of a storage account. Queues are commonly used to create a backlog of work to process asynchronously.

upvoted 1 times

✉ **Eusouzati** 4 months, 1 week ago

**Selected Answer: C**

C. Azure Queue Storage

upvoted 1 times

✉ **VBK8579** 4 months, 3 weeks ago

**Selected Answer: C**

C. Azure Queue Storage

upvoted 1 times

✉ **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

C. Azure Queue Storage

upvoted 1 times

✉ **Zepponstream** 5 months ago

**Selected Answer: C**

C. Azure Queue Storage.

Azure Queue Storage can be used to asynchronously communicate transaction information between cloud services by using XML messages. Azure Queue Storage is a fully managed message queue that can store and retrieve large numbers of messages. Messages can be stored in a queue for a specified period of time and can be retrieved by multiple consumers. This allows different cloud services to process customer orders, billing, payment, inventory, and shipping in parallel and asynchronously, without having to wait for a response from other services.

upvoted 1 times

✉ **tfulanchan** 5 months ago

I want a refund or a convincing explanation.

upvoted 1 times

✉ **bacms** 5 months ago

**Selected Answer: C**

Duplicated with #65, should be Azure Queue Storage

upvoted 1 times

✉ **yeanlingmedal71** 5 months, 1 week ago

**Selected Answer: B**

Asynchronous messaging options.

There are different types of messages and the entities that participate in a messaging infrastructure. Based on the requirements of each message type, Microsoft recommends Azure messaging services. The options include Azure Service Bus, Event Grid, and Event Hubs.

Azure Service Bus queues are well suited for transferring commands from producers to consumers.

Data is transferred between different applications and services using messages. A message is a container decorated with metadata, and contains data. The data can be any kind of information, including structured data encoded with the common formats such as the following ones: JSON, XML, Apache Avro, Plain Text.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/messaging>

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

upvoted 1 times

✉ **FabrityDev** 5 months ago

Option B is Service Fabric, not Service Bus

upvoted 2 times

✉ **70mach1** 5 months, 2 weeks ago

The question is worded the same and the answer is the same. Just because you changed one answer does not make them different questions. Really puts the "185 questions" in doubt.

upvoted 3 times

You need to design a highly available Azure SQL database that meets the following requirements:

- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

- Azure SQL Database Hyperscale
- Azure SQL Database Premium
- Azure SQL Database Basic
- Azure SQL Database Standard

**Correct Answer: B**

*Community vote distribution*

B (83%) D (17%)

 **mVic**  5 months, 2 weeks ago

**Selected Answer: B**

Premium should be the answer.

Whenever zone-redundancy (availability within the same region) is required you can only choose:

- General Purpose
- Premium
- Business Critical

See:

<https://learn.microsoft.com/en-GB/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>  
upvoted 10 times

 **ServerBrain**  5 months, 3 weeks ago

Actually About 23 questions added today..

upvoted 5 times

 **[Removed]** 5 months, 3 weeks ago

Some look like they are duplicates

upvoted 3 times

 **steel72**  3 months, 1 week ago

**Selected Answer: B**

Correct answer is "Azure SQL Database Premium".

Basic and Standard do not support zone-redundancy:

<https://learn.microsoft.com/en-GB/azure/azure-sql/database/high-availability-sla>

upvoted 1 times

 **zellick** 4 months, 1 week ago

Same as Question 16.

<https://www.examtopics.com/discussions/microsoft/view/79423-exam-az-305-topic-2-question-16-discussion>

upvoted 1 times

 **zellick** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql#service-tiers>

The Premium service tier is designed for OLTP applications with high transaction rates and low latency I/O requirements. It offers the highest resilience to failures by using several isolated replicas.

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: B**

B. Azure SQL Database Premium

upvoted 1 times

✉ **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

B. Azure SQL Database Premium

upvoted 1 times

✉ **janvandermerwer** 5 months, 1 week ago

**Selected Answer: B**

Premium for failover without data loss.

upvoted 1 times

✉ **yeanlingmedal71** 5 months, 1 week ago

**Selected Answer: B**

Azure SQL Database Premium tier supports multiple redundant replicas for each database that are automatically provisioned in the same datacenter within a region. This design leverages the SQL Server AlwaysON technology and provides resilience to server failures with 99.99% availability SLA and RPO=0.

With the introduction of Azure Availability Zones, we are happy to announce that SQL Database now offers built-in support of Availability Zones in its Premium service tier.

<https://azure.microsoft.com/en-us/blog/azure-sql-database-now-offers-zone-redundant-premium-databases-and-elastic-pools/>

Zone-redundant configuration is not available in SQL Managed Instance. In SQL Database this feature is only available when the Gen5 hardware is selected.

<https://docs.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

upvoted 3 times

✉ **uacanillo** 5 months, 1 week ago

The deployment option that should be used to meet the requirements of a highly available Azure SQL database with minimal data loss and minimal cost is option D, Azure SQL Database Standard. This option provides active-passive failover capabilities and also allows for read-access to secondary replicas, which can help minimize costs. Additionally, it also provides zone-redundant databases, so in case of zone outage, the database will remain available

upvoted 1 times

✉ **diego84** 5 months ago

check this

Basic, Standard, and General Purpose service tier locally redundant availability.  
However, General Purpose service tier zone redundant availability

<https://learn.microsoft.com/en-GB/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

upvoted 1 times

✉ **mscbsgt** 5 months, 3 weeks ago

**Selected Answer: D**

Azure SQL database standard as we have to minimize costs:

<https://azure.microsoft.com/en-us/blog/azure-sql-database-standard-geo-replication/>

upvoted 4 times

✉ **maku067** 5 months, 3 weeks ago

**Selected Answer: B**

seems correct.

upvoted 1 times

✉ **ServerBrain** 5 months, 3 weeks ago

This question was added today 05Jan2023. Serves as update confirmation ..

upvoted 2 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.

What should you include in the recommendation?

- A. Azure Service Bus
- B. Azure Data Lake
- C. Azure Traffic Manager
- D. Azure Blob Storage

**Correct Answer: A**

*Community vote distribution*

A (100%)

✉  **lombri** 1 month, 3 weeks ago

**Selected Answer: A**

Azure Service Bus

because it is a messaging service that supports asynchronous communication between different components of an application.

It enables the exchange of messages using different protocols and message patterns, including XML messages.

It also supports features such as pub/sub messaging, message batching, and message ordering.

upvoted 1 times

✉  **zellck** 4 months ago

Same as Question 82.

<https://www.examtopics.com/discussions/microsoft/view/99749-exam-az-305-topic-4-question-82-discussion>

upvoted 1 times

✉  **zellck** 4 months ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

Azure Service Bus is a fully managed enterprise message broker with message queues and publish-subscribe topics (in a namespace). Service Bus is used to decouple applications and services from each other, providing the following benefits:

- Load-balancing work across competing workers
- Safely routing and transferring data and control across service and application boundaries
- Coordinating transactional work that requires a high-degree of reliability

upvoted 2 times

✉  **RouterWiFi443** 4 months ago

**Selected Answer: A**

Azure Service Bus

upvoted 1 times

✉  **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: A**

Azure Service Bus

upvoted 1 times

✉  **VBK8579** 5 months ago

**Selected Answer: A**

A is correct

upvoted 1 times

✉  **ZakySama** 5 months, 2 weeks ago

**Selected Answer: A**

Correct ( Azure Service Bus or Azure Queue Storage)

upvoted 3 times

 **maku067** 5 months, 3 weeks ago

**Selected Answer: A**

seems correct.

upvoted 1 times

 **Clarkszw** 5 months, 3 weeks ago

**Selected Answer: A**

Service bus or Storage queue

upvoted 1 times

 **ServerBrain** 5 months, 3 weeks ago

**Selected Answer: A**

A is 100% correct

upvoted 1 times

You need to design a highly available Azure SQL database that meets the following requirements:

- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

- Azure SQL Database Basic
- Azure SQL Managed Instance General Purpose
- Azure SQL Database Business Critical
- Azure SQL Managed Instance Business Critical

**Correct Answer: C**

*Community vote distribution*

C (71%)	B (25%)	4%
---------	---------	----

✉️  **lombri** 1 month, 3 weeks ago

**Selected Answer: B**

Option B (Azure SQL Managed Instance General Purpose)

best meets the stated requirements, as it supports automatic failover between replicas and ensures availability even in the event of a zone outage, at a lower cost than Option C, and D.

upvoted 1 times

✉️  **lombri** 1 month, 3 weeks ago

D. Azure SQL Managed Instance Business Critical.

This option is designed for high availability and disaster recovery, with multiple replicas across different availability zones to ensure minimal data loss and downtime.

The Business Critical service tier

offers the highest resilience to failures and is specifically designed for OLTP applications with high transaction rates and low latency I/O requirements.

Option C, Azure SQL Database Business Critical, only offers replication within the same region and does not provide zone redundancy.

upvoted 1 times

✉️  **alexander\_panfilenok** 1 week, 1 day ago

Azure SQL Database Business Critical does provide Zone Redundancy: <https://learn.microsoft.com/en-GB/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

upvoted 1 times

✉️  **zellck** 4 months, 1 week ago

Same as Question 84.

<https://www.examtopics.com/discussions/microsoft/view/99751-exam-az-305-topic-4-question-84-discussion>

upvoted 2 times

✉️  **zellck** 4 months, 1 week ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql#service-tiers>

The Business Critical service tier is designed for OLTP applications with high transaction rates and low latency I/O requirements. It offers the highest resilience to failures by using several isolated replicas.

upvoted 4 times

✉️  **pkkalra** 4 months, 1 week ago

**Selected Answer: C**

C. Azure SQL Database Business Critical

upvoted 2 times

✉️  **\_fvt** 4 months, 1 week ago

**Selected Answer: C**

"Zone-redundant configuration is currently in preview for SQL Managed Instance, and only available for the Business Critical service tier." (<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>)

So any Managed Instance option should yet not be an acceptable answer.

upvoted 3 times

✉️ **\_fvt** 4 months, 1 week ago

Also Azure SQL Database Basic doesn't offer zone redundant availability so it can only be answer C: "Azure SQL Database Business Critical"

upvoted 1 times

✉️ **Lu5ck** 4 months, 3 weeks ago

**Selected Answer: C**

Hi guys,

Managed Instance General Purpose zone redundant feature is not available world wide yet therefore I don't think is a "safe" answer.

Therefore, it come down to C and D. Azure SQL Database Business Critical should be cheaper than Managed. I mean, managed is called managed for a reason even if you don't know the actual available specs. Upon googling, you will learn that Azure SQL Database Business Critical provide lower specs aka cheaper options than Managed.

upvoted 3 times

✉️ **jingasloth** 4 months, 3 weeks ago

ChatGPT says C - Azure SQL Database Business Critical

upvoted 4 times

✉️ **ITboy8** 4 months, 1 week ago

well, respect the chatGPT then. I will go with C

upvoted 1 times

✉️ **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

B. Azure SQL Managed Instance General Purpose

upvoted 1 times

✉️ **OPT\_001122** 4 months, 3 weeks ago

this seems not to be the correct ans,

Same question73 has a different ans and it is highly voted

A. Azure SQL Database Business Critical

upvoted 1 times

✉️ **Tralala182** 4 months, 4 weeks ago

Chatgpt answer is D

upvoted 2 times

✉️ **tfulanchan** 5 months ago

**Selected Answer: C**

Zone-redundant configuration is currently in preview for SQL Managed Instance, and only available for the Business Critical service tier.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#general-purpose-service-tier-zone-redundant-availability>

upvoted 3 times

✉️ **VBK8579** 5 months ago

**Selected Answer: C**

C. Azure SQL Database Business Critical

upvoted 2 times

✉️ **VBK8579** 5 months ago

**Selected Answer: D**

C. Azure SQL Database Business Critical

upvoted 1 times

✉️ **Nvoisn** 5 months ago

**Selected Answer: B**

General Purpose can use ZRS

upvoted 1 times

✉️ **RandomNickname** 5 months, 1 week ago

**Selected Answer: B**

General Purpose can use ZRS and it meets the costs must be minimized request, no need for Premium as far as I can see.

<https://learn.microsoft.com/en-GB/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

<https://techcommunity.microsoft.com/t5/azure-sql-blog/zone-redundancy-for-azure-sql-database-general-purpose-tier/ba-p/3280376>

upvoted 4 times

 **np2021** 4 months, 1 week ago

Although General Purpose exists, its not given as an option - only Az Db BASIC. There is no such thing as BASIC service level.  
upvoted 1 times

 **mVic** 5 months, 2 weeks ago

for these questions where zone-redundancy is required, there are only these options:  
-General Purpose  
-Premium  
-Business Critical

<https://learn.microsoft.com/en-GB/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>  
upvoted 4 times

 **maku067** 5 months, 3 weeks ago

A lot of similar question with different ans. For me it should be Azure SQL Database Premium but can be also Azure SQL Database General Purpose / Serverless. Depends on other available ans.  
upvoted 1 times

 **ServerBrain** 5 months, 3 weeks ago

**Selected Answer: C**

C, as Azure SQL Database Premium is not in the list  
upvoted 3 times

You have an Azure subscription.

You need to deploy an Azure Kubernetes Service (AKS) solution that will use Windows Server 2019 nodes. The solution must meet the following requirements:

- Minimize the time it takes to provision compute resources during scale-out operations.
- Support autoscaling of Windows Server containers.

Which scaling option should you recommend?

- A. horizontal pod autoscaler
- B. Virtual nodes
- C. Kubernetes version 1.20.2 or newer
- D. cluster autoscaler

**Correct Answer: D**

*Community vote distribution*

D (100%)

✉️  **maku067**  5 months, 3 weeks ago

**Selected Answer: D**

For me D.  
cluster autoscaler - For Windows  
virtual nodes - For Linux  
upvoted 17 times

✉️  **OPT\_001122** 4 months, 3 weeks ago  
good description to clear confusion  
upvoted 1 times

✉️  **ZakySama** 5 months, 2 weeks ago  
Correct... Thank you  
upvoted 1 times

✉️  **zellck**  4 months, 1 week ago

**Selected Answer: D**  
D is the answer.

<https://learn.microsoft.com/en-us/azure/aks/cluster-autoscaler>  
To keep up with application demands in Azure Kubernetes Service (AKS), you may need to adjust the number of nodes that run your workloads. The cluster autoscaler component can watch for pods in your cluster that can't be scheduled because of resource constraints. When issues are detected, the number of nodes in a node pool is increased to meet the application demand. Nodes are also regularly checked for a lack of running pods, with the number of nodes then decreased as needed. This ability to automatically scale up or down the number of nodes in your AKS cluster lets you run an efficient, cost-effective cluster.

upvoted 2 times

✉️  **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: D**  
D. cluster autoscaler  
upvoted 1 times

✉️  **tfulanchan** 5 months ago

Virtual nodes are only supported with Linux pods and nodes.  
<https://learn.microsoft.com/en-us/azure/aks/virtual-nodes>  
upvoted 2 times

✉️  **lmy** 5 months, 3 weeks ago  
same questions order has been changed.  
upvoted 2 times

✉️  **shako** 5 months, 3 weeks ago

**Selected Answer: D**

as it's Windows nodes I go for D.  
my notes :  
Linux nodes autoscale: virtual nodes.  
Windows nodes autoscale: cluster autoscaler.

upvoted 1 times

 **Clarkszw** 5 months, 3 weeks ago

**Selected Answer: D**

Linux => Virtual nodes  
Windows => cluster autoscale  
upvoted 1 times

 **ServerBrain** 5 months, 3 weeks ago

for a second, I thought answer should be B?  
upvoted 1 times

 **[Removed]** 5 months, 3 weeks ago

Look at question 28 in topic 4  
upvoted 1 times

 **[Removed]** 5 months, 3 weeks ago

Linux is virtual nodes, windows is cluster autoscaler??  
upvoted 1 times

 **maku067** 5 months, 3 weeks ago

For me D.  
cluster autoscaler - For Windows  
virtual nodes - For Linux  
upvoted 1 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.

What should you include in the recommendation?

- A. Azure Service Fabric
- B. Azure Data Lake
- C. Azure Service Bus
- D. Azure Application Gateway

**Correct Answer: C**

*Community vote distribution*

C (100%)

 **lombri** 1 month, 3 weeks ago

**Selected Answer: C**

Azure Service Bus in the recommendation as it provides reliable and scalable cloud messaging between the different cloud services in the application.

Same as question 68

upvoted 1 times

 **Glob3r** 3 months, 2 weeks ago

Same as question 68

upvoted 1 times

 **zellick** 4 months ago

Same as Question 82.

<https://www.examtopics.com/discussions/microsoft/view/99749-exam-az-305-topic-4-question-82-discussion>

upvoted 2 times

 **zellick** 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

Azure Service Bus is a fully managed enterprise message broker with message queues and publish-subscribe topics (in a namespace). Service Bus is used to decouple applications and services from each other, providing the following benefits:

- Load-balancing work across competing workers
- Safely routing and transferring data and control across service and application boundaries
- Coordinating transactional work that requires a high-degree of reliability

upvoted 1 times

 **globy118** 4 months, 1 week ago

appeared in exam 02/15/2023

upvoted 3 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

C. Azure Service Bus

upvoted 1 times

 **VBK8579** 5 months ago

**Selected Answer: C**

Answer C

upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: C**

C is the best answer by far.

upvoted 1 times

 **yeanlingmedal71** 5 months, 1 week ago

**Selected Answer: C**

Asynchronous messaging options.

There are different types of messages and the entities that participate in a messaging infrastructure. Based on the requirements of each message type, Microsoft recommends Azure messaging services. The options include Azure Service Bus, Event Grid, and Event Hubs.

Azure Service Bus queues are well suited for transferring commands from producers to consumers.

Data is transferred between different applications and services using messages. A message is a container decorated with metadata, and contains data. The data can be any kind of information, including structured data encoded with the common formats such as the following ones: JSON, XML, Apache Avro, Plain Text.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/guide/technology-choices/messaging>

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

upvoted 1 times

 **maku067** 5 months, 3 weeks ago

**Selected Answer: C**

seems correct.

upvoted 1 times

 **ServerBrain** 5 months, 3 weeks ago

**Selected Answer: C**

C, all day..

upvoted 1 times

Your company has offices in North America and Europe.

You plan to migrate to Azure.

You need to recommend a networking solution for the new Azure infrastructure. The solution must meet the following requirements:

- The Point-to-Site (P2S) VPN connections of mobile users must connect automatically to the closest Azure region.
- The offices in each region must connect to their local Azure region by using an ExpressRoute circuit.
- Transitive routing between virtual networks and on-premises networks must be supported.
- The network traffic between virtual networks must be filtered by using FQDNs.

What should you include in the recommendation?

- Azure Virtual WAN with a secured virtual hub
- virtual network peering and application security groups
- virtual network gateways and network security groups (NSGs)
- Azure Route Server and Azure Network Function Manager

**Correct Answer: C**

*Community vote distribution*

A (88%) 9%

✉️  **SilverFox22**  5 months, 2 weeks ago

**Selected Answer: A**

The Virtual WAN meets the first 3 requirements, and the secured virtual hub has the Azure Firewall Manager, which can do the FQDN filtering.  
<https://learn.microsoft.com/en-us/azure/firewall-manager/secured-virtual-hub> <https://learn.microsoft.com/en-us/azure/firewall/fqdn-filtering-network-rules>

upvoted 12 times

✉️  **steel72** 3 months, 1 week ago

And NSG does not support FQDN filtering.

Source or destination: Any, or an individual IP address, classless inter-domain routing (CIDR) block (10.0.0.0/24, for example), service tag, or application security group.

<https://learn.microsoft.com/en-us/azure/virtual-network/network-security-groups-overview#security-rules>

upvoted 2 times

✉️  **lombri**  1 month, 3 weeks ago

**Selected Answer: A**

Option A, Azure Virtual WAN with a secured virtual hub,  
is the best recommendation for this scenario as it allows for automatic connection of mobile users to the closest Azure region, connection of offices to their local Azure region via ExpressRoute circuits, support for transitive routing, and filtering of network traffic between virtual networks by using FQDNs.

Option B, virtual network peering and application security groups,  
does not provide automatic connection of mobile users to the closest Azure region or support for transitive routing.

Option C, virtual network gateways and network security groups (NSGs),  
does not provide automatic connection of mobile users to the closest Azure region or support for transitive routing, and filtering network traffic between virtual networks by using FQDNs is more challenging.

Option D, Azure Route Server and Azure Network Function Manager,  
does not provide automatic connection of mobile users to the closest Azure region or support for filtering network traffic between virtual networks by using FQDNs.

upvoted 4 times

✉️  **Dean208** 3 months, 2 weeks ago

**Selected Answer: A**

Virtual WAN

upvoted 1 times

✉️  **zellck** 4 months ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/firewall-manager/secured-virtual-hub>

A secured virtual hub is an Azure Virtual WAN Hub with associated security and routing policies configured by Azure Firewall Manager. Use secured virtual hubs to easily create hub-and-spoke and transitive architectures with native security services for traffic governance and protection.

You can use a secured virtual hub to filter traffic between virtual networks (V2V), virtual networks and branch offices (B2V) and traffic to the Internet (B2I/V2I).

upvoted 2 times

 **Srirupam** 4 months ago

**Selected Answer: A**

Correct Answer A

upvoted 1 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: A**

A. Azure Virtual WAN with a secured virtual hub

upvoted 3 times

 **VBK8579** 5 months ago

**Selected Answer: A**

A. Azure Virtual WAN with a secured virtual hub.

upvoted 1 times

 **tfulanchan** 5 months ago

Not sure if this is relevant:

Virtual Networks connected to the Secure Virtual Hub can send traffic to public, destinations on the Internet, using the Secure Hub as a central point of Internet access.

This traffic can be filtered locally using Azure Firewall FQDN rules, or sent to a third-party security service for inspection.

<https://learn.microsoft.com/en-us/azure/virtual-wan/migrate-from-hub-spoke-topology#path-7>

upvoted 1 times

 **Kay04** 5 months, 2 weeks ago

**Selected Answer: A**

Only A can filter by FQDN

upvoted 1 times

 **[Removed]** 5 months, 2 weeks ago

**Selected Answer: A**

A is correct

upvoted 1 times

 **mercuryit** 5 months, 2 weeks ago

**Selected Answer: A**

B & C incorrect: they work at 4th network level

Request is for FQDN filtering

upvoted 1 times

 **Mitytskr** 5 months, 3 weeks ago

**Selected Answer: A**

According to <https://learn.microsoft.com/en-us/azure/architecture/networking/hub-spoke-vwan-architecture#architecture>, which shako shared, I think the answer needs to be A. This supports requirement 1 & 2 (P2S/ExpressRoute) per "Standard Virtual WAN supports any-to-any connectivity (Site-to-Site VPN, VNet, ExpressRoute, Point-to-site endpoints) in a single hub as well as across hubs." Requirement 2 "Virtual network peering is a nontransitive relationship between two virtual networks. While using Azure Virtual WAN, virtual network peering is managed by Microsoft. Each connection added to a hub will also configure virtual network peering. With the help Virtual WAN, all spokes will have a transitive relationship." Finally, requirement 4, "A virtual hub can be created as a secured virtual hub or converted to a secure one anytime after creation. For additional information, see Secure your virtual hub using Azure Firewall Manager." Azure Firewall Manager will allow the FQDN filtering.

upvoted 2 times

 **Mitytskr** 5 months, 3 weeks ago

EDIT: the Virtual network peering is actually requirement 3, sorry.

upvoted 1 times

 **mVic** 5 months, 3 weeks ago

**Selected Answer: B**

B should be the right one to include FQDN filtering requirement

upvoted 1 times

 **mVic** 5 months, 2 weeks ago

I think Mltytskr and SilverFox are right, and the answer is A.  
upvoted 1 times

 **shako** 5 months, 3 weeks ago

**Selected Answer: B**

for connection transitivity and security, I go for B.  
IMO the case study stick with this architecture: <https://learn.microsoft.com/en-us/azure/architecture/networking/hub-spoke-vwan-architecture#architecture>  
upvoted 2 times

 **Mltytskr** 5 months, 3 weeks ago

Based on the link you shared, why would the answer not be A - Virtual WAN hub? In the link, it states: "Standard Virtual WANs are by default connected in a full mesh. Standard Virtual WAN supports any-to-any connectivity (Site-to-Site VPN, VNet, ExpressRoute, Point-to-site endpoints) in a single hub as well as across hubs." That seems to meet the different connection requirements listed. Additionally, you stated B - virtual network peering, and in the same article, it states: "Virtual network peering is a nontransitive relationship between two virtual networks," and the requirement says transitive, so I'm not sure B is correct.

upvoted 1 times

 **ServerBrain** 5 months, 3 weeks ago

**Selected Answer: C**

correct  
upvoted 1 times

 **[Removed]** 5 months, 3 weeks ago

Something doesn't right here, correct me if I am wrong but, this quote:  
"The network traffic between virtual networks must be filtered by using FQDNs"

NSGs do not understand FQDNs as they operate at Layer 4, so TCP/UDP. FQDN is Layer 7.

Am I missing something?

upvoted 1 times

You need to design a highly available Azure SQL database that meets the following requirements:

- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

- Azure SQL Database Business Critical
- Azure SQL Managed Instance Business Critical
- Azure SQL Database Standard
- Azure SQL Managed Instance General Purpose

**Correct Answer: A**

*Community vote distribution*

A (82%) C (18%)

✉️  **zellck** 4 months, 1 week ago

Same as Question 84.  
<https://www.examtopics.com/discussions/microsoft/view/99751-exam-az-305-topic-4-question-84-discussion>  
 upvoted 1 times

✉️  **zellck** 4 months, 1 week ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql#service-tiers>  
 The Business Critical service tier is designed for OLTP applications with high transaction rates and low latency I/O requirements. It offers the highest resilience to failures by using several isolated replicas.  
 upvoted 1 times

✉️  **zellck** 4 months ago

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#premium-and-business-critical-service-tier-zone-redundant-availability>  
 By default, the cluster of nodes for the premium availability model is created in the same datacenter. With the introduction of Azure Availability Zones, SQL Database can place different replicas of the Business Critical database to different availability zones in the same region. To eliminate a single point of failure, the control ring is also duplicated across multiple zones as three gateway rings (GW). The routing to a specific gateway ring is controlled by Azure Traffic Manager (ATM). Because the zone-redundant configuration in the Premium or Business Critical service tiers doesn't create additional database redundancy, you can enable it at no extra cost. By selecting a zone-redundant configuration, you can make your Premium or Business Critical databases resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes to the application logic.

upvoted 1 times

✉️  **CloudK** 4 months, 1 week ago

**Selected Answer: A**

From: <https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>  
 Zone-redundant configuration is currently in preview for SQL Managed Instance, and ONLY available for the Business Critical service tier.  
 I think that for a production service it is correct to use a service that is not in preview, so the correct answer should be "A"  
 upvoted 1 times

✉️  **Mangocurrency** 4 months, 3 weeks ago

**Selected Answer: C**

I think this should be C, General Purpose with ZRS.  
 upvoted 2 times

✉️  **zellck** 4 months ago

Azure SQL DB Standard tier only supports LRS.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#basic-standard-and-general-purpose-service-tier-locally-redundant-availability>  
 upvoted 1 times

✉️  **Mangocurrency** 4 months, 3 weeks ago

Actually this is wrong. Standard falls under DTU based purchasing model and does not support ZRS. Standard != General Purpose  
upvoted 2 times

✉ **clueless888** 4 months, 3 weeks ago

From what I have read General Purpose(aka Standard) supports ZRS

There are three architectural models that are used in Azure SQL Database:

- General Purpose/Standard
- Business Critical/Premium
- Hyperscale

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

upvoted 4 times

✉ **Lu5ck** 4 months, 3 weeks ago

MI GP does not support world wide yet thus the safest choice is as stated.

upvoted 1 times

✉ **yanlingmedal71** 5 months, 1 week ago

**Selected Answer: A**

Duplicate

upvoted 2 times

✉ **RandomNickname** 5 months, 1 week ago

**Selected Answer: A**

For no data-loss and as per mVic A is correct.

upvoted 1 times

✉ **mVic** 5 months, 2 weeks ago

**Selected Answer: A**

for these questions where zone-redundancy is required, there are only these options:

- General Purpose
- Premium
- Business Critical

<https://learn.microsoft.com/en-GB/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

upvoted 2 times

✉ **ServerBrain** 5 months, 3 weeks ago

**Selected Answer: A**

Correct, In the absence of Azure SQL Database Premium

upvoted 2 times

You are designing a point of sale (POS) solution that will be deployed across multiple locations and will use an Azure Databricks workspace in the Standard tier. The solution will include multiple apps deployed to the on-premises network of each location.

You need to configure the authentication method that will be used by the app to access the workspace. The solution must minimize the administrative effort associated with staff turnover and credential management.

What should you configure?

- A. a managed identity
- B. a service principal
- C. a personal access token

**Correct Answer: B**

*Community vote distribution*

B (78%) A (22%)

 **uettidam**  5 months, 1 week ago

**Selected Answer: B**

response is B

reason: MID can be used only between Azure resources, here we have on-prem application communicating to Azure resources, then you need a service principal

upvoted 19 times

 **[Removed]** 5 months, 1 week ago

A managed identity is a type of service principal.

upvoted 1 times

 **[Removed]** 5 months, 1 week ago

Correction. A service principal is one of two types of managed identities fam

upvoted 3 times

 **VBK8579**  4 months, 3 weeks ago

**Selected Answer: B**

A managed identity can provide authentication for Azure resources, but it cannot provide authentication for on-premises resources. In the case of an on-premises network, you would typically use a service principal or a personal access token for authentication.

upvoted 7 times

 **sjb666**  1 month, 3 weeks ago

**Selected Answer: B**

Service principle, since we're connecting a third party app with AAD. See <https://devblogs.microsoft.com/devops/demystifying-service-principals-managed-identities/>

upvoted 1 times

 **lombri** 1 month, 3 weeks ago

**Selected Answer: A**

A managed identity

Is a service principal that is automatically managed by Azure and provides an easier and more secure way to authenticate applications and services to access Azure resources.

It reduces the administrative effort associated with credential management and provides seamless access to the Azure resources.

With managed identity, you do not have to store any secrets or credentials in the application code or configuration.

upvoted 1 times

 **lombri** 1 month, 3 weeks ago

my mistake

service principal is the rightone

authentication method for accessing an Azure Databricks workspace from an application deployed on-premises. A service principal provides an identity for the application and enables the application to authenticate with Azure Databricks without requiring user credentials. This

approach reduces the administrative effort associated with managing user credentials and simplifies the process of granting and revoking access to the workspace.

upvoted 2 times

✉️ **EXzw** 3 months ago

**Selected Answer: A**

From GPT

Managed identities are a feature of Azure Active Directory (Azure AD) and are primarily designed for use with Azure services. However, you can leverage managed identities for on-premises applications by using Azure AD Application Proxy or Hybrid Connections. This way, the on-premises application can authenticate with Azure services using the managed identity.

Here's a high-level overview of how you can achieve this:

Configure Azure AD Application Proxy or Hybrid Connections to securely expose the on-premises application to the internet.

Register the on-premises application in Azure AD and enable a managed identity for the app.

Assign the appropriate roles and permissions to the managed identity for accessing the required Azure resources, such as the Azure Databricks workspace.

Update the on-premises application to use the managed identity to authenticate with Azure services.

upvoted 1 times

✉️ **EXzw** 3 months ago

Continued....

Please note that this approach adds some complexity and requires additional configuration. However, it allows you to take advantage of managed identities for your on-premises applications, thus minimizing administrative effort associated with staff turnover and credential management.

upvoted 1 times

✉️ **Jamesat** 4 months ago

Service Principal as Managed Identity can't be used for On-Premises workloads.

upvoted 1 times

✉️ **cp2323** 4 months, 1 week ago

**Selected Answer: B**

its onsite app authentication hence it should be Service Principal

upvoted 1 times

✉️ **zellick** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/databricks/administration-guide/users-groups/service-principals#what-is-a-service-principal>

A service principal is an identity that you create in Azure Databricks for use with automated tools, jobs, and applications. Service principals give automated tools and scripts API-only access to Azure Databricks resources, providing greater security than using users or groups. It also prevents jobs and automations from failing if a user leaves your organization or a group is modified.

upvoted 6 times

✉️ **Eusouzati** 4 months, 2 weeks ago

**Selected Answer: B**

B - A Service Principal

upvoted 2 times

✉️ **OPT\_001122** 4 months, 2 weeks ago

**Selected Answer: B**

on-premises = Service Principle

upvoted 2 times

✉️ **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

B. a service principal

upvoted 2 times

✉️ **VBK8579** 5 months ago

A. a managed identity per ChatGPT

upvoted 3 times

✉️ **alphajt** 4 months, 2 weeks ago

ChatGPT is not always right. You should always check for correctness

upvoted 1 times

✉️ **VBK8579** 4 months, 3 weeks ago

Wrong Answer.

Answer is B. a service principal

Because A managed identity can provide authentication for Azure resources, but it cannot provide authentication for on-premises resources.

In the case of an on-premises network, you would typically use a service principal or a personal access token for authentication.

upvoted 1 times

✉  **ed79** 5 months ago

Azure Databricks doesn't support use of Managed Identity only Service Principals

upvoted 1 times

✉  **kmk\_01** 5 months ago

Wrong, Azure Databricks supports system-assigned managed identities not user-assigned. <https://learn.microsoft.com/en-us/azure/databricks/data-governance/unity-catalog/azure-managed-identities#--configure-a-managed-identity-for-unity-catalog>. However, the answer for this question is Service Principal.

upvoted 2 times

✉  **diego84** 5 months ago

**Selected Answer: B**

as

The solution will include multiple apps deployed to the on-premises network of each location. You need to configure the authentication method that will be used by the app to access the workspace.

app->on-prem-> service principal-> auth Azure

upvoted 2 times

✉  **janvandermerwer** 5 months, 1 week ago

**Selected Answer: B**

<https://learn.microsoft.com/en-us/azure/databricks/administration-guide/users-groups/#identity-model>

This is a hard one and I can't find a definitive answer.

Initially thought A, but now I'm leaning toward service principals.

upvoted 2 times

✉  **yeanlingmedal71** 5 months, 1 week ago

**Selected Answer: B**

a managed identity is a service principal of a special type that may ONLY be used with Azure resources.

You can, however, use a Service Principal to connect to Key Vault from an application running on-premises.

For Service Principals, authentication can be done in two different ways: password-based authentication (application secret) and certificate-based authentication. Using a certificate is recommended, but you can also create an application secret

upvoted 2 times

✉  **Miguel\_A** 5 months, 1 week ago

**Selected Answer: B**

<https://learn.microsoft.com/en-us/azure/databricks/administration-guide/users-groups/service-principals>

upvoted 2 times

**HOTSPOT**

You have two Azure AD tenants named contoso.com and fabrikam.com. Each tenant is linked to 50 Azure subscriptions. Contoso.com contains two users named User1 and User2.

