Microsoft

70-765 Exam

Microsoft Provisioning SQL Databases Exam

Questions & Answers
Demo

Version: 21.1

Question: 1

You have a Microsoft SQL Server 2014 named SRV2014 that has a single tempdb database file. The tempdb database file is eight gigabytes (GB) in size.
You install a SQL Server 2016 instance named SQL Server 2016 by using default settings. The new instance has eight logical processor cores.
You plan to migrate the databases from SRV2014 to SRV2016.
You need to configure the tempdb database on SRV2016. The solution must minimize the number of future tempdb autogrowth events.
What should you do?

A. Increase the size of the tempdb datafile to 8 GB. In the tempdb database, set the value of the MAXDOP property to8.
B. Increase the size of the tempdb data files to1 GB.
C. Add seven additional tempdb data files. In the tempdb database, set the value of the MAXDOP property to8.
D. Setthe value for the autogrowth setting for the tempdb data file to128megabytes (MB). Add seven additional tempdb data files and set the autogrowth value to128 MB.

Answer: B

Explanation:
In an effort to simplify the tempdb configuration experience, SQL Server 2016 setup has been extended to configure various properties for tempdb for multi-processor environments.
1. A new tab dedicated to tempdb has been added to the Database Engine Configuration step of setup workflow.
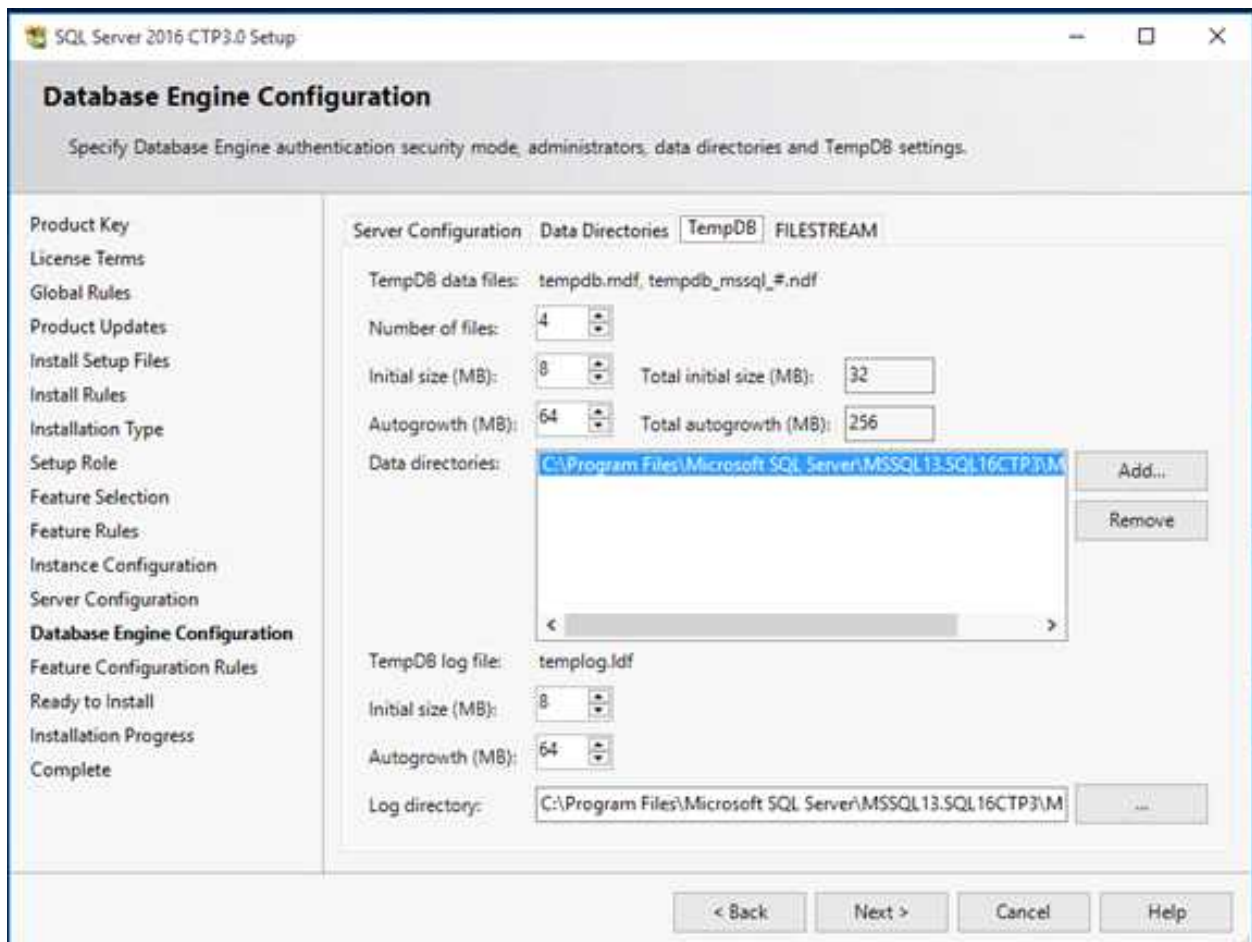2. Configuration options:
Data Files
* Number offiles – this will default to the lower value of 8 or number of logical cores as detected by setup.
* Initial size – is specified in MB and applies to each tempdb data file. This makes it easier to configure all files of same size. Total initial size is the cumulative tempdb data file size (Number of files * Initial Size) that will be created.
* Autogrowth – is specified in MB (fixed growth is preferred as opposed to a non-linear percentage based growth) and applies to each file. The default value of 64MBwas chosen to cover one PFS interval.
Figure:

References:
https://blogs.msdn.microsoft.com/psssql/2016/03/17/sql-2016-it-just-runs-faster-automatic-tempdb-configuration/

Question: 2

Note: This question is part of a series of questions that use the same or similar answer choices. An answer choice may be correct for more than one question in the series. Each question is independent of the other questions in this series. Information and details provided in a question apply only to that question.

