Microsoft

AZ-304

Microsoft Azure Architect Design

QUESTION & ANSWERS

QUESTION 1

To meet the authencaon requirements of Fabrikam, what should you include in the soluon? To answer, select
the appropriate opons in the answer area.
NOTE: Each correct selecon is worth one point.

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

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:

QUESTION 2

Your company deploys an Azure App Service Web App.

During tesng the applicaon fails under load. The applicaon cannot handle more than 100 concurrent user

sessions. You enable the Always On feature. You also configure auto-scaling to increase counts from two to 10

based on HTTP queue length.

You need to improve the performance of the applicaon.

Which soluon should you use for each applicaon scenario? To answer, select the appropriate opons in the

answer area.

NOTE: Each correct selecon is worth one point.

References:

Scenario	Solution
Store content close to end users.	▼
	Azure Redis Cache
	Azure Traffic Manager
	Azure Content Delivery Network
	Azure Application Gateway
Store content close to the application.	▼
	Azure Redis Cache
	Azure Traffic Manager
	Azure Content Delivery Network
	Azure Application Gateway

Scenario	Solution
Store content close to end users.	Azure Redis Cache Azure Traffic Manager **Azure Content Delivery Network** Azure Application Gateway
Store content close to the application.	**Azure Redis Cache** Azure Traffic Manager Azure Content Delivery Network Azure Application Gateway

Correct Answer:

QUESTION 3

Your company develops a web service that is deployed to at, Azure virtual machine named VM1 the web service
allows an API to access real- me data from VM1. The current virtual machine deployment is shown in the
Deployment exhibit. (Click the Deployment tab).
The chief technology officer (CTO) sends you the following email message: 'Our developers have deployed the
web service to a virtual machine named WL Tesng has shown that the API is accessible from VM1 and VM? Our
partners must be able to connect to the API over the Internet Partners will me this data in applicaons that they
develop:
You deploy an Azure API Management service. The relevant API Management configuraon is shown in the API
ambit. (Click the API tab).
For each of the following statements, select. Yes, if the statement is true. Otherwise. select No.
NOTE: Each correct selecon is worth one point.

Statements	Yes	No
The API is available to partners over the Internet.	○	○
The APIM instance can access real-time data from VM1.	○	○
A VPN gateway is required for partner access.	○	○

Correct Answer:

Statements	Yes	No
The API is available to partners over the Internet.	⦿	○
The APIM instance can access real-time data from VM1.	⦿	○
A VPN gateway is required for partner access.	○	⦿

QUESTION 4

You are designing an Azure resource deployment that will use Azure Resource Manager templates. The
deployment will use Azure Key Vault to store secrets.
You need to recommend a soluon to meet the following requirements:
Prevent the IT staff that will perform the deployment from retrieving the secrets directly from Key Vault.
Use the principle of least privilege.
Which two acons should you recommend? Each correct answer presents part of the soluon.
NOTE: Each correct selecon is worth one point.

A. Create a Key Vault access policy that allows all get key permissions, get secret permissions, and get cerficatepermissions.
B. From Access policies in Key Vault, enable access to the Azure Resource Manager for template deployment.
C. Create a Key Vault access policy that allows all list key permissions, list secret permissions, and list cerficatepermissions.
D. Assign the IT staff a custom role that includes the Microso.KeyVault/Vaults/Deploy/Acon permission.
E. Assign the Key Vault Contributor role to the IT staff.

Correct Answer:B,D

Explanation/Reference:

B: To access a key vault during template deployment, set enabledForTemplateDeployment on the key vault to
true.
D: The user who deploys the template must have the Microso.KeyVault/vaults/deploy/acon permission for the
scope of the resource group and key vault.
Incorrect Answers:
E: To grant access to a user to manage key vaults, you assign a predefined key vault Contributor role to the user at
a specific scope.
If a user has Contributor permissions to a key vault management plane, the user can grant themselves access to
the data plane by seng a Key Vault access policy. You should ghtly control who has Contributor role

access to
your key vaults. Ensure that only authorized persons can access and manage your key vaults, keys, secrets, and
cerficates.
hps://docs.microso.com/en-us/azure/azure-resource-manager/templates/key-vault-parameter
hps://docs.microso.com/en-us/azure/key-vault/general/overview-security

QUESTION 5

You are planning to deploy an applicaon 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 soluon for App1. Updated container images must be replicated automacally
to all the AKS clusters.
Which storage soluon should you recommend?

