

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 (78%)

B (22%)

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while others might not have a correct solution. After you answer a question in this section, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

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%)

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%)

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%)

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%)

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*

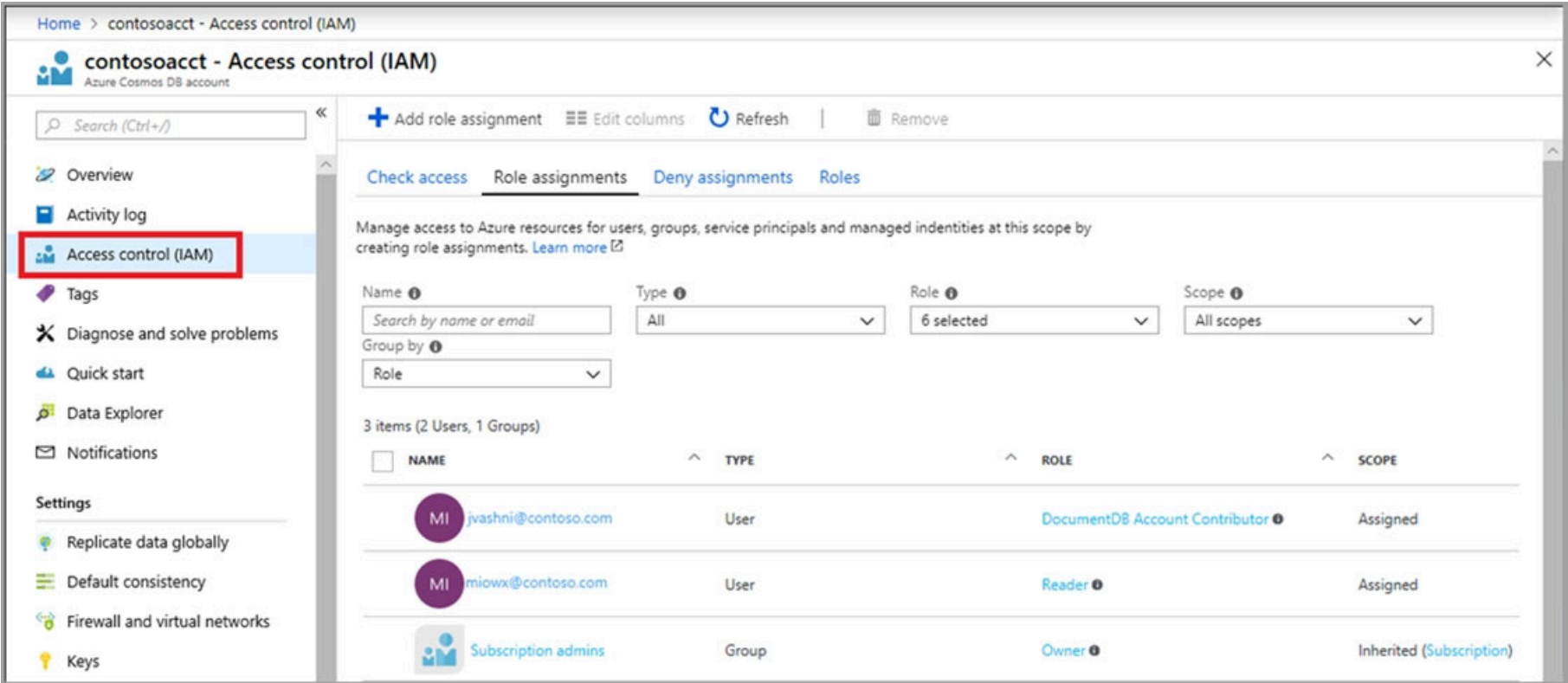
B (100%)

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:



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%)

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%)

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>



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*



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

Correct Answer:

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

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 dedicate 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 in automatically scaling and managing virtual machines running those jobs.