You need to meet the following requirements:

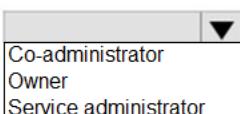
- Ensure that User1 can change the Azure AD tenant linked to specific Azure subscriptions.
- If an Azure subscription is linked to a new Azure AD tenant, and no available Azure AD accounts have full subscription-level permissions to the subscription, elevate the access of User2 to the subscription.

The solution must use the principle of least privilege.

Which role should you assign to each user? To answer, select the appropriate options in the answer area.

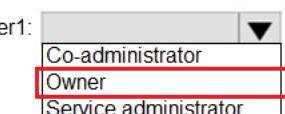
NOTE: Each correct selection is worth one point.

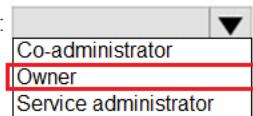
**Answer Area**

User1:   
Co-administrator  
Owner  
Service administrator

User2:   
Co-administrator  
Owner  
Service administrator

**Answer Area**

Correct Answer:  
User1:   
Co-administrator  
**Owner**  
Service administrator

User2:   
Co-administrator  
**Owner**  
Service administrator

  upwork  5 months ago

From ChatGPT:

An Azure AD Service Administrator role is designed to manage user, groups and other resources within an Azure AD tenant. While they can manage the users and groups, they don't have the permission to move a subscription from one tenant to another.

To move a subscription from one tenant to another, you need to have the "Subscription Owner" or "Global Administrator" role within the Azure AD tenant to which you want to move the subscription.

So I think the answer should be "Owner" x 2

upvoted 6 times

  upwork 5 months ago

Not sure about the GPT answer, but I find this link useful <https://learn.microsoft.com/en-us/azure/role-based-access-control/classic-administrators>

It suggests the answer would be the Service Admin and the Co-Admin in the old-school days, but today perhaps we should rely on the Owner's role.

upvoted 1 times

 **zellck**  4 months ago

1. Owner
2. Owner

<https://learn.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-how-subscriptions-associated-directory#before-you-begin>

Before you can associate or add your subscription, do the following steps:

- Sign in using an account that: Has an Owner role assignment for the subscription.

upvoted 6 times

 **betterthanlife**  1 month, 2 weeks ago

- Co-Administrator "can't change the association of subs to Azure AD directories so it's out.
- Given that the tenants & some subs exist then, & since we live in the real world (as strange as it's become) & there's no mention otherwise, & given the options we can presume User 1 to have the Service Administrator role, which provides full access to the Azure portal.
- Given "elevate the access" is a requirement for User, the only deduction in this whole madness of stupidity mess possible is Owner.

<https://learn.microsoft.com/en-us/azure/role-based-access-control/rbac-and-directory-admin-roles>

upvoted 1 times

 **clearn** 4 months, 1 week ago

Service Administrator and Co-Administrator are classic subscription roles that have the equivalent access of a user who is assigned the Owner role at the subscription scope. The answer for both is Owner.

<https://learn.microsoft.com/en-us/azure/role-based-access-control/rbac-and-directory-admin-roles>

upvoted 1 times

 **VBK8579** 4 months, 3 weeks ago

Owner  
Owner

upvoted 2 times

 **RandomNickname** 4 months, 3 weeks ago

Based on the requirements in the question given answer looks correct to me.

upvoted 1 times

 **OPT\_001122** 4 months, 3 weeks ago

Owner  
Owner

upvoted 1 times

 **tfulanchan** 5 months ago

There are only four "Azure roles", and "Owner" is the only "role" in the answers, the other two are "Classic subscription administrator".  
The Service Administrator and Co-Administrators are assigned the Owner role at the subscription scope.

<https://learn.microsoft.com/en-us/azure/role-based-access-control/rbac-and-directory-admin-roles#azure-roles>

upvoted 1 times

 **LeeVee** 5 months, 1 week ago

Service Administrator and Co-Administrator were a classic subscription role. These to Roles equivalent is current role assignment is Owner. So I think answer is correct. you don't want to use classic RBAC as Microsoft will move away on this classic roles in the future. do future proofing a bit on this.

upvoted 1 times

 **Mo22** 5 months, 2 weeks ago

The answer is correct to me:

<https://learn.microsoft.com/en-us/azure/active-directory/fundamentals/active-directory-how-subscriptions-associated-directory>

upvoted 1 times

 **Kernely5** 5 months, 3 weeks ago

They are talking about role

Owner : The Service Administrator and Co-Administrators are assigned the Owner role at the subscription scope

Applies to all resource types.

upvoted 1 times

 **maku067** 5 months, 3 weeks ago

Why 2x "Owner"?

upvoted 1 times

 **shako** 5 months, 3 weeks ago

from <https://learn.microsoft.com/en-us/azure/role-based-access-control/rbac-and-directory-admin-roles#classic-subscription-administrator-roles>:

"Co-administrator: same access privileges as the Service Administrator, but can't change the association of subscriptions to Azure AD directories"

"The Co-Administrator has the equivalent access of a user who is assigned the Owner role at the subscription scope." ==> My understanding is that co-admin role has owner role's permissions + its permissions. If yes here is the order from most to less privileges: service admin > co-admin > owner.

So I'd go for:

user1: service administrator

user2: owner.

upvoted 5 times

 **mVic** 5 months, 3 weeks ago

User1: Service Administrator  
Manage services in the Azure portal

User 2: Owner  
to meet the least-privileged requirement.

<https://learn.microsoft.com/en-us/azure/role-based-access-control/rbac-and-directory-admin-roles>  
upvoted 1 times

Your company has the divisions shown in the following table.

Division	Azure subscription	Azure AD tenant
East	Sub1	Contoso.com
West	Sub2	Fabrikam.com

Sub1 contains an Azure App Service web app named App1. App1 uses Azure AD for single-tenant user authentication. Users from contoso.com can authenticate to App1.

You need to recommend a solution to enable users in the fabrikam.com tenant to authenticate to App1.

What should you recommend?

- A. Configure a Conditional Access policy.
- B. Use Azure AD entitlement management to govern external users.
- C. Configure the Azure AD provisioning service.
- D. Configure Azure AD Identity Protection.

**Correct Answer: C**

*Community vote distribution*

B (100%)

 **zellick** Highly Voted 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-overview#what-can-i-do-with-entitlement-management>

Here are some of capabilities of entitlement management:

- Select connected organizations whose users can request access. When a user who isn't yet in your directory requests access, and is approved, they're automatically invited into your directory and assigned access. When their access expires, if they have no other access package assignments, their B2B account in your directory can be automatically removed.

upvoted 7 times

 **yonie** Highly Voted 2 months ago

**Selected Answer: B**

There are 10 variations of this question. In each question there are two possible answers. Either its  
- Use Azure AD entitlement management to govern external users

Or

- Configure Supported account types in the application registration and update the sign-in endpoint
- These two answers are never offered together in the same question.

upvoted 5 times

 **JohnPhan** Most Recent 3 months ago

**Selected Answer: B**

- B. Use Azure AD entitlement management to govern external users.

upvoted 2 times

 **zellick** 4 months, 1 week ago

Same as Question 38.

<https://www.examtopics.com/discussions/microsoft/view/93994-exam-az-305-topic-1-question-38-discussion>

upvoted 2 times

 **VBK8579** 4 months, 3 weeks ago

**Selected Answer: B**

- B. Use Azure AD entitlement management to govern external users.

upvoted 1 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

B. Use Azure AD entitlement management to govern external users.  
upvoted 1 times

 **Mo22** 5 months, 2 weeks ago

**Selected Answer: B**

Agreed that B is the correct answer:  
<https://learn.microsoft.com/en-us/azure/active-directory/governance/entitlement-management-external-users>  
Keep in mind if we wanted to allow the App to be accessible to our AZ AD users then C would be correct like a SaaS  
upvoted 2 times

 **ZakySama** 5 months, 2 weeks ago

**Selected Answer: B**

It should be B  
upvoted 1 times

 **[Removed]** 5 months, 3 weeks ago

**Selected Answer: B**

B is correct  
upvoted 1 times

 **lmy** 5 months, 3 weeks ago

This appears at least 3/4 times.  
upvoted 4 times

 **FabrytDev** 5 months, 1 week ago

The question is the same but answers might not. If you know which answer is correct you probably don't notice that one or two of others answers change and it matters if you are not sure which one is correct.  
upvoted 1 times

 **maku067** 5 months, 3 weeks ago

Should be B?  
upvoted 1 times

 **Clarkszw** 5 months, 3 weeks ago

**Selected Answer: B**

Azure AD for single-tenant user authentication  
upvoted 1 times

 **Aziza\_Adam** 5 months, 3 weeks ago

B is the right answer  
upvoted 1 times

 **mVic** 5 months, 3 weeks ago

**Selected Answer: B**

Answer is B as long as the Apps is using AAD for single-tenant auth.  
upvoted 1 times

You have a multi-tier app named App1 and an Azure SQL database named SQL1. The backend service of App1 writes data to SQL1. Users use the App1 client to read the data from SQL1.

During periods of high utilization, the users experience delays retrieving the data.

You need to minimize how long it takes for data requests.

What should you include in the solution?

- A. Azure Cache for Redis
- B. Azure Content Delivery Network (CDN)
- C. Azure Data Factory
- D. Azure Synapse Analytics

**Correct Answer: A**

*Community vote distribution*

A (100%)

 **zellck** 4 months ago

**Selected Answer: A**

A is the answer.

<https://learn.microsoft.com/en-us/azure/azure-cache-for-redis/cache-overview>

Azure Cache for Redis provides an in-memory data store based on the Redis software. Redis improves the performance and scalability of an application that uses backend data stores heavily. It's able to process large volumes of application requests by keeping frequently accessed data in the server memory, which can be written to and read from quickly. Redis brings a critical low-latency and high-throughput data storage solution to modern applications.

upvoted 3 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: A**

A. Azure Cache for Redis

upvoted 1 times

 **VBK8579** 5 months ago

**Selected Answer: A**

A. Azure Cache for Redis

upvoted 1 times

 **[Removed]** 5 months, 1 week ago

**Selected Answer: A**

Caching: Implementing a caching mechanism, such as Redis, can help to reduce the number of requests made to the Azure SQL database. This can improve the performance of data retrieval for users.

upvoted 3 times

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

Name	Type	Description
VM1	Virtual machine	Frontend component in the Central US Azure region
VM2	Virtual machine	Backend component in the East US Azure region
VM3	Virtual machine	Backend component in the West US 2 Azure region
VNet1	Virtual network	Hosts VM1
VNet2	Virtual network	Hosts VM2
VNet3	Virtual network	Hosts VM3

You create peering between VNet1 and VNet2 and between VNet1 and VNet3.

The virtual machines host an HTTPS-based client/server application and are accessible only via the private IP address of each virtual machine.

You need to implement a load balancing solution for VM2 and VM3. The solution must ensure that if VM2 fails, requests will be routed automatically to VM3, and if VM3 fails, requests will be routed automatically to VM2.

What should you include in the solution?

- A. Azure Firewall Premium
- B. Azure Application Gateway v2
- C. a cross-region load balancer
- D. Azure Front Door Premium

**Correct Answer: D**

*Community vote distribution*

D (85%)      B (15%)

✉  **zellck**  4 months ago

**Selected Answer: D**

D is the answer.

<https://learn.microsoft.com/en-us/azure/frontdoor/front-door-faq#what-is-the-difference-between-azure-front-door-and-azure-application-gateway->

While both Front Door and Application Gateway are layer 7 (HTTP/HTTPS) load balancers, the primary difference is that Front Door is a non-regional service whereas Application Gateway is a regional service. While Front Door can load balance between your different scale units/clusters/stamp units across regions, Application Gateway allows you to load balance between your VMs/containers etc. that is within the scale unit.

upvoted 6 times

✉  **rex303**  2 months, 3 weeks ago

**Selected Answer: D**

The answer is D.

While both front door and the Cross-Region load balancer are used for cross-region load balancing. Front door allows the use of Private IP's, nd the Cross-region load balancer does not, as per documentation: <https://learn.microsoft.com/en-us/azure/load-balancer/cross-region-overview#regional-redundancy>.

Also, as of the time of writing this answer, the Cross-Region load balancer is still in preview and should not be the first choice for production loads.

upvoted 3 times

✉  **RandomNickname** 4 months, 3 weeks ago

**Selected Answer: D**

Based on the limitation with C: as per below as well as in preview the more appropriate choice is likely D:

<https://learn.microsoft.com/en-us/azure/load-balancer/cross-region-overview#regional-redundancy>

upvoted 1 times

✉  **SajanK** 4 months, 3 weeks ago

This link says that Azure Front Door premium can use private IPs.  
<https://learn.microsoft.com/en-us/azure/frontdoor/private-link>

upvoted 4 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: D**

D. Azure Front Door Premium

upvoted 1 times

 **upwork** 5 months ago

Can Azure Front Door load balance or route traffic within a virtual network?

Azure Front Door Standard, Premium and (classic) tier requires a public IP or publicly resolvable DNS name to route traffic to backend resources.

Azure resources such as Application Gateways or Azure Load Balancers can enable routing to resources within a virtual network.

<https://learn.microsoft.com/en-us/azure/frontdoor/front-door-faq#can-azure-front-door-load-balance-or-route-traffic-within-a-virtual-network>

upvoted 3 times

 **upwork** 5 months ago

Front Door requires public IPs while the case explicitly says the VMs are accessible only on private IPs.

Front Door: Backend pools can be composed of Storage, Web App, Kubernetes instances, or any other custom hostname that has public connectivity. Azure Front Door requires that the backends are defined either via a public IP or a publicly resolvable DNS hostname. Members of backend pools can be across zones, regions, or even outside of Azure as long as they have public connectivity.

upvoted 2 times

 **mscbslt** 5 months ago

**Selected Answer: D**

<https://learn.microsoft.com/en-us/azure/frontdoor/front-door-faq>

upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: D**

D - Looks to be the best answer

<https://learn.microsoft.com/en-us/azure/frontdoor/health-probes>

b - Application load balancer is only for in-region connectivity. - incorrect

upvoted 3 times

 **jwjw** 5 months, 1 week ago

**Selected Answer: D**

VMs are in different regions so only FrontDoor

upvoted 2 times

 **[Removed]** 5 months, 1 week ago

**Selected Answer: B**

Answer is B as per - <https://learn.microsoft.com/en-us/azure/application-gateway/overview-v2>

"The autoscaling v2 SKU now supports default health probes to automatically monitor the health of all resources in its backend pool and highlight those backend members that are considered unhealthy. "

upvoted 3 times

 **[Removed]** 5 months, 1 week ago

Answer might be correct looking at this

upvoted 1 times

 **[Removed]** 5 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/frontdoor/health-probes>

upvoted 1 times

You are designing an app that will include two components. The components will communicate by sending messages via a queue.

You need to recommend a solution to process the messages by using a First in, First out (FIFO) pattern.

What should you include in the recommendation?

- A. storage queues with a custom metadata setting
- B. Azure Service Bus queues with partitioning enabled
- C. Azure Service Bus queues with sessions enabled
- D. storage queues with a stored access policy

**Correct Answer: C**

*Community vote distribution*

C (100%)

 **zellck**  4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/message-sessions>

Azure Service Bus sessions enable joint and ordered handling of unbounded sequences of related messages. Sessions can be used in first in, first out (FIFO) and request-response patterns. This article shows how to use sessions to implement these patterns when using Service Bus.  
upvoted 6 times

 **steel72**  3 months, 1 week ago

**Selected Answer: C**

"Azure Service Bus queues with sessions enabled"

As a solution architect/developer, you should consider using Service Bus queues when your solution requires the queue to provide a guaranteed first-in-first-out (FIFO) ordered delivery.

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-azure-and-service-bus-queues-compared-contrasted#consider-using-service-bus-queues>

Sessions can be used in first in, first out (FIFO) and request-response patterns.

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/message-sessions>

upvoted 2 times

 **VBK8579** 4 months, 1 week ago

**Selected Answer: C**

C. Azure Service Bus queues with sessions enabled.

Azure Service Bus queues with sessions enabled ensure a FIFO pattern by allowing messages to be processed in order, and messages are processed by a single receiver instance.

upvoted 2 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

C. Azure Service Bus queues with sessions enabled

upvoted 2 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: C**

C is a go and recommended from what i can see.

Service Bus queues ordering guarantee

Yes - First-In-First-Out (FIFO)

(by using message sessions)

upvoted 2 times

 **FabrityDev** 5 months, 1 week ago

**Selected Answer: C**

Only Service Bus guarantees FIFO and you need to use Sessions for this.

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-azure-and-service-bus-queues-compared-contrasted>  
upvoted 2 times

 [Removed] 5 months, 1 week ago

**Selected Answer: C**

C:

Sessions: Enabling sessions on an Azure Service Bus queue allows for grouping of related messages together. This can be useful if you need to ensure that messages related to a specific session or conversation are processed in order. With sessions, you can also allow multiple consumers to process messages from the same session in parallel, which can improve the overall throughput of the queue. This is useful if you expect to have a large number of conversations and need to scale out the processing of those messages.

upvoted 2 times

**HOTSPOT**

You need to deploy an instance of SQL Server on Azure Virtual Machines. The solution must meet the following requirements:

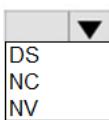
- Support 15,000 disk IOPS.
- Support SR-IOV.
- Minimize costs.

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

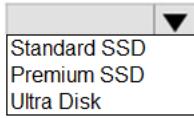
NOTE: Each correct selection is worth one point.

**Answer Area**

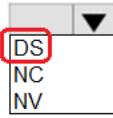
Virtual machine series:



Disk type:

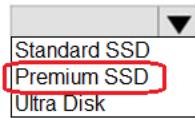
**Answer Area**

Virtual machine series:



Correct Answer:

Disk type:



**SomeCert** Highly Voted 3 months ago

What's the point of memorizing this kind of sheit?

upvoted 28 times

**exam\_taker24** 1 month ago

I agree, it's dumb

upvoted 1 times

**betterthanlife** 1 month, 3 weeks ago

It's stupidity...

upvoted 2 times

**NinjaDog00** 2 months, 3 weeks ago

Agree.....

upvoted 5 times

**[Removed]** Highly Voted 5 months, 1 week ago

Answers are correct:

Azure Virtual Machine:

Use a high-performance Azure Virtual Machine such as the Dv3 or Ev3 series, which are optimized for workloads that require low latency and high throughput.

SR-IOV: Enable SR-IOV on the Virtual Machine. SR-IOV allows for direct communication between the virtual NIC and the physical NIC, reducing latency and increasing throughput.

Azure Premium SSD Disks:

Use Azure Premium SSD Disks as they are optimized for performance-sensitive workloads and have a high IOPS and throughput limit.

upvoted 8 times

✉️  **lombri** Most Recent 2 months, 2 weeks ago

The answer seems correct:

1. DS

Ideal for testing and development, small to medium databases, and low to medium traffic web servers.

D-series, feature a more powerful CPU and optimal CPU-to-memory configuration, making them suitable for most production workloads.

2. Premium SSD

Azure Premium SSDs deliver high-performance and low-latency disk support for virtual machines (VMs) with input/output (IO)-intensive workloads.(max IOPS 20,000)

For any consultation see look this link is going to be helpful for every one :

Link 1 = <https://learn.microsoft.com/en-us/azure/virtual-machines/sizes>

Link 2 = <https://learn.microsoft.com/en-us/azure/virtual-machines/dv2-dsv2-series>

Link 3 = <https://learn.microsoft.com/en-us/azure/virtual-machines/sizes-general>

Link 3 = <https://learn.microsoft.com/en-us/azure/virtual-machines/disks-types#disk-type-comparison>

upvoted 1 times

✉️  **zellck** 4 months ago

1. DS

2. Premium SSD

<https://learn.microsoft.com/en-us/azure/virtual-network/accelerated-networking-overview>

<https://learn.microsoft.com/en-us/azure/virtual-machines/disks-types#disk-type-comparison>

Premium SSD

- Max IOPS: 20,000

upvoted 5 times

✉️  **pkkalra** 4 months, 1 week ago

Premium SSD supports upto 20,000 IOPS

Only DS supports SR-IOV/Accelerated Networking

Although NC and NV sizes will show in the command below, they do not support Accelerated Networking. Enabling Accelerated Networking on NC or NV VMs will have no effect.

<https://learn.microsoft.com/en-us/azure/virtual-network/accelerated-networking-overview>

<https://learn.microsoft.com/en-us/azure/virtual-network/accelerated-networking-overview>

upvoted 3 times

✉️  **pkkalra** 4 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/virtual-machines/disks-types>

upvoted 1 times

✉️  **OPT\_001122** 4 months, 3 weeks ago

1. DS

2. Premium SSD

upvoted 1 times

✉️  **janvandermerwer** 5 months, 1 week ago

Agreed - DS series and premium SSD

initially thought maybe a use case for ultra - but that is lacking a few features we'll probably need for sql

upvoted 1 times

✉️  **RandomNickname** 5 months, 1 week ago

Answer looks correct;

<https://learn.microsoft.com/en-us/azure/virtual-machines/disks-types>

<https://azure.microsoft.com/en-us/pricing/details/virtual-machines/series/>

<https://learn.microsoft.com/en-us/azure/site-recovery/azure-vm-disaster-recovery-with-accelerated-networking>

upvoted 3 times

✉️  **WindowAFX** 5 months, 1 week ago

Looks correct

upvoted 4 times

You are developing an app that will use Azure Functions to process Azure Event Hubs events. Request processing is estimated to take between five and 20 minutes.

You need to recommend a hosting solution that meets the following requirements:

- Supports estimates of request processing runtimes
- Supports event-driven autoscaling for the app

Which hosting plan should you recommend?

- A. Dedicated
- B. Consumption
- C. App Service
- D. Premium

**Correct Answer: D**

*Community vote distribution*

D (100%)

✉️  **azkumar305**  2 months, 2 weeks ago

Got this on 14-Apr-2023

upvoted 7 times

✉️  **zellck**  4 months ago

**Selected Answer: D**

D is the answer.

<https://learn.microsoft.com/en-us/azure/event-hubs/compare-tiers#features>

Premium

Dynamic Partition scale out

- Yes

upvoted 4 times

✉️  **zellck** 4 months ago

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale#scale>

Premium plan

- Event driven. Scale out automatically, even during periods of high load. Azure Functions infrastructure scales CPU and memory resources by adding additional instances of the Functions host, based on the number of events that its functions are triggered on.

upvoted 3 times

✉️  **zellck** 4 months ago

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale#timeout>

Premium plan

- default timeout: 30 mins

- max timeout: Unlimited

upvoted 2 times

✉️  **VBK8579** 4 months, 1 week ago

**Selected Answer: D**

App timeout duration for Consumption plan is 5 mins default and Maximum is 10 mins. For dedicated and Premium, it is 30 mins default and maximum is unlimited.

Dedicated supports Autoscaling but cannot support event driven. Only Consumption and Premium supports Event driven autoscaling.

So best suitable option is Premium

upvoted 2 times

✉️  **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: D**

D. Premium

upvoted 2 times

✉️  **Jzx** 5 months, 1 week ago

**Selected Answer: D**

D it is...

upvoted 1 times

✉️  **janvandermerwer** 5 months, 1 week ago

**Selected Answer: D**

Let's go with D

- Mostly due to time based limits.

upvoted 2 times

✉️  **vldt** 5 months, 1 week ago

**Selected Answer: D**

Only Dedicated and Premium have the matching timeout so we need to choose between A and D. Then as usual they let us guess what is hidden in the "Supports estimates of request processing runtimes". If it is "Predictive scaling and costs are required" then the correct answer is D as per <https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale#overview-of-plans>

upvoted 2 times

✉️  **RandomNickname** 5 months, 1 week ago

**Selected Answer: D**

D looks like as per article provided by jose

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale#timeout>

upvoted 1 times

✉️  **rolmisha** 5 months, 1 week ago

Premium - consumption time is up to 30 minutes.

upvoted 1 times

✉️  **[Removed]** 5 months, 1 week ago

Think this should be B, consumption:

The Consumption Plan is a serverless hosting plan that automatically scales the number of instances of your function based on the number of incoming events, which can help to optimize costs and ensure that your app can handle varying loads. Additionally, the Consumption Plan supports the ability to set a timeout for your functions, which can help to ensure that your app can handle estimates of request processing runtimes.

upvoted 2 times

✉️  **jose** 5 months, 1 week ago

In consumption plan the maximum timeout is 10 minutes:

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-scale#timeout>

upvoted 5 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.

What should you include in the recommendation?

- A. Azure Notification Hubs
- B. Azure Application Gateway
- C. Azure Service Bus
- D. Azure Traffic Manager

**Correct Answer:** C

*Community vote distribution*

C (100%)

✉  **Sanjeevsn** 1 month, 1 week ago

**Selected Answer: C**

Azure Service Bus

upvoted 1 times

✉  **malcubierre** 2 months, 4 weeks ago

**Selected Answer: C**

Azure Service Bus is the only one that allow async comm

upvoted 1 times

✉  **zelick** 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>

Azure Service Bus is a fully managed enterprise message broker with message queues and publish-subscribe topics (in a namespace). Service Bus is used to decouple applications and services from each other, providing the following benefits:

- Load-balancing work across competing workers
- Safely routing and transferring data and control across service and application boundaries
- Coordinating transactional work that requires a high-degree of reliability

upvoted 1 times

✉  **pkkalra** 4 months, 1 week ago

**Selected Answer: C**

service bus

upvoted 1 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.

What should you include in the recommendation?

- A. Azure Notification Hubs
- B. Azure Application Gateway
- C. Azure Queue Storage
- D. Azure Traffic Manager

**Correct Answer:** C

*Community vote distribution*

C (100%)

 **Alessandro365** 3 months, 3 weeks ago

**Selected Answer: C**

C is the correct answer  
upvoted 1 times

 **zelick** 4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/storage/queues/storage-queues-introduction>

Azure Queue Storage is a service for storing large numbers of messages. You access messages from anywhere in the world via authenticated calls using HTTP or HTTPS. A queue message can be up to 64 KB in size. A queue may contain millions of messages, up to the total capacity limit of a storage account. Queues are commonly used to create a backlog of work to process asynchronously.

upvoted 3 times

 **pkkalra** 4 months, 1 week ago

**Selected Answer: C**

Azure Queue Storage  
upvoted 2 times

You need to design a highly available Azure SQL database that meets the following requirements:

- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Database Basic
- B. Azure SQL Database Business Critical
- C. Azure SQL Database Standard
- D. Azure SQL Managed Instance General Purpose

**Correct Answer: B**

*Community vote distribution*

B (80%)

C (20%)

✉️  **sainandam** 4 months, 1 week ago

**Selected Answer: C**

Minimize costs  
upvoted 1 times

✉️  **zellick** 4 months ago

Azure SQL DB Standard tier only supports LRS.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#basic-standard-and-general-purpose-service-tier-locally-redundant-availability>  
upvoted 1 times

✉️  **zellick** 4 months, 1 week ago

**Selected Answer: B**

B is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/sql-database-paas-overview?view=azuresql#service-tiers>

The Business Critical service tier is designed for OLTP applications with high transaction rates and low latency I/O requirements. It offers the highest resilience to failures by using several isolated replicas.

upvoted 2 times

✉️  **zellick** 4 months ago

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#premium-and-business-critical-service-tier-zone-redundant-availability>

By default, the cluster of nodes for the premium availability model is created in the same datacenter. With the introduction of Azure Availability Zones, SQL Database can place different replicas of the Business Critical database to different availability zones in the same region. To eliminate a single point of failure, the control ring is also duplicated across multiple zones as three gateway rings (GW). The routing to a specific gateway ring is controlled by Azure Traffic Manager (ATM). Because the zone-redundant configuration in the Premium or Business Critical service tiers doesn't create additional database redundancy, you can enable it at no extra cost. By selecting a zone-redundant configuration, you can make your Premium or Business Critical databases resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes to the application logic.

upvoted 1 times

✉️  **pkkalra** 4 months, 1 week ago

**Selected Answer: B**

Azure SQL Database Business Critical

upvoted 2 times

You need to design a highly available Azure SQL database that meets the following requirements:

- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Database Hyperscale
- B. Azure SQL Database Premium
- C. Azure SQL Database Standard
- D. Azure SQL Managed Instance General Purpose

**Correct Answer: B**

*Community vote distribution*

B (100%)

 **lombri** 2 months, 2 weeks ago

**Selected Answer: B**

In Premium, Business Critical, and Hyperscale service tiers, SQL Database supports the use of read-only replicas to offload read-only query workloads, using the ApplicationIntent=ReadOnly parameter in the connection string.

The question to ask for costs must be minimized.

So the answer is Premium

upvoted 1 times

 **lombri** 2 months, 2 weeks ago

In Premium, Business Critical, and Hyperscale service tiers, SQL Database supports the use of read-only replicas to offload read-only query workloads, using the ApplicationIntent=ReadOnly parameter in the connection string.

The question to ask for costs must be minimized.

So the answer is Premium

upvoted 1 times

 **Alessandro365** 3 months, 3 weeks ago

**Selected Answer: B**

B is the correct answer

upvoted 2 times

**HOTSPOT**

You company has offices in New York City, Sydney, Paris, and Johannesburg.

The company has an Azure subscription.

You plan to deploy a new Azure networking solution that meets the following requirements:

- Connects to ExpressRoute circuits in the Azure regions of East US, Southeast Asia, North Europe, and South Africa
- Minimizes latency by supporting connection in three regions
- Supports Site-to-site VPN connections
- Minimizes costs

You need to identify the minimum number of Azure Virtual WAN hubs that you must deploy, and which virtual WAN SKU to use.

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

NOTE: Each correct selection is worth one point.

**Answer Area**

Number of Virtual WAN hubs:

 1  
 2  
 3  
 4

Virtual WAN SKU:

 Basic  
 Standard**Answer Area**

Number of Virtual WAN hubs:

 1  
 2  
 3  
 4

Correct Answer:

Virtual WAN SKU:

 Basic  
 Standard

  **r3nenge** Highly Voted 4 months, 1 week ago

But why is it 3 virtual hubs, if we have 4 localisations?

upvoted 7 times

  **arxxas** 3 months, 2 weeks ago

Based on the requirements, you should deploy at least one Azure Virtual WAN hub in each of the following regions: East US, North Europe, and South Africa.

To support Site-to-site VPN connections and minimize costs, you should use the Basic SKU of Azure Virtual WAN.

Therefore, you should deploy three Azure Virtual WAN hubs using the Basic SKU, one in each of the required regions. This configuration would allow you to connect to ExpressRoute circuits in those regions and minimize latency by supporting connections in three regions.

upvoted 1 times

✉️👤 **Debosree** 3 months, 1 week ago

why Southeast Asia not considered here?

upvoted 6 times

✉️👤 **bd1234** 3 months, 3 weeks ago

should be 4 virtual hubs.

upvoted 2 times

✉️👤 **sankar07** 2 months ago

Requirement is "Minimizes latency by supporting connection in three regions". 3 is sufficient.

upvoted 1 times

✉️👤 **kanag1** 4 months ago

Q :Minimizes latency by supporting connection in three regions

upvoted 3 times

✉️👤 **fred356** [Most Recent ⓘ] 1 month, 2 weeks ago

SKU: Standard, because:

Basic: Site-to-site VPN only

Standard: ExpressRoute, User VPN (P2S), VPN (site-to-site), Inter-hub and VNet-to-VNet transiting through the virtual hub, Azure Firewall, NVA in a virtual WAN

Source: <https://learn.microsoft.com/en-us/azure/virtual-wan/virtual-wan-about>

upvoted 2 times

✉️👤 **sjb666** 2 months, 1 week ago

4 hubs, standard sku.

upvoted 2 times

✉️👤 **sjb666** 2 months, 1 week ago

Moderator, please ignore this comment, should be three hubs

upvoted 1 times

✉️👤 **VBK8579** 3 months, 2 weeks ago

deploy at least three Azure Virtual WAN hubs in order to minimize latency by supporting connections in three regions.

As for the SKU, the Basic SKU does not support ExpressRoute or site-to-site VPN connections, so you would need to use the Standard SKU to meet all the requirements.

upvoted 4 times

✉️👤 **sainandam** 4 months, 1 week ago

A Basic hub is limited to site-to-site VPN functionality only. When you upgrade from Basic to Standard, all the hubs within the virtual WAN are upgraded to Standard hubs. Standard hubs support ExpressRoute, point-to-site (User VPN), a full mesh hub, and VNet-to-VNet transit through the Azure hubs.

upvoted 3 times

✉️👤 **mscbslt** 4 months, 1 week ago

Site-to-site VPN only => Basic virtual WAN only.

Standard => ExpressRoute available.

upvoted 1 times

You have an Azure Functions microservice app named App1 that is hosted in the Consumption plan. App1 uses an Azure Queue Storage trigger.

You plan to migrate App1 to an Azure Kubernetes Service (AKS) cluster.

You need to prepare the AKS cluster to support App1. The solution must meet the following requirements:

- Use the same scaling mechanism as the current deployment.
- Support kubenet and Azure Container Networking Interface (CNI) networking.

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

NOTE: Each correct answer is worth one point.

- Configure the horizontal pod autoscaler.
- Install Virtual Kubelet.
- Configure the AKS cluster autoscaler.
- Configure the virtual node add-on.
- Install Kubernetes-based Event Driven Autoscaling (KEDA).

**Correct Answer: AE**

*Community vote distribution*

AE (89%) 11%

 **zellck** Highly Voted 4 months ago

**Selected Answer: AE**

AE is the answer.

<https://learn.microsoft.com/en-us/azure/aks/concepts-scale#horizontal-pod-autoscaler>

Kubernetes uses the horizontal pod autoscaler (HPA) to monitor the resource demand and automatically scale the number of replicas. By default, the horizontal pod autoscaler checks the Metrics API every 15 seconds for any required changes in replica count, but the Metrics API retrieves data from the Kubelet every 60 seconds. Effectively, the HPA is updated every 60 seconds. When changes are required, the number of replicas is increased or decreased accordingly. Horizontal pod autoscaler works with AKS clusters that have deployed the Metrics Server for Kubernetes 1.8+.

<https://learn.microsoft.com/en-us/azure/aks/keda-about>

Kubernetes Event-driven Autoscaling (KEDA) is a single-purpose and lightweight component that strives to make application autoscaling simple and is a CNCF Incubation project.

It applies event-driven autoscaling to scale your application to meet demand in a sustainable and cost-efficient manner with scale-to-zero.

upvoted 7 times

 **AHUI** Most Recent 1 month ago

**Selected Answer: AE**

ans is correct

upvoted 1 times

 **Tr619899** 1 month, 1 week ago

To prepare the AKS cluster to support App1 and meet the requirements you specified, you should perform two actions: Configure the horizontal pod autoscaler and Install Kubernetes-based Event Driven Autoscaling (KEDA).

