

Administering Relational Databases on Microsoft Azure

1. What should you use to migrate the PostgreSQL database?

A. Azure Data Box

B. AzCopy

C. Azure Database Migration Service

D. Azure Site Recovery

Answer(s): C

2. You plan to move two 100-GB databases to Azure.

You need to dynamically scale resources consumption based on workloads. The solution must minimize downtime during scaling operations.

What should you use?

A. An Azure SQL Database elastic pool

B. SQL Server on Azure virtual machines

C. an Azure SQL Database managed instance

D. Azure SQL databases

Answer(s): A

3. You have 10 Azure virtual machines that have SQL Server installed.

You need to implement a backup strategy to ensure that you can restore specific databases to other SQL Server instances. The solution must provide centralized management of the backups.

What should you include in the backup strategy?

A. Automated Backup in the SQL virtual machine settings

B. Azure Backup

C. Azure Site Recovery

D. SQL Server Agent jobs

Answer(s): B

4. You need to recommend an availability strategy for an Azure SQL database. The strategy must meet the following requirements:

- Support failovers that do not require client applications to change their connection strings.
- Replicate the database to a secondary Azure region.

-Support failover to the secondary region.

What should you include in the recommendation?

A. failover groups

B. transactional replication

C. Availability Zones

D. geo-replication

Answer(s): A

5. DRAG DROP (Drag and Drop is not supported)

You have SQL Server on an Azure virtual machine that contains a database named DB1. DB1 is 30 TB and has a 1-GB daily rate of change.

You back up the database by using a Microsoft SQL Server Agent job that runs Transact-SQL commands.

You perform a weekly full backup on Sunday, daily differential backups at 01:00, and transaction log backups every five minutes.

The database fails on Wednesday at 10:00.

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

Select and Place:

Actions	Answer Area
Monday, Tuesday, and then Wednesday differential backups	
Wednesday, Tuesday, and then Monday log backups	
full backup	
Monday, Tuesday, and then Wednesday log backups	
Wednesday, Tuesday, and then Monday differential backups	
Wednesday log backups	
Wednesday differential backup	

Navigation arrows: > < (between columns), ↑ ↓ (in answer area)

A. See Explanation section for answer.

Answer(s): A

6. You are building a database backup solution for a SQL Server database hosted on an Azure virtual machine.

In the event of an Azure regional outage, you need to be able to restore the database backups. The solution must minimize costs.

Which type of storage accounts should you use for the backups?

A. locally-redundant storage (LRS)

B. read-access geo-redundant storage (RA-GRS)

C. zone-redundant storage (ZRS)

D. geo-redundant storage

Answer(s): B

7. You have SQL Server on Azure virtual machines in an availability group. You have a database named DB1 that is NOT in the availability group. You create a full database backup of DB1.

You need to add DB1 to the availability group.

Which restore option should you use on the secondary replica?

A. Restore with Recovery

B. Restore with Norecovery

C. Restore with Standby

Answer(s): B

8. You are planning disaster recovery for the failover group of an Azure SQL Database managed instance.

Your company's SLA requires that the database in the failover group become available as quickly as possible if a major outage occurs.

You set the Read/Write failover policy to Automatic.

What are two results of the configuration? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A. In the event of a datacenter or Azure regional outage, the databases will fail over automatically.

B. In the event of an outage, the databases in the primary instance will fail over immediately.

C. In the event of an outage, you can selectively fail over individual databases.

D. In the event of an outage, you can set a different grace period to fail over each database.

E. In the event of an outage, the minimum delay for the databases to fail over in the primary instance will be one hour.

Answer(s): A E

9. You have an Azure SQL database named DB1.

You need to ensure that DB1 will support automatic failover without data loss if a datacenter fails. The solution must minimize costs.

Which deployment option and pricing tier should you configure?