A. Premium SKU Azure Container Registry
B. Azure Content Delivery Network (CDN)
C. geo redundant storage (GRS) accounts
D. Azure Cache for Redis

Correct Answer: A

Explanation/Reference:

Enable geo-replicaon for container images.
Best pracce: Store your container images in Azure Container Registry and geo-replicate the registry to each AKS
region.
To deploy and run your applicaons 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 mulmaster geo-replicaon to automacally replicate your images to Azure regions around the world.
Geo-replicaon is a feature of Premium SKU container registries.
Note:
When you use Container Registry geo-replicaon to pull images from the same region, the results are:
Faster: You pull images from high-speed, low-latency network connecons 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.
hps://docs.microso.com/en-us/azure/aks/operator-best-pracces-mul-region

QUESTION 6

Note: This queson is part of a series of quesons that present the same scenario. Each queson in the series

contains a unique soluon that might meet the stated goals. Some queson sets might have more than one

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

Aer you answer a queson in this secon, you will NOT be able to return to it. As a result, these quesons will

not appear in the review screen.

You plan to deploy mulple instances of an Azure web app across several Azure regions.

You need to design an access soluon for the app. The soluon must meet the following replicaon requirements:

Support rate liming.

Balance requests between all instances.

Ensure that users can access the app in the event of a regional outage.

Soluon: You use Azure Traffic Manager to provide access to the app.

Does this meet the goal?

A. Yes
B. No

Correct Answer: B

Explanation/Reference:

Azure Traffic Manager is a DNS-based traffic load balancer. This service allows you to distribute traffic to your

public facing applicaons across the global Azure regions. Traffic Manager also provides your public endpoints

with high availability and quick responsiveness. It does not provide rate liming.

hps://docs.microso.com/en-us/azure/app-service/web-sites-traffic-manager

hps://docs.microso.com/en-us/azure/traffic-manager/traffic-manager-overview

QUESTION 7

You have mulple Anne deployments.

You plan to implement Azure Blueprints.

Which arfact types can be added to a blueprint?

A. Policy assignment Resource group, Role assignment virtual machines, and virtual networks only
B. Subscripons. tenants. Resource group, and Key vault only
C. Subscripons. tenants. Resource group, and Azure Acve Directory only
D. Azure Resource Manager template (Subscripon). Policy assignment Resource group, and Role assignment only

QUESTION 8

You have an Azure Acve Directory (Azure AD) tenant named Contoso.com. The tenant contains a group named
Group1. Group1 contains all the administrator user accounts.
You discover several login aempts to the Azure portal from countries administrator users do NOT work.
You need to ensure that all login aempts to the portal from those countries require Azure Mul-Factor Authencaon (MFA).
Soluon: Implement Azure AD identy Protecon for Group1.
Does this meet the goal?

A. Yes
B. No hps://docs.microso.com/en-us/azure/acve-directory/identy-protecon/concept-identy-proteconpolicies hps://docs.microso.com/en-us/azure/acve-directory/condional-access/concept-condional-accesscondions#sign-in-risk

QUESTION 9

The developers at your company are building a stac web app to support users sending text messages. The app
must meet the following requirements:
* Website latency must be consistent for users in different geographical regions.
* Users must be able to authencate by using Twier and Facebook.
* Code must include only HTML, nave JavaScript and jQuery.
* Costs must be minimized.
Which Azure service should you use to complete the architecture? To answer, drag the appropriate services to the
correct locaons. 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 selecon is worth one point.

Services		Answer Area
Azure App Service plan (Basic)	Azure Content Delivery Network (CDN)	Serves website — Hosts website — Sends SMS
Azure Front Door	Azure Functions	Service ← Azure Storage → Service
Azure Logic Apps	Azure SQL Database	
Azure virtual machine		

Correct Answer:

Explanation/Reference:

Explanaon:
hps://docs.microso.com/en-us/javascript/api/overview/azure/cdn?view=azure-node-latest#overview
hps://www.codeproject.com/Arcles/1368337/Implemenng-SMS-API-using-Azure-Serverless-Func

QUESTION 10

You need to recommend a soluon for the collecon of security logs the middle er of the payment processing
system.
What should you include in the recommendaon?

A. Azure Noficaon Hubs
B. the Azure Diagnoscs agent
C. Azure Event Hubs
D. the Azure Log Analycs agent References: hps://docs.microso.com/en-
   us/azure/azuremonitor/plaorm/diagnoscs-extension-overview

Correct Answer: D

QUESTION 11

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 opon should you use?