The horizontal pod autoscaler will allow you to use the same scaling mechanism as the current deployment by automatically scaling the number of pods based on CPU utilization or other application-provided metrics. KEDA will enable event-driven autoscaling by allowing you to scale based on events in Azure Queue Storage.

upvoted 3 times

 **Sudhir204** 2 months ago

apps can be part of only pods not the nodes.. hence it should be hpa.

upvoted 1 times

 **azkumar305** 2 months, 2 weeks ago

Got this on 14-Apr-2023

upvoted 2 times

 **megaejay** 3 months ago

**Selected Answer: AC**

each choice represent part of solution. A and E do the same action . it's wrong . For me it's A & C

upvoted 1 times

 **bd1234** 3 months, 1 week ago

Even A looks good,

I vote for:

- C. AKS cluster autoscaler
- E. KEDA

upvoted 2 times

 **bd1234** 3 months, 2 weeks ago

just wondering why there are no AKS node scaling involved? which is C.

A and E are both pod level scaling.

upvoted 1 times

 **infavolante** 4 months ago

Answers are correct

upvoted 1 times

Question #88

Topic 4

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.

What should you include in the recommendation?

- A. Azure Application Gateway
- B. Azure Queue Storage
- C. Azure Data Lake
- D. Azure Traffic Manager

**Correct Answer: B**

*Community vote distribution*

B (100%)

 **fred356** 1 month, 2 weeks ago

**Selected Answer: B**

asynchronously = queue Storage or Service Bus Queue

upvoted 3 times

You need to design a highly available Azure SQL database that meets the following requirements:

- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Managed Instance General Purpose
- B. Azure SQL Database Hyperscale
- C. Azure SQL Database Premium
- D. Azure SQL Managed Instance Business Critical

**Correct Answer: C**

You need to design a highly available Azure SQL database that meets the following requirements:

- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Database Hyperscale
- B. Azure SQL Database Premium
- C. Azure SQL Database Basic
- D. Azure SQL Database Serverless

**Correct Answer: B**

✉️  **lombri** 3 weeks ago

Azure SQL Database Hyperscale is a scalable option for large workloads with flexible storage management. However, it is not specifically designed to ensure availability in case of zone outages and does not offer data-loss-free failover.

Azure SQL Database Basic is the most cost-effective option but lacks advanced features such as automatic failover and high availability.

Azure SQL Database Serverless is a cost-effective option for light and intermittent workloads but may not be suitable for an application requiring high availability without interruptions.

Azure SQL Database Premium is the recommended option as it offers advanced features like active geo-replication and automatic, data-loss-free failover. It also supports high availability in case of zone outages, ensuring the database remains accessible even if a specific zone experiences an interruption

upvoted 1 times

✉️  **techrat** 1 month, 4 weeks ago

**Selected Answer: B**

Passed the exam with 979 today, my answer to this question on the exam was Premium

upvoted 1 times

✉️  **waqarahmed78** 2 months, 1 week ago

This Question is same as Question # 52 on page 31 and answer is different. Why? Shouldn't it be Serverless?

upvoted 2 times

✉️  **yonie** 2 months ago

There are \*16\* variations of this question. Each of them offering different possible answers.

The answer priority is as follows. If it exists then choose it. If it doesn't, proceed to the next priority. Sometimes both appear in the same question, so make sure to select the higher priority.

1. Azure SQL Database Premium
2. Azure SQL Database Serverless
3. Azure SQL Database Business Critical

upvoted 6 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.

What should you include in the recommendation?

- A. Azure Notification Hubs
- B. Azure Service Bus
- C. Azure Blob Storage
- D. Azure Service Fabric

**Correct Answer:** B

 **Vimeiro** 1 month, 4 weeks ago

What is the purpose of repeating these questions over and over ???

upvoted 1 times

 **exam\_taker24** 1 month ago

Haha it's nice cause I have to finish fewer questions than expected

upvoted 2 times

 **GS300** 2 months ago

**Selected Answer: B**

It is B

upvoted 1 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.

What should you include in the recommendation?

- A. Azure Service Fabric
- B. Azure Traffic Manager
- C. Azure Queue Storage
- D. Azure Notification Hubs

**Correct Answer:** C

You have an on-premises Microsoft SQL Server 2008 instance that hosts a 50-GB database.

You need to migrate the database to an Azure SQL managed instance. The solution must minimize downtime.

What should you use?

- A. Azure Migrate
- B. Azure Data Studio
- C. WANDisco LiveData Platform for Azure
- D. SQL Server Management Studio (SSMS)

**Correct Answer: B**

 **psr83** Highly Voted 2 months, 1 week ago

**Selected Answer: B**

Migration guide: SQL Server to Azure SQL Managed Instance

Prerequisites

To migrate your SQL Server to Azure SQL Managed Instance, make sure you have:

- 1.Chosen a migration method and the corresponding tools for your method.
- 2.Install the Azure SQL migration extension for Azure Data Studio.
- 3.Created a target Azure SQL Managed Instance
4. Configured connectivity and proper permissions to access both source and target.
5. Reviewed the SQL Server database engine features available in Azure SQL Managed Instance.  
<https://learn.microsoft.com/en-us/azure/azure-sql/migration-guides/managed-instance/sql-server-to-managed-instance-guide?view=azuresql>

upvoted 7 times

 **Martin2021** Most Recent 2 weeks, 3 days ago

**Selected Answer: A**

Answer is A

upvoted 1 times

 **MantuKumarDeka** 3 weeks, 4 days ago

Azure Migrate

upvoted 1 times

 **Clarisa** 1 month ago

**Selected Answer: A**

Azure Migrate

upvoted 1 times

 **Sanjeevsn** 1 month, 1 week ago

**Selected Answer: A**

Azure Migrate

upvoted 1 times

 **rejisundar** 1 month, 2 weeks ago

Azure Data Studio is a tool for data professionals using on-premises and cloud data platforms on Windows, macOS, and Linux.

<https://learn.microsoft.com/en-us/sql/azure-data-studio/what-is-azure-data-studio?view=sql-server-ver16>

Hence the answer is Azure Migrate

upvoted 2 times

 **lombri** 1 month, 3 weeks ago

**Selected Answer: A**

Azure Data Studio

Is a lightweight multi-platform database tool for managing SQL Server instances and databases. While it can be used for migrations, it is not specifically designed for this purpose and does not provide the same level of automation and ease of use as Azure Migrate.

upvoted 3 times

 **sjb666** 2 months, 1 week ago

**Selected Answer: B**

Azure Data Studio -

- Migrate single databases or at scale.
- Offline mode only.

Supported sources:

- SQL Server (2008 onwards) on-premises, or on Azure Virtual Machines
- SQL Server on Amazon EC2
- Amazon RDS for SQL Server
- SQL Server on Google Compute Engine

upvoted 2 times

✉️  **Sanjeevsn** 1 month, 1 week ago

No, Azure Data Studio is a cross-platform database tool that provides a modern and lightweight interface for managing and working with various database platforms, including Azure SQL Database and Azure SQL Managed Instance. However, it is primarily a client tool and not specifically designed for database migration.

upvoted 1 times

✉️  **sjb666** 2 months, 1 week ago

**Selected Answer: A**

With Azure Migrate, you can discover, assess, and migrate your on-premises applications, infrastructure, and data to Azure. Azure Migrate uses Azure Site Recovery to migrate on-premises SQL Server instances to Azure SQL Managed Instance. It provides a single integrated experience for assessment, migration, and monitoring.

upvoted 2 times

✉️  **sjb666** 2 months, 1 week ago

moderator, please delete this comment, not having a good day, it's B

upvoted 2 times

✉️  **Sanaie** 2 months, 1 week ago

A.

Azure Migrate is the correct answer.

Azure Migrate provides a streamlined, comprehensive portfolio of Microsoft and partner tools to migrate your datacenter infrastructure and applications to Azure. Azure Migrate can help you assess and migrate on-premises servers, infrastructure, applications, and data to Azure. With Azure Migrate, you can discover, assess, and migrate your on-premises applications, infrastructure, and data to Azure. Azure Migrate uses Azure Site Recovery to migrate on-premises SQL Server instances to Azure SQL Managed Instance. It provides a single integrated experience for assessment, migration, and monitoring.

upvoted 3 times

Question #94

Topic 4

You need to design a highly available Azure SQL database that meets the following requirements:

- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Managed Instance Business Critical
- B. Azure SQL Managed Instance General Purpose
- C. Azure SQL Database Standard
- D. Azure SQL Database Premium

**Correct Answer: D**

You need to design a highly available Azure SQL database that meets the following requirements:

- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Database Business Critical
- B. Azure SQL Database Basic
- C. Azure SQL Managed Instance General Purpose
- D. Azure SQL Database Hyperscale

**Correct Answer: A**

 **csol** 2 months ago

**Selected Answer: A**

A - Hyperscale is more expensive and the other options doesn't support zone outage  
upvoted 1 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.

What should you include in the recommendation?

- A. Azure Service Fabric
- B. Azure Queue Storage
- C. Azure Traffic Manager
- D. Azure Application Gateway

**Correct Answer: B**

 **fred356** 1 month, 2 weeks ago

asynchronously => queue  
upvoted 2 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.

What should you include in the recommendation?

- A. Azure Application Gateway
- B. Azure Data Lake
- C. Azure Queue Storage
- D. Azure Blob Storage

**Correct Answer:** C

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.

What should you include in the recommendation?

- A. Azure Blob Storage
- B. Azure Data Lake
- C. Azure Queue Storage
- D. Azure Service Fabric

**Correct Answer:** C

 **gca22** 2 months ago

C. Azure Queue Storage  
upvoted 1 times

You need to design a highly available Azure SQL database that meets the following requirements:

- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Database Serverless
- B. Azure SQL Managed Instance General Purpose
- C. Azure SQL Database Basic
- D. Azure SQL Database Business Critical

**Correct Answer: A**

✉️  **yonie**  2 months ago

There are \*16\* variations of this question. Each of them offering different possible answers.

The answer priority is as follows. If it exists then choose it. If it doesn't, proceed to the next priority. Sometimes both appear in the same question, so make sure to select the higher priority.

1. Azure SQL Database Premium
2. Azure SQL Database Serverless
3. Azure SQL Database Business Critical

upvoted 19 times

✉️  **SandCloud** 1 month, 3 weeks ago

thanks yonie

upvoted 1 times

✉️  **betterthanlife** 2 months ago

It is true, thanks yonie.

upvoted 1 times

✉️  **skye\_winnn**  3 weeks, 1 day ago

The general purpose service tier zone redundant availability is only available in some regions, not all of the regions:

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#general-purpose-service-tier-zone-redundant-availability>

upvoted 1 times

✉️  **sankar07** 2 months ago

**Selected Answer: D**

Several times repeated and now the answer is A. It should be D.

upvoted 2 times

✉️  **sankar07** 2 months ago

I take it back. the order is Premium - Serverless - Business Critical. Answer is right. A.

upvoted 1 times

✉️  **przema86** 2 months ago

Why these question is constantly repeating? last 10x times a correct answer on the same question was "Azure SQL Database Business Critical"

upvoted 1 times

✉️  **gca22** 2 months ago

D. Azure SQL Database Business Critical

upvoted 3 times

You need to design a highly available Azure SQL database that meets the following requirements:

- Failover between replicas of the database must occur without any data loss.
- The database must remain available in the event of a zone outage.
- Costs must be minimized.

Which deployment option should you use?

- A. Azure SQL Database Standard
- B. Azure SQL Managed Instance General Purpose
- C. Azure SQL Database Serverless
- D. Azure SQL Database Premium

**Correct Answer: D**

✉️  **P8r** Highly Voted 2 months, 1 week ago

**Selected Answer: D**

In order of preference:

Premium > Serverless > Business Critical

upvoted 8 times

✉️  **eoicp** Most Recent 1 month, 1 week ago

I think it's serverless. Servers the requirement AT less cost

upvoted 2 times

✉️  **pxo1000** 1 month, 4 weeks ago

**Selected Answer: C**

Please explain how Premium is a better answer here than serverless? If serverless supports zone availability, it can failover without any data loss

upvoted 1 times

✉️  **resser19** 3 weeks, 6 days ago

Here are some factors to consider when choosing between Azure Database Serverless and Premium:

Database size: If your database is small, Azure Database Serverless is the most cost-effective option.

Database usage: If your database is used infrequently, Azure Database Serverless is the most cost-effective option.

Database requirements: If your database has specific requirements, such as high availability or disaster recovery, Azure Database Premium may be the best option.

Ultimately, the best way to choose between Azure Database Serverless and Premium is to consider your specific needs and requirements.

upvoted 1 times

✉️  **resser19** 3 weeks, 6 days ago

This response from Google Bard.

upvoted 1 times

You are developing a sales application that will contain several Azure cloud services and handle different components of a transaction. Different cloud services will process customer orders, billing, payment, inventory, and shipping.

You need to recommend a solution to enable the cloud services to asynchronously communicate transaction information by using XML messages.

What should you include in the recommendation?

- A. Azure Notification Hubs
- B. Azure Queue Storage
- C. Azure Blob Storage
- D. Azure Application Gateway

**Correct Answer: B**

 **Madbo** 3 weeks, 6 days ago

Azure Queue Storage provides a reliable messaging solution for asynchronous communication between different components of an application. It allows messages to be stored in a queue and processed later by the receiving service. XML messages can be stored as messages in the Azure Queue Storage, enabling asynchronous communication between the cloud services.

upvoted 1 times

 **psr83** 2 months, 1 week ago

**Selected Answer: B**  
Azure Queue Storage / Azure Service Bus are used to asynchronously communicate transaction information by using XML messages

upvoted 3 times

 **JohnPhan** 2 months, 1 week ago

**Selected Answer: B**

Answer is B

upvoted 1 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Litware, Inc. is a medium-sized finance company that has a main office in Boston.

Existing Environment -

Identity Environment -

The network contains an Active Directory forest named litware.com that is linked to an Azure Active Directory (Azure AD) tenant named litware.com. All users have Azure Active Directory Premium P2 licenses.

Litware has a second Azure AD tenant named dev.litware.com that is used as a development environment.

The litware.com tenant has a Conditional Access policy named Capolicy1. Capolicy1 requires that when users manage the Azure subscription for a production environment by using the Azure portal, they must connect from a hybrid Azure AD-joined device.

Azure Environment -

Litware has 10 Azure subscriptions that are linked to the Litware.com tenant and five Azure subscriptions that are linked to the dev.litware.com tenant. All the subscriptions are in an Enterprise Agreement (EA).

The litware.com tenant contains a custom Azure role-based access control (Azure RBAC) role named Role1 that grants the DataActions read permission to the blobs and files in Azure Storage.

On-Premises Environment -

The on-premises network of Litware contains the resources shown in the following table.

Name	Type	Configuration
SERVER1 SERVER2 SERVER3	Ubuntu 18.04 virtual machines hosted on Hyper-V	The virtual machines host a third-party app named App1. App1 uses an external storage solution that provides Apache Hadoop-compatible data storage. The data storage supports POSIX access control list (ACL) file-level permissions.
SERVER10	Server that runs Windows Server 2016	The server contains a Microsoft SQL Server instance that hosts two databases named DB1 and DB2.

## Network Environment -

Litware has ExpressRoute connectivity to Azure.

## Planned Changes and Requirements

### Planned Changes -

Litware plans to implement the following changes:

Migrate DB1 and DB2 to Azure.

Migrate App1 to Azure virtual machines.

Migrate the external storage used by App1 to Azure Storage.

Deploy the Azure virtual machines that will host App1 to Azure dedicated hosts.

### Authentication and Authorization Requirements

Litware identifies the following authentication and authorization requirements:

Only users that manage the production environment by using the Azure portal must connect from a hybrid Azure AD-joined device and authenticate by using

Azure Multi-Factor Authentication (MFA).

The Network Contributor built-in RBAC role must be used to grant permissions to the network administrators for all the virtual networks in all the Azure subscriptions.

To access the resources in Azure, App1 must use the managed identity of the virtual machines that will host the app.

RBAC roles must be applied to management groups.

### Resiliency Requirements -

Litware identifies the following resiliency requirements:

Once migrated to Azure, DB1 and DB2 must meet the following requirements:

- Maintain availability if two availability zones in the local Azure region fail.

- Fail over automatically.

- Minimize I/O latency.

App1 must meet the following requirements:

- Be hosted in an Azure region that supports availability zones.

- Be hosted on Azure virtual machines that support automatic scaling.

- Maintain availability if two availability zones in the local Azure region fail.

### Security and Compliance Requirements

Litware identifies the following security and compliance requirements:

Once App1 is migrated to Azure, you must ensure that new data can be written to the app, and the modification of new and existing data is prevented for a period of three years.

On-premises users and services must be able to access the Azure Storage account that will host the data in App1.

Access to the public endpoint of the Azure Storage account that will host the App1 data must be prevented.

All Azure SQL databases in the production environment must have Transparent Data Encryption (TDE) enabled.

App1 must NOT share physical hardware with other workloads.

### Business Requirements -

Litware identifies the following business requirements:

Minimize administrative effort.

Minimize costs.

## Question

### HOTSPOT -

You need to ensure that users managing the production environment are registered for Azure MFA and must authenticate by using Azure MFA when they sign in to the Azure portal. The solution must meet the authentication and authorization requirements.

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

NOTE: Each correct selection is worth one point.

Hot Area:

### Answer Area

To register the users for Azure MFA, use:

Azure AD Identity Protection
Security defaults in Azure AD
Azure AD authentication methods policy

To enforce Azure MFA authentication, configure:

Grant control in capolicy1
Session control in capolicy1
Sign-in risk policy in Azure AD Identity Protection for the Litware.com.tenant

Correct Answer:

### Answer Area

To register the users for Azure MFA, use:

Azure AD Identity Protection
Security defaults in Azure AD
Azure AD authentication methods policy

To enforce Azure MFA authentication, configure:

Grant control in capolicy1
Session control in capolicy1
Sign-in risk policy in Azure AD Identity Protection for the Litware.com.tenant

#### Box 1: Azure AD Identity Protection

Only users that manage the production environment by using the Azure portal must connect from a hybrid Azure AD-joined device and authenticate by using Azure Multi-Factor Authentication (MFA).

Note: Policy configuration -

1. Navigate to the Azure portal.
2. Browse to Azure Active Directory > Security > Identity Protection > MFA registration policy.
3. Under Assignments
4. Users - Choose All users or Select individuals and groups if limiting your rollout.
5. Optionally you can choose to exclude users from the policy.
6. Enforce Policy - On
7. Save

#### Box 2: Grant control in capolicy1

The litware.com tenant has a Conditional Access policy named Capolicy1. Capolicy1 requires that when users manage the Azure subscription for a production environment by using the Azure portal, they must connect from a hybrid Azure AD-joined device.

Note: We need to configure the policy conditions for capolicy1 that prompt for MFA.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/identity-protection/howto-identity-protection-configure-mfa-policy>

<https://docs.microsoft.com/en-us/azure/active-directory/authentication/tutorial-enable-azure-mfa>

 Guest  6 months, 1 week ago

If it helps there seem to be only 3 case studies.  
All the others have the same case, but different questions  
Maybe the admins can merge this ?  
topic 5: Litware  
topic 6: Contoso  
topic 7: Fabrikam  
topic 8: Litware = topic 5  
topic 9: Fabrikam = topic 7  
topic 10: Contoso Ltd = topic 6  
topic 11: Fabrikam = topic 7  
topic 12: Litware = topic 5  
topic 13: Contoso Ltd = topic 6

topic 14: Contoso Ltd = topic 6

topic 15: Litware = topic 5

topic 16: Fabrikam = topic 7

upvoted 25 times

✉ OPT\_001122 5 months, 1 week ago

This is a great help!!!! . i added few more details into it - case study specific details

topic 5: Litware-Question #1-Page42

topic 8: Litware-Question #1-Page44

topic 8: Litware-Question #2-Page44

topic 8: Litware-Question #3-Page45

topic 8: Litware-Question #4-Page45

topic 8: Litware-Question #5-Page45

topic 12: Litware-Question #1-Page47

topic 15: Litware-Question #1-Page48

=====

Total = 8

upvoted 7 times

✉ OPT\_001122 5 months, 1 week ago

Total = 9

topic 5: Litware-Question #2-Page42

upvoted 1 times

✉ comoon 3 months, 3 weeks ago

what is this, man?

upvoted 1 times

✉ Davin0406 [Highly Voted] 8 months, 2 weeks ago

Correct. appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.

upvoted 22 times

✉ steel72 [Most Recent] 3 months, 1 week ago

The provided answer is correct.

First box "Azure AD Identity Protection":

<https://learn.microsoft.com/en-us/azure/active-directory/identity-protection/howto-identity-protection-configure-mfa-policy>

Second box "Grant control in capolicy1":

7. Under Access controls > Grant, select Grant access, Require multifactor authentication, and select Select.

<https://learn.microsoft.com/en-us/azure/active-directory/conditional-access/howto-conditional-access-policy-all-users-mfa#create-a-conditional-access-policy>

upvoted 1 times

✉ globy118 4 months, 1 week ago

appeared in exam 02/15/2023

upvoted 2 times

✉ OPT\_001122 5 months, 1 week ago

the given ans is correct

upvoted 1 times

✉ Mo22 5 months, 2 weeks ago

I agree with both selections, the answer is correct to me

upvoted 1 times

✉ [Removed] 5 months, 2 weeks ago

Given answer is correct, 'nuff said.

upvoted 1 times

✉ Ghoshy 6 months ago

One can define AD Authentication Method Policy which enforces MFA. So, it could be Azure AD Authentication Method Policy and Grant Control.

You could navigate to Access Method for the AD by Security-> Manage Section-> Authentication Methods

upvoted 1 times

✉ jellybiscuit 9 months, 1 week ago

Identity Protection

Grant control

Identity protection can create MFA registration policies if you have AD Premium P2. (which is mentioned in the study)

<https://learn.microsoft.com/en-us/azure/active-directory/identity-protection/howto-identity-protection-configure-mfa-policy>

<https://learn.microsoft.com/en-us/azure/active-directory/identity-protection/overview-identity-protection>

<https://learn.microsoft.com/en-us/azure/active-directory/authentication/tutorial-enable-azure-mfa>

upvoted 9 times

✉️ **Neo2c** 9 months, 2 weeks ago

It's security defaults for MFA

<https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/concept-fundamentals-security-defaults>

upvoted 2 times

✉️ **Neo2c** 9 months, 2 weeks ago

The Document Says the if we use Conditional access policy then it does not make sense to use Security defaults. so it should be the third option which enables the MS authenticator APP for MFA

upvoted 1 times

✉️ **kay00001** 9 months, 2 weeks ago

1: Azure AD Identity Protection

2: Grant control in capolicy1

upvoted 4 times

✉️ **One11** 9 months, 3 weeks ago

First part does not make sense. Identity Protection has nothing to do with hybrid joined device or enforcing MFA to resource managers. It can provide risky policies or password protection.

upvoted 2 times

✉️ **ServerBrain** 5 months, 3 weeks ago

Because Microsoft is notorious for providing irrelevant info to try and throw you off, focus on the buzzwords. By focusing on those buzzwords, the answer should be easier to formulate..

upvoted 1 times

✉️ **jellybiscuit** 9 months, 1 week ago

<https://learn.microsoft.com/en-us/azure/active-directory/identity-protection/howto-identity-protection-configure-mfa-policy>

It does if you have Azure AD Premium P2

upvoted 2 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Litware, Inc. is a medium-sized finance company that has a main office in Boston.

Existing Environment -

Identity Environment -

The network contains an Active Directory forest named litware.com that is linked to an Azure Active Directory (Azure AD) tenant named litware.com. All users have Azure Active Directory Premium P2 licenses.

Litware has a second Azure AD tenant named dev.litware.com that is used as a development environment.

The litware.com tenant has a Conditional Access policy named Capolicy1. Capolicy1 requires that when users manage the Azure subscription for a production environment by using the Azure portal, they must connect from a hybrid Azure AD-joined device.

Azure Environment -

Litware has 10 Azure subscriptions that are linked to the Litware.com tenant and five Azure subscriptions that are linked to the dev.litware.com tenant. All the subscriptions are in an Enterprise Agreement (EA).

The litware.com tenant contains a custom Azure role-based access control (Azure RBAC) role named Role1 that grants the DataActions read permission to the blobs and files in Azure Storage.

On-Premises Environment -

The on-premises network of Litware contains the resources shown in the following table.

Name	Type	Configuration
SERVER1 SERVER2 SERVER3	Ubuntu 18.04 virtual machines hosted on Hyper-V	The virtual machines host a third-party app named App1. App1 uses an external storage solution that provides Apache Hadoop-compatible data storage. The data storage supports POSIX access control list (ACL) file-level permissions.
SERVER10	Server that runs Windows Server 2016	The server contains a Microsoft SQL Server instance that hosts two databases named DB1 and DB2.

Network Environment -

Litware has ExpressRoute connectivity to Azure.

#### Planned Changes and Requirements

##### Planned Changes -

Litware plans to implement the following changes:

Migrate DB1 and DB2 to Azure.

Migrate App1 to Azure virtual machines.

Migrate the external storage used by App1 to Azure Storage.

Deploy the Azure virtual machines that will host App1 to Azure dedicated hosts.

##### Authentication and Authorization Requirements

Litware identifies the following authentication and authorization requirements:

Only users that manage the production environment by using the Azure portal must connect from a hybrid Azure AD-joined device and authenticate by using

Azure Multi-Factor Authentication (MFA).

The Network Contributor built-in RBAC role must be used to grant permissions to the network administrators for all the virtual networks in all the Azure subscriptions.

To access the resources in Azure, App1 must use the managed identity of the virtual machines that will host the app.

RBAC roles must be applied to management groups.

##### Resiliency Requirements -

Litware identifies the following resiliency requirements:

Once migrated to Azure, DB1 and DB2 must meet the following requirements:

- Maintain availability if two availability zones in the local Azure region fail.
- Fail over automatically.
- Minimize I/O latency.

App1 must meet the following requirements:

- Be hosted in an Azure region that supports availability zones.
- Be hosted on Azure virtual machines that support automatic scaling.
- Maintain availability if two availability zones in the local Azure region fail.

##### Security and Compliance Requirements

Litware identifies the following security and compliance requirements:

Once App1 is migrated to Azure, you must ensure that new data can be written to the app, and the modification of new and existing data is prevented for a period of three years.

On-premises users and services must be able to access the Azure Storage account that will host the data in App1.

Access to the public endpoint of the Azure Storage account that will host the App1 data must be prevented.

All Azure SQL databases in the production environment must have Transparent Data Encryption (TDE) enabled.

App1 must NOT share physical hardware with other workloads.

##### Business Requirements -

Litware identifies the following business requirements:

Minimize administrative effort.

Minimize costs.

#### Question

After you migrate App1 to Azure, you need to enforce the data modification requirements to meet the security and compliance requirements.

What should you do?

- A. Create an access policy for the blob service.
- B. Implement Azure resource locks.
- C. Create Azure RBAC assignments.
- D. Modify the access level of the blob service.

**Correct Answer: A**

Scenario: Once App1 is migrated to Azure, you must ensure that new data can be written to the app, and the modification of new and existing data is prevented for a period of three years.

As an administrator, you can lock a subscription, resource group, or resource to prevent other users in your organization from accidentally deleting or modifying critical resources. The lock overrides any permissions the user might have.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-resource-manager/management/lock-resources>

✉️  **Davin0406** Highly Voted 8 months, 2 weeks ago

Selected Answer: A

This case study appeared in exam, 10/14/2022. I passed with 946/1000 and there were only 1~2 new questions but others were all from AZ-305 dump.

upvoted 22 times

✉️  **AHUI** 2 months ago

appreciated your feedback Davin0406. keep it up

upvoted 1 times

✉️  **AzureJobsTillRetire** 6 months ago

Your contributions are much appreciated

upvoted 2 times

✉️  **Kikota12** 3 months ago

He posts this in every comment, i think we understood

upvoted 3 times

✉️  **Mwavey** 8 months, 2 weeks ago

Well, we are tired of your comments on every question that you passed.

You are adding no value to this dump.

upvoted 35 times

✉️  **MarkMac** 6 months, 2 weeks ago

Totally disagree. Helps validate the accuracy of the post. Please keep it up Davin0406.

upvoted 9 times

✉️  **EXzw** 3 months ago

Agree. keep it up Davin0406.

upvoted 1 times

✉️  **ExamTopicsTST** 7 months, 2 weeks ago

No value? The lad is giving you heads up this case study was seen on recent exam. Why would you not find value in that? And the fact that they got a high score, if they saw a question, and agreed with the answer, then I'd probably take note of this and for sure study this for the exam. We know there are not this many questions on the exam. So appreciate those that come back to help others. Geez.

upvoted 16 times

✉️  **ExamTopicsTST** 7 months, 2 weeks ago

I will confirm, after passing w/903 on 11/13, this case study was the one that I was presented w/8 questions from this dump.

upvoted 3 times

✉️  **ExamTopicsTST** 7 months, 2 weeks ago

My bad...CORRECTION...it was the next case study with Fabrikam that had the App1 and App2 scenario.

upvoted 2 times

✉️  **ianzzy** 6 months, 1 week ago

Hey mate did you studied the 304 dump as well or only this one?

upvoted 1 times

✉️  **Mo22** 5 months, 3 weeks ago

wow, just no comments ... how can you be so disrespectful, he is adding a great a value

upvoted 3 times

✉️  **zellick** Most Recent 4 months ago

Same as Question 1.

<https://www.examtopics.com/discussions/microsoft/view/67635-exam-az-305-topic-5-question-1-discussion>

upvoted 2 times

✉️  **zellick** 4 months ago

Selected Answer: A

A is the answer.

<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview>

Immutable storage for Azure Blob Storage enables users to store business-critical data in a WORM (Write Once, Read Many) state. While in a WORM state, data cannot be modified or deleted for a user-specified interval. By configuring immutability policies for blob data, you can protect your data from overwrites and deletes.

upvoted 3 times

**OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: A**

A. Create an access policy for the blob service.

upvoted 2 times

**janvandermerwer** 5 months, 1 week ago

**Selected Answer: A**

I'm going to go with A - Seems to be "most" correct.

upvoted 1 times

**MadSysadmin** 5 months, 1 week ago

**Selected Answer: B**

Azure resource locks can do this

upvoted 1 times

**Villa76** 6 months, 1 week ago

access policy is the right answer because resource lock will not achieve the time based retention which is required here. Have a look here you will understand all :<https://learn.microsoft.com/en-us/azure/storage/blobs/immutable-policy-configure-version-scope?tabs=azure-portal#configure-a-default-time-based-retention-policy>

upvoted 1 times

**Born\_Again** 6 months, 3 weeks ago

**Selected Answer: A**

100% A is the right choice!

upvoted 1 times

**CLToh** 8 months ago

**Selected Answer: B**

Why not B since the explanation is about applying resource lock?

As an administrator, you can lock a subscription, resource group, or resource to prevent other users in your organization from accidentally deleting or modifying critical resources. The lock overrides any permissions the user might have.

upvoted 3 times

**FabrityDev** 5 months, 1 week ago

Because you don't want to lock the resource, only the data in it, specifically in a storage.

upvoted 1 times

**randomaccount123** 7 months, 3 weeks ago

That's used for the actual resource in Azure mate. Access policies are used for the actual data in the containers.

upvoted 8 times

**Snownoodles** 8 months ago

**Selected Answer: A**

Given answer is correct

upvoted 1 times

**kay000001** 9 months, 2 weeks ago

**Selected Answer: A**

A. Create an access policy for the blob service.

upvoted 1 times

**kay000001** 9 months, 2 weeks ago

**Selected Answer: A**

A. Create an access policy for the blob service.

upvoted 1 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Contoso, Ltd. is a research company that has a main office in Montreal.

Existing Environment -

Technical Environment -

The on-premises network contains a single Active Directory domain named contoso.com.

Contoso has a single Azure subscription.

Business Partnerships -

Contoso has a business partnership with Fabrikam, Inc. Fabrikam users access some Contoso applications over the internet by using Azure Active Directory (Azure AD) guest accounts.

Requirements -

Planned Changes -

Contoso plans to deploy two applications named App1 and App2 to Azure.

App1 -

App1 will be a Python web app hosted in Azure App Service that requires a Linux runtime. Users from Contoso and Fabrikam will access App1. App1 will access several services that require third-party credentials and access strings. The credentials and access strings are stored in Azure Key Vault.

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

App1 has the following data requirements:

Each instance will write data to a data store in the same availability zone as the instance.

Data written by any App1 instance must be visible to all App1 instances.

App1 will only be accessible from the internet. App1 has the following connection requirements:

Connections to App1 must pass through a web application firewall (WAF).

Connections to App1 must be active-active load balanced between instances.

All connections to App1 from North America must be directed to the East US region. All other connections must be directed to the West Europe region.

Every hour, you will run a maintenance task by invoking a PowerShell script that copies files from all the App1 instances. The PowerShell script will run from a central location.

## App2 -

App2 will be a .NET app hosted in App Service that requires a Windows runtime. App2 has the following file storage requirements:

Save files to an Azure Storage account.

Replicate files to an on-premises location.

Ensure that on-premises clients can read the files over the LAN by using the SMB protocol.

You need to monitor App2 to analyze how long it takes to perform different transactions within the application. The solution must not require changes to the application code.

### Application Development Requirements

Application developers will constantly develop new versions of App1 and App2. The development process must meet the following requirements:

A staging instance of a new application version must be deployed to the application host before the new version is used in production.

After testing the new version, the staging version of the application will replace the production version.

The switch to the new application version from staging to production must occur without any downtime of the application.

### Identity Requirements -

Contoso identifies the following requirements for managing Fabrikam access to resources:

Every month, an account manager at Fabrikam must review which Fabrikam users have access permissions to App1. Accounts that no longer need permissions must be removed as guests.

The solution must minimize development effort.

### Security Requirement -

All secrets used by Azure services must be stored in Azure Key Vault.

Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services.

## Question

You need to recommend a solution for the App1 maintenance task. The solution must minimize costs.

What should you include in the recommendation?

- A. an Azure logic app
- B. an Azure function
- C. an Azure virtual machine
- D. an App Service WebJob

### Correct Answer: A

Every hour, you will run a maintenance task by invoking a PowerShell script that copies files from all the App1 instances. The PowerShell script will run from a central location.

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

You can create and manage workflows with Azure PowerShell in Azure Logic Apps.

You can create a Consumption logic app in multi-tenant Azure Logic Apps by using the JSON file for a logic app workflow definition. You can then manage your logic app by running the cmdlets in the Az.LogicApp PowerShell module.

Reference:

<https://docs.microsoft.com/en-us/azure/logic-apps/quickstart-logic-apps-azure-powershell>

  **Tusharsp** Highly Voted 6 months ago

#### Selected Answer: A

Azure function will need to be run from every region. This will need 2 functions. Logic app can be created centrally and executed for both regions as per given requirement. "The PowerShell script will run from a central location."

upvoted 10 times

  **AzureJobsTillRetire** 6 months ago

You can create a Consumption logic app in multi-tenant Azure Logic Apps by using the JSON file for a logic app workflow definition. You can then manage your logic app by running the cmdlets in the Az.LogicApp PowerShell module.