A. Azure SQL Database Premium

B. Azure SQL Database serverless

C. Azure SQL Database managed instance Business Critical

D. Azure SQL Database Standard

Answer(s): A

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

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

You have an Azure SQL database named Sales.

You need to implement disaster recovery for Sales to meet the following requirements:

- During normal operations, provide at least two readable copies of Sales.
- Ensure that Sales remains available if a datacenter fails.

Solution: You deploy an Azure SQL database that uses the General Purpose service tier and geo-replication.

Does this meet the goal?

A. Yes

B. No

Answer(s): B

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

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

You have an Azure SQL database named Sales.

You need to implement disaster recovery for Sales to meet the following requirements:

- During normal operations, provide at least two readable copies of Sales.
- Ensure that Sales remains available if a datacenter fails.

Solution: You deploy an Azure SQL database that uses the Business Critical service tier and Availability Zones.

Does this meet the goal?

A. Yes

B. No

Answer(s): A

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

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

You have an Azure SQL database named Sales.

You need to implement disaster recovery for Sales to meet the following requirements:

- During normal operations, provide at least two readable copies of Sales.
- Ensure that Sales remains available if a datacenter fails.

Solution: You deploy an Azure SQL database that uses the General Purpose service tier and failover groups.

Does this meet the goal?

A. Yes

B. No

Answer(s): B

13. You have an on-premises app named App1 that stores data in an on-premises Microsoft SQL Server 2016 database named DB1.

You plan to deploy additional instances of App1 to separate Azure regions. Each region will have a separate instance of App1 and DB1. The separate instances of DB1 will sync by using Azure SQL Data Sync.

You need to recommend a database service for the deployment. The solution must minimize administrative effort.

What should you include in the recommendation?

A. Azure SQL Managed instance

B. Azure SQL Database single database

C. Azure Database for PostgreSQL

D. SQL Server on Azure virtual machines

Answer(s): B

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

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

You have two Azure SQL Database servers named Server1 and Server2. Each server contains an Azure SQL database named Database1.

You need to restore Database1 from Server1 to Server2. The solution must replace the existing Database1 on Server2.

Solution: From Microsoft SQL Server Management Studio (SSMS), you rename Database1 on Server2 as Database2. From the Azure portal, you create a new database on Server2 by restoring the backup of Database1 from Server1, and then you delete Database2.

Does this meet the goal?

A. Yes

B. No

Answer(s): A

15. You have an Azure subscription that uses a domain named contoso.com.

You have two Azure VMs named DBServer1 and DBServer2. Each of them hosts a default SQL Server instance. DBServer1 is in the East US Azure region and contains a database named DatabaseA. DBServer2 is in the West US Azure region.

DBServer1 has a high volume of data changes and low latency requirements for data writes.

You need to configure a new availability group for DatabaseA. The secondary replica will reside on DBServer2. What should you do?

A. Configure the primary endpoint as TCP://DBServer1.contoso.com:445, configure the secondary endpoint as TCP://DBServer2.contoso.com:445, and set the availability mode to Asynchronous.

B. Configure the primary endpoint as TCP://DBServer1.contoso.com:445, configure the secondary endpoint as TCP://DBServer2.contoso.com:445, and set the availability mode to Synchronous.

C. Configure the primary endpoint as TCP://DBServer1.contoso.com:5022, configure the secondary endpoint as TCP://DBServer2.contoso.com:5022, and set the availability mode to Asynchronous.

D. Configure the primary endpoint as TCP://DBServer1.contoso.com:5022, configure the secondary endpoint as TCP://DBServer2.contoso.com:5022, and set the availability mode to Synchronous.

Answer(s): C

16. You have an on-premises multi-tier application named App1 that includes a web tier, an application tier, and a Microsoft SQL Server tier. All the tiers run on Hyper-V virtual machines. Your new disaster recovery plan requires that all business-critical applications can be recovered to Azure. You need to recommend a solution to fail over the database tier of App1 to Azure. The solution must provide the ability to test failover to Azure without affecting the current environment. What should you include in the recommendation?