You have deployed several GS-series virtual machines (VMs) in Microsoft Azure. You plan to deploy Microsoft SQL Server in a development environment. Each VM has a dedicated disk for backups.

You need to backup a database to the local disk on a VM. The backup must be replicated to another region.

Which storage option should you use?

A. Premium P10 disk storage
B. Premium P20 diskstorage
C. Premium P30 disk storage
D. Standard locally redundant disk storage
E. Standard geo-redundant disk storage
F. Standard zone redundant blob storage

G. Standard locally redundant blob storage
H. Standard geo-redundant blob storage

	Answer: E

Explanation:
Note: SQL Database automatically creates a database backups and uses Azure read-access geo-redundant storage (RA-GRS) to provide geo-redundancy. These backups are created automatically and at no additional charge. You don't need to do anything to make them happen. Database backups are an essential part of any business continuity and disaster recovery strategy because they protect your data from accidental corruption or deletion.
References:
https://docs.microsoft.com/en-us/azure/sql-database/sql-database-automated-backups

Question: 3

Note: This question is part of a series of questions that use the same or similar answer choices. An answer choice may be correct for more than one question in the series. Each question is independent of the other questions in this series. Information and details provided in a question apply only to that question.
You have a virtual machine (VM) in Microsoft Azure, which has a 2 terabyte (TB) database. Microsoft SQL Server backups are performed by using Backup to URL.
You need to provision the storage account for the backups while minimizing costs.
Which storage option should you use?

A. Premium P10 disk storage
B. Premium P20 disk storage
C. Premium P30 disk storage
D. Standard locally redundant disk storage
E. Standard geo-redundant disk storage
F. Standard zone redundant blob storage
G. Standard locally redundant blob storage
H. Standard geo-redundant blob storage

	Answer: G

Explanation:
A URL specifies a Uniform Resource Identifier (URI) to a unique backup file. The URL is used to provide the location and name of the SQL Server backup file. The URL must point to an actual blob, not just a container. If the blob does not exist, it is created. If an existing blob is specified, BACKUP fails, unless the "WITH FORMAT" option is specified to overwrite the existing backup file in the blob.
LOCALLY REDUNDANT STORAGE (LRS) makes multiple synchronous copies of your data within a single datacenter.

Question: 4

Note: This question is part of a series of questions that use the same or similar answer choices. An answer choice may be correct for more than one question in the series. Each question is independent of the other questions in this series. Information and details provided in a question apply only to that question.

You have deployed a GS-series virtual machine (VM) in Microsoft Azure. You plan to deploy Microsoft SQL Server.

You need to deploy a 30 megabyte (MB) database that requires 100 IOPS to be guaranteed while minimizing costs.

Which storage option should you use?

A. Premium P10 disk storage
B. Premium P20 disk storage
C. Premium P30 disk storage
D. Standard locally redundant disk storage
E. Standard geo-redundant disk storage
F. Standard zone redundant blob storage
G. Standard locally redundant blob storage
H. Standard geo-redundant blob storage

Answer: A

Explanation:
Premium Storage Disks Limits
When you provision a disk against a Premium Storage account, how much input/output operations per second (IOPS) and throughput (bandwidth) it can get depends on the size of the disk. Currently, there are three types of Premium Storage disks: P10, P20, and P30. Each one has specific limits for IOPS and throughput as specified in the following table:

Premium Storage Disk Type	P10	P20	P30
Disk Size	128 GiB	512 GiB	1024 GiB (1 TB)
IOPS per disk	500	2300	5000
Throughput per disk	100 MB per second	150 MB per second	200 MB per second

References:
https://docs.microsoft.com/en-us/azure/storage/storage-premium-storage

Question: 5

Note: This question is part of a series of questions that use the same or similar answer choices. An answer choice may be correct for more than one question in the series. Each question is independent

of the other questions in this series. Information and details provided in a question apply only to that question.

You have deployed several GS-series virtual machines (VMs) in Microsoft Azure. You plan to deploy Microsoft SQL Server in a development environment.

You need to provide storage to the environment that minimizes costs.

Which storage option should you use?

A. Premium P10 disk storage
B. Premium P20 disk storage
C. Premium P30 disk storage
D. Standard locally redundant disk storage
E. Standard geo-redundant disk storage
F. Standard zone redundant blob storage
G. Standard locally redundant blob storage
H. Standard geo-redundant blob storage

Answer: D

Question: 6

HOTSPOT

You use Resource Manager to deploy a new Microsoft SQL Server instance in a Microsoft Azure virtual machine (VM) that uses Premium storage. The combined initial size of the SQL Server user database files is expected to be over 200 gigabytes (GB). You must maximize performance for the database files and the log file.

You add the following additional drive volumes to the VM:

Drive volume	Storage	Host caching
E:	Premium storage	ReadOnly
F:	Premium storage	None

You have the following requirements:

You need to deploy the SQL instance.

In the table below, identify the drive where you must store each SQL Server file type.

NOTE: Make only one selection in each column. Each correct selection is worth one point.

Answer area

Drive	Data files	Log files
C:	O	O
D:	O	O
E:	O	O
F:	O	O

Answer:

Answer area

Drive	Data files	Log files
C:	O	O
D:	O	O
E:	**[O]**	O
F:	O	**[O]**

Explanation:
Enable read caching on the disk(s) hosting