Reference:

<https://docs.microsoft.com/en-us/azure/logic-apps/quickstart-logic-apps-azure-powershell>

upvoted 2 times

  **pkkalra** 5 months, 3 weeks ago

Azure function as a resource is created in a region but it can access data store from a different region if access is provided. A single function from a region should be able to do the job. I have no reason to believe that a logic app can access data store from two regions but a function

cannot. Answer is B.

upvoted 1 times

✉️ **AzureJobsTillRetire** 6 months ago

"Azure Functions resources are region-specific and can't be moved across regions. You must create a copy of your existing function app resources in the target region, then redeploy your functions code over to the new app."

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-move-across-regions>

upvoted 2 times

✉️ **Snownoodles** Highly Voted 8 months ago

Selected Answer: B

Azure function

upvoted 9 times

✉️ **upwork** 5 months ago

What about the 5 min. timeout for a Function app in Azure?

upvoted 1 times

✉️ **Tr619899** Most Recent 2 weeks, 3 days ago

Yes, Azure Functions can run a PowerShell script from a central location. Azure Functions support PowerShell as a language for writing functions, and you can use the timer trigger to run the function every hour as mentioned in the current web page context. The function can be hosted in one of the regions where App1 is deployed, either East US or West Europe, and can access all the App1 instances to copy the files.

upvoted 1 times

✉️ **Clarisa** 1 month ago

Selected Answer: B

Azure Function

upvoted 1 times

✉️ **techrat** 1 month, 4 weeks ago

I am confident it's B. Azure Function. I had this question on the exam today, and I got 979, in the Design Infrastructure Solutions, I was 100% correct, and this question belongs to this category.

upvoted 2 times

✉️ **steel72** 3 months, 1 week ago

Selected Answer: B

The correct answer is an Azure Function.

A Logic App would work but it's more expensive so it does not meet "minimize cost" requirement.

upvoted 1 times

✉️ **Davesabath** 3 months, 2 weeks ago

chatgpt says otherwise.

To minimize costs, the recommended solution for the App1 maintenance task is to use an App Service WebJob. App Service WebJobs allow you to run scripts or programs in the same context as a web app, which can be triggered on a schedule or manually. In this case, the PowerShell script can be triggered hourly and run from a central location using the WebJob.

Option A, an Azure logic app, is not the best fit for this scenario since it is a more complex solution that allows you to create workflows using different connectors and services. Option B, an Azure function, is designed for event-driven scenarios and is more suitable for short-lived, stateless functions. Option C, an Azure virtual machine, is a more expensive and complex solution that is not necessary for running a simple PowerShell script.

upvoted 1 times

✉️ **T10T** 3 months, 1 week ago

GPT-4 has been a lot more reliable than 3.5 on this brain dump.

B. an Azure function

Explanation:

To run the maintenance task for App1, you should use an Azure Function. Azure Functions allow you to run small pieces of code (called "functions") without worrying about the underlying infrastructure. They are serverless, meaning you only pay for the compute time consumed during execution, which makes them cost-effective for tasks that run periodically or are triggered by events. In this case, you can schedule the Azure Function to run the PowerShell script every hour. This approach will minimize costs while meeting the requirements.

upvoted 1 times

✉️ **EXzw** 3 months ago

Yes. Gpt 4 opt for B. Azure Function.

upvoted 1 times

✉️ **alison0115** 4 months, 1 week ago

In the comparison table, Function cannot be managed by powershell. So the answer should be Logic App.

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-compare-logic-apps-ms-flow-webjobs#compare-azure-functions-and-azure-logic-apps>

upvoted 1 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: B**

B. an Azure function

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-reference-powershell?tabs=portal>

upvoted 2 times

 **upwork** 5 months ago

I would say a scheduled WebJob could be a perfect fit, but it is not supported on Linux yet so we need to choose from other options.

WebJobs is a feature of Azure App Service that enables you to run a program or script in the same instance as a web app, API app, or mobile app. There is no additional cost to use WebJobs. WebJobs is not yet supported for App Service on Linux.

<https://learn.microsoft.com/en-us/azure/app-service/webjobs-create>

upvoted 1 times

 **OPT\_001122** 5 months, 1 week ago

topic 6: Contoso-Question #1-Page-43

topic 6: Contoso-Question #2-Page-43

topic 6: Contoso-Question #3-Page-43

topic 6: Contoso-Question #4-Page-43

topic 10: Contoso Itd-Question #1-Page-46

topic 10: Contoso Itd-Question #1-Page-46

topic 13: Contoso Itd-Question #1-Page-47

topic 13: Contoso Itd-Question #2-Page-47

topic 14: Contoso Itd-Question #1-Page-48

=====

Total = 9

upvoted 5 times

 **pkkalra** 5 months, 3 weeks ago

**Selected Answer: B**

Azure function as a resource is created in a region but it can access data store from a different region if access is provided. A single function from a region should be able to do the job. I have no reason to believe that a logic app can access data store from two regions but a function cannot. Answer is B.

upvoted 4 times

 **A\_GEE** 6 months, 3 weeks ago

**Selected Answer: B**

Azure Function. Given everything same, pick the lowest cost one

upvoted 2 times

 **Born\_Again** 6 months, 3 weeks ago

**Selected Answer: A**

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-create-scheduled-function#create-a-timer-triggered-function>

upvoted 1 times

 **Born\_Again** 6 months, 3 weeks ago

This quickstart shows how to create and manage automated workflows that run in Azure Logic Apps by using Azure PowerShell. From PowerShell, you can create a Consumption logic app in multi-tenant Azure Logic Apps by using the JSON file for a logic app workflow definition. You can then manage your logic app by running the cmdlets in the Az.LogicApp PowerShell module.

upvoted 2 times

 **tfulanchan** 5 months ago

Source: <https://learn.microsoft.com/en-us/azure/logic-apps/quickstart-logic-apps-azure-powershell>

upvoted 1 times

 **jp\_mcgee** 7 months, 2 weeks ago

B - Azure Function

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-reference-powershell?tabs=portal>

<https://learn.microsoft.com/en-us/azure/azure-functions/functions-create-scheduled-function#create-a-timer-triggered-function>

This is the lowest cost

upvoted 4 times

 **Jay\_2pt0** 8 months, 1 week ago

B. Azure Function

upvoted 3 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Contoso, Ltd. is a research company that has a main office in Montreal.

Existing Environment -

Technical Environment -

The on-premises network contains a single Active Directory domain named contoso.com.

Contoso has a single Azure subscription.

Business Partnerships -

Contoso has a business partnership with Fabrikam, Inc. Fabrikam users access some Contoso applications over the internet by using Azure Active Directory  
(Azure AD) guest accounts.

Requirements -

Planned Changes -

Contoso plans to deploy two applications named App1 and App2 to Azure.

App1 -

App1 will be a Python web app hosted in Azure App Service that requires a Linux runtime. Users from Contoso and Fabrikam will access App1.

App1 will access several services that require third-party credentials and access strings. The credentials and access strings are stored in Azure Key Vault.

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

App1 has the following data requirements:

Each instance will write data to a data store in the same availability zone as the instance.

Data written by any App1 instance must be visible to all App1 instances.

App1 will only be accessible from the internet. App1 has the following connection requirements:

Connections to App1 must pass through a web application firewall (WAF).

Connections to App1 must be active-active load balanced between instances.

All connections to App1 from North America must be directed to the East US region. All other connections must be directed to the West Europe region.

Every hour, you will run a maintenance task by invoking a PowerShell script that copies files from all the App1 instances. The PowerShell script will run from a central location.

App2 -

App2 will be a .NET app hosted in App Service that requires a Windows runtime. App2 has the following file storage requirements:

Save files to an Azure Storage account.

Replicate files to an on-premises location.

Ensure that on-premises clients can read the files over the LAN by using the SMB protocol.

You need to monitor App2 to analyze how long it takes to perform different transactions within the application. The solution must not require changes to the application code.

#### Application Development Requirements

Application developers will constantly develop new versions of App1 and App2. The development process must meet the following requirements:

A staging instance of a new application version must be deployed to the application host before the new version is used in production.

After testing the new version, the staging version of the application will replace the production version.

The switch to the new application version from staging to production must occur without any downtime of the application.

#### Identity Requirements -

Contoso identifies the following requirements for managing Fabrikam access to resources:

Every month, an account manager at Fabrikam must review which Fabrikam users have access permissions to App1. Accounts that no longer need permissions must be removed as guests.

The solution must minimize development effort.

#### Security Requirement -

All secrets used by Azure services must be stored in Azure Key Vault.

Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services.

### Question

You need to recommend a solution that meets the application development requirements.

What should you include in the recommendation?

- A. the Azure App Configuration service
- B. an Azure Container Registry instance
- C. deployment slots
- D. Continuous Integration/Continuous Deployment (CI/CD) sources

#### Correct Answer: C

When you deploy your web app, web app on Linux, mobile back end, or API app to Azure App Service, you can use a separate deployment slot instead of the default production slot when you're running in the Standard, Premium, or Isolated App Service plan tier. Deployment slots are live apps with their own host names.

App content and configurations elements can be swapped between two deployment slots, including the production slot.

Deploying your application to a non-production slot has the following benefits:

- \* You can validate app changes in a staging deployment slot before swapping it with the production slot.
- \* Deploying an app to a slot first and swapping it into production makes sure that all instances of the slot are warmed up before being swapped into production.

This eliminates downtime when you deploy your app.

- \* After a swap, the slot with previously staged app now has the previous production app. If the changes swapped into the production slot aren't as you expect, you can perform the same swap immediately to get your "last known good site" back.

Note: Application Development Requirements

Application developers will constantly develop new versions of App1 and App2. The development process must meet the following requirements:

• A staging instance of a new application version must be deployed to the application host before the new version is used in production.

• After testing the new version, the staging version of the application will replace the production version.

• The switch to the new application version from staging to production must occur without any downtime of the application.

Reference:

<https://docs.microsoft.com/en-us/azure/app-service/deploy-staging-slots>

 **Darkx** Highly Voted 8 months, 2 weeks ago

appeared on 11th Oct 2022

upvoted 5 times

 **codefries**  9 months, 1 week ago

**Selected Answer: C**

Should be C - Deployment Slots

<https://learn.microsoft.com/en-us/azure/app-service/deploy-staging-slots>

upvoted 5 times

 **zelick**  4 months ago

**Selected Answer: C**

C is the answer.

<https://learn.microsoft.com/en-us/azure/app-service/deploy-best-practices#use-deployment-slots>

Whenever possible, use deployment slots when deploying a new production build. When using a Standard App Service Plan tier or better, you can deploy your app to a staging environment, validate your changes, and do smoke tests. When you are ready, you can swap your staging and production slots. The swap operation warms up the necessary worker instances to match your production scale, thus eliminating downtime.

upvoted 3 times

 **OPT\_001122** 4 months, 3 weeks ago

**Selected Answer: C**

C. deployment slot

upvoted 1 times

 **diego\_alessandro** 7 months, 3 weeks ago

Correct Answer C-Deployments Slots

upvoted 3 times

 **randomaccount123** 8 months, 2 weeks ago

Its wants deployment slots as the answer, but CI/CD would be the better way of doing it.

upvoted 3 times

 **Dinima** 9 months, 2 weeks ago

For me CI/CD could be the best option. you can test it when it's in an env.

upvoted 3 times

 **Sant25** 9 months, 2 weeks ago

It should be A. the Azure App Configuration service

upvoted 1 times

 **kay000001** 9 months, 2 weeks ago

**Selected Answer: C**

Answer is C - Deployment Slots

We are dealing with testing then deploying versions of Apps.

As per the Case Study:

Application Development Requirements:

Application developers will constantly develop new versions of App1 and App2. The development process must meet the following requirements:  
A staging instance of a new application version must be deployed to the application host before the new version is used in production.

After testing the new version, the staging version of the application will replace the production version.

upvoted 4 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Contoso, Ltd. is a research company that has a main office in Montreal.

Existing Environment -

Technical Environment -

The on-premises network contains a single Active Directory domain named contoso.com.

Contoso has a single Azure subscription.

Business Partnerships -

Contoso has a business partnership with Fabrikam, Inc. Fabrikam users access some Contoso applications over the internet by using Azure Active Directory  
(Azure AD) guest accounts.

Requirements -

Planned Changes -

Contoso plans to deploy two applications named App1 and App2 to Azure.

App1 -

App1 will be a Python web app hosted in Azure App Service that requires a Linux runtime. Users from Contoso and Fabrikam will access App1.

App1 will access several services that require third-party credentials and access strings. The credentials and access strings are stored in Azure Key Vault.

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

App1 has the following data requirements:

Each instance will write data to a data store in the same availability zone as the instance.

Data written by any App1 instance must be visible to all App1 instances.

App1 will only be accessible from the internet. App1 has the following connection requirements:

Connections to App1 must pass through a web application firewall (WAF).

Connections to App1 must be active-active load balanced between instances.

All connections to App1 from North America must be directed to the East US region. All other connections must be directed to the West Europe region.

Every hour, you will run a maintenance task by invoking a PowerShell script that copies files from all the App1 instances. The PowerShell script will run from a central location.

App2 -

App2 will be a .NET app hosted in App Service that requires a Windows runtime. App2 has the following file storage requirements:

Save files to an Azure Storage account.

Replicate files to an on-premises location.

Ensure that on-premises clients can read the files over the LAN by using the SMB protocol.

You need to monitor App2 to analyze how long it takes to perform different transactions within the application. The solution must not require changes to the application code.

#### Application Development Requirements

Application developers will constantly develop new versions of App1 and App2. The development process must meet the following requirements:

A staging instance of a new application version must be deployed to the application host before the new version is used in production.

After testing the new version, the staging version of the application will replace the production version.

The switch to the new application version from staging to production must occur without any downtime of the application.

#### Identity Requirements -

Contoso identifies the following requirements for managing Fabrikam access to resources:

Every month, an account manager at Fabrikam must review which Fabrikam users have access permissions to App1. Accounts that no longer need permissions must be removed as guests.

The solution must minimize development effort.

#### Security Requirement -

All secrets used by Azure services must be stored in Azure Key Vault.

Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services.

### Question

You need to recommend an App Service architecture that meets the requirements for App1. The solution must minimize costs.

What should you recommend?

- A. one App Service Environment (ASE) per availability zone
- B. one App Service Environment (ASE) per region
- C. one App Service plan per region
- D. one App Service plan per availability zone

#### Correct Answer: B

App1 has the following data requirements:

Each instance will write data to a data store in the same availability zone as the instance.

Data written by any App1 instance must be visible to all App1 instances.

Note: The Azure App Service Environment v2 is an Azure App Service feature that provides a fully isolated and dedicated environment for securely running App

Service apps at high scale.

Customers can create multiple ASEs within a single Azure region or across multiple Azure regions. This flexibility makes ASEs ideal for horizontally scaling stateless application tiers in support of high requests per second (RPS) workloads.

Reference:

<https://docs.microsoft.com/en-us/azure/app-service/environment/intro>

✉️  **GarryK**  9 months ago

**Selected Answer: C**

No need for dedicated environment. So Azure Service Plan per region is enough.

upvoted 22 times

✉️  **kay00001**  9 months, 2 weeks ago

**Selected Answer: B**

B. one App Service Environment (ASE) per region

It's correct, but a single ASE can cover multiple regions - as per the requirement of the case study.

As per case study:

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

upvoted 7 times

 **Snownoodles** 9 months ago

It doesn't have to be ASE, the ordinary web app plan should be enough.  
So the correct answer should be C  
upvoted 4 times

 **JDKJDKJDK** 9 months, 1 week ago

Hi kay can you explain why C is incorrect?  
upvoted 2 times

 **alexander\_panfilenok** [Most Recent] 7 hours, 3 minutes ago

So if the answer is "App Service Plan per region" and there should be 6 instances and there are 2 regions, Can anybody tell me what is the reason to have 3 instances of the same Web App sitting on the same App Service Plan?  
upvoted 1 times

 **jeanmi312** 2 months, 1 week ago

**Selected Answer: B**

In  
<https://learn.microsoft.com/en-us/azure/app-service/overview-hosting-plans#should-i-put-an-app-in-a-new-plan-or-an-existing-plan>  
Isolate your app into a new App Service plan when:  
....  
- The app needs resource in a different geographical region.

In

<https://learn.microsoft.com/en-us/azure/app-service/manage-move-across-regions>  
App Service resources are region-specific and can't be moved across regions.

As per case study, data for one instance of App1 must be available to all instances of App1

So I would say B even if it's more expensive

upvoted 1 times

 **SedateBlogs** 2 months, 2 weeks ago

**Selected Answer: B**

I did think C initially, but am angling towards B now (not notwithstanding the cost requirement) The only additional thing that I would say should be considered should be the need for the data to be available to App1 across all regions and instances. App service plans are region specific. At <https://learn.microsoft.com/en-us/azure/app-service/environment/overview#virtual-network-support> its stated "If the App Service Environment virtual network is connected to another network, the apps in the App Service Environment can access resources in those extended networks." Does this not imply that the app can therefore access all data across all six instances? Not sure that having a separate app service plan in each region would allow that portion of the requirement stated

upvoted 1 times

 **curtmcgirt** 3 months, 1 week ago

**Selected Answer: C**

ASE is too much. ASP will do .

upvoted 1 times

 **memyself2** 4 months ago

**Selected Answer: C**

This was a question was on my exam today (2/26/23) - Scored 844  
I selected C, ASE seems like more than requested, if trying to keep it simple  
upvoted 5 times

 **globby118** 4 months, 1 week ago

Exam Question 02/15/2023  
upvoted 3 times

 **RandomNickname** 5 months, 1 week ago

**Selected Answer: C**

No need to ASE as far as the requirement go that I can see.  
ASP should be fine, which also minimizes cost.

<https://learn.microsoft.com/en-us/azure/app-service/overview-hosting-plans>  
upvoted 2 times

 **OPT\_001122** 5 months, 1 week ago

**Selected Answer: C**  
C. one App Service plan per region  
upvoted 1 times

 **gramotei** 5 months, 2 weeks ago

**Selected Answer: C**  
Since it's minimise cost I would go with C:

Availability zone support is a property of the App Service plan. The following are the current requirements/limitations for enabling availability

zones:

Both Windows and Linux are supported.

Requires either Premium v2 or Premium v3 App Service plans.

upvoted 4 times

 **Mo22** 5 months, 2 weeks ago

**Selected Answer: C**

To minize the cost I will go with C

upvoted 2 times

 **Kay04** 6 months, 1 week ago

B and C has fit for the solution however C is the cheaper option to fulfill the requirement.

upvoted 3 times

 **venram7** 6 months, 2 weeks ago

**Selected Answer: B**

If both App1 & App2 needs to be considered, then ASE can support access to On-Prem using express route. As cost was not mentioned i think ASE is good fit as well

upvoted 1 times

 **sainandam** 4 months, 1 week ago

They mentioned cost must be minimized

upvoted 1 times

 **Mltytskr** 5 months, 3 weeks ago

The question only mentions App1, so C should be sufficient.

upvoted 1 times

 **adamp54** 8 months ago

**Selected Answer: C**

App Service Plan should be OK

upvoted 1 times

 **sondrex** 8 months ago

Answer B is correct (<https://learn.microsoft.com/en-us/azure/app-service/environment/overview>)

upvoted 1 times

 **simonseztech** 8 months, 1 week ago

**Selected Answer: C**

to minimise the cost and no vnet integration are needed. that should be C.

upvoted 3 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Contoso, Ltd. is a research company that has a main office in Montreal.

Existing Environment -

Technical Environment -

The on-premises network contains a single Active Directory domain named contoso.com.

Contoso has a single Azure subscription.

Business Partnerships -

Contoso has a business partnership with Fabrikam, Inc. Fabrikam users access some Contoso applications over the internet by using Azure Active Directory  
(Azure AD) guest accounts.

Requirements -

Planned Changes -

Contoso plans to deploy two applications named App1 and App2 to Azure.

App1 -

App1 will be a Python web app hosted in Azure App Service that requires a Linux runtime. Users from Contoso and Fabrikam will access App1.

App1 will access several services that require third-party credentials and access strings. The credentials and access strings are stored in Azure Key Vault.

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

App1 has the following data requirements:

Each instance will write data to a data store in the same availability zone as the instance.

Data written by any App1 instance must be visible to all App1 instances.

App1 will only be accessible from the internet. App1 has the following connection requirements:

Connections to App1 must pass through a web application firewall (WAF).

Connections to App1 must be active-active load balanced between instances.

All connections to App1 from North America must be directed to the East US region. All other connections must be directed to the West Europe region.

Every hour, you will run a maintenance task by invoking a PowerShell script that copies files from all the App1 instances. The PowerShell script will run from a central location.

App2 -

App2 will be a .NET app hosted in App Service that requires a Windows runtime. App2 has the following file storage requirements:

Save files to an Azure Storage account.

Replicate files to an on-premises location.

Ensure that on-premises clients can read the files over the LAN by using the SMB protocol.

You need to monitor App2 to analyze how long it takes to perform different transactions within the application. The solution must not require changes to the application code.

#### Application Development Requirements

Application developers will constantly develop new versions of App1 and App2. The development process must meet the following requirements:

A staging instance of a new application version must be deployed to the application host before the new version is used in production.

After testing the new version, the staging version of the application will replace the production version.

The switch to the new application version from staging to production must occur without any downtime of the application.

#### Identity Requirements -

Contoso identifies the following requirements for managing Fabrikam access to resources:

Every month, an account manager at Fabrikam must review which Fabrikam users have access permissions to App1. Accounts that no longer need permissions must be removed as guests.

The solution must minimize development effort.

#### Security Requirement -

All secrets used by Azure services must be stored in Azure Key Vault.

Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services.

#### Question

##### HOTSPOT -

You need to recommend a solution to ensure that App1 can access the third-party credentials and access strings. The solution must meet the security requirements.

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

NOTE: Each correct selection is worth one point.

Hot Area:

#### Answer Area

Authenticate App1 by using:

A certificate
A system-assigned managed identity
A user-assigned managed identity

Authorize App1 to retrieve Key Vault secrets by using:

An access policy
A connected service
A private link
A role assignment

Correct Answer:

## Answer Area

Authenticate App1 by using:

A certificate
A system-assigned managed identity
A user-assigned managed identity

Authorize App1 to retrieve Key Vault secrets by using:

An access policy
A connected service
A private link
A role assignment

Scenario: Security Requirement -

All secrets used by Azure services must be stored in Azure Key Vault.

Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services.

Box 1: A system-assigned managed identity

No one knows the credentials of managed identities.

Managed Identities exist in two formats:

\* System assigned: in this scenario, the identity is linked to a single Azure Resource, eg a Virtual Machine, a Logic App, a Storage Account, Web App, Function, so almost anything. Next, they also live with the Azure Resource, which means they get deleted when the Azure Resource gets deleted.

\* User Assigned Managed Identity (incorrect for this question), which means that you first have to create it as a stand-alone Azure resource by itself, after which it can be linked to multiple Azure Resources.

Box 2: An access policy -

Set up an access policy for the system-assigned managed identity.

Note: Grant access -

The managed identity needs to be granted access to read the secret that we'll store in the Key Vault.

1. Navigate to your newly created Key Vault
2. Select Access Policy from the menu on the left side.
3. Select Add Access Policy
4. Etc.

Reference:

<https://devblogs.microsoft.com/devops/demystifying-service-principals-managed-identities/> <https://docs.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-nonaad>

✉️  **kay00001** Highly Voted 9 months, 2 weeks ago

Drop Down 1:

A system-assigned managed identity.

Drop Down 2:

Role Assignment.

But I'm happy to be corrected. Thanks.

upvoted 24 times

✉️  **Snownoodles** 9 months ago

Question 2: Both access policy and role assignment should work here

upvoted 3 times

✉️  **Snownoodles** 8 months, 3 weeks ago

I figured out why only "role assignment" is the correct answer.

"Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services"

RBAC can assign permission to a specific secret, but the access policy assigns permissions for all secrets or keys, not as granular as RBAC

upvoted 11 times

✉️ **AzureJobsTillRetire** 5 months, 2 weeks ago

What do you mean RBAC can assign permission to a specific secret? How? For the controls at key/secret level, Access Policy is more granular than RBAC.

upvoted 1 times

✉️ **AzureJobsTillRetire** 5 months, 2 weeks ago

I created a key and a secret in a key vault and can confirm that you cannot do role assignment on a particular key or secret.

upvoted 1 times

✉️ **SedateBloggs** 2 months, 2 weeks ago

That was the older model of KeyVault. The newer KeyVault allows you to select RBAC as the model and is granular to the point of individual secrets

upvoted 1 times

✉️ **JaQua** Highly Voted 8 months, 2 weeks ago

1. user assigned managed identity - share 1 identity among all 6 app services

2. access policy

upvoted 15 times

✉️ **Jay\_2pto** 7 months, 3 weeks ago

It specifies that "credentials must NOT be shared."

upvoted 5 times

✉️ **DeBoer** 4 months, 1 week ago

They must not be shared... between APP1 and APP2. But it says nothing about sharing between instances of the app. If we want to reduce admin overhead then this is actually better while still adhering to requirements,

upvoted 3 times

✉️ **alexander\_panfilenok** Most Recent 1 week ago

System Assigned Managed Identity + Role Assignment.

Just create the KeyVault and then go to settings -> access configuration. You will see that the RBAC is turned on by default and it is recommended. The Access Policy is turned off.

upvoted 1 times

✉️ **tunaparker** 1 month ago

For the second dropdown question, chatgpt-3 says:

For retrieving secrets from Azure Key Vault in your specific scenario, the recommended approach would be to use an access policy.

Access policies within Azure Key Vault are specifically designed to control and manage permissions for accessing secrets stored within the Key Vault. By adding an access policy for your App1 application, you can define the specific actions (such as "get" or "list") that the application can perform on the secrets stored in the Key Vault.

Role assignments, on the other hand, are used to grant broader access to Azure resources at a higher scope, such as a subscription or resource group. While role assignments can provide access to the Key Vault itself, they do not offer the same granular control over secret operations as access policies do.

Therefore, in the context of retrieving secrets from Azure Key Vault for your App1 application, the primary mechanism to use would be an access policy within the Key Vault. This allows you to grant the necessary permissions to your application to retrieve the secrets securely.

upvoted 1 times

✉️ **nitin\_90** 3 months ago

About KV,

Whenever question about Authentication => Use RBAC / MI / SP  
when about authorization => Use Access policy

upvoted 2 times

✉️ **upwork** 5 months ago

Tested in Azure. If we are asked to isolate access to individual items in a Key Vault, then RBAC model is the only solution.

upvoted 2 times

✉️ **RandomNickname** 5 months, 1 week ago

Q1: System

Q2: Looks like RBAC is preferred.

"Applications: there are scenarios when application would need to share secret with other application. Using vault access polices separate key vault had to be created to avoid giving access to all secrets. Azure RBAC allows assign role with scope for individual secret instead using single key vault."

In URL;

<https://learn.microsoft.com/en-us/azure/key-vault/general/rbac-migration>

upvoted 1 times

✉️ **AzureJobsTillRetire** 5 months, 2 weeks ago

Box 1: A system-assigned managed identity.

Requirement: Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services.

Hence, it cannot be a user-assigned managed identity.

Box 2: An access policy

Requirement: retrieve key vault secrets

Use GET access policy on secrets.

upvoted 3 times

✉ **Galon** 8 months, 1 week ago

Drop Down 1:

System-assigned Managed Identity

Drop Down 2: Access Policy

<https://learn.microsoft.com/en-us/azure/active-directory/managed-identities-azure-resources/tutorial-windows-vm-access-nonaad>

upvoted 4 times

✉ **Bartol0** 9 months ago

Drop Down 2: Role Assignment.

Important

When using the Access Policy permission model, if a user has Contributor permissions to a key vault management plane, the user can grant themselves access to the data plane by setting a Key Vault access policy. You should tightly control who has Contributor role access to your key vaults with the Access Policy permission model to ensure that only authorized persons can access and manage your key vaults, keys, secrets, and certificates. It is recommended to use the new Role Based Access Control (RBAC) permission model to avoid this issue. With the RBAC permission model, permission management is limited to 'Owner' and 'User Access Administrator' roles, which allows separation of duties between roles for security operations and general administrative operations.

[https://learn.microsoft.com/en-us/azure/key-vault/general/security-features?WT.mc\\_id=Portal-Microsoft\\_Azure\\_KeyVault#access-model-overview](https://learn.microsoft.com/en-us/azure/key-vault/general/security-features?WT.mc_id=Portal-Microsoft_Azure_KeyVault#access-model-overview)

upvoted 3 times

✉ **Snownoodles** 9 months, 2 weeks ago

The second question, why not "role assignment"? Key vault can use both access policy and RBAC to authorize key vault access:

<https://docs.microsoft.com/en-us/azure/key-vault/general/rbac-migration>

upvoted 4 times

✉ **mufflon** 9 months ago

i looks like RBAC is the preferred solution.

<https://samcogan.com/its-time-to-move-to-rbac-for-key-vault/>

<https://learn.microsoft.com/en-us/azure/key-vault/general/rbac-guide?tabs=azure-cli>

upvoted 2 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Fabrikam, Inc. is an engineering company that has offices throughout Europe. The company has a main office in London and three branch offices in Amsterdam,

Berlin, and Rome.

Existing Environment: Active Directory Environment

The network contains two Active Directory forests named corp.fabrikam.com and rd.fabrikam.com. There are no trust relationships between the forests.

Corp.fabrikam.com is a production forest that contains identities used for internal user and computer authentication.

Rd.fabrikam.com is used by the research and development (R&D) department only. The R&D department is restricted to using on-premises resources only.

Existing Environment: Network Infrastructure

Each office contains at least one domain controller from the corp.fabrikam.com domain. The main office contains all the domain controllers for the rd.fabrikam.com forest.

All the offices have a high-speed connection to the internet.

An existing application named WebApp1 is hosted in the data center of the London office. WebApp1 is used by customers to place and track orders. WebApp1 has a web tier that uses Microsoft Internet Information Services (IIS) and a database tier that runs Microsoft SQL Server 2016. The web tier and the database tier are deployed to virtual machines that run on Hyper-V.

The IT department currently uses a separate Hyper-V environment to test updates to WebApp1.

Fabrikam purchases all Microsoft licenses through a Microsoft Enterprise Agreement that includes Software Assurance.

Existing Environment: Problem Statements

The use of WebApp1 is unpredictable. At peak times, users often report delays. At other times, many resources for WebApp1 are underutilized.

Requirements: Planned Changes -

Fabrikam plans to move most of its production workloads to Azure during the next few years, including virtual machines that rely on Active Directory for authentication.

As one of its first projects, the company plans to establish a hybrid identity model, facilitating an upcoming Microsoft 365 deployment.

All R&D operations will remain on-premises.

Fabrikam plans to migrate the production and test instances of WebApp1 to Azure.

Requirements: Technical Requirements

Fabrikam identifies the following technical requirements:

Website content must be easily updated from a single point.

User input must be minimized when provisioning new web app instances.

Whenever possible, existing on-premises licenses must be used to reduce cost.

Users must always authenticate by using their corp.fabrikam.com UPN identity.

Any new deployments to Azure must be redundant in case an Azure region fails.

Whenever possible, solutions must be deployed to Azure by using the Standard pricing tier of Azure App Service.

An email distribution group named IT Support must be notified of any issues relating to the directory synchronization services.

In the event that a link fails between Azure and the on-premises network, ensure that the virtual machines hosted in Azure can authenticate to Active Directory.

Directory synchronization between Azure Active Directory (Azure AD) and corp.fabrikam.com must not be affected by a link failure between Azure and the on-premises network.

Requirements: Database Requirements

Fabrikam identifies the following database requirements:

Database metrics for the production instance of WebApp1 must be available for analysis so that database administrators can optimize the performance settings.

To avoid disrupting customer access, database downtime must be minimized when databases are migrated.

Database backups must be retained for a minimum of seven years to meet compliance requirements.

Requirements: Security Requirements

Fabrikam identifies the following security requirements:

Company information including policies, templates, and data must be inaccessible to anyone outside the company.

Users on the on-premises network must be able to authenticate to corp.fabrikam.com if an internet link fails.

Administrators must be able authenticate to the Azure portal by using their corp.fabrikam.com credentials.

All administrative access to the Azure portal must be secured by using multi-factor authentication (MFA).

The testing of WebApp1 updates must not be visible to anyone outside the company.

#### Question

HOTSPOT -

You are evaluating the components of the migration to Azure that require you to provision an Azure Storage account. For each of the following statements, select

Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Hot Area:

#### Answer Area

Statements	Yes	No
You must provision an Azure Storage account for the SQL Server database migration.	<input type="radio"/>	<input type="radio"/>
You must provision an Azure Storage account for the Web site content storage.	<input type="radio"/>	<input type="radio"/>
You must provision an Azure Storage account for the Database metric monitoring.	<input type="radio"/>	<input type="radio"/>

Correct Answer:

#### Answer Area

Statements	Yes	No
You must provision an Azure Storage account for the SQL Server database migration.	<input type="radio"/>	<input checked="" type="radio"/>
You must provision an Azure Storage account for the Web site content storage.	<input type="radio"/>	<input checked="" type="radio"/>
You must provision an Azure Storage account for the Database metric monitoring.	<input checked="" type="radio"/>	<input type="radio"/>

Box 1: No -

Online migration will work fine. It does not require an Azure Storage account.

Box 2: No -

Data for the web site can be migrated to Azure app service.

Box 3: Yes -

Scenario: Database metrics for the production instance of WebApp1 must be available for analysis so that database administrators can

optimize the performance settings.