A. Azure Backup

B. Azure Information Protection

C. Windows Server Failover Cluster

D. Azure Site Recovery

Answer(s): D

17. HOTSPOT (Drag and Drop is not supported)

You plan to migrate on-premises Microsoft SQL Server databases to Azure.

You need to identify which deployment and resiliency options meet the following requirements:

-Support user-initiated backups.

-Support multiple automatically replicated instances across Azure regions.

-Minimize administrative effort to implement and maintain business continuity.

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

Deployment option:

	▼
Azure SQL Managed Instance	
SQL Server on Azure Virtual Machines	
An Azure SQL Database single database	

Resiliency option:

	▼
Auto-failover group	
Active geo-replication	
Zone-redundant deployment	

A. See Explanation section for answer.

Answer(s): A

18. HOTSPOT (Drag and Drop is not supported)

You configure a long-term retention policy for an Azure SQL database as shown in the exhibit. (Click the Exhibit tab.)

Configure policies SQL server

Point in Time Restore Configuration

Configure PiTR backup retention Days

Long-term Retention Configurations

Weekly LTR Backups ⓘ

How long would you like weekly backups to be kept?

Monthly LTR Backups ⓘ

How long would you like the first backup of each month to be kept?

Yearly LTR Backups ⓘ

Which weekly backup of the year would you like to retain?

How long would you like this annual backup to be kept?

The first weekly backup occurred on January 4, 2020. The dates for the first 10 weekly backups are:

- January 4, 2020
- January 11, 2020
- January 18, 2020
- January 25, 2020
- February 1, 2020
- February 8, 2020
- February 15, 2020
- February 22, 2020
- February 29, 2020
- March 7, 2020

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 backup saved to long-term retention on January 4, 2020, will be retained for

- | |
|---------|
| 6 week |
| 12 mon |
| 10 year |

The backup saved to long-term retention on January 11, 2020 will be retained for

- | |
|---------|
| 6 week |
| 12 mon |
| 10 year |

A. See Explanation section for answer.

Answer(s): A

19. You have a new Azure subscription.

You create an Azure SQL Database instance named DB1 on an Azure SQL Database server named Server1.

You need to ensure that users can connect to DB1 in the event of an Azure regional outage. In the event of an outage, applications that connect to DB1 must be able to connect without having to update the connection strings.

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

NOTE: Each correct selection is worth one point.

- A. From the properties of DB1, configure geo-replication.
- B. From the properties of Server1, add a failover group.
- C. Create a new Azure SQL Database server named Server2.
- D. From the properties of Server1, configure retention for DB1.
- E. Create a new Azure SQL Database instance named DB2.

Answer(s): B C

20. HOTSPOT (Drag and Drop is not supported)

You have an Azure SQL database.

You run the following PowerShell script.


```
$serverName = "SERVER1"  
$resourceGroup = "RG1"  
$dbName = "DB1"
```

```
Connect-AzAccount
```

```
$server = Get-AzSqlServer -ServerName $serverName -ResourceGroupName  
$resourceGroup
```

```
Set-AzSqlDatabaseBackupShortTermRetentionPolicy -ResourceGroupName $resourceG  
-ServerName $server `   
-DatabaseName $dbName -RetentionDays 21
```

```
Set-AzSqlDatabaseBackupLongTermRetentionPolicy -ServerName $serverName -  
DatabaseName $dbName `   
-ResourceGroupName $resourceGroup -WeeklyRetention P52W -YearlyRetention  
-WeekOfYear 52
```

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
DB1 can be restored to a specific point in time 30 days ago.	<input type="radio"/>
DB1 can be restored from a weekly backup performed six months ago.	<input type="radio"/>
DB1 can be restored from a yearly backup performed six years ago.	<input type="radio"/>

A. See Explanation section for answer.

Answer(s): A