A. Azure SQL Database Business Crical
B. Azure SQL Database Managed Instance Business Crical
C. Azure SQL Database Hyperscale
D. Azure SQL Database Standard

Explanation/Reference:

Explanaon: hps://docs.microso.com/en-us/azure/azure-sql/database/service-er-business-crical

QUESTION 12

You need to recommend a disaster recovery soluon for the back-end er of the payment processing system.
What should you include in the recommendaon?

A. Always On Failover Cluster Instances
B. acve geo-replicaon
C. Azure Site Recovery
D. an auto-failover group References: hps://docs.microso.com/en-us/azure/sql-database/sql-database-autofailover-group

QUESTION 13

You are designing a soluon for a stateless front-end applicaon named Applicaon1. Applicaon1 will be hosted
on two Azure virtual machines named VM1 and VM2.
You plan to load balance connecons to VM1 and VM2 from the Internet by using one Azure load balancer.
You need to recommend the minimum number of required public IP addresses.
How many public IP addresses should you recommend using for each resource? To answer, select the appropriate
opons in the answer area.
NOTE: Each correct selecon is worth one point.

Load balancer:
```
▼
0
1
2
3
```

VM1:
```
▼
0
1
2
3
```

VM2:
```
▼
0
1
2
3
```

Correct Answer:

Load balancer:
```
▼
0
[1]
2
3
```

VM1:
```
▼
[0]
1
2
3
```

VM2:
```
▼
[0]
1
2
3
```

QUESTION 14

You are designing an access policy for the sales department at your company.

Occasionally, the developers at the company must stop, start, and restart Azure virtual machines. The development team changes oen.

You need to recommend a soluon to provide the developers with the required access to the virtual machines.

The soluon must meet the following requirements:

Provide permissions only when needed.

Use the principle of least privilege.

Minimize costs.

What should you include in the recommendaon? To answer, select the appropriate opons in the answer area.

NOTE: Each correct selecon is worth one point.

Azure Active Directory (Azure ID)
license:

Free
Basic
Premium P1
Premium P2

Security feature:

Just in time VM access
A conditional access policy
Privileged Identity Management for the Azure resources

Correct Answer:

Azure Active Directory (Azure ID)
license:

Free
Basic
Premium P1
Premium P2

Security feature:

Just in time VM access
A conditional access policy
Privileged Identity Management for the Azure resources

QUESTION 15

You plan to deploy an API by using Azure API Management
You need to recommend a soluon to protect the API from a distributed denial of service (DDoS) aack.
What should you recommend?

A. Create network security groups (NSGs).
B. Enable quotas.
C. Strip the Powered-By response header.
D. Enable rate liming.

Correct Answer:D

QUESTION 16

You need to recommend a soluon for the data store of the historical transacon query system.
What should you include in the recommendaon? To answer, select the appropriate opons in the
answer area.
NOTE: Each correct selecon is worth one point.

Sizing requirements:

| A table that has unlimited capacity |
| A table that has a fixed capacity |
| Multiple tables that have unlimited capacity |
| Multiple tables that have fixed capacity |

Resiliency:

| An additional read region |
| An availability set |
| An availability zone |

Correct Answer:

Sizing requirements:

| A table that has unlimited capacity |
| A table that has a fixed capacity |
| Multiple tables that have unlimited capacity |
| Multiple tables that have fixed capacity |

Resiliency:

| An additional read region |
| An availability set |
| An availability zone |

You design a soluon for the web er of WebApp1 as shown in the exhibit.
For each of the following statements, select Yes if the statement is true. Otherwise, select No.