Reference:

<https://azure.microsoft.com/en-au/services/sql-server-stretch-database/>

✉️  **Greysi**  1 year, 5 months ago

Y,N,N - just another solution

1. SQL Migration:

Because on-prem licenses must be used, whenever possible=> BYOL. Preferred SQL Migration in this case is uploading VHD from on-prem Hyper-V-VM and create a new Azure VM  
<https://docs.microsoft.com/en-us/azure/azure-sql/virtual-machines/windows/migrate-to-vm-from-sql-server#choose-a-migration-method>

2. WebApp: <https://docs.microsoft.com/en-us/azure/app-service/deploy-continuous-deployment?tabs=github>  
Single point source: GitHub Repository can be configured as source for continuous Deployment

3. Database metrics: <https://docs.microsoft.com/en-us/azure/azure-sql/database/monitor-tune-overview>  
Also for SQL Server on Azure VMs it is possible to send metrics to 3 services:

- a) Log Analytics workspace in Azure Monitor
- b) Azure Event Hub
- c) Azure Storage

2 of 3 do not need a dedicated Azure Storage account.. It is not REQUIRED to create a storage account to fulfill requirements.

upvoted 47 times

✉️  **trap** 1 year, 3 months ago

I agree with your answer  
Yes: Migrate to SQL Managed Instance needs storage account <https://docs.microsoft.com/en-us/azure/dms/tutorial-sql-server-managed-instance-online#configure-migration-settings>

No: use Azure Web app where the app can be upgraded from a single point and can scale in /out with its own storage  
<https://docs.microsoft.com/en-us/azure/azure-monitor/autoscale/autoscale-get-started?toc=/azure/app-service/toc.json>

No: Storage account is not mandatory, you can use Log Analytics workspace instead. Storage account can be used as a cheap option when you want to "archive" Stream metrics and resource logs <https://docs.microsoft.com/en-us/azure/azure-sql/database/monitor-tune-overview#azure-storage>

upvoted 4 times

✉️  **Galron** 8 months, 1 week ago

I agree with this. Been researching all the comments and articles and this is closest fit to the requirement.

upvoted 1 times

✉️  **Galron** 8 months, 1 week ago

In fact with SQL MI, you don't even need Log Analytics workspace, it has native metrics built into the offer:  
<https://learn.microsoft.com/en-us/azure/azure-sql/database/monitor-tune-overview?view=azuresql>

upvoted 2 times

✉️  **Shadoken** 10 months, 3 weeks ago

In this question we are supposing that we will use SQL Server on VM (IaaS). Although in previous questions we suppose we will use Azure SQL Databases with Long-term retention (PaaS).

If I understood, we can't use long-term backup retention in SQL Server VM.

Then we have to use IaaS database or PaaS database?

upvoted 1 times

✉️  **helpaws** 1 year, 5 months ago

2. Website content storage is more like html, css, media. I think you would need a storage account for that.

upvoted 6 times

✉️  **AberdeenAngus** 1 year, 2 months ago

The web app gets some PaaS storage, the amount depending on the plan. This is where the html, css etc go. So I think you shouldn't need a storage account. I saw a good explanation from the Microsoft person in <https://docs.microsoft.com/en-us/answers/questions/102686/azure-web-app-dlocal-storage-has-hit-storage-limit.html>

upvoted 3 times

✉️  **PmgCosta** 1 year, 5 months ago

I have the same doubt

upvoted 4 times

✉️  **AberdeenAngus** 1 year, 1 month ago

I don't see why we must migrate to SQL Server on Azure VM. The requirement to reuse on-prem licenses can be met with Azure Hybrid Benefit which works with SQL Managed Instance and SQL Database (vCore) too. As others have pointed out, if we go to SQL Managed Instance then we can meet the requirement to minimize downtime with the online migration method, which requires a storage account.

I can't see anything in <https://docs.microsoft.com/en-us/azure/azure-sql/database/monitor-tune-overview?view=azuresql> which says a storage account is always required so I'm also going YNN, but for slightly different reasons.

upvoted 2 times

✉️  **honzar**  5 months, 3 weeks ago

Appeared 2023/01/04 in the exam

upvoted 8 times

✉️  **yonie**  1 month, 3 weeks ago

I think it is Yes No Yes

Same as question from az-304 - this question has been around for a long time.

<https://www.examtopics.com/discussions/microsoft/view/56780-exam-az-304-topic-13-question-4-discussion/>

upvoted 3 times

✉️  **upwork** 5 months ago

SQL Server db migration does not require a storage account in some min.downtime scenarios and I would go with NO for the first point, but what about the existing backups? According to the case study "Database backups must be retained for a minimum of seven years to meet compliance requirements." so perhaps we already have a bunch of them.

upvoted 1 times

✉️  **OPT\_001122** 5 months, 1 week ago

topic 7: Fabrikam-Question #1-Page-44

topic 7: Fabrikam-Question #2-Page-44

topic 9: Fabrikam-Question #1-Page-45

topic 9: Fabrikam-Question #2-Page-46

topic 9: Fabrikam-Question #3-Page-46

topic 11: Fabrikam-Question #1-Page-47

topic 16: Fabrikam-Question #1-Page-48

=====

Total = 7

upvoted 2 times

✉️  **RandomNickname** 5 months, 1 week ago

#1 Y. "database downtime must be minimized when databases are migrated."

Offline isn't applicable which doesn't need storage account.

Online migration required which needs storage account

<https://learn.microsoft.com/en-us/azure/dms/tutorial-sql-server-managed-instance-online#configure-migration-settings>

#2 Y. If this is as per the question is referring to ensure you have storage to render content then Y due to article reference below for static content, otherwise N

"Website content must be easily updated from a single point."

<https://learn.microsoft.com/en-us/azure/storage/blobs/storage-blob-static-website>

#3 N. No need for storage for metrics, these will be sent to other Azure services like log analytics

upvoted 3 times

✉️  **testtaker13** 4 months, 2 weeks ago

1. Y. Your link is under older tutorials. But it seems under Azure Data Studio the information is similar. Storage or SMB share is required.

<https://learn.microsoft.com/en-us/azure/dms/tutorial-sql-server-managed-instance-online-ads>

upvoted 1 times

✉️  **RandomNickname** 4 months, 1 week ago

Nice. Good spot.

Cheers

upvoted 1 times

✉️  **CineZorro824** 6 months, 3 weeks ago

1. SQL Migration: Y

because Database migration assistant requires a Storage Account to store the database backup files

2. Web app content: Y

Content needs to be updated from an easy to use single point. That's a storage account. I don't consider the available storage that's built into an App Service as easily accessible or a 'single point'

3. Database metrics: N

Log Analytics workspace has its own storage, it doesn't require you to link your own storage account (although it's possible)

upvoted 2 times

✉️  **sondrex** 8 months ago

Answer NO NO YES - are correct

upvoted 2 times

✉️  **MountainW** 8 months, 1 week ago

1. SQL migration. It request minimum downtime. Because of reusing the license requirement from other question with same situation, this migration uses SQL managed instance. There is no need of storage account to create a SQL MI.

- The migration entails establishing a network connection between SQL Server and SQL Managed Instance, and opening communication ports.

- Uses Always On availability group technology to replicate database near real-time, making an exact replica of the SQL Server database on SQL Managed Instance.

- The database can be used for read-only access on SQL Managed Instance while migration is in progress.

- Provides the best performance during migration with minimum downtime.

Managed Instance link is for customers who require the most performant minimum downtime migration.  
<https://learn.microsoft.com/en-us/azure/azure-sql/migration-guides/managed-instance/sql-server-to-managed-instance-overview?view=azuresql>  
upvoted 1 times

✉️ **AubinBakana** 10 months, 3 weeks ago

They've not provided enough information on the database and application requirement to determine whether we want to do a lift & shift to an Azure VM, migrate to MI or SQL Database. So the suggestion that we must create a storage account is inaccurate - you have options where you can migrate without the need for a storage account. Hence, both first and second options have to be false.

Answer is: N,o No, Yes.

upvoted 2 times

✉️ **sapien45** 1 year ago

YNN

Make sure to create the Azure Storage Account in the same region as the Azure Database Migration Service instance is created  
upvoted 1 times

✉️ **Ahbey\_911** 1 year, 2 months ago

Y,N,Y seem correct if one considers the database requirement of the case study. Be sure to check the requirement before selecting an answer.  
upvoted 3 times

✉️ **Ahbey\_911** 1 year, 1 month ago

I now agree with Y,N,N.  
It is not compulsory to create a storage account for metrics analysis, Log Analytics workspace in Azure Monitor will suffice.  
upvoted 1 times

✉️ **DivyaJyoti** 1 year, 2 months ago

N,N,Y 1. You can use online database migration service for minimal downtime, which does not require a storage account. 2. There is no mention about website data. So, website data can be migrated to Azure App Service. 3. Database metrics must be available for administrators, so you store metrics in a storage account.

upvoted 3 times

✉️ **Justin0020** 1 year, 3 months ago

Was in my exam om March. 10  
upvoted 5 times

✉️ **ashxos** 1 year, 4 months ago

Answer for Q1 - Storage Account is required.  
Whether you use the Manual Method of Backup file upload to storage account and restore, or use the DMS Service of Microsoft, Storage Account is a must.

<https://docs.microsoft.com/en-us/shows/Azure-Videos/Data-migration-demo-using-Azure-Migrate-DMA-and-DMS>  
upvoted 2 times

✉️ **moro73** 1 year, 4 months ago

Answer is Y - Y - N  
no need to have storage account for Metrics Monitoring  
the below link NO mention of Storage Account needs

<https://docs.microsoft.com/en-us/azure/azure-monitor/essentials/data-platform-metrics>  
upvoted 2 times

✉️ **jkklim** 1 year, 4 months ago

ANSWER : NO NEED STORAGE ACCOUNT FOR SQL SERVER DATABASE MIGRATION  
<https://docs.microsoft.com/en-us/azure/dms/tutorial-sql-server-to-managed-instance>  
upvoted 2 times

✉️ **FrancisFerreira** 1 year, 3 months ago

Without storage account we can only do offline migrations, which means longer downtime. So, to minimize downtime as per requirement, we do need a storage account.  
upvoted 4 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Fabrikam, Inc. is an engineering company that has offices throughout Europe. The company has a main office in London and three branch offices in Amsterdam, Berlin, and Rome.

Existing Environment: Active Directory Environment

The network contains two Active Directory forests named corp.fabrikam.com and rd.fabrikam.com. There are no trust relationships between the forests.

Corp.fabrikam.com is a production forest that contains identities used for internal user and computer authentication.

Rd.fabrikam.com is used by the research and development (R&D) department only. The R&D department is restricted to using on-premises resources only.

Existing Environment: Network Infrastructure

Each office contains at least one domain controller from the corp.fabrikam.com domain. The main office contains all the domain controllers for the rd.fabrikam.com forest.

All the offices have a high-speed connection to the internet.

An existing application named WebApp1 is hosted in the data center of the London office. WebApp1 is used by customers to place and track orders. WebApp1 has a web tier that uses Microsoft Internet Information Services (IIS) and a database tier that runs Microsoft SQL Server 2016.

The web tier and the database tier are deployed to virtual machines that run on Hyper-V.

The IT department currently uses a separate Hyper-V environment to test updates to WebApp1.

Fabrikam purchases all Microsoft licenses through a Microsoft Enterprise Agreement that includes Software Assurance.

Existing Environment: Problem Statements

The use of WebApp1 is unpredictable. At peak times, users often report delays. At other times, many resources for WebApp1 are underutilized.

Requirements: Planned Changes -

Fabrikam plans to move most of its production workloads to Azure during the next few years, including virtual machines that rely on Active Directory for authentication.

As one of its first projects, the company plans to establish a hybrid identity model, facilitating an upcoming Microsoft 365 deployment.

All R&D operations will remain on-premises.

Fabrikam plans to migrate the production and test instances of WebApp1 to Azure.

Requirements: Technical Requirements

Fabrikam identifies the following technical requirements:

Website content must be easily updated from a single point.

User input must be minimized when provisioning new web app instances.

Whenever possible, existing on-premises licenses must be used to reduce cost.

Users must always authenticate by using their corp.fabrikam.com UPN identity.

Any new deployments to Azure must be redundant in case an Azure region fails.

Whenever possible, solutions must be deployed to Azure by using the Standard pricing tier of Azure App Service.

An email distribution group named IT Support must be notified of any issues relating to the directory synchronization services.

In the event that a link fails between Azure and the on-premises network, ensure that the virtual machines hosted in Azure can authenticate to Active Directory.

Directory synchronization between Azure Active Directory (Azure AD) and corp.fabrikam.com must not be affected by a link failure between Azure and the on-premises network.

#### Requirements: Database Requirements

Fabrikam identifies the following database requirements:

Database metrics for the production instance of WebApp1 must be available for analysis so that database administrators can optimize the performance settings.

To avoid disrupting customer access, database downtime must be minimized when databases are migrated.

Database backups must be retained for a minimum of seven years to meet compliance requirements.

#### Requirements: Security Requirements

Fabrikam identifies the following security requirements:

Company information including policies, templates, and data must be inaccessible to anyone outside the company.

Users on the on-premises network must be able to authenticate to corp.fabrikam.com if an internet link fails.

Administrators must be able to authenticate to the Azure portal by using their corp.fabrikam.com credentials.

All administrative access to the Azure portal must be secured by using multi-factor authentication (MFA).

The testing of WebApp1 updates must not be visible to anyone outside the company.

### Question

What should you include in the identity management strategy to support the planned changes?

- A. Deploy domain controllers for corp.fabrikam.com to virtual networks in Azure.
- B. Move all the domain controllers from corp.fabrikam.com to virtual networks in Azure.
- C. Deploy a new Azure AD tenant for the authentication of new R&D projects.
- D. Deploy domain controllers for the rd.fabrikam.com forest to virtual networks in Azure.

#### Correct Answer: A

Directory synchronization between Azure Active Directory (Azure AD) and corp.fabrikam.com must not be affected by a link failure between Azure and the on-premises network. (This requires domain controllers in Azure).

Users on the on-premises network must be able to authenticate to corp.fabrikam.com if an Internet link fails. (This requires domain controllers on-premises).

✉ **andas2008** Highly Voted 1 year, 6 months ago

**Selected Answer: A**

correct answer

upvoted 15 times

✉ **Paulwryan** Highly Voted 1 year, 5 months ago

This appears to be correct:

<https://docs.microsoft.com/en-us/azure/architecture/reference-architectures/identity/adds-extend-domain>

upvoted 6 times

✉ **Paulwryan** 1 year, 5 months ago

That is, deploy domain controllers in Azure. do not move them, they are still needed on prem.

upvoted 4 times

✉ **memyself2** Most Recent 4 months ago

This was a question was on my exam today (2/26/23) - Scored 844

I agree with this answer

upvoted 2 times

✉ **RandomNickname** 5 months, 1 week ago

**Selected Answer: A**

A looks correct as per article and request

upvoted 1 times

✉ **honzar** 5 months, 3 weeks ago

Appeared 2023/01/04 in the exam

upvoted 3 times

✉ **randomaccount123** 7 months, 3 weeks ago

Never a good idea to move a DC to Azure. Better to always create a new one.

upvoted 3 times

✉ **codefries** 9 months, 1 week ago

Shouldn't B instead of A?

As per requirement: Directory synchronization between Azure Active Directory (Azure AD) and corp.fabrikam.com must not be affected by a link failure between Azure and the on-premises network.

upvoted 1 times

✉ **Dudulle** 7 months ago

Nope because, in this case, users won't be able to authenticate in case of internet failure

upvoted 1 times

✉ **Dudulle** 7 months ago

Since, as ALL DCs are in Azure, there are 0 left on-prem!

upvoted 1 times

✉ **AubinBakana** 10 months, 3 weeks ago

**Selected Answer: A**

Yes. This will ensure that when the London office AD DS is down, other branch offices have access to WebApp1.

upvoted 1 times

✉ **Teringzooi** 1 year, 1 month ago

**Selected Answer: A**

Correct answer: A

<https://docs.microsoft.com/en-us/azure/architecture/reference-architectures/identity/adds-extend-domain>

upvoted 1 times

✉ **Justin0020** 1 year, 3 months ago

Was in my exam on March. 10

upvoted 4 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Litware, Inc. is a medium-sized finance company that has a main office in Boston.

Existing Environment -

Identity Environment -

The network contains an Active Directory forest named litware.com that is linked to an Azure Active Directory (Azure AD) tenant named litware.com. All users have Azure Active Directory Premium P2 licenses.

Litware has a second Azure AD tenant named dev.litware.com that is used as a development environment.

The litware.com tenant has a Conditional Access policy named Capolicy1. Capolicy1 requires that when users manage the Azure subscription for a production environment by using the Azure portal, they must connect from a hybrid Azure AD-joined device.

Azure Environment -

Litware has 10 Azure subscriptions that are linked to the Litware.com tenant and five Azure subscriptions that are linked to the dev.litware.com tenant. All the subscriptions are in an Enterprise Agreement (EA).

The litware.com tenant contains a custom Azure role-based access control (Azure RBAC) role named Role1 that grants the DataActions read permission to the blobs and files in Azure Storage.

On-Premises Environment -

The on-premises network of Litware contains the resources shown in the following table.

Name	Type	Configuration
SERVER1 SERVER2 SERVER3	Ubuntu 18.04 virtual machines hosted on Hyper-V	The virtual machines host a third-party app named App1. App1 uses an external storage solution that provides Apache Hadoop-compatible data storage. The data storage supports POSIX access control list (ACL) file-level permissions.
SERVER10	Server that runs Windows Server 2016	The server contains a Microsoft SQL Server instance that hosts two databases named DB1 and DB2.

## Network Environment -

Litware has ExpressRoute connectivity to Azure.

## Planned Changes and Requirements

### Planned Changes -

Litware plans to implement the following changes:

Migrate DB1 and DB2 to Azure.

Migrate App1 to Azure virtual machines.

Migrate the external storage used by App1 to Azure Storage.

Deploy the Azure virtual machines that will host App1 to Azure dedicated hosts.

### Authentication and Authorization Requirements

Litware identifies the following authentication and authorization requirements:

Only users that manage the production environment by using the Azure portal must connect from a hybrid Azure AD-joined device and authenticate by using

Azure Multi-Factor Authentication (MFA).

The Network Contributor built-in RBAC role must be used to grant permissions to the network administrators for all the virtual networks in all the Azure subscriptions.

To access the resources in Azure, App1 must use the managed identity of the virtual machines that will host the app.

RBAC roles must be applied to management groups.

### Resiliency Requirements -

Litware identifies the following resiliency requirements:

Once migrated to Azure, DB1 and DB2 must meet the following requirements:

- Maintain availability if two availability zones in the local Azure region fail.
- Fail over automatically.
- Minimize I/O latency.

App1 must meet the following requirements:

- Be hosted in an Azure region that supports availability zones.
- Be hosted on Azure virtual machines that support automatic scaling.
- Maintain availability if two availability zones in the local Azure region fail.

### Security and Compliance Requirements

Litware identifies the following security and compliance requirements:

Once App1 is migrated to Azure, you must ensure that new data can be written to the app, and the modification of new and existing data is prevented for a period of three years.

On-premises users and services must be able to access the Azure Storage account that will host the data in App1.

Access to the public endpoint of the Azure Storage account that will host the App1 data must be prevented.

All Azure SQL databases in the production environment must have Transparent Data Encryption (TDE) enabled.

App1 must NOT share physical hardware with other workloads.

### Business Requirements -

Litware identifies the following business requirements:

Minimize administrative effort.

Minimize costs.

## Question

### HOTSPOT -

You plan to migrate App1 to Azure.

You need to recommend a high-availability solution for App1. The solution must meet the resiliency requirements.

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

NOTE: Each correct selection is worth one point.

Hot Area:

## Answer Area

Number of host groups:

1
2
3
6

Number of virtual machine scale sets:

0
1
3

## Answer Area

Number of host groups:

1
2
3
6

Correct Answer:

0
1
3

Number of virtual machine scale sets:

Box 1: 3 -

Need three host groups to meet the third scenario requirement below.

Scenario: App1 must meet the following requirements:

Be hosted in an Azure region that supports availability zones.

Be hosted on Azure virtual machines that support automatic scaling.

Maintain availability if two availability zones in the local Azure region fail.

Box 2: 3 -

The availability setting of your host group should match your scale set.

\* The host group and the scale set must be using the same availability zone.

\* The fault domain count for the host group level should match the fault domain count for your scale set.

Reference:

<https://docs.microsoft.com/en-us/azure/virtual-machines/dedicated-hosts>

 **zenithcsa1** Highly Voted 7 months, 2 weeks ago

3-3

VMSS supports zone-redundant, while Dedicated Host does not. No-zone option of host group in Dedicated Host is not zone-redundant, it represents regional resource.

- You must create a host group in each zone.
- You must create a VMSS in each zone where the host group is deployed.

<https://learn.microsoft.com/en-us/azure/reliability/availability-zones-service-support#azure-services-with-availability-zone-support>

<https://learn.microsoft.com/en-us/azure/virtual-machines/dedicated-hosts#virtual-machine-scale-set-support>

In addition, when a Host Groups is deployed in each zone, creating a zone-redundant VMSS is also not possible.

All tested with multiple hosts, FSv2 Type1.

upvoted 20 times

✉  **steel72** 3 months, 1 week ago

The host group and the scale set must be using the same availability zone.  
<https://learn.microsoft.com/en-us/azure/virtual-machines/dedicated-hosts#virtual-machine-scale-set-support>

upvoted 1 times

✉  **techrat**  1 month, 4 weeks ago

I am confident the answer is 3-3.

I had this question in my exam today, and I passed the exam with 979. In Design Infrastructure Solutions section, I got 100% correct.

upvoted 6 times

✉  **Ezio8423**  2 months, 1 week ago

Automatic VM placement needs to be enabled.

The availability setting of your host group should match your scale set.

A regional host group (created without specifying an availability zone) should be used for regional scale sets.

The host group and the scale set must be using the same availability zone.

The fault domain count for the host group level should match the fault domain count for your scale set. The Azure portal lets you specify max spreading for your scale set, which sets the fault domain count of 1.

Dedicated hosts should be created first, with sufficient capacity, and the same settings for scale set zones and fault domains.

The supported VM sizes for your dedicated hosts should match the one used for your scale set.

upvoted 1 times

✉  **globby118** 4 months, 1 week ago

Exam Question 02/15/2023

upvoted 1 times

✉  **GarryK** 4 months, 2 weeks ago

3-3

<https://learn.microsoft.com/en-us/azure/virtual-machines/dedicated-hosts#groups-hosts-and-vms>

A host group is created in a single availability zone. Once created, all hosts will be placed within that zone. To achieve high availability across zones, you need to create multiple host groups (one per zone) and spread your hosts between them accordingly.

If you assign a host group to an availability zone, all VMs created on that host must be created in the same zone.

When creating a Virtual Machine Scale Set, you can specify an existing host group to have all of the VM instances created on dedicated hosts.

upvoted 1 times

✉  **GarryK** 4 months, 2 weeks ago

The host group and the scale set must be using the same availability zone.

upvoted 1 times

✉  **OPT\_001122** 4 months, 3 weeks ago

3 and 3

upvoted 1 times

✉  **FabirtyDev** 5 months, 1 week ago

Based on <https://learn.microsoft.com/en-us/azure/virtual-machines/dedicated-hosts#virtual-machine-scale-set-support> i would say it's 3-3

upvoted 2 times

✉  **RandomNickname** 5 months, 1 week ago

3-3 Looks correct as per article:

<https://learn.microsoft.com/en-us/azure/virtual-machines/dedicated-hosts#groups-hosts-and-vms>

upvoted 1 times

✉  **Guest** 6 months, 1 week ago

Maybe this Testlet can be merged with Topic 5 - Testlet 1?

Case looks identical (questions are different)

upvoted 1 times

✉  **Ravi1383** 7 months ago

what are the correct answer folks? what have changed on 10th Oct?

upvoted 2 times

✉  **Snownoodles** 8 months ago

3-3

"If the VM is in an availability zone, it must be the same availability zone as the host group. The availability zone settings for the VM and the host group must match"

<https://learn.microsoft.com/en-us/azure/virtual-machines/dedicated-hosts-how-to?tabs=portal>

upvoted 3 times

✉  **heero** 9 months, 1 week ago

should be

3

1

upvoted 5 times

✉ **Galron** 8 months ago

Recent changes on 10th Oct makes it 1 and 1. Will they update the answers?

upvoted 1 times

✉ **ronsav80** 9 months ago

I think based on <https://learn.microsoft.com/en-us/azure/virtual-machines/dedicated-hosts> under "Virtual Machine Scale Set Support", it states "When creating a virtual machine scale set you can specify an existing host group to have all of the VM instances created on dedicated hosts." So based on this, I think this is 3-3

upvoted 9 times

✉ **Galron** 8 months, 1 week ago

1 scale set can span the 3 hosts in separate AZ's.

upvoted 1 times

✉ **ckyap** 7 months, 2 weeks ago

3 host in the same availability zone only, if you want to span across different zone, you need to create additional host group.<https://learn.microsoft.com/en-us/azure/virtual-machines/dedicated-hosts-how-to?tabs=portal#:~:text=Span%20across%20multiple%20availability%20zones.%20In%20this%20case%2C%20you%27re%20required%20to%20have%20a%20host%20group%20in%20each%20of%20the%20zones%20you%20wish%20to%20use>

upvoted 1 times

### Introductory Info

#### Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

#### To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

#### Overview -

Litware, Inc. is a medium-sized finance company that has a main office in Boston.

#### Existing Environment -

##### Identity Environment -

The network contains an Active Directory forest named litware.com that is linked to an Azure Active Directory (Azure AD) tenant named litware.com. All users have Azure Active Directory Premium P2 licenses.

Litware has a second Azure AD tenant named dev.litware.com that is used as a development environment.

The litware.com tenant has a Conditional Access policy named Capolicy1. Capolicy1 requires that when users manage the Azure subscription for a production environment by using the Azure portal, they must connect from a hybrid Azure AD-joined device.

##### Azure Environment -

Litware has 10 Azure subscriptions that are linked to the Litware.com tenant and five Azure subscriptions that are linked to the dev.litware.com tenant. All the subscriptions are in an Enterprise Agreement (EA).

The litware.com tenant contains a custom Azure role-based access control (Azure RBAC) role named Role1 that grants the DataActions read permission to the blobs and files in Azure Storage.

#### On-Premises Environment -

The on-premises network of Litware contains the resources shown in the following table.

Name	Type	Configuration
SERVER1 SERVER2 SERVER3	Ubuntu 18.04 virtual machines hosted on Hyper-V	The virtual machines host a third-party app named App1. App1 uses an external storage solution that provides Apache Hadoop-compatible data storage. The data storage supports POSIX access control list (ACL) file-level permissions.
SERVER10	Server that runs Windows Server 2016	The server contains a Microsoft SQL Server instance that hosts two databases named DB1 and DB2.

#### Network Environment -

Litware has ExpressRoute connectivity to Azure.

#### Planned Changes and Requirements

##### Planned Changes -

Litware plans to implement the following changes:

Migrate DB1 and DB2 to Azure.

Migrate App1 to Azure virtual machines.

Migrate the external storage used by App1 to Azure Storage.

Deploy the Azure virtual machines that will host App1 to Azure dedicated hosts.

##### Authentication and Authorization Requirements

Litware identifies the following authentication and authorization requirements:

Only users that manage the production environment by using the Azure portal must connect from a hybrid Azure AD-joined device and authenticate by using

Azure Multi-Factor Authentication (MFA).

The Network Contributor built-in RBAC role must be used to grant permissions to the network administrators for all the virtual networks in all the Azure subscriptions.

To access the resources in Azure, App1 must use the managed identity of the virtual machines that will host the app.

RBAC roles must be applied to management groups.

##### Resiliency Requirements -

Litware identifies the following resiliency requirements:

Once migrated to Azure, DB1 and DB2 must meet the following requirements:

- Maintain availability if two availability zones in the local Azure region fail.
- Fail over automatically.
- Minimize I/O latency.

App1 must meet the following requirements:

- Be hosted in an Azure region that supports availability zones.
- Be hosted on Azure virtual machines that support automatic scaling.
- Maintain availability if two availability zones in the local Azure region fail.

##### Security and Compliance Requirements

Litware identifies the following security and compliance requirements:

Once App1 is migrated to Azure, you must ensure that new data can be written to the app, and the modification of new and existing data is prevented for a period of three years.

On-premises users and services must be able to access the Azure Storage account that will host the data in App1.

Access to the public endpoint of the Azure Storage account that will host the App1 data must be prevented.

All Azure SQL databases in the production environment must have Transparent Data Encryption (TDE) enabled.

App1 must NOT share physical hardware with other workloads.

##### Business Requirements -

Litware identifies the following business requirements:

Minimize administrative effort.

Minimize costs.

#### Question

##### HOTSPOT -

You plan to migrate App1 to Azure.

You need to recommend a storage solution for App1 that meets the security and compliance requirements.

Which type of storage should you recommend, and how should you recommend configuring the storage? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

### Answer Area

Storage account type:

Premium page blobs
Premium file shares
Standard general-purpose v2

Configuration:

NFSv3
Large file shares
Hierarchical namespace

### Answer Area

Storage account type:

Premium page blobs
Premium file shares
Standard general-purpose v2

Correct Answer:

Configuration:

NFSv3
Large file shares
Hierarchical namespace

Box 1: Standard general-purpose v2

Standard general-purpose v2 supports Blob Storage.

Azure Storage provides data protection for Blob Storage and Azure Data Lake Storage Gen2.

Scenario:

Litware identifies the following security and compliance requirements:

⇒ Once App1 is migrated to Azure, you must ensure that new data can be written to the app, and the modification of new and existing data is prevented for a period of three years.

⇒ On-premises users and services must be able to access the Azure Storage account that will host the data in App1.

⇒ Access to the public endpoint of the Azure Storage account that will host the App1 data must be prevented.

All Azure SQL databases in the production environment must have Transparent Data Encryption (TDE) enabled.

▪

⇒ App1 must NOT share physical hardware with other workloads.

Box 2: Hierarchical namespace -

Scenario: Plan: Migrate App1 to Azure virtual machines.

Azure Data Lake Storage Gen2 implements an access control model that supports both Azure role-based access control (Azure RBAC) and POSIX-like access control lists (ACLs).

Data Lake Storage Gen2 and the Network File System (NFS) 3.0 protocol both require a storage account with a hierarchical namespace enabled.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/blobs/data-protection-overview> <https://docs.microsoft.com/en-us/azure/storage/blobs/immutable-storage-overview>

✉  **WickedMJ**  8 months, 2 weeks ago  
> Storage account type: " Standard general-purpose v2 "  
> Configuration: " Hierarchical namespace "  
upvoted 23 times

✉️  **yuhji** 4 months, 3 weeks ago

Using only hierarchical namespaces does not support ACLs.  
Therefore, NFS must be used.

Azure BLOB storage now supports the new NFS v3.0.

<https://learn.microsoft.com/en-us/azure/storage/blobs/network-file-system-protocol-support>

<https://learn.microsoft.com/en-us/azure/storage/blobs/network-file-system-protocol-support-how-to>

upvoted 1 times

✉️  **techrat** [Most Recent] 1 month, 4 weeks ago

I think the given answer is correct. I had this question on my exam today, I passed exam with 979. my answer to this question is Standard general-purpose v2

Hierarchical namespace

upvoted 3 times

✉️  **globby118** 4 months, 1 week ago

Exam Question 02/15/2023

upvoted 4 times

✉️  **RandomNickname** 5 months, 1 week ago

Given answer looks good

upvoted 2 times

✉️  **adamp54** 8 months ago

ACLs are not supported with NFSv3 according to:

"The only way to secure the data in your account is by using a VNet and other network security settings. Any other tool used to secure data including account key authorization, Azure Active Directory (AD) security, and access control lists (ACLs) are not yet supported in accounts that have the NFS 3.0 protocol support enabled on them"

<https://learn.microsoft.com/en-us/azure/storage/blobs/network-file-system-protocol-support>

Enabling hierarchical namespace is the right answer :

"Azure Data Lake Storage Gen2 implements an access control model that supports both Azure role-based access control (Azure RBAC) and POSIX-like access control lists (ACLs)."

<https://learn.microsoft.com/en-us/azure/storage/blobs/data-lake-storage-access-control>

upvoted 3 times

✉️  **MountainW** 8 months, 1 week ago

If the request is to migrate the third party storage solution which support ACL to Azure, I think the answer is Premium file shares and NFSv3.  
Because the App is running on Linux, NFS makes more sense to me. Standard general purpose v2 does not support NFS.

upvoted 1 times

✉️  **np2021** 4 months, 1 week ago

The data is not allowed to be on shared hardware tho, as per the requirements.

upvoted 1 times

✉️  **FabritDev** 5 months, 1 week ago

"Azure Data Lake Storage Gen2 implements an access control model that supports both Azure role-based access control (Azure RBAC) and POSIX-like access control lists (ACLs)"

Data Lake means hierarchical namespace. Besides if you want to use NFSv3 you have to have hierarchical namespaces enabled anyway. So in any scenario hierarchical namespaces are correct.

<https://learn.microsoft.com/en-us/azure/storage/blobs/data-lake-storage-access-control>

upvoted 1 times

✉️  **boblina** 8 months, 1 week ago

> Storage account type: " Standard general-purpose v2 "

> Configuration: " NFSv3 "

Source App1 are in a linux server

upvoted 2 times

✉️  **FabritDev** 5 months, 1 week ago

"Azure Data Lake Storage Gen2 implements an access control model that supports both Azure role-based access control (Azure RBAC) and POSIX-like access control lists (ACLs)"

Data Lake means hierarchical namespace. Besides if you want to use NFSv3 you have to have hierarchical namespaces enabled anyway. So in any scenario hierarchical namespaces are correct.

<https://learn.microsoft.com/en-us/azure/storage/blobs/data-lake-storage-access-control>

upvoted 1 times

✉️  **MountainW** 8 months, 1 week ago

1. Storage account type: " Standard general-purpose v2 "

Standard general purpose v2 does not support NFS. So 2 is not NFSV3

<https://learn.microsoft.com/en-us/azure/storage/blobs/network-file-system-protocol-support>.

upvoted 1 times

### Introductory Info

#### Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

#### To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

#### Overview -

Litware, Inc. is a medium-sized finance company that has a main office in Boston.

#### Existing Environment -

##### Identity Environment -

The network contains an Active Directory forest named litware.com that is linked to an Azure Active Directory (Azure AD) tenant named litware.com. All users have Azure Active Directory Premium P2 licenses.

Litware has a second Azure AD tenant named dev.litware.com that is used as a development environment.

The litware.com tenant has a Conditional Access policy named Capolicy1. Capolicy1 requires that when users manage the Azure subscription for a production environment by using the Azure portal, they must connect from a hybrid Azure AD-joined device.

##### Azure Environment -

Litware has 10 Azure subscriptions that are linked to the Litware.com tenant and five Azure subscriptions that are linked to the dev.litware.com tenant. All the subscriptions are in an Enterprise Agreement (EA).

The litware.com tenant contains a custom Azure role-based access control (Azure RBAC) role named Role1 that grants the DataActions read permission to the blobs and files in Azure Storage.

#### On-Premises Environment -

The on-premises network of Litware contains the resources shown in the following table.

Name	Type	Configuration
SERVER1 SERVER2 SERVER3	Ubuntu 18.04 virtual machines hosted on Hyper-V	The virtual machines host a third-party app named App1. App1 uses an external storage solution that provides Apache Hadoop-compatible data storage. The data storage supports POSIX access control list (ACL) file-level permissions.
SERVER10	Server that runs Windows Server 2016	The server contains a Microsoft SQL Server instance that hosts two databases named DB1 and DB2.

#### Network Environment -

Litware has ExpressRoute connectivity to Azure.

#### Planned Changes and Requirements

##### Planned Changes -

Litware plans to implement the following changes:

Migrate DB1 and DB2 to Azure.

Migrate App1 to Azure virtual machines.

Migrate the external storage used by App1 to Azure Storage.

Deploy the Azure virtual machines that will host App1 to Azure dedicated hosts.

##### Authentication and Authorization Requirements

Litware identifies the following authentication and authorization requirements:

Only users that manage the production environment by using the Azure portal must connect from a hybrid Azure AD-joined device and authenticate by using

Azure Multi-Factor Authentication (MFA).

The Network Contributor built-in RBAC role must be used to grant permissions to the network administrators for all the virtual networks in all the Azure subscriptions.

To access the resources in Azure, App1 must use the managed identity of the virtual machines that will host the app.

RBAC roles must be applied to management groups.

##### Resiliency Requirements -

Litware identifies the following resiliency requirements:

Once migrated to Azure, DB1 and DB2 must meet the following requirements:

- Maintain availability if two availability zones in the local Azure region fail.
- Fail over automatically.
- Minimize I/O latency.

App1 must meet the following requirements:

- Be hosted in an Azure region that supports availability zones.
- Be hosted on Azure virtual machines that support automatic scaling.
- Maintain availability if two availability zones in the local Azure region fail.

##### Security and Compliance Requirements

Litware identifies the following security and compliance requirements:

Once App1 is migrated to Azure, you must ensure that new data can be written to the app, and the modification of new and existing data is prevented for a period of three years.

On-premises users and services must be able to access the Azure Storage account that will host the data in App1.

Access to the public endpoint of the Azure Storage account that will host the App1 data must be prevented.

All Azure SQL databases in the production environment must have Transparent Data Encryption (TDE) enabled.

App1 must NOT share physical hardware with other workloads.

##### Business Requirements -

Litware identifies the following business requirements:

Minimize administrative effort.

Minimize costs.

#### Question

You plan to migrate App1 to Azure.

You need to recommend a network connectivity solution for the Azure Storage account that will host the App1 data. The solution must meet the security and compliance requirements.

What should you include in the recommendation?

- A. Microsoft peering for an ExpressRoute circuit
- B. Azure public peering for an ExpressRoute circuit
- C. a service endpoint that has a service endpoint policy
- D. a private endpoint

**Correct Answer: D**

Private Endpoint securely connect to storage accounts from on-premises networks that connect to the VNet using VPN or ExpressRoutes with private-peering.

Private Endpoint also secure your storage account by configuring the storage firewall to block all connections on the public endpoint for the storage service.

Incorrect Answers:

A: Microsoft peering provides access to Azure public services via public endpoints with public IP addresses, which should not be allowed.

B: Azure public peering has been deprecated.

C: By default, Service Endpoints are enabled on subnets configured in Azure virtual networks. Endpoints can't be used for traffic from your premises to Azure services.

Reference:

<https://docs.microsoft.com/en-us/azure/expressroute/expressroute-circuit-peerings>

 **WickedMJ** Highly Voted 8 months, 2 weeks ago

**Selected Answer: D**

D. a private endpoint

upvoted 14 times

 **zelick** Most Recent 4 months ago

Same as Topic 12 Question 2.

<https://www.examtopics.com/discussions/microsoft/view/69317-exam-az-305-topic-12-question-2-discussion>

upvoted 1 times

 **zelick** 4 months ago

**Selected Answer: D**

D is the answer.

<https://learn.microsoft.com/en-us/azure/storage/common/storage-private-endpoints>

You can use private endpoints for your Azure Storage accounts to allow clients on a virtual network (VNet) to securely access data over a Private Link. The private endpoint uses a separate IP address from the VNet address space for each storage account service. Network traffic between the clients on the VNet and the storage account traverses over the VNet and a private link on the Microsoft backbone network, eliminating exposure from the public internet.

upvoted 1 times

 **janvandermerwer** 5 months, 1 week ago

**Selected Answer: D**

D - Agreed.

Private endpoint is the way to go in any cloud provider.

upvoted 2 times

 **OPT\_001122** 5 months, 1 week ago

**Selected Answer: D**

private endpoint

upvoted 1 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Litware, Inc. is a medium-sized finance company that has a main office in Boston.

Existing Environment -

Identity Environment -

The network contains an Active Directory forest named litware.com that is linked to an Azure Active Directory (Azure AD) tenant named litware.com. All users have Azure Active Directory Premium P2 licenses.

Litware has a second Azure AD tenant named dev.litware.com that is used as a development environment.

The litware.com tenant has a Conditional Access policy named Capolicy1. Capolicy1 requires that when users manage the Azure subscription for a production environment by using the Azure portal, they must connect from a hybrid Azure AD-joined device.

Azure Environment -

Litware has 10 Azure subscriptions that are linked to the Litware.com tenant and five Azure subscriptions that are linked to the dev.litware.com tenant. All the subscriptions are in an Enterprise Agreement (EA).

The litware.com tenant contains a custom Azure role-based access control (Azure RBAC) role named Role1 that grants the DataActions read permission to the blobs and files in Azure Storage.

On-Premises Environment -

The on-premises network of Litware contains the resources shown in the following table.

Name	Type	Configuration
SERVER1 SERVER2 SERVER3	Ubuntu 18.04 virtual machines hosted on Hyper-V	The virtual machines host a third-party app named App1. App1 uses an external storage solution that provides Apache Hadoop-compatible data storage. The data storage supports POSIX access control list (ACL) file-level permissions.
SERVER10	Server that runs Windows Server 2016	The server contains a Microsoft SQL Server instance that hosts two databases named DB1 and DB2.

Network Environment -

Litware has ExpressRoute connectivity to Azure.

#### Planned Changes and Requirements

##### Planned Changes -

Litware plans to implement the following changes:

Migrate DB1 and DB2 to Azure.

Migrate App1 to Azure virtual machines.

Migrate the external storage used by App1 to Azure Storage.

Deploy the Azure virtual machines that will host App1 to Azure dedicated hosts.

##### Authentication and Authorization Requirements

Litware identifies the following authentication and authorization requirements:

Only users that manage the production environment by using the Azure portal must connect from a hybrid Azure AD-joined device and authenticate by using

Azure Multi-Factor Authentication (MFA).

The Network Contributor built-in RBAC role must be used to grant permissions to the network administrators for all the virtual networks in all the Azure subscriptions.

To access the resources in Azure, App1 must use the managed identity of the virtual machines that will host the app.

RBAC roles must be applied to management groups.

##### Resiliency Requirements -

Litware identifies the following resiliency requirements:

Once migrated to Azure, DB1 and DB2 must meet the following requirements:

- Maintain availability if two availability zones in the local Azure region fail.
- Fail over automatically.
- Minimize I/O latency.

App1 must meet the following requirements:

- Be hosted in an Azure region that supports availability zones.
- Be hosted on Azure virtual machines that support automatic scaling.
- Maintain availability if two availability zones in the local Azure region fail.

##### Security and Compliance Requirements

Litware identifies the following security and compliance requirements:

Once App1 is migrated to Azure, you must ensure that new data can be written to the app, and the modification of new and existing data is prevented for a period of three years.

On-premises users and services must be able to access the Azure Storage account that will host the data in App1.

Access to the public endpoint of the Azure Storage account that will host the App1 data must be prevented.

All Azure SQL databases in the production environment must have Transparent Data Encryption (TDE) enabled.

App1 must NOT share physical hardware with other workloads.

##### Business Requirements -

Litware identifies the following business requirements:

Minimize administrative effort.

Minimize costs.

#### Question

You need to implement the Azure RBAC role assignments for the Network Contributor role. The solution must meet the authentication and authorization requirements.

What is the minimum number of assignments that you must use?

- A. 1
- B. 2
- C. 5
- D. 10
- E. 15

**Correct Answer: B**

Scenario: The Network Contributor built-in RBAC role must be used to grant permissions to the network administrators for all the virtual networks in all the Azure subscriptions.

RBAC roles must be applied at the highest level possible.

✉ **darren888** Highly Voted 7 months, 1 week ago

**Selected Answer: B**

Litware has two Azure tenants. One tenant with 10 subscriptions and one tenant with five subscriptions. We can organize the subscriptions of the two tenants in a management group each and assign users to the Network Contributor role or to Role1 at the management group level.

upvoted 17 times

✉ **globy118** Most Recent 4 months, 1 week ago

Exam Question 02/15/2023

upvoted 4 times

✉ **mscbgslt** 5 months, 3 weeks ago

**Selected Answer: B**

two tenants two MG

upvoted 4 times

✉ **lolo13698** 8 months, 2 weeks ago

**Selected Answer: B**

i would say B.2 as root management group is created by default in a Tenant and we have 2 Tenants here.

But as they are not mentionning management group it could also be 15 assigment (one per subscription)

upvoted 2 times

✉ **Mltytskr** 5 months, 4 weeks ago

The authentication and authorization requirements state: "RBAC roles must be applied to management groups," so I think you were correct with B.

upvoted 2 times

✉ **WickedMJ** 8 months, 2 weeks ago

**Selected Answer: B**

B. 2

<https://www.cert2brain.com/Server/Demo.aspx?exam=AZ-304>

upvoted 1 times

✉ **ezfix** 8 months, 3 weeks ago

E - 15) There are 2 Tenants with 15 total subscriptions. Medium size company with only 1 office. I can't find anything in the use case stating they have enabled management groups, or anything mentioning a "Tenant Root Group". The RBAC for network contributor would be assigned at the "Tenant Root Group" if management groups were enabled. Otherwise, they would assign it at the next best thing, the 15 subscriptions.

upvoted 3 times

✉ **ronsay80** 8 months, 3 weeks ago

Per <https://learn.microsoft.com/en-us/azure/governance/management-groups/overview#root-management-group-for-each-directory> ... "Each directory is given a single top-level management group called the root management group. The root management group is built into the hierarchy to have all management groups and subscriptions fold up to it. This root management group allows for global policies and Azure role assignments to be applied at the directory level". So from this, a root MG exists for every Azure tenant/directory, so we would only need 2 RBAC assignments to each root MG

upvoted 8 times

✉ **Mltytskr** 5 months, 4 weeks ago

It can't be E because the authentication and authorization requirements state: "RBAC roles must be applied to management groups," so it should be B.

upvoted 1 times

✉ **cj00** 9 months ago

**Selected Answer: B**

2 tenants, so 2x management groups to assign to

upvoted 2 times

✉ **ronsay80** 9 months ago

Since this states that "Litware has a second Azure AD tenant named dev.litware.com", a tenant is a security boundary, so corp.litware.com AAD tenant has no access to dev.litware.com AAD tenant. Hence, need 2 RBAC roles (one in each tenant)

upvoted 3 times

✉ **mlounge** 9 months, 1 week ago

**Selected Answer: B**

The network contains an Active Directory forest named litware.com that is linked to an Azure Active Directory (Azure AD) tenant named litware.com.

Litware has a second Azure AD tenant named dev.litware.com that is used as a development environment.

upvoted 3 times

 **jellybiscuit** 9 months, 1 week ago

**Selected Answer: A**

Where would 2 come from? Two domains? Two Tenant's?

You can put both the domains into one Tenant with one management group, where you would assign your role.

upvoted 1 times

 **mufflon** 9 months ago

Are you suggesting a multi tenant solution?

upvoted 1 times

 **KarVaid** 9 months, 1 week ago

**Selected Answer: A**

This should be A. The access should be applied at the root management group level to ensure that it gets applied at all levels.

upvoted 2 times

 **lolo13698** 8 months, 2 weeks ago

Yes, buts there are 2 tenants, so one root management group per tenant. So answer B.

upvoted 1 times

 **KarVaid** 9 months, 1 week ago

This should be A. The access should be applied at the root management group level to ensure that it gets applied at all levels.

upvoted 1 times

 **FabritDev** 5 months, 1 week ago

"Management groups give you enterprise-grade management at scale no matter what type of subscriptions you might have. However, all subscriptions within a single management group must trust the same Azure Active Directory (Azure AD) tenant."

Therefore you cannot have a management group that spans AAD tenants and that's why it cannot be A.

<https://learn.microsoft.com/en-us/azure/governance/management-groups/overview>

upvoted 1 times

## Introductory Info

### Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

### To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

### Overview -

Litware, Inc. is a medium-sized finance company that has a main office in Boston.

### Existing Environment -

#### Identity Environment -

The network contains an Active Directory forest named litware.com that is linked to an Azure Active Directory (Azure AD) tenant named litware.com. All users have Azure Active Directory Premium P2 licenses.

Litware has a second Azure AD tenant named dev.litware.com that is used as a development environment.

The litware.com tenant has a Conditional Access policy named Capolicy1. Capolicy1 requires that when users manage the Azure subscription for a production environment by using the Azure portal, they must connect from a hybrid Azure AD-joined device.

#### Azure Environment -

Litware has 10 Azure subscriptions that are linked to the Litware.com tenant and five Azure subscriptions that are linked to the dev.litware.com tenant. All the subscriptions are in an Enterprise Agreement (EA).

The litware.com tenant contains a custom Azure role-based access control (Azure RBAC) role named Role1 that grants the DataActions read permission to the blobs and files in Azure Storage.

### On-Premises Environment -

The on-premises network of Litware contains the resources shown in the following table.

Name	Type	Configuration
SERVER1 SERVER2 SERVER3	Ubuntu 18.04 virtual machines hosted on Hyper-V	The virtual machines host a third-party app named App1. App1 uses an external storage solution that provides Apache Hadoop-compatible data storage. The data storage supports POSIX access control list (ACL) file-level permissions.
SERVER10	Server that runs Windows Server 2016	The server contains a Microsoft SQL Server instance that hosts two databases named DB1 and DB2.

### Network Environment -

Litware has ExpressRoute connectivity to Azure.

#### Planned Changes and Requirements

##### Planned Changes -

Litware plans to implement the following changes:

Migrate DB1 and DB2 to Azure.

Migrate App1 to Azure virtual machines.

Migrate the external storage used by App1 to Azure Storage.

Deploy the Azure virtual machines that will host App1 to Azure dedicated hosts.

##### Authentication and Authorization Requirements

Litware identifies the following authentication and authorization requirements:

Only users that manage the production environment by using the Azure portal must connect from a hybrid Azure AD-joined device and authenticate by using

Azure Multi-Factor Authentication (MFA).

The Network Contributor built-in RBAC role must be used to grant permissions to the network administrators for all the virtual networks in all the Azure subscriptions.

To access the resources in Azure, App1 must use the managed identity of the virtual machines that will host the app.

RBAC roles must be applied to management groups.

##### Resiliency Requirements -

Litware identifies the following resiliency requirements:

Once migrated to Azure, DB1 and DB2 must meet the following requirements:

- Maintain availability if two availability zones in the local Azure region fail.
- Fail over automatically.
- Minimize I/O latency.

App1 must meet the following requirements:

- Be hosted in an Azure region that supports availability zones.
- Be hosted on Azure virtual machines that support automatic scaling.
- Maintain availability if two availability zones in the local Azure region fail.

##### Security and Compliance Requirements

Litware identifies the following security and compliance requirements:

Once App1 is migrated to Azure, you must ensure that new data can be written to the app, and the modification of new and existing data is prevented for a period of three years.

On-premises users and services must be able to access the Azure Storage account that will host the data in App1.

Access to the public endpoint of the Azure Storage account that will host the App1 data must be prevented.

All Azure SQL databases in the production environment must have Transparent Data Encryption (TDE) enabled.

App1 must NOT share physical hardware with other workloads.

##### Business Requirements -

Litware identifies the following business requirements:

Minimize administrative effort.

Minimize costs.

#### Question

##### DRAG DROP -

You need to configure an Azure policy to ensure that the Azure SQL databases have Transparent Data Encryption (TDE) enabled. The solution must meet the security and compliance requirements.

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.

Select and Place:

Actions
Create an Azure policy definition that uses the deployIfNotExists effect.
Invoke a remediation task.
Create an Azure policy definition that uses the Modify effect
Create an Azure policy assignment.
Create a user-assigned managed identity.

**Answer Area**



**Correct Answer:**

Actions
Create an Azure policy definition that uses the Modify effect
Create a user-assigned managed identity.

**Answer Area**

Create an Azure policy definition that uses the deployIfNotExists effect.
Create an Azure policy assignment.
Invoke a remediation task.

**Step 1: Create an Azure policy definition that uses the deployIfNotExists**

The first step is to define the roles that deployIfNotExists and modify needs in the policy definition to successfully deploy the content of your included template.

**Step 2: Create an Azure policy assignment**

When creating an assignment using the portal, Azure Policy both generates the managed identity and grants it the roles defined in roleDefinitionIds.

**Step 3: Invoke a remediation task.**

Resources that are non-compliant to a deployIfNotExists or modify policy can be put into a compliant state through Remediation. Remediation is accomplished by instructing Azure Policy to run the deployIfNotExists effect or the modify operations of the assigned policy on your existing resources and subscriptions, whether that assignment is to a management group, a subscription, a resource group, or an individual resource.

During evaluation, the policy assignment with deployIfNotExists or modify effects determines if there are non-compliant resources or subscriptions. When non-compliant resources or subscriptions are found, the details are provided on the Remediation page.

**Reference:**

<https://docs.microsoft.com/en-us/azure/governance/policy/how-to/remediate-resources>

✉️ **VBK8579** Highly Voted 4 months, 2 weeks ago

The three actions you should perform in sequence are:

Create an Azure policy definition that uses the deployIfNotExists effect and specifies TDE as a required setting.

Create an Azure policy assignment and assign the policy definition to the desired scope (e.g. subscription or resource group).

Invoke a remediation task to automatically enforce the policy and enable TDE on existing databases that do not have it enabled.

upvoted 10 times

✉️ **ronsav80** Highly Voted 9 months ago

Per <https://learn.microsoft.com/en-us/azure/governance/policy/how-to/remediate-resources?tabs=azure-portal>, the steps are a) deployIfNoExists, b) create user or system managed identity, c) create remediation task. So shouldn't the 2nd step be "Create user managed identity"?

upvoted 6 times

✉️ **Snownoodles** 8 months, 3 weeks ago

managed identity is assigned automatically if you create policy by Portal

upvoted 5 times

✉️ **globy118** Most Recent 4 months, 1 week ago

Exam Question 02/15/2023

upvoted 2 times

✉️ **RandomNickname** 5 months, 1 week ago

Answer looks good to me as per article:

<https://learn.microsoft.com/en-us/azure/governance/policy/how-to/remediate-resources?tabs=azure-portal>  
upvoted 3 times

 **OPT\_001122** 5 months, 1 week ago

is given ans correct?  
upvoted 1 times

 **AHUI** 1 month ago

yes, ans is correct  
upvoted 1 times

 **JDKJDKJDK** 9 months, 1 week ago

True deployIfNotExists

<https://learn.microsoft.com/en-us/azure/azure-sql/database/policy-reference?view=azuresql>  
upvoted 5 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Fabrikam, Inc. is an engineering company that has offices throughout Europe. The company has a main office in London and three branch offices in Amsterdam,

Berlin, and Rome.

Existing Environment: Active Directory Environment

The network contains two Active Directory forests named corp.fabrikam.com and rd.fabrikam.com. There are no trust relationships between the forests.

Corp.fabrikam.com is a production forest that contains identities used for internal user and computer authentication.

Rd.fabrikam.com is used by the research and development (R&D) department only. The R&D department is restricted to using on-premises resources only.

Existing Environment: Network Infrastructure

Each office contains at least one domain controller from the corp.fabrikam.com domain. The main office contains all the domain controllers for the rd.fabrikam.com forest.

All the offices have a high-speed connection to the internet.

An existing application named WebApp1 is hosted in the data center of the London office. WebApp1 is used by customers to place and track orders. WebApp1 has a web tier that uses Microsoft Internet Information Services (IIS) and a database tier that runs Microsoft SQL Server 2016. The web tier and the database tier are deployed to virtual machines that run on Hyper-V.

The IT department currently uses a separate Hyper-V environment to test updates to WebApp1.

Fabrikam purchases all Microsoft licenses through a Microsoft Enterprise Agreement that includes Software Assurance.

Existing Environment: Problem Statements

The use of WebApp1 is unpredictable. At peak times, users often report delays. At other times, many resources for WebApp1 are underutilized.

Requirements: Planned Changes -

Fabrikam plans to move most of its production workloads to Azure during the next few years, including virtual machines that rely on Active Directory for authentication.

As one of its first projects, the company plans to establish a hybrid identity model, facilitating an upcoming Microsoft 365 deployment.

All R&D operations will remain on-premises.

Fabrikam plans to migrate the production and test instances of WebApp1 to Azure.

Requirements: Technical Requirements

Fabrikam identifies the following technical requirements:

Website content must be easily updated from a single point.

User input must be minimized when provisioning new web app instances.

Whenever possible, existing on-premises licenses must be used to reduce cost.

Users must always authenticate by using their corp.fabrikam.com UPN identity.

Any new deployments to Azure must be redundant in case an Azure region fails.

Whenever possible, solutions must be deployed to Azure by using the Standard pricing tier of Azure App Service.

An email distribution group named IT Support must be notified of any issues relating to the directory synchronization services.

In the event that a link fails between Azure and the on-premises network, ensure that the virtual machines hosted in Azure can authenticate to Active Directory.

Directory synchronization between Azure Active Directory (Azure AD) and corp.fabrikam.com must not be affected by a link failure between Azure and the on-premises network.

Requirements: Database Requirements

Fabrikam identifies the following database requirements:

Database metrics for the production instance of WebApp1 must be available for analysis so that database administrators can optimize the performance settings.

To avoid disrupting customer access, database downtime must be minimized when databases are migrated.

Database backups must be retained for a minimum of seven years to meet compliance requirements.

Requirements: Security Requirements

Fabrikam identifies the following security requirements:

Company information including policies, templates, and data must be inaccessible to anyone outside the company.

Users on the on-premises network must be able to authenticate to corp.fabrikam.com if an internet link fails.

Administrators must be able authenticate to the Azure portal by using their corp.fabrikam.com credentials.

All administrative access to the Azure portal must be secured by using multi-factor authentication (MFA).

The testing of WebApp1 updates must not be visible to anyone outside the company.

#### Question

HOTSPOT -

To meet the authentication requirements of Fabrikam, what should you include in the solution? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

#### Answer Area

Minimum number of Azure AD tenants:

0
1
2
3
4

Minimum number of custom domains to add:

0
1
2
3
4

Minimum number of conditional access policies to create:

0
1
2
3
4

Correct Answer:

## Answer Area

Minimum number of Azure AD tenants:

0
1
2
3
4

Minimum number of custom domains to add:

0
1
2
3
4

Minimum number of conditional access policies to create:

0
1
2
3
4

Box 1: 1 -

One single Azure AD tenant is needed as only the Corp tenant is migrated.

Box 2: 1 -

Box 3: 2 -

One conditional access policy for Multi-Factor Authentication (MFA) will be used for administrative access, and a second conditional access policy in order to prevent external access.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/howto-conditional-access-policy-location>

<https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/howto-conditional-access-policy-admin-mfa>

 **ronsav80** Highly Voted 9 months ago

I think it is 1-1-1 as you can include locations in "Conditions" section of a Conditional Access Policy (and "Grant with MFA" in the Access Control section)

upvoted 15 times

 **mikenyga** 7 months, 1 week ago

All >ADMINISTRATIVE< only access to the Azure portal must be secured by using multi-factor authentication (MFA). So 1 policy for location and 2 for MFA. 1-1-2

upvoted 11 times

 **honzar** Highly Voted 5 months, 3 weeks ago

Appeared 2023/01/04 in the exam

upvoted 9 times

 **Bertmeister** Most Recent 1 week, 5 days ago

2-1-1

Minimum Number of Azure AD Tenants:

Fabrikam already has two Active Directory forests: corp.fabrikam.com and rd.fabrikam.com. These forests can be synchronized with Azure AD as separate tenants.

Therefore, the minimum number of Azure AD tenants required would be 2.

Minimum Number of Custom Domains to Add:

Fabrikam wants users to authenticate using their corp.fabrikam.com UPN identity.

For this, you need to add a custom domain to Azure AD that matches the domain used in the on-premises Active Directory forest (corp.fabrikam.com).

Therefore, the minimum number of custom domains to add would be 1.

Minimum Number of Conditional Access Policies to Create:

Fabrikam has a requirement to ensure that users always authenticate using their corp.fabrikam.com UPN identity.

You can create a conditional access policy in Azure AD to enforce this requirement. The policy can be configured to only allow authentication from the corp.fabrikam.com domain and deny access from other domains.

Therefore, the minimum number of conditional access policies to create would be 1.

upvoted 1 times

 **OPT\_001122** 4 months, 2 weeks ago

ans is 1-1-2

upvoted 2 times

 **RandomNickname** 5 months, 1 week ago

Given answer looks correct, 1-1-2.

1=1:Single tenant creation required only due to RD restrictions implemented.

2=1:Need to add custom domain due to default .onmicrosoft.com domain on tenant creation

3=2 Two policies requires, can't have multiple actions to block + allow on single conditional access policies.

One required for admin MFA, second to block external access as per requirements.

upvoted 6 times

 **CineZorro824** 6 months, 3 weeks ago

On Conditional Access policies:

The case says "Company information ... must be inaccessible to anyone outside the company." The question is what is meant "outside the company": not on the company network? In that case the second conditional access policy makes sense.

If they just mean external users (non-employees), then you can solve this in a better way than with conditional access.

upvoted 2 times

 **jp\_mcgee** 7 months, 2 weeks ago

0 Custom Domains since contoso.com should be the primary domain name

<https://learn.microsoft.com/en-us/azure/active-directory/enterprise-users/domains-manage#set-the-primary-domain-name-for-your-azure-ad-organization>

upvoted 1 times

 **Grimstad** 6 months ago

Not true. In your link the user has already added a custom domain. "Every new Azure AD tenant comes with an initial domain name, <domainname>.onmicrosoft.com. You can't change or delete the initial domain name, but you can add your organization's names. Adding custom domain names helps you to create user names that are familiar to your users, such as alain@contoso.com."

upvoted 1 times

 **Samko635** 8 months, 1 week ago

2 policies should be correct for the last box. Security defaults are used to enable MFA for ALL users, not just admins. And preventing users from accessing the portal outside the company network needs a separate policy as the policy action cannot be more than 1 per policy, unlike scope.

upvoted 6 times

 **existingname** 8 months, 2 weeks ago

1 tenant, as dev will stay on prep

1 custom domain, so users can login with their UPN

0 CA, MFA for adios is already enabled by Security defaults.

upvoted 1 times

 **Borman** 5 months, 2 weeks ago

There did you see a mention about security defaults? They could be on CA already, it is not clear.

upvoted 1 times

 **Davin0406** 9 months ago

I'm confused of the 3rd box...maybe 1?

upvoted 1 times

 **jellybiscuit** 9 months, 1 week ago

Regarding conditional access policies, I could answer 0, or 1. I can't imagine where 2 came from.

0 - If I enable security defaults, I create zero policies and I accomplish the task admin task.

1 - If I configure a new policy for just the admins (without enabling security defaults)

Preventing public access to your dev/test environment would be handled through your app service. <https://learn.microsoft.com/en-us/azure/app-service/app-service-ip-restrictions>

But maybe I'm missing something.

upvoted 9 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Fabrikam, Inc. is an engineering company that has offices throughout Europe. The company has a main office in London and three branch offices in Amsterdam, Berlin, and Rome.

Existing Environment: Active Directory Environment

The network contains two Active Directory forests named corp.fabrikam.com and rd.fabrikam.com. There are no trust relationships between the forests.

Corp.fabrikam.com is a production forest that contains identities used for internal user and computer authentication.

Rd.fabrikam.com is used by the research and development (R&D) department only. The R&D department is restricted to using on-premises resources only.

Existing Environment: Network Infrastructure

Each office contains at least one domain controller from the corp.fabrikam.com domain. The main office contains all the domain controllers for the rd.fabrikam.com forest.

All the offices have a high-speed connection to the internet.

An existing application named WebApp1 is hosted in the data center of the London office. WebApp1 is used by customers to place and track orders. WebApp1 has a web tier that uses Microsoft Internet Information Services (IIS) and a database tier that runs Microsoft SQL Server 2016.

The web tier and the database tier are deployed to virtual machines that run on Hyper-V.

The IT department currently uses a separate Hyper-V environment to test updates to WebApp1.

Fabrikam purchases all Microsoft licenses through a Microsoft Enterprise Agreement that includes Software Assurance.

Existing Environment: Problem Statements

The use of WebApp1 is unpredictable. At peak times, users often report delays. At other times, many resources for WebApp1 are underutilized.

Requirements: Planned Changes -

Fabrikam plans to move most of its production workloads to Azure during the next few years, including virtual machines that rely on Active Directory for authentication.

As one of its first projects, the company plans to establish a hybrid identity model, facilitating an upcoming Microsoft 365 deployment.

All R&D operations will remain on-premises.

Fabrikam plans to migrate the production and test instances of WebApp1 to Azure.

Requirements: Technical Requirements

Fabrikam identifies the following technical requirements:

Website content must be easily updated from a single point.

User input must be minimized when provisioning new web app instances.

Whenever possible, existing on-premises licenses must be used to reduce cost.

Users must always authenticate by using their corp.fabrikam.com UPN identity.

Any new deployments to Azure must be redundant in case an Azure region fails.

Whenever possible, solutions must be deployed to Azure by using the Standard pricing tier of Azure App Service.

An email distribution group named IT Support must be notified of any issues relating to the directory synchronization services.

In the event that a link fails between Azure and the on-premises network, ensure that the virtual machines hosted in Azure can authenticate to Active Directory.

Directory synchronization between Azure Active Directory (Azure AD) and corp.fabrikam.com must not be affected by a link failure between Azure and the on-premises network.

#### Requirements: Database Requirements

Fabrikam identifies the following database requirements:

Database metrics for the production instance of WebApp1 must be available for analysis so that database administrators can optimize the performance settings.

To avoid disrupting customer access, database downtime must be minimized when databases are migrated.

Database backups must be retained for a minimum of seven years to meet compliance requirements.

#### Requirements: Security Requirements

Fabrikam identifies the following security requirements:

Company information including policies, templates, and data must be inaccessible to anyone outside the company.

Users on the on-premises network must be able to authenticate to corp.fabrikam.com if an internet link fails.

Administrators must be able authenticate to the Azure portal by using their corp.fabrikam.com credentials.

All administrative access to the Azure portal must be secured by using multi-factor authentication (MFA).

The testing of WebApp1 updates must not be visible to anyone outside the company.

### Question

You need to recommend a notification solution for the IT Support distribution group.

What should you include in the recommendation?

- A. a SendGrid account with advanced reporting
- B. an action group
- C. Azure Network Watcher
- D. Azure AD Connect Health

#### Correct Answer: D

An email distribution group named IT Support must be notified of any issues relating to the directory synchronization services.

Note: You can configure the Azure AD Connect Health service to send email notifications when alerts indicate that your identity infrastructure is not healthy. This occurs when an alert is generated, and when it is resolved.

The screenshot shows the Azure Active Directory Connect (Sync) Alerts blade. At the top, there are tabs for 'Time Range' and 'Notifications'. The 'Notifications' tab is highlighted with a red box. Below the tabs, a message says 'You can provide feedback by doing a right click on any alert.' There is a search bar labeled 'Find...'. The main area is divided into 'ACTIVE ALERTS' and 'RESOLVED ALERTS'. Under 'ACTIVE ALERTS', there is one entry: 'Azure AD Connect Sync Service is not running' (Type: Error, Scope: FABVM03). Under 'RESOLVED ALERTS', it says 'No items for this.' On the right side, there is a 'Notification' section with a switch labeled 'ON' and a checkbox for 'Notify All Global Administrators'. Below that, there is a section for 'ADDITIONAL EMAIL RECIPIENTS' with two entries: 'varun@fabtoso.com' and 'idadmins@fabtoso.com'.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/hybrid/how-to-connect-health-operations>

WickedMJ Highly Voted 8 months, 2 weeks ago

Selected Answer: D

Azure AD Connect Health

upvoted 11 times

zellick Most Recent 4 months ago

Selected Answer: D

D is the answer.

<https://learn.microsoft.com/en-us/azure/active-directory/hybrid/whatis-azure-ad-connect#what-is-azure-ad-connect-health>  
Azure Active Directory (Azure AD) Connect Health provides robust monitoring of your on-premises identity infrastructure. It enables you to maintain a reliable connection to Microsoft 365 and Microsoft Online Services. This reliability is achieved by providing monitoring capabilities for your key identity components. Also, it makes the key data points about these components easily accessible.

upvoted 3 times

 **honzar** 5 months, 3 weeks ago  
Appeared 2023/01/04 in the exam  
upvoted 3 times

 **Alanckhhb** 6 months, 2 weeks ago  
**Selected Answer: D**  
Correct, D  
upvoted 3 times

## Introductory Info

### Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

### To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

### Overview -

Fabrikam, Inc. is an engineering company that has offices throughout Europe. The company has a main office in London and three branch offices in Amsterdam, Berlin, and Rome.

#### Existing Environment: Active Directory Environment

The network contains two Active Directory forests named corp.fabrikam.com and rd.fabrikam.com. There are no trust relationships between the forests.

Corp.fabrikam.com is a production forest that contains identities used for internal user and computer authentication.

Rd.fabrikam.com is used by the research and development (R&D) department only. The R&D department is restricted to using on-premises resources only.

#### Existing Environment: Network Infrastructure

Each office contains at least one domain controller from the corp.fabrikam.com domain. The main office contains all the domain controllers for the rd.fabrikam.com forest.

All the offices have a high-speed connection to the internet.

An existing application named WebApp1 is hosted in the data center of the London office. WebApp1 is used by customers to place and track orders. WebApp1 has a web tier that uses Microsoft Internet Information Services (IIS) and a database tier that runs Microsoft SQL Server 2016.

The web tier and the database tier are deployed to virtual machines that run on Hyper-V.

The IT department currently uses a separate Hyper-V environment to test updates to WebApp1.

Fabrikam purchases all Microsoft licenses through a Microsoft Enterprise Agreement that includes Software Assurance.

#### Existing Environment: Problem Statements

The use of WebApp1 is unpredictable. At peak times, users often report delays. At other times, many resources for WebApp1 are underutilized.

#### Requirements: Planned Changes -

Fabrikam plans to move most of its production workloads to Azure during the next few years, including virtual machines that rely on Active Directory for authentication.

As one of its first projects, the company plans to establish a hybrid identity model, facilitating an upcoming Microsoft 365 deployment.

All R&D operations will remain on-premises.

Fabrikam plans to migrate the production and test instances of WebApp1 to Azure.

#### Requirements: Technical Requirements

Fabrikam identifies the following technical requirements:

Website content must be easily updated from a single point.

User input must be minimized when provisioning new web app instances.

Whenever possible, existing on-premises licenses must be used to reduce cost.

Users must always authenticate by using their corp.fabrikam.com UPN identity.

Any new deployments to Azure must be redundant in case an Azure region fails.

Whenever possible, solutions must be deployed to Azure by using the Standard pricing tier of Azure App Service.

An email distribution group named IT Support must be notified of any issues relating to the directory synchronization services.