Traffic Manager

North Europe
Azure Web App

West Europe
Azure Web App
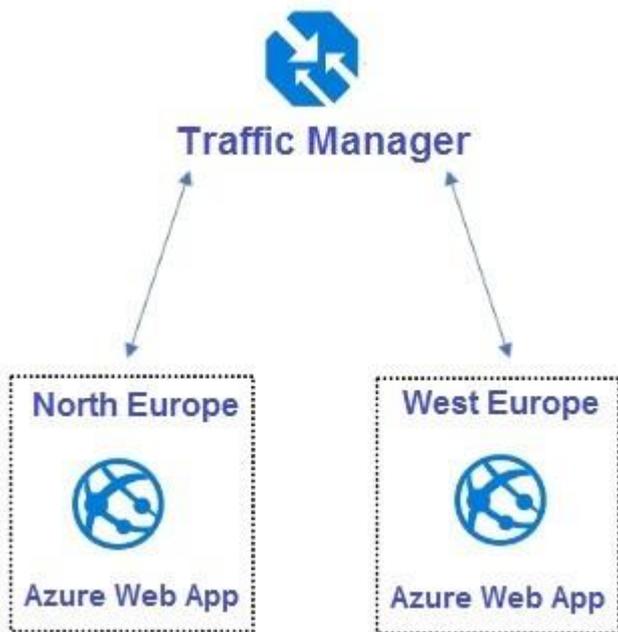
Statements	Yes	No
The design supports the technical requirements for redundancy.	○	○
The design supports autoscaling.	○	○
The design requires a manual configuration if an Azure region fails.	○	○

Statements	Yes	No
The design supports the technical requirements for redundancy.	⊡	○
The design supports autoscaling.	⊡	○
The design requires a manual configuration if an Azure region fails.	○	⊡

Correct Answer:

Explanation/Reference:

Explanaon:
hps://docs.microso.com/en-us/azure/traffic-manager/traffic-manager-overview
hps://blogs.msdn.microso.com/hsirtl/2017/07/03/autoscaling-azure-web-apps/

QUESTION 18

Your company has the divisions shown in the following table.
You plan to deploy a custom applicaon to each subscripon. The applicaon 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 applicaon to each subscripon.

What is the minimum number of objects required to deploy the applicaon? To answer, select the appropriate

opons in the answer area.

NOTE: Each correct selecon is worth one point.

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

Management groups:

1
2
3
4

Blueprint definitions:

1
2
3
4

Blueprint assignments:

1
2
3
4

Management groups: [▼]
1
2
3
4

Blueprint definitions: [▼]
1
2
3
4

Blueprint assignments: [▼]
1
2
3
4

Correct Answer:

QUESTION 19

You need to recommend a soluon for protecng the content of the payment processing system.
What should you include in the recommendaon?

A. Transparent Data Encrypon (TDE)
B. Azure Storage Service Encrypon
C. Always Encrypted with randomized encrypon
D. Always Encrypted with determinisc encrypon

Correct Answer: D

QUESTION 20

You have an Azure SQL database named DB1 that contains mulple tables.
You need to improve the performance of DB1. The soluon must minimize administrave effort.
What should you use?

A. automac tuning
B. Azure Advisor
C. Azure Monitor
D. Query Performance Insight

Correct Answer: A

Explanation/Reference:

Azure SQL Database and Azure SQL Managed Instance automac tuning provides peak performance and stable
workloads through connuous performance tuning based on AI and machine learning.
Automac tuning is a fully managed intelligent performance service that uses built-in intelligence to connuously
monitor queries executed on a database, and it automacally improves their performance.
hps://docs.microso.com/en-us/azure/azure-sql/database/automac-tuning-overview

QUESTION 21

A company named Contoso Ltd., has a single-domain Acve Directory forest named contoso.com.
Contoso is preparing to migrate all workloads to Azure. Contoso wants users to use single sign-on (SSO) when
they access cloud-based services that integrate with Azure Acve Directory (Azure AD).
You need to idenfy any objects in Acve Directory that will fail to synchronize to Azure AD due to formang
issues. The soluon must minimize costs.
What should you include in the soluon?

A. Azure Advisor
B. Microso Office 365 IdFix
C. Azure AD Connect Health
D. Password Export Server version 3.1 (PES v3.1) in Acve Directory Migraon Tool
   (ADMT)hps://docs.microso.com/en-us/troubleshoot/azure/acve-directory/objects-
   dont-sync-ad-sync-tool

Correct Answer: B

QUESTION 22

Note: This queson is part of a series of quesons that present the same scenario. Each queson in the series
contains a unique soluon that might meet the stated goals. Some queson sets might have more than one
correct soluon, while others might not have a correct soluon.
Aer you answer a queson in this secon, you will NOT be able to return to it. As a result, these quesons will
not appear in the review screen.
You have an Azure Storage account that contains two 1-GB data files named File1 and File2. The data files are set
to use the archive access er.
You need to ensure that File1 is accessible immediately when a retrieval request is iniated.
Soluon: You add a new file share to the storage account.
Does this meet the goal?

A. Yes

B. No

Correct Answer: B