In the event that a link fails between Azure and the on-premises network, ensure that the virtual machines hosted in Azure can authenticate to Active Directory.

Directory synchronization between Azure Active Directory (Azure AD) and corp.fabrikam.com must not be affected by a link failure between Azure and the on-premises network.

Requirements: Database Requirements

Fabrikam identifies the following database requirements:

Database metrics for the production instance of WebApp1 must be available for analysis so that database administrators can optimize the performance settings.

To avoid disrupting customer access, database downtime must be minimized when databases are migrated.

Database backups must be retained for a minimum of seven years to meet compliance requirements.

Requirements: Security Requirements

Fabrikam identifies the following security requirements:

Company information including policies, templates, and data must be inaccessible to anyone outside the company.

Users on the on-premises network must be able to authenticate to corp.fabrikam.com if an internet link fails.

Administrators must be able authenticate to the Azure portal by using their corp.fabrikam.com credentials.

All administrative access to the Azure portal must be secured by using multi-factor authentication (MFA).

The testing of WebApp1 updates must not be visible to anyone outside the company.

### Question

You need to recommend a solution to meet the database retention requirements.

What should you recommend?

- A. Configure a long-term retention policy for the database.
- B. Configure Azure Site Recovery.
- C. Use automatic Azure SQL Database backups.
- D. Configure geo-replication of the database.

**Correct Answer: A**

Scenario: Database backups must be retained for a minimum of seven years to meet compliance requirements.

Many applications have regulatory, compliance, or other business purposes that require you to retain database backups beyond the 7-35 days provided by Azure

SQL Database and Azure SQL Managed Instance automatic backups. By using the long-term retention (LTR) feature, you can store specified SQL Database and

SQL Managed Instance full backups in Azure Blob storage with configured redundancy for up to 10 years. LTR backups can then be restored as a new database.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/long-term-retention-overview>

✉ Eltooth Highly Voted 1 year, 6 months ago

Selected Answer: A

Correct answer - A

upvoted 17 times

✉ jkklim 1 year, 4 months ago

<https://docs.microsoft.com/en-us/azure/azure-sql/database/long-term-retention-overview>

CORRECT - A

upvoted 7 times

✉ wsrudmen Highly Voted 1 year, 3 months ago

You can process by elimination:

Site recovery and geo-replication are out of scope

We can think that automatic backup can be sufficient but Microsoft recommendation for Long Term Retention is to use LTR feature:  
<https://docs.microsoft.com/en-us/azure/azure-sql/database/automated-backups-overview?tabs=single-database>

Then A is correct

upvoted 8 times

✉ zellck Most Recent 4 months ago

Selected Answer: A

A is the answer.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/long-term-retention-overview?view=azuresql>

Many applications have regulatory, compliance, or other business purposes that require you to retain database backups beyond the 7-35 days provided by Azure SQL Database and Azure SQL Managed Instance automatic backups. By using the long-term retention (LTR) feature, you can store specified SQL Database and SQL Managed Instance full backups in Azure Blob storage with configured redundancy for up to 10 years. LTR backups can then be restored as a new database.

upvoted 1 times

✉ **honzar** 5 months, 3 weeks ago

Appeared 2023/01/04 in the exam

upvoted 4 times

✉ **Gor** 1 year, 1 month ago

**Selected Answer: A**

Correct answer: A

<https://docs.microsoft.com/en-us/azure/azure-sql/database/long-term-retention-overview?view=azuresql>

upvoted 1 times

✉ **Teringzooi** 1 year, 2 months ago

**Selected Answer: A**

Correct answer: A

<https://docs.microsoft.com/en-us/azure/azure-sql/database/long-term-retention-overview?view=azuresql>

upvoted 1 times

✉ **Justin0020** 1 year, 3 months ago

Was in my exam om March. 10

upvoted 4 times

✉ **Paulwryyan** 1 year, 5 months ago

It is not clear that idea is that the customer migrates to Azure SQL Database. Assuming that is the idea then answer is correct. Otherwise, long term retention policy is not available to SQL on Azure VM. But I can't see answer that fits if SQL remains hosted on a VM.

upvoted 4 times

✉ **DoolyMilly** 1 year, 4 months ago

I agree, one of the requirements is to leverage licensing, the company has SA, they could use hybrid licensing for their SQL. This suggests to me they migrate the SQL instance as a VM, I'd say Azure VM backup (if it was a possible answer!)

upvoted 2 times

✉ **Mr\_wippy** 1 year, 1 month ago

I'm not a DBA by any means.

But as per the following article, you can use hybrid benefits for V-CORE based SQL databases ( and can be done without any downtime )  
So, Answer A should be correct.

<https://docs.microsoft.com/en-us/azure/azure-sql/azure-hybrid-benefit?view=azuresql&tabs=azure-portal>

upvoted 4 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Contoso, Ltd. is a research company that has a main office in Montreal.

Existing Environment: Technical Environment

The on-premises network contains a single Active Directory domain named contoso.com.

Contoso has a single Azure subscription.

Existing Environment: Business Partnerships

Contoso has a business partnership with Fabrikam, Inc. Fabrikam users access some Contoso applications over the internet by using Azure Active Directory

(Azure AD) guest accounts.

Requirements: Planned Changes -

Contoso plans to deploy two applications named App1 and App2 to Azure.

Requirements: App1 -

App1 will be a Python web app hosted in Azure App Service that requires a Linux runtime. Users from Contoso and Fabrikam will access App1.

App1 will access several services that require third-party credentials and access strings. The credentials and access strings are stored in Azure Key Vault.

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

App1 has the following data requirements:

Each instance will write data to a data store in the same availability zone as the instance.

Data written by any App1 instance must be visible to all App1 instances.

App1 will only be accessible from the internet. App1 has the following connection requirements:

Connections to App1 must pass through a web application firewall (WAF).

Connections to App1 must be active-active load balanced between instances.

All connections to App1 from North America must be directed to the East US region. All other connections must be directed to the West Europe region.

Every hour, you will run a maintenance task by invoking a PowerShell script that copies files from all the App1 instances. The PowerShell script will run from a central location.

Requirements: App2 -

App2 will be a .NET app hosted in App Service that requires a Windows runtime. App2 has the following file storage requirements:

Save files to an Azure Storage account.

Replicate files to an on-premises location.

Ensure that on-premises clients can read the files over the LAN by using the SMB protocol.

You need to monitor App2 to analyze how long it takes to perform different transactions within the application. The solution must not require

changes to the application code.

#### Application Development Requirements

Application developers will constantly develop new versions of App1 and App2. The development process must meet the following requirements:

A staging instance of a new application version must be deployed to the application host before the new version is used in production.

After testing the new version, the staging version of the application will replace the production version.

The switch to the new application version from staging to production must occur without any downtime of the application.

#### Identity Requirements -

Contoso identifies the following requirements for managing Fabrikam access to resources:

Every month, an account manager at Fabrikam must review which Fabrikam users have access permissions to App1. Accounts that no longer need permissions must be removed as guests.

The solution must minimize development effort.

#### Security Requirement -

All secrets used by Azure services must be stored in Azure Key Vault.

Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services.

#### Question

HOTSPOT -

What should you implement to meet the identity requirements? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

#### Answer Area

Service:

Azure AD Identity Governance
Azure AD Identity Protection
Azure AD Privilege Access Management (PIM)
Azure Automation

Feature:

Access packages
Access reviews
Approvals
Runbooks

## Answer Area

Service:

Azure AD Identity Governance
Azure AD Identity Protection
Azure AD Privilege Access Management (PIM)
Azure Automation

Correct Answer:

Feature:

Access packages
Access reviews
Approvals
Runbooks

Requirements: Identity Requirements

Contoso identifies the following requirements for managing Fabrikam access to resources:

- \* Every month, an account manager at Fabrikam must review which Fabrikam users have access permissions to App1. Accounts that no longer need permissions must be removed as guests.
- \* The solution must minimize development effort.

Box 1: Azure AD Identity Governance

Incorrect:

Not PIM: Life Cycle Requirements must be met.

Box 2: Access reviews -

Azure Active Directory (Azure AD) access reviews enable organizations to efficiently manage group memberships, access to enterprise applications, and role assignments. User's access can be reviewed on a regular basis to make sure only the right people have continued access.

Reference:

<https://docs.microsoft.com/en-us/azure/active-directory/governance/access-reviews-overview>

 **jellybiscuit** Highly Voted ⓘ 9 months, 1 week ago

correct

Azure AD Identity Governance

Access reviews

upvoted 19 times

 **kay000001** Highly Voted ⓘ 9 months, 2 weeks ago

1. Azure AD Identity Governance

2. Access reviews

upvoted 11 times

 **leoletopic** Most Recent ⓘ 6 months, 1 week ago

I think this is also the reason do not choose PIM

<https://learn.microsoft.com/en-us/azure/active-directory/governance/create-access-review>

upvoted 1 times

 **CineZorro824** 6 months, 3 weeks ago

Correct. Azure AD Identity Governance. Access reviews.

I initially thought the first one was PIM, but that's for reviewing other types of access.

<https://learn.microsoft.com/en-us/azure/active-directory/governance/create-access-review>

upvoted 1 times

## Introductory Info

### Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

### To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

### Overview -

Contoso, Ltd. is a research company that has a main office in Montreal.

#### Existing Environment: Technical Environment

The on-premises network contains a single Active Directory domain named contoso.com.

Contoso has a single Azure subscription.

#### Existing Environment: Business Partnerships

Contoso has a business partnership with Fabrikam, Inc. Fabrikam users access some Contoso applications over the internet by using Azure Active Directory

(Azure AD) guest accounts.

### Requirements: Planned Changes -

Contoso plans to deploy two applications named App1 and App2 to Azure.

### Requirements: App1 -

App1 will be a Python web app hosted in Azure App Service that requires a Linux runtime. Users from Contoso and Fabrikam will access App1.

App1 will access several services that require third-party credentials and access strings. The credentials and access strings are stored in Azure Key Vault.

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

App1 has the following data requirements:

Each instance will write data to a data store in the same availability zone as the instance.

Data written by any App1 instance must be visible to all App1 instances.

App1 will only be accessible from the internet. App1 has the following connection requirements:

Connections to App1 must pass through a web application firewall (WAF).

Connections to App1 must be active-active load balanced between instances.

All connections to App1 from North America must be directed to the East US region. All other connections must be directed to the West Europe region.

Every hour, you will run a maintenance task by invoking a PowerShell script that copies files from all the App1 instances. The PowerShell script will run from a central location.

### Requirements: App2 -

App2 will be a .NET app hosted in App Service that requires a Windows runtime. App2 has the following file storage requirements:

Save files to an Azure Storage account.

Replicate files to an on-premises location.

Ensure that on-premises clients can read the files over the LAN by using the SMB protocol.

You need to monitor App2 to analyze how long it takes to perform different transactions within the application. The solution must not require changes to the application code.

Application Development Requirements

Application developers will constantly develop new versions of App1 and App2. The development process must meet the following requirements:  
A staging instance of a new application version must be deployed to the application host before the new version is used in production.  
After testing the new version, the staging version of the application will replace the production version.  
The switch to the new application version from staging to production must occur without any downtime of the application.

#### Identity Requirements -

Contoso identifies the following requirements for managing Fabrikam access to resources:

Every month, an account manager at Fabrikam must review which Fabrikam users have access permissions to App1. Accounts that no longer need permissions must be removed as guests.

The solution must minimize development effort.

#### Security Requirement -

All secrets used by Azure services must be stored in Azure Key Vault.

Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services.

#### Question

What should you recommend to meet the monitoring requirements for App2?

- A. VM insights
- B. Azure Application Insights
- C. Microsoft Sentinel
- D. Container insights

#### Correct Answer: B

Scenario: You need to monitor App2 to analyze how long it takes to perform different transactions within the application. The solution must not require changes to the application code.

Unified cross-component transaction diagnostics.

The unified diagnostics experience automatically correlates server-side telemetry from across all your Application Insights monitored components into a single view. It doesn't matter if you have multiple resources. Application Insights detects the underlying relationship and allows you to easily diagnose the application component, dependency, or exception that caused a transaction slowdown or failure.

Note: Components are independently deployable parts of your distributed/microservices application. Developers and operations teams have code-level visibility or access to telemetry generated by these application components.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-monitor/app/transaction-diagnostics>

 **key000001** Highly Voted 9 months, 2 weeks ago

Selected Answer: B

B. Azure Application Insights

upvoted 8 times

 **zelick** Most Recent 4 months ago

Selected Answer: B

B is the answer.

<https://learn.microsoft.com/en-us/azure/azure-monitor/app/app-insights-overview?tabs=net>

Application Insights is an extension of Azure Monitor and provides Application Performance Monitoring (also known as "APM") features. APM tools are useful to monitor applications from development, through test, and into production in the following ways:

- Proactively understand how an application is performing.
- Reactively review application execution data to determine the cause of an incident.

upvoted 2 times

 **SilverFox22** 5 months, 3 weeks ago

Selected Answer: B

Application Insights provides this.

upvoted 1 times

 **Born\_Again** 6 months, 3 weeks ago

Selected Answer: B

b it is!

upvoted 1 times

 **Snownoodles** 8 months ago

Selected Answer: B

Application Insight

upvoted 1 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Fabrikam, Inc. is an engineering company that has offices throughout Europe. The company has a main office in London and three branch offices in Amsterdam,

Berlin, and Rome.

Existing Environment: Active Directory Environment

The network contains two Active Directory forests named corp.fabrikam.com and rd.fabrikam.com. There are no trust relationships between the forests.

Corp.fabrikam.com is a production forest that contains identities used for internal user and computer authentication.

Rd.fabrikam.com is used by the research and development (R&D) department only. The R&D department is restricted to using on-premises resources only.

Existing Environment: Network Infrastructure

Each office contains at least one domain controller from the corp.fabrikam.com domain. The main office contains all the domain controllers for the rd.fabrikam.com forest.

All the offices have a high-speed connection to the internet.

An existing application named WebApp1 is hosted in the data center of the London office. WebApp1 is used by customers to place and track orders. WebApp1 has a web tier that uses Microsoft Internet Information Services (IIS) and a database tier that runs Microsoft SQL Server 2016. The web tier and the database tier are deployed to virtual machines that run on Hyper-V.

The IT department currently uses a separate Hyper-V environment to test updates to WebApp1.

Fabrikam purchases all Microsoft licenses through a Microsoft Enterprise Agreement that includes Software Assurance.

Existing Environment: Problem Statements

The use of WebApp1 is unpredictable. At peak times, users often report delays. At other times, many resources for WebApp1 are underutilized.

Requirements: Planned Changes -

Fabrikam plans to move most of its production workloads to Azure during the next few years, including virtual machines that rely on Active Directory for authentication.

As one of its first projects, the company plans to establish a hybrid identity model, facilitating an upcoming Microsoft 365 deployment.

All R&D operations will remain on-premises.

Fabrikam plans to migrate the production and test instances of WebApp1 to Azure.

Requirements: Technical Requirements

Fabrikam identifies the following technical requirements:

Website content must be easily updated from a single point.

User input must be minimized when provisioning new web app instances.

Whenever possible, existing on-premises licenses must be used to reduce cost.

Users must always authenticate by using their corp.fabrikam.com UPN identity.

Any new deployments to Azure must be redundant in case an Azure region fails.

Whenever possible, solutions must be deployed to Azure by using the Standard pricing tier of Azure App Service. An email distribution group named IT Support must be notified of any issues relating to the directory synchronization services. In the event that a link fails between Azure and the on-premises network, ensure that the virtual machines hosted in Azure can authenticate to Active Directory. Directory synchronization between Azure Active Directory (Azure AD) and corp.fabrikam.com must not be affected by a link failure between Azure and the on-premises network.

#### Requirements: Database Requirements

Fabrikam identifies the following database requirements:

Database metrics for the production instance of WebApp1 must be available for analysis so that database administrators can optimize the performance settings.

To avoid disrupting customer access, database downtime must be minimized when databases are migrated.

Database backups must be retained for a minimum of seven years to meet compliance requirements.

#### Requirements: Security Requirements

Fabrikam identifies the following security requirements:

Company information including policies, templates, and data must be inaccessible to anyone outside the company.

Users on the on-premises network must be able to authenticate to corp.fabrikam.com if an internet link fails.

Administrators must be able authenticate to the Azure portal by using their corp.fabrikam.com credentials.

All administrative access to the Azure portal must be secured by using multi-factor authentication (MFA).

The testing of WebApp1 updates must not be visible to anyone outside the company.

#### Question

You need to recommend a data storage strategy for WebApp1.

What should you include in the recommendation?

- A. an Azure virtual machine that runs SQL Server
- B. a fixed-size DTU Azure SQL database
- C. an Azure SQL Database elastic pool
- D. a vCore-based Azure SQL database

#### Correct Answer: D

The use of WebApp1 is unpredictable. At peak times, users often report delays. At other times, many resources for WebApp1 are underutilized.

Database metrics for the production instance of WebApp1 must be available for analysis so that database administrators can optimize the performance settings.

Note: A virtual core (vCore) represents a logical CPU and offers you the option to choose between generations of hardware and the physical characteristics of the hardware (for example, the number of cores, the memory, and the storage size). The vCore-based purchasing model gives you flexibility, control, transparency of individual resource consumption, and a straightforward way to translate on-premises workload requirements to the cloud. This model optimizes price, and allows you to choose compute, memory, and storage resources based on your workload needs.

Incorrect:

Not C: Azure SQL Database elastic pools are a simple, cost-effective solution for managing and scaling multiple databases, not for a single database.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/service-tiers-sql-database-vcore>

 **jellybiscuit** Highly Voted 9 months, 1 week ago

vCore-based Azure SQL database -- because the case states they want to use Azure Hybrid Benefit licensing. You cannot utilize that with the DTU model.

upvoted 17 times

 **sjb666** Most Recent 2 months ago

Selected Answer: D

D because of Azure Hybrid Benefit licensing requirement

upvoted 1 times

 **pkkalra** 4 months, 3 weeks ago

Selected Answer: D

Hyperscale service tier is available for single databases that are using the vCore-based purchasing model.

Rapid scale out and scale up options are available for unpredictable load.

A Hyperscale database grows as needed - and you're billed only for the capacity you use. For read-intensive workloads, the Hyperscale service tier provides rapid scale-out by provisioning additional replicas as needed for offloading read workloads.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tier-hyperscale?view=azuresql>

upvoted 1 times

✉️ **RandomNickname** 5 months, 1 week ago

**Selected Answer: D**

Given answer looks correct as per article, which discusses auto-scale with serverless compute tier

<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tiers-sql-database-vcore?view=azuresql>

upvoted 1 times

✉️ **honzar** 5 months, 3 weeks ago

Appeared 2023/01/04 in the exam

upvoted 3 times

✉️ **Snownoodles** 8 months ago

**Selected Answer: D**

Hybrid benefit - vCore-Based Azure SQL Database

upvoted 3 times

✉️ **WickedMJ** 8 months, 2 weeks ago

**Selected Answer: D**

vCore-based Azure SQL database

upvoted 1 times

✉️ **ezfix** 8 months, 3 weeks ago

C. Elastic Pool. Perfectly matches the description of the answer listed. The use case also mentioned databases plural being migrated and unpredictable usage. Also you can setup regional auto failover groups for SQL Database and Elastic Pools, so that would cover the geo-redundancy requirement. <https://learn.microsoft.com/en-us/azure/azure-sql/database/elastic-pool-overview?view=azuresql>

upvoted 2 times

✉️ **FabrityDev** 5 months, 1 week ago

Elastic Pool makes sense only when you have multiple databases.

upvoted 1 times

✉️ **Jay\_2pt0** 7 months, 3 weeks ago

I certainly would agree with you if multiple databases, but I'm not seeing that reference.

upvoted 4 times

✉️ **HTEC** 9 months ago

Why not A? "To avoid disrupting customer access, database downtime must be minimized when databases are migrated."

upvoted 1 times

✉️ **scottn26** 8 months, 1 week ago

I think there is always a preference to migrate to a cloud native solution rather than VMs. There is a migration tool within SQL Server to Azure SQL Database which wouldn't take any longer than migrating the VM from on-premises (using Migrate, for example)

upvoted 2 times

✉️ **kay00001** 9 months, 2 weeks ago

**Selected Answer: D**

D. a vCore-based Azure SQL database

upvoted 4 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Litware, Inc. is a medium-sized finance company that has a main office in Boston.

Existing Environment -

Identity Environment -

The network contains an Active Directory forest named litware.com that is linked to an Azure Active Directory (Azure AD) tenant named litware.com. All users have Azure Active Directory Premium P2 licenses.

Litware has a second Azure AD tenant named dev.litware.com that is used as a development environment.

The litware.com tenant has a Conditional Access policy named Capolicy1. Capolicy1 requires that when users manage the Azure subscription for a production environment by using the Azure portal, they must connect from a hybrid Azure AD-joined device.

Azure Environment -

Litware has 10 Azure subscriptions that are linked to the Litware.com tenant and five Azure subscriptions that are linked to the dev.litware.com tenant. All the subscriptions are in an Enterprise Agreement (EA).

The litware.com tenant contains a custom Azure role-based access control (Azure RBAC) role named Role1 that grants the DataActions read permission to the blobs and files in Azure Storage.

On-Premises Environment -

The on-premises network of Litware contains the resources shown in the following table.

Name	Type	Configuration
SERVER1 SERVER2 SERVER3	Ubuntu 18.04 virtual machines hosted on Hyper-V	The virtual machines host a third-party app named App1. App1 uses an external storage solution that provides Apache Hadoop-compatible data storage. The data storage supports POSIX access control list (ACL) file-level permissions.
SERVER10	Server that runs Windows Server 2016	The server contains a Microsoft SQL Server instance that hosts two databases named DB1 and DB2.

#### Network Environment -

Litware has ExpressRoute connectivity to Azure.

#### Planned Changes and Requirements

##### Planned Changes -

Litware plans to implement the following changes:

Migrate DB1 and DB2 to Azure.

Migrate App1 to Azure virtual machines.

Migrate the external storage used by App1 to Azure Storage.

Deploy the Azure virtual machines that will host App1 to Azure dedicated hosts.

##### Authentication and Authorization Requirements

Litware identifies the following authentication and authorization requirements:

Only users that manage the production environment by using the Azure portal must connect from a hybrid Azure AD-joined device and authenticate by using

Azure Multi-Factor Authentication (MFA).

The Network Contributor built-in RBAC role must be used to grant permissions to the network administrators for all the virtual networks in all the Azure subscriptions.

To access the resources in Azure, App1 must use the managed identity of the virtual machines that will host the app.

RBAC roles must be applied to management groups.

##### Resiliency Requirements -

Litware identifies the following resiliency requirements:

Once migrated to Azure, DB1 and DB2 must meet the following requirements:

- Maintain availability if two availability zones in the local Azure region fail.
- Fail over automatically.
- Minimize I/O latency.

App1 must meet the following requirements:

- Be hosted in an Azure region that supports availability zones.
- Be hosted on Azure virtual machines that support automatic scaling.
- Maintain availability if two availability zones in the local Azure region fail.

##### Security and Compliance Requirements

Litware identifies the following security and compliance requirements:

Once App1 is migrated to Azure, you must ensure that new data can be written to the app, and the modification of new and existing data is prevented for a period of three years.

On-premises users and services must be able to access the Azure Storage account that will host the data in App1.

Access to the public endpoint of the Azure Storage account that will host the App1 data must be prevented.

All Azure SQL databases in the production environment must have Transparent Data Encryption (TDE) enabled.

App1 must NOT share physical hardware with other workloads.

##### Business Requirements -

Litware identifies the following business requirements:

Minimize administrative effort.

Minimize costs.

#### Question

##### HOTSPOT -

You plan to migrate DB1 and DB2 to Azure.

You need to ensure that the Azure database and the service tier meet the resiliency and business requirements.

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

NOTE: Each correct selection is worth one point.

Hot Area:

## Answer Area

Database:

A single Azure SQL database
Azure SQL Managed Instance
An Azure SQL Database elastic pool

Service tier:

Hyperscale
Business Critical
General Purpose

Correct Answer:

## Answer Area

Database:

A single Azure SQL database
Azure SQL Managed Instance
An Azure SQL Database elastic pool

Service tier:

Hyperscale
Business Critical
General Purpose

Box 1: An Azure SQL Database elastic pool

Scenario:

\* Resiliency Requirements. Once migrated to Azure, DB1 and DB2 must meet the following requirements:

Maintain availability if two availability zones in the local Azure region fail.

Fail over automatically.

Minimize I/O latency.

\* Litware identifies the following business requirements:

Minimize administrative effort.

Minimize costs.

Box 2: Business Critical

✉  **WickedMJ** Highly Voted 8 months, 2 weeks ago

> Database: "An Azure SQL Database elastic pool"  
> Service Tier: "Business Critical"

Reference & explanations:

<https://www.examtopics.com/discussions/microsoft/view/68044-exam-az-305-topic-9-question-1-discussion/>  
upvoted 18 times

✉  **tfulanchan** 5 months ago

The reference you provided suggests that "SQL Managed Instance" is the answer  
upvoted 3 times

✉  **ezfix** Highly Voted 8 months, 3 weeks ago

To minimize i/o, what is needed is a SQL AO availability group that spans availability zones. This is covered by Premium and Business Critical SQL Database, and SQL Database Elastic Pools. Since there are 2 databases, it has to be Elastic Pool.  
upvoted 6 times

✉  **fireddog2023** Most Recent 1 week, 1 day ago

any thoughts on this please as zone redundancy is not supported for Azure SQL General Purpose. This would make it the most cost effective option above business critical.

<https://techcommunity.microsoft.com/t5/azure-sql-blog/zone-redundancy-for-azure-sql-database-general-purpose-tier/ba-p/3280376>

upvoted 1 times

✉️ **Tr619899** 1 month ago

1. Azure SQL Managed Instance for the database
2. Business Critical service tier

Azure SQL Managed Instance provides automatic failover within an availability zone and can be configured with auto-failover groups for cross-region disaster recovery. The Business Critical service tier provides high availability with several readable secondary replicas and fast failover within an availability zone. This configuration meets Litware's requirements for maintaining availability if two availability zones in the local Azure region fail, failing over automatically, and minimizing I/O latency.

An Azure SQL Database Elastic Pool is a cost-effective solution for managing and scaling multiple databases that have varying and unpredictable resource demands. However, based on the information provided in the case study, it does not appear to be the best option for meeting Litware's resiliency requirements for DB1 and DB2. Azure SQL Managed Instance would be a better choice for meeting these requirements.

upvoted 2 times

✉️ **techrat** 1 month, 4 weeks ago

The given answer is correct:

1. Azure SQL Database elastic pool
2. Business Critical

I had this case study on my exam today, and I passed it with 979

upvoted 4 times

✉️ **zellck** 4 months ago

1. Azure SQL DB elastic pool
2. Business Critical

<https://learn.microsoft.com/en-us/azure/azure-sql/database/service-tiers-sql-database-vcore?view=azuresql#when-to-choose-this-service-tier-1>  
The Business Critical service tier is designed for applications that require low-latency responses from the underlying SSD storage (1-2 ms in average), faster recovery if the underlying infrastructure fails, or need to off-load reports, analytics, and read-only queries to the free of charge readable secondary replica of the primary database.

The key reasons why you should choose Business Critical service tier instead of General Purpose tier are:

- Low I/O latency requirements – workloads that need a consistently fast response from the storage layer (1-2 milliseconds in average) should use Business Critical tier.

upvoted 1 times

✉️ **zellck** 4 months ago

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#premium-and-business-critical-service-tier-zone-redundant-availability>

With the introduction of Azure Availability Zones, SQL Database can place different replicas of the Business Critical database to different availability zones in the same region. To eliminate a single point of failure, the control ring is also duplicated across multiple zones as three gateway rings (GW). The routing to a specific gateway ring is controlled by Azure Traffic Manager (ATM). Because the zone-redundant configuration in the Premium or Business Critical service tiers doesn't create additional database redundancy, you can enable it at no extra cost. By selecting a zone-redundant configuration, you can make your Premium or Business Critical databases resilient to a much larger set of failures, including catastrophic datacenter outages, without any changes to the application logic.

upvoted 1 times

✉️ **\_fvt** 4 months, 1 week ago

Database: "An Azure SQL Database elastic pool"

- Zone Redundancy still in Preview for Managed Instance so it's a no go
- You could have deployed two Azure Databases but here it is written "A SINGLE" so it's not working as you have two databases to migrate

Service Tier: "Business Critical"

- as you need to minimize I/O latency

upvoted 2 times

✉️ **testgm** 4 months, 2 weeks ago

Answer:

Database: SQL Managed Instances

Service Tier: Business Critical

SQL Managed Instance now supports zone redundancy

upvoted 1 times

✉️ **np2021** 4 months, 1 week ago

As at today, documentation still says its in PREVIEW only on BusCritical tier. I think its been raised before its not reliable as answer.

upvoted 1 times

✉️ **dagomo** 4 months, 2 weeks ago

Hello guys,

I guess should be the following:

> Database: "AZURE SQL MANAGED INSTANCE" - it can provide AUTO-FAILOVER

> Service Tier: "Business Critical"

upvoted 1 times

✉️  **Lu5ck** 4 months, 2 weeks ago

The scenario ask for availability zone and I wanted to opt for MI Business Critical but zone redundant feature is in preview. Single Azure SQL Database doesn't make sense because we got two databases.

So the only option is actually elastic pool. So the answer is correct.

upvoted 1 times

✉️  **pkkalra** 4 months, 4 weeks ago

Single Azure SQL Database

Business Critical

A single azure sql db for each db would meet the requirements.

You can't use an elastic pool unless you are aware of the load pattern of each db to make it worthwhile to use elastic db. There is no indication in the question to hint pool will be useful.

also there is no indication in the answer that single azure db has to be for both dbs. It can a single db for each - db1 and db2. Therefore Multi DB in question doesn't rule out a single azure db as potential answer.

upvoted 2 times

✉️  **RandomNickname** 5 months, 1 week ago

SQL MI with Business critical seems to meet the resiliency and business requirement.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

<https://techcommunity.microsoft.com/t5/azure-sql-blog/zone-redundancy-for-azure-sql-managed-instance-business-critical/ba-p/3677646>

upvoted 2 times

✉️  **OPT\_001122** 5 months, 1 week ago

Database: "An Azure SQL Database elastic pool"

Service Tier: "Business Critical"

Reason as per my understanding -

Zone-redundant configuration is not available in SQL Managed Instances

Scenario:

\* Resiliency Requirements. Once migrated to Azure, DB1 and DB2 must meet the following requirements:

Maintain availability if two availability zones in the local Azure region fail.

Fail over automatically.

upvoted 2 times

✉️  **gabmancuso** 2 months, 1 week ago

You are wrong in 2023... it seems ZRS is available and you can see how here: <https://techcommunity.microsoft.com/t5/azure-sql-blog/zone-redundancy-for-azure-sql-managed-instance-business-critical/ba-p/3677646#:~:text=1%20Step%201%3A%20Select%20Configure%20Managed%20Instance%20in,of%20the%20compatible%20redundancy%20options%20for%20backup%20storage%3A>

upvoted 1 times

✉️  **rpananivel83** 5 months, 1 week ago

Answer:

Database : "Azure SQL Managed Instance"

Service Tier: "Business Critical"

Refer the benefits and Service tier sections here

<https://learn.microsoft.com/en-us/azure/azure-sql/managed-instance/sql-managed-instance-paas-overview?view=azuresql>

upvoted 2 times

✉️  **Kay04** 5 months, 2 weeks ago

MI and Business critical .

APP1 required auto-scaling NOT DB1 and DB2

Litware identifies the following resiliency requirements:

Once migrated to Azure, DB1 and DB2 must meet the following requirements:

- Maintain availability if two availability zones in the local Azure region fail.

- Fail over automatically.

- Minimize I/O latency.

upvoted 1 times

✉️  **mscbslt** 5 months, 3 weeks ago

SQL MI + business critical

<https://techcommunity.microsoft.com/t5/azure-sql-blog/zone-redundancy-for-azure-sql-managed-instance-business-critical/ba-p/3677646>

upvoted 1 times

✉️  **TOSHI** 7 months ago

For reference please read the following documentation:

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#premium-and-business-critical-service-tier-zone-redundant-availability>

I would go for :

Database: Azure SQL Database

Service tier: Business Critical

upvoted 4 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Contoso, Ltd. is a research company that has a main office in Montreal.

Existing Environment: Technical Environment

The on-premises network contains a single Active Directory domain named contoso.com.

Contoso has a single Azure subscription.

Existing Environment: Business Partnerships

Contoso has a business partnership with Fabrikam, Inc. Fabrikam users access some Contoso applications over the internet by using Azure Active Directory

(Azure AD) guest accounts.

Requirements: Planned Changes -

Contoso plans to deploy two applications named App1 and App2 to Azure.

Requirements: App1 -

App1 will be a Python web app hosted in Azure App Service that requires a Linux runtime. Users from Contoso and Fabrikam will access App1.

App1 will access several services that require third-party credentials and access strings. The credentials and access strings are stored in Azure Key Vault.

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

App1 has the following data requirements:

Each instance will write data to a data store in the same availability zone as the instance.

Data written by any App1 instance must be visible to all App1 instances.

App1 will only be accessible from the internet. App1 has the following connection requirements:

Connections to App1 must pass through a web application firewall (WAF).

Connections to App1 must be active-active load balanced between instances.

All connections to App1 from North America must be directed to the East US region. All other connections must be directed to the West Europe region.

Every hour, you will run a maintenance task by invoking a PowerShell script that copies files from all the App1 instances. The PowerShell script will run from a central location.

Requirements: App2 -

App2 will be a .NET app hosted in App Service that requires a Windows runtime. App2 has the following file storage requirements:

Save files to an Azure Storage account.

Replicate files to an on-premises location.

Ensure that on-premises clients can read the files over the LAN by using the SMB protocol.

You need to monitor App2 to analyze how long it takes to perform different transactions within the application. The solution must not require

changes to the application code.

#### Application Development Requirements

Application developers will constantly develop new versions of App1 and App2. The development process must meet the following requirements:

A staging instance of a new application version must be deployed to the application host before the new version is used in production.

After testing the new version, the staging version of the application will replace the production version.

The switch to the new application version from staging to production must occur without any downtime of the application.

#### Identity Requirements -

Contoso identifies the following requirements for managing Fabrikam access to resources:

Every month, an account manager at Fabrikam must review which Fabrikam users have access permissions to App1. Accounts that no longer need permissions must be removed as guests.

The solution must minimize development effort.

#### Security Requirement -

All secrets used by Azure services must be stored in Azure Key Vault.

Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services.

#### Question

##### DRAG DROP -

You need to recommend a solution that meets the file storage requirements for App2.

What should you deploy to the Azure subscription and the on-premises network? To answer, drag the appropriate services to the correct locations.

Each service may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

#### Services

Azure Blob Storage

Azure Data Box

Azure Data Box Gateway

Azure Data Lake Storage

Azure File Sync

Azure Files

#### Answer Area

Azure subscription:

Service

On-premises network:

Service



**Correct Answer:**

**Services**

Azure Blob Storage

Azure Data Box

Azure Data Box Gateway

Azure Data Lake Storage

**Answer Area**

Azure subscription:

Azure Files

On-premises network:

Azure File Sync

Box 1: Azure Files -

Scenario: App2 has the following file storage requirements:

- ⇒ Save files to an Azure Storage account.
- ⇒ Replicate files to an on-premises location.
- ⇒ Ensure that on-premises clients can read the files over the LAN by using the SMB protocol.

Box 2: Azure File Sync -

Use Azure File Sync to centralize your organization's file shares in Azure Files, while keeping the flexibility, performance, and compatibility of an on-premises file server. Azure File Sync transforms Windows Server into a quick cache of your Azure file share. You can use any protocol that's available on Windows Server to access your data locally, including SMB, NFS, and FTPS. You can have as many caches as you need across the world.

Reference:

<https://docs.microsoft.com/en-us/azure/storage/file-sync/file-sync-deployment-guide>

✉️  **airmancompsci** Highly Voted 6 months, 3 weeks ago

Took the AZ-305 on 12/7 and passed with a 935 only using this question bank (I have the Contributor access). I did not use AZ-304 or any other question bank.

I had this specific case study actually, in case knowing that helps anyone.

upvoted 26 times

✉️  **OPT\_001122** 5 months, 1 week ago

Thanks for mentioning this!!!

upvoted 1 times

✉️  **WickedMJ** Highly Voted 8 months, 2 weeks ago

> Azure Subscription: "Azure Files"

> On-premises network: "Azure File Sync"

Reference:

<https://www.examtopics.com/discussions/microsoft/view/67817-exam-az-305-topic-8-question-1-discussion/>

upvoted 9 times

## Introductory Info

### Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

### To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

### Overview -

Contoso, Ltd. is a research company that has a main office in Montreal.

#### Existing Environment: Technical Environment

The on-premises network contains a single Active Directory domain named contoso.com.

Contoso has a single Azure subscription.

#### Existing Environment: Business Partnerships

Contoso has a business partnership with Fabrikam, Inc. Fabrikam users access some Contoso applications over the internet by using Azure Active Directory

(Azure AD) guest accounts.

### Requirements: Planned Changes -

Contoso plans to deploy two applications named App1 and App2 to Azure.

### Requirements: App1 -

App1 will be a Python web app hosted in Azure App Service that requires a Linux runtime. Users from Contoso and Fabrikam will access App1.

App1 will access several services that require third-party credentials and access strings. The credentials and access strings are stored in Azure Key Vault.

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

App1 has the following data requirements:

Each instance will write data to a data store in the same availability zone as the instance.

Data written by any App1 instance must be visible to all App1 instances.

App1 will only be accessible from the internet. App1 has the following connection requirements:

Connections to App1 must pass through a web application firewall (WAF).

Connections to App1 must be active-active load balanced between instances.

All connections to App1 from North America must be directed to the East US region. All other connections must be directed to the West Europe region.

Every hour, you will run a maintenance task by invoking a PowerShell script that copies files from all the App1 instances. The PowerShell script will run from a central location.

### Requirements: App2 -

App2 will be a .NET app hosted in App Service that requires a Windows runtime. App2 has the following file storage requirements:

Save files to an Azure Storage account.

Replicate files to an on-premises location.

Ensure that on-premises clients can read the files over the LAN by using the SMB protocol.

You need to monitor App2 to analyze how long it takes to perform different transactions within the application. The solution must not require changes to the application code.

Application Development Requirements

Application developers will constantly develop new versions of App1 and App2. The development process must meet the following requirements:  
A staging instance of a new application version must be deployed to the application host before the new version is used in production.  
After testing the new version, the staging version of the application will replace the production version.  
The switch to the new application version from staging to production must occur without any downtime of the application.

#### Identity Requirements -

Contoso identifies the following requirements for managing Fabrikam access to resources:

Every month, an account manager at Fabrikam must review which Fabrikam users have access permissions to App1. Accounts that no longer need permissions must be removed as guests.

The solution must minimize development effort.

#### Security Requirement -

All secrets used by Azure services must be stored in Azure Key Vault.

Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services.

#### Question

You need to recommend a solution that meets the data requirements for App1.

What should you recommend deploying to each availability zone that contains an instance of App1?

- A. an Azure Cosmos DB that uses multi-region writes
- B. an Azure Data Lake store that uses geo-zone-redundant storage (GZRS)
- C. an Azure Storage account that uses geo-zone-redundant storage (GZRS)

#### Correct Answer: A

Scenario: App1 has the following data requirements:

- ⇒ Each instance will write data to a data store in the same availability zone as the instance.
- ⇒ Data written by any App1 instance must be visible to all App1 instances.

Azure Cosmos DB: Each partition across all the regions is replicated. Each region contains all the data partitions of an Azure Cosmos container and can serve reads as well as serve writes when multi-region writes is enabled.

Incorrect Answers:

B, D: GZRS protects against failures. Geo-redundant storage (with GRS or GZRS) replicates your data to another physical location in the secondary region to protect against regional outages. However, that data is available to be read only if the customer or Microsoft initiates a failover from the primary to secondary region.

C: Active geo-replication is designed as a business continuity solution that lets you perform quick disaster recovery of individual databases in case of a regional disaster or a large scale outage. Once geo-replication is set up, you can initiate a geo-failover to a geo-secondary in a different Azure region. The geo-failover is initiated programmatically by the application or manually by the user.

Reference:

<https://docs.microsoft.com/en-us/azure/cosmos-db/high-availability>

✉️  **WickedMJ** Highly Voted 8 months, 2 weeks ago

**Selected Answer: A**

A. an Azure Cosmos DB that uses multi-region writes

Reference

<https://www.examtopics.com/discussions/microsoft/view/69314-exam-az-305-topic-8-question-2-discussion/>

upvoted 10 times

✉️  **OPT\_001122** Most Recent 5 months, 1 week ago

**Selected Answer: A**

A. an Azure Cosmos DB that uses multi-region writes

upvoted 3 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Contoso, Ltd. is a research company that has a main office in Montreal.

Existing Environment: Technical Environment

The on-premises network contains a single Active Directory domain named contoso.com.

Contoso has a single Azure subscription.

Existing Environment: Business Partnerships

Contoso has a business partnership with Fabrikam, Inc. Fabrikam users access some Contoso applications over the internet by using Azure Active Directory

(Azure AD) guest accounts.

Requirements: Planned Changes -

Contoso plans to deploy two applications named App1 and App2 to Azure.

Requirements: App1 -

App1 will be a Python web app hosted in Azure App Service that requires a Linux runtime. Users from Contoso and Fabrikam will access App1.

App1 will access several services that require third-party credentials and access strings. The credentials and access strings are stored in Azure Key Vault.

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

App1 has the following data requirements:

Each instance will write data to a data store in the same availability zone as the instance.

Data written by any App1 instance must be visible to all App1 instances.

App1 will only be accessible from the internet. App1 has the following connection requirements:

Connections to App1 must pass through a web application firewall (WAF).

Connections to App1 must be active-active load balanced between instances.

All connections to App1 from North America must be directed to the East US region. All other connections must be directed to the West Europe region.

Every hour, you will run a maintenance task by invoking a PowerShell script that copies files from all the App1 instances. The PowerShell script will run from a central location.

Requirements: App2 -

App2 will be a .NET app hosted in App Service that requires a Windows runtime. App2 has the following file storage requirements:

Save files to an Azure Storage account.

Replicate files to an on-premises location.

Ensure that on-premises clients can read the files over the LAN by using the SMB protocol.

You need to monitor App2 to analyze how long it takes to perform different transactions within the application. The solution must not require

changes to the application code.

#### Application Development Requirements

Application developers will constantly develop new versions of App1 and App2. The development process must meet the following requirements:

A staging instance of a new application version must be deployed to the application host before the new version is used in production.

After testing the new version, the staging version of the application will replace the production version.

The switch to the new application version from staging to production must occur without any downtime of the application.

#### Identity Requirements -

Contoso identifies the following requirements for managing Fabrikam access to resources:

Every month, an account manager at Fabrikam must review which Fabrikam users have access permissions to App1. Accounts that no longer need permissions must be removed as guests.

The solution must minimize development effort.

#### Security Requirement -

All secrets used by Azure services must be stored in Azure Key Vault.

Services that require credentials must have the credentials tied to the service instance. The credentials must NOT be shared between services.

#### Question

HOTSPOT -

You are evaluating whether to use Azure Traffic Manager and Azure Application Gateway to meet the connection requirements for App1.

What is the minimum numbers of instances required for each service? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

### Answer Area

Azure Traffic Manager:

1
2
3
6

Azure Application Gateway:

1
2
3
6

### Answer Area

Azure Traffic Manager:

1
2
3
6

Correct Answer:

Azure Application Gateway:

1
2
3
6

Box 1: 1 -

App1 will only be accessible from the internet. App1 has the following connection requirements:

Connections to App1 must be active-active load balanced between instances.

All connections to App1 from North America must be directed to the East US region. All other connections must be directed to the West

Europe region.

App1 will have six instances: three in the East US Azure region and three in the West Europe Azure region.

Note: Azure Traffic Manager is a DNS-based traffic load balancer. This service allows you to distribute traffic to your public facing applications across the global Azure regions.

Box 2: 2 -

For production workloads, run at least two gateway instances.

A single Application Gateway deployment can run multiple instances of the gateway.

Use one Application Gateway in East US Region, and one in the West Europe region.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/high-availability/reference-architecture-traffic-manager-application-gateway>

✉️ **WickedMJ** Highly Voted 8 months, 2 weeks ago

> Azure Traffic Manager: " 1 "  
> Azure Application Gateway: " 2 "  
upvoted 21 times

✉️ **Dudulle** Highly Voted 7 months, 1 week ago

1  
2  
of course since:  
- traffic mgr is global  
- app GW is regional

2 regions imply: 1 TM and 2 app GW  
upvoted 11 times

✉️ **johnD16** Most Recent 3 months, 1 week ago

Showed in exam 18.03.2023. correct  
passed 940/1000  
upvoted 3 times

✉️ **RandomNickname** 5 months ago

Given answer is correct  
upvoted 1 times

✉️ **heero** 9 months, 1 week ago

should be  
2  
1  
upvoted 1 times

✉️ **ronsav80** 9 months ago

From <https://learn.microsoft.com/en-us/azure/architecture/high-availability/reference-architecture-traffic-manager-application-gateway>, that has 1 traffic manager (for DNS responses) and 2 app gateways, so 1-2 seems right  
upvoted 9 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Litware, Inc. is a medium-sized finance company that has a main office in Boston.

Existing Environment -

Identity Environment -

The network contains an Active Directory forest named litware.com that is linked to an Azure Active Directory (Azure AD) tenant named litware.com. All users have Azure Active Directory Premium P2 licenses.

Litware has a second Azure AD tenant named dev.litware.com that is used as a development environment.

The litware.com tenant has a Conditional Access policy named Capolicy1. Capolicy1 requires that when users manage the Azure subscription for a production environment by using the Azure portal, they must connect from a hybrid Azure AD-joined device.

Azure Environment -

Litware has 10 Azure subscriptions that are linked to the Litware.com tenant and five Azure subscriptions that are linked to the dev.litware.com tenant. All the subscriptions are in an Enterprise Agreement (EA).

The litware.com tenant contains a custom Azure role-based access control (Azure RBAC) role named Role1 that grants the DataActions read permission to the blobs and files in Azure Storage.

On-Premises Environment -

The on-premises network of Litware contains the resources shown in the following table.

Name	Type	Configuration
SERVER1 SERVER2 SERVER3	Ubuntu 18.04 virtual machines hosted on Hyper-V	The virtual machines host a third-party app named App1. App1 uses an external storage solution that provides Apache Hadoop-compatible data storage. The data storage supports POSIX access control list (ACL) file-level permissions.
SERVER10	Server that runs Windows Server 2016	The server contains a Microsoft SQL Server instance that hosts two databases named DB1 and DB2.

#### Network Environment -

Litware has ExpressRoute connectivity to Azure.

#### Planned Changes and Requirements

##### Planned Changes -

Litware plans to implement the following changes:

Migrate DB1 and DB2 to Azure.

Migrate App1 to Azure virtual machines.

Migrate the external storage used by App1 to Azure Storage.

Deploy the Azure virtual machines that will host App1 to Azure dedicated hosts.

##### Authentication and Authorization Requirements

Litware identifies the following authentication and authorization requirements:

Only users that manage the production environment by using the Azure portal must connect from a hybrid Azure AD-joined device and authenticate by using

Azure Multi-Factor Authentication (MFA).

The Network Contributor built-in RBAC role must be used to grant permissions to the network administrators for all the virtual networks in all the Azure subscriptions.

To access the resources in Azure, App1 must use the managed identity of the virtual machines that will host the app.

RBAC roles must be applied to management groups.

##### Resiliency Requirements -

Litware identifies the following resiliency requirements:

Once migrated to Azure, DB1 and DB2 must meet the following requirements:

- Maintain availability if two availability zones in the local Azure region fail.
- Fail over automatically.
- Minimize I/O latency.

App1 must meet the following requirements:

- Be hosted in an Azure region that supports availability zones.
- Be hosted on Azure virtual machines that support automatic scaling.
- Maintain availability if two availability zones in the local Azure region fail.

##### Security and Compliance Requirements

Litware identifies the following security and compliance requirements:

Once App1 is migrated to Azure, you must ensure that new data can be written to the app, and the modification of new and existing data is prevented for a period of three years.

On-premises users and services must be able to access the Azure Storage account that will host the data in App1.

Access to the public endpoint of the Azure Storage account that will host the App1 data must be prevented.

All Azure SQL databases in the production environment must have Transparent Data Encryption (TDE) enabled.

App1 must NOT share physical hardware with other workloads.

##### Business Requirements -

Litware identifies the following business requirements:

Minimize administrative effort.

Minimize costs.

#### Question

##### HOTSPOT -

How should the migrated databases DB1 and DB2 be implemented in Azure?

Hot Area:

## Answer Area

Database:

A single Azure SQL database
Azure SQL Managed Instance
An Azure SOL Database elastic pool

Service tier:

Hyperscale
Business Critical
General Purpose

## Answer Area

Database:

A single Azure SQL database
Azure SQL Managed Instance
An Azure SOL Database elastic pool

Correct Answer:

Service tier:

Hyperscale
Business Critical
General Purpose

Box 1: SQL Managed Instance -

Scenario: Once migrated to Azure, DB1 and DB2 must meet the following requirements:

- ⇒ Maintain availability if two availability zones in the local Azure region fail.
- ⇒ Fail over automatically.
- ⇒ Minimize I/O latency.

The auto-failover groups feature allows you to manage the replication and failover of a group of databases on a server or all databases in a managed instance to another region. It is a declarative abstraction on top of the existing active geo-replication feature, designed to simplify deployment and management of geo-replicated databases at scale. You can initiate a geo-failover manually or you can delegate it to the Azure service based on a user-defined policy. The latter option allows you to automatically recover multiple related databases in a secondary region after a catastrophic failure or other unplanned event that results in full or partial loss of the SQL Database or SQL Managed Instance availability in the primary region.

Box 2: Business critical -

SQL Managed Instance is available in two service tiers:

General purpose: Designed for applications with typical performance and I/O latency requirements.

Business critical: Designed for applications with low I/O latency requirements and minimal impact of underlying maintenance operations on the workload.

Reference:

<https://docs.microsoft.com/en-us/azure/azure-sql/database/auto-failover-group-overview> <https://docs.microsoft.com/en-us/azure/azure-sql/managed-instance/sql-managed-instance-paas-overview>

Elastic Pool.

Managed instance does not support zone redundancy

Zone-redundant configuration is not available in SQL Managed Instance. In SQL Database this feature is only available when the Gen5 hardware is selected.

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

upvoted 30 times

✉️ **GarryK** 4 months, 2 weeks ago

Updating my comment: now the feature is in preview, but for production and reduce administrative effort, i would still go with elastic pool:

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

This feature is currently in Preview for SQL Managed Instance. In SQL Database, when using the Business Critical tier, zone-redundant configuration is only available when the standard-series (Gen5) hardware is selected. For up to date information about the regions that support zone-redundant databases, see Services support by region.

upvoted 5 times

✉️ **DeBoer** 4 months, 1 week ago

We're talking about 2 DBs, so a single DB won't cut it. Managed Instances support zone redundancy in preview - so that's not something we'd want in production yet. Only option left: elastic pool. Makes sense since we're using 2 DBs.

Regarding the tier:

General Purpose fits the bill for zone redundancy - you can turn on Zone Redundancy in GP. However... they also want high IOPS (requirement 3). So that means Business Critical or Hyperscale (500 IOPS per vCore with 7,000 maximum IOPS in GP, 8,000 IOPS per vCore with 200,000 maximum in BC an Hyperscale has 327,680 IOPS with max local SSD).

I'm not sure if you can use Hyperscale with elastic pools (portal won't let me select it in my lab), so I'd go for Business Critical.

upvoted 4 times

✉️ **bd1234** [Most Recent] 3 months, 3 weeks ago

1.SQL Managed Instance

2. Business Critical service tier

"Zone-redundant configuration is currently in preview for SQL Managed Instance, and only available for the Business Critical service tier."

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

upvoted 2 times

✉️ **dagomo** 4 months, 2 weeks ago

Hello guys,

I guess is correct, should be the following:

> Database: "AZURE SQL MANAGED INSTANCE" - it can provide AUTO-FAILOVER

> Service Tier: "Business Critical"

upvoted 2 times

✉️ **OPT\_001122** 4 months, 3 weeks ago

Question #1-Page47 - this question looks similar

for this question the answer is Elastic Pool now Why Single Azure SQL Database here?

I think GarryK is correct

upvoted 1 times

✉️ **pkkalra** 4 months, 4 weeks ago

Single Azure SQL Database

Business Critical

Indeed a repeated question IMHO

A single azure sql db for each db would meet the requirements.

You can't use an elastic pool unless you are aware of the load pattern of each db to make it worthwhile to use elastic db. There is no indication in the question to hint pool will be useful.

also there is no indication in the answer that single azure db has to be for both dbs. It can a single db for each - db1 and db2. Therefore Multi DB in question doesn't rule out a single azure db as potential answer.

upvoted 3 times

✉️ **EXzw** 3 months ago

in most of the answer it use Azure SQL Database. only this question it use "A Single Azure SQL Database". so I don't think it imply 1 SQL DB for each.

upvoted 1 times

✉️ **Madball** 5 months, 1 week ago

SQL Managed Instance does support zone redundancy, however you need to choose Gen5 hardware, so it all depends on when this question was released. One of the business requirements is to minimize cost, so elastic pool would be the preferred choice to minimize cost, however MI would work too.

upvoted 2 times

✉️ **Madball** 5 months, 1 week ago

Additional comments, General Purpose has zone redundancy on elastic pool too, so so the answer should be Elastic Pool and General Purpose.

upvoted 3 times

✉️ **Ghoshy** 6 months ago

Yes, Azure SQL Managed Instance supports Zone Redundancy. Zone Redundancy is a feature that provides additional resiliency and availability for Azure SQL Managed Instance by replicating the data to a secondary region within the same geography. This allows you to maintain availability in the event of a region-wide failure or disaster.

To enable Zone Redundancy for your Azure SQL Managed Instance, you can specify the zone redundancy option when you create the instance. You can also enable or disable this feature later on by modifying the instance's properties.

It's important to note that Zone Redundancy is only available for Azure SQL Managed Instance in the General Purpose and Business Critical service tiers. It is not available for the Hyperscale service tier.

upvoted 2 times

✉️ **[Removed]** 5 months, 2 weeks ago

I think you are getting confused.

"Zone Redundancy is a feature that provides additional resiliency and availability for Azure SQL Managed Instance by replicating the data to a secondary region within the same geography" - Wrong.

See below correction:

Zone Redundancy is a feature that provides additional resiliency and availability for Azure SQL Managed Instance by replicating the data across multiple physical locations within an Azure region.

Note - "Physical Locations"

Meaning, your data is replicated to other availability zones within the same region. Hence "ZONE" Redundancy.

An availability zone consists of one or more data centers (physical locations).

upvoted 4 times

✉️ **RandomNickname** 6 months, 3 weeks ago

Agree with others.

Elastic Pool

Multi DB so not Azure SQL and as per below not SQL MI either

Business Critical

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell>

From above URL;

Premium and Business Critical service tier zone redundant availability

This feature is not available in SQL Managed Instance. In SQL Database, when using the Business Critical tier, zone-redundant configuration is only available when the standard-series (Gen5) hardware is selected. For up to date information about the regions that support zone-redundant databases, see Services support by region.

upvoted 3 times

✉️ **RandomNickname** 5 months, 1 week ago

Correction.

After a further look given answer looks correct.

SQL MI does support zone redundancy.

<https://techcommunity.microsoft.com/t5/azure-sql-blog/zone-redundancy-for-azure-sql-managed-instance-business-critical/ba-p/3677646>

upvoted 3 times

✉️ **testtaker13** 4 months, 2 weeks ago

According to official docs <https://learn.microsoft.com/en-us/azure/azure-sql/database/features-comparison?view=azuresql#platform-capabilities> it is still in Preview. This means it is not official for the general public. Also I doubt that the test questions are updated on monthly basis for the latest feature updates. Not sure though, question is a bit tricky.

upvoted 2 times

✉️ **RandomNickname** 4 months, 2 weeks ago

Great point regarding preview mode, and the frequency of when the questions are updated.

There are usually assumptions with Microsoft.

I think I'll see which way the wind blows on the big day if this crops up :)

upvoted 2 times

✉️ **Ravi1383** 7 months ago

Questions is when DB1 and Db2 are already migrated to Azure! The given answers are correct and it's not a repeated question.

upvoted 2 times

✉️ **A\_GEE** 6 months, 3 weeks ago

The zone redundant availability is not available for SQL Managed Instance. So one of the requirements is not met  
upvoted 2 times

 **A\_GEE** 7 months, 1 week ago

Repeat questions

upvoted 3 times

 **ezfix** 9 months, 1 week ago

"Azure SQL Database elastic pool" in the Premium and Business Critical service tiers of the Premium Availability model support both locally redundant and zone redundant availability. Premium and Business Critical service tier zone redundant availability is not available for SQL Managed Instance. Azure SQL Database with General Purpose supports zone redundant availability, but, the answer calls for "Single Azure SQL database", which won't work for this use case.

<https://azure.microsoft.com/en-gb/blog/azure-sql-database-now-offers-zone-redundant-premium-databases-and-elastic-pools/#:~:text=To%20take%20advantage%20of%20this%20capability%C2%20you%20simply,reconfigure%20the%20database%20or%20pool%20without%20any%20downtime>

<https://learn.microsoft.com/en-us/azure/azure-sql/database/high-availability-sla?view=azuresql&tabs=azure-powershell#premium-and-business-critical-service-tier-locally-redundant-availability>

upvoted 2 times

 **Wolviet7** 9 months, 1 week ago

Business Critical service is available for managed instance with zone redundancy and auto failover. It is also cheaper than elastic pool...

upvoted 1 times

 **Wolviet7** 9 months, 1 week ago

Sorry not zone redundant ... zone redundancy backup

upvoted 3 times

 **ntobars** 8 months, 3 weeks ago

"Zone-redundant configuration is not available in SQL Managed Instance. In SQL Database this feature is only available when the Gen5 hardware is selected."

upvoted 3 times

**Introductory Info**

Case Study -

This is a case study. Case studies are not timed separately. You can use as much exam time as you would like to complete each case. However, there may be additional case studies and sections on this exam. You must manage your time to ensure that you are able to complete all questions included on this exam in the time provided.

To answer the questions included in a case study, you will need to reference information that is provided in the case study. Case studies might contain exhibits and other resources that provide more information about the scenario that is described in the case study. Each question is independent of the other questions in this case study.

At the end of this case study, a review screen will appear. This screen allows you to review your answers and to make changes before you move to the next section of the exam. After you begin a new section, you cannot return to this section.

To start the case study -

To display the first question in this case study, click the Next button. Use the buttons in the left pane to explore the content of the case study before you answer the questions. Clicking these buttons displays information such as business requirements, existing environment, and problem statements. If the case study has an All Information tab, note that the information displayed is identical to the information displayed on the subsequent tabs. When you are ready to answer a question, click the Question button to return to the question.

Overview -

Fabrikam, Inc. is an engineering company that has offices throughout Europe. The company has a main office in London and three branch offices in Amsterdam,

Berlin, and Rome.

Existing Environment: Active Directory Environment

The network contains two Active Directory forests named corp.fabrikam.com and rd.fabrikam.com. There are no trust relationships between the forests.

Corp.fabrikam.com is a production forest that contains identities used for internal user and computer authentication.

Rd.fabrikam.com is used by the research and development (R&D) department only. The R&D department is restricted to using on-premises resources only.

Existing Environment: Network Infrastructure

Each office contains at least one domain controller from the corp.fabrikam.com domain. The main office contains all the domain controllers for the rd.fabrikam.com forest.

All the offices have a high-speed connection to the internet.

An existing application named WebApp1 is hosted in the data center of the London office. WebApp1 is used by customers to place and track orders. WebApp1 has a web tier that uses Microsoft Internet Information Services (IIS) and a database tier that runs Microsoft SQL Server 2016. The web tier and the database tier are deployed to virtual machines that run on Hyper-V.

The IT department currently uses a separate Hyper-V environment to test updates to WebApp1.

Fabrikam purchases all Microsoft licenses through a Microsoft Enterprise Agreement that includes Software Assurance.

Existing Environment: Problem Statements

The use of WebApp1 is unpredictable. At peak times, users often report delays. At other times, many resources for WebApp1 are underutilized.

Requirements: Planned Changes -

Fabrikam plans to move most of its production workloads to Azure during the next few years, including virtual machines that rely on Active Directory for authentication.

As one of its first projects, the company plans to establish a hybrid identity model, facilitating an upcoming Microsoft 365 deployment.

All R&D operations will remain on-premises.

Fabrikam plans to migrate the production and test instances of WebApp1 to Azure.

Requirements: Technical Requirements

Fabrikam identifies the following technical requirements:

Website content must be easily updated from a single point.

User input must be minimized when provisioning new web app instances.

Whenever possible, existing on-premises licenses must be used to reduce cost.

Users must always authenticate by using their corp.fabrikam.com UPN identity.

Any new deployments to Azure must be redundant in case an Azure region fails.

Whenever possible, solutions must be deployed to Azure by using the Standard pricing tier of Azure App Service.  
An email distribution group named IT Support must be notified of any issues relating to the directory synchronization services.  
In the event that a link fails between Azure and the on-premises network, ensure that the virtual machines hosted in Azure can authenticate to Active Directory.  
Directory synchronization between Azure Active Directory (Azure AD) and corp.fabrikam.com must not be affected by a link failure between Azure and the on-premises network.

Requirements: Database Requirements

Fabrikam identifies the following database requirements:

Database metrics for the production instance of WebApp1 must be available for analysis so that database administrators can optimize the performance settings.

To avoid disrupting customer access, database downtime must be minimized when databases are migrated.

Database backups must be retained for a minimum of seven years to meet compliance requirements.

Requirements: Security Requirements

Fabrikam identifies the following security requirements:

Company information including policies, templates, and data must be inaccessible to anyone outside the company.

Users on the on-premises network must be able to authenticate to corp.fabrikam.com if an internet link fails.

Administrators must be able to authenticate to the Azure portal by using their corp.fabrikam.com credentials.

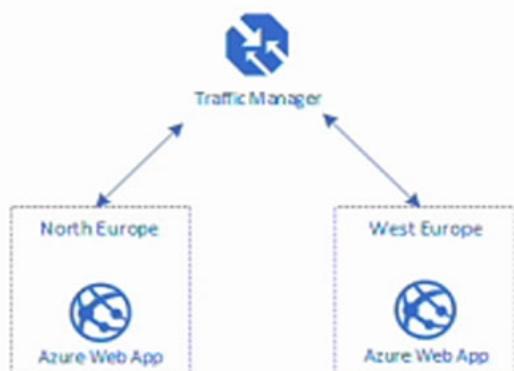
All administrative access to the Azure portal must be secured by using multi-factor authentication (MFA).

The testing of WebApp1 updates must not be visible to anyone outside the company.

**Question**

HOTSPOT -

You design a solution for the web tier of WebApp1 as shown in the exhibit.



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

NOTE: Each correct selection is worth one point.

Hot Area:

Statements	Yes	No
<b>The design supports the technical requirements for redundancy.</b>	<input type="radio"/>	<input type="radio"/>
<b>The design supports autoscaling.</b>	<input type="radio"/>	<input type="radio"/>
<b>The design requires a manual configuration if an Azure region fails.</b>	<input type="radio"/>	<input type="radio"/>

Statements	Yes	No
<b>The design supports the technical requirements for redundancy.</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Correct Answer:</b> <b>The design supports autoscaling.</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>The design requires a manual configuration if an Azure region fails.</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Box 1: Yes -  
Any new deployments to Azure must be redundant in case an Azure region fails.  
Traffic Manager is resilient to failure, including the failure of an entire Azure region.

Box 2: No -  
Traffic Manager provides load balancing, but not auto-scaling.

Box 3: No -  
Automatic failover using Azure Traffic Manager: when you have complex architectures and multiple sets of resources capable of performing the same function, you can configure Azure Traffic Manager (based on DNS) to check the health of your resources and route the traffic from the non-healthy resource to the healthy resource.  
Reference:  
<https://docs.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview> <https://docs.microsoft.com/en-us/azure/networking/disaster-recovery-dns-traffic-manager>

✉  **ezfix** Highly Voted 9 months ago

Should be Y,Y,N

(Yes) Traffic manager distributes load to two sites (redundancy). (Yes) The graphic clearly shows an "Azure Web App", which is production. By default, production web apps support auto scale. (No) Azure Traffic manager does automatic failover, so no manual configuration is necessary.

upvoted 42 times

✉  **Bartolo** Highly Voted 9 months ago

YYN

"In this way, the App Service plan is the scale unit of the App Service apps. If the plan is configured to run five VM instances, then all apps in the plan run on all five instances. If the plan is configured for autoscaling, then all apps in the plan are scaled out together based on the autoscale settings."

<https://learn.microsoft.com/en-us/azure/app-service/overview-hosting-plans>

upvoted 8 times

✉  **Galron** 8 months, 1 week ago

YYN, with Std Web App plan you get autoscale vertical and horizontal.

<https://learn.microsoft.com/en-us/azure/app-service/manage-scale-up>

<https://azure.microsoft.com/en-us/pricing/details/app-service/windows/>

upvoted 2 times

✉  **yonie** Most Recent 2 months ago

I think YYN

Same question as AZ-304

<https://www.examtopics.com/discussions/microsoft/view/49469-exam-az-304-topic-13-question-2-discussion/>

And the answer provided is YYN and all comment sections agrees.

So the problem is with the wording of the question? We all agree TM doesn't provide auto scale and webapp does, so its a question of whether you are looking at the design as a whole or only at TM. I am inclined towards design as a whole.

upvoted 1 times

✉  **Rogercampos** 3 months, 2 weeks ago

gentlemen I have counted the questions of this dump, from the first of the topic 1 to the last of T16 - 1 There are 202 questions and not 209, moderator at least tell the questions.

upvoted 3 times

✉  **abxc** 4 months ago

It should YYN.

Statement is asking if design supports autoscaling not if traffic manager supports it and in design they have Azure webapp that support autoscale.

upvoted 1 times

✉️ **RandomNickname** 4 months, 3 weeks ago

Y,Y,N.

1:Y - Traffic manager regional redundancy

2: Y - Sure traffic manager doesn't offer auto-scaling but Azure web app does offer Auto-scaling.  
<https://learn.microsoft.com/en-us/azure/azure-monitor/autoscale/autoscale-get-started>

3: N - Traffic manager auto fails over.  
upvoted 3 times

✉️ **dimsok** 5 months ago

They are talking about the design though, and traffic manager doesn't support autoscale  
upvoted 2 times

✉️ **honzar** 5 months, 3 weeks ago

Appeared 2023/01/04 in the exam  
upvoted 4 times

✉️ **Ghoshy** 6 months ago

The answer should be Y,Y,N . For Azure App Service, the requirement is talking about standard ones.  
Yes, the Standard pricing tier of Azure App Service supports autoscaling. Autoscaling is a feature that automatically increases or decreases the number of instances of an app based on demand. This can help you to optimize the performance and cost of your app by ensuring that it has the right number of instances to handle the current workload.

To enable autoscaling for an Azure App Service app, you can use the Azure portal, Azure PowerShell, or the Azure CLI. You can specify the criteria that should trigger an increase or decrease in the number of instances, as well as the minimum and maximum number of instances that should be maintained. You can also specify the scale-out and scale-in rules, which determine how the number of instances should be changed in response to demand.

It's important to note that autoscaling is only available for the Standard and Premium pricing tiers of Azure App Service. It is not available for the Free, Shared, or Basic tiers.

upvoted 2 times

✉️ **Kay04** 6 months, 1 week ago

Y,Y,N  
<https://azure.microsoft.com/en-gb/products/app-service/web/>  
WebApp Built-in autoscale and load balancing  
upvoted 1 times

✉️ **simonverma** 6 months, 2 weeks ago

I believe it should be (Y,N,N) - same as the answer.  
1 & 3 are clear.  
But for 2 it should be N since traffic manager does load balancing but here it is asking for autoscaling i.e. horizontal/vertical scaling.  
upvoted 2 times

✉️ **SuperMax** 6 months, 2 weeks ago

Should be Y,N,N  
How does the scenario supports autoscaling? The Azure Traffic Manager is a DNS-based load balancer, it allows you to distribute traffic across your public facing applications. With the traffic manager it will use DNS to direct requests from your users to the appropriate endpoint based on the traffic-routing method that you have configured. Your endpoints can be any Internet-facing service hosted inside OR outside of Azure  
upvoted 1 times

Agreed

YNN

upvoted 1 times

✉️ **Louri** 8 months ago

Should be Y Y N. The scenario supports autoscale.  
upvoted 3 times

✉️ **sondrex** 8 months ago

Answer is not correct  
Should be YYN  
upvoted 3 times

✉️ **GaneshPP** 8 months, 1 week ago

YNN  
Autoscaling needs more instances added dynamically, this architecture is fixed, can't support.  
upvoted 5 times

✉️ **HTEC** 9 months ago

Web apps support autoscaling, so maybe YYN?  
upvoted 3 times

 **Abas240** 9 months, 2 weeks ago

Correct answer.

upvoted 3 times

 **WickedMJ** 8 months, 2 weeks ago

Answer correct - Upvoted!

Y N N

for redundancy, you can use the priority traffic routing method which would automatically failover the web app if it detects a failure in the primary region.

Traffic manager is a load distribution service and not an autoscaling service.

You don't need manual configuration because you can use automatic in traffic manger

upvoted 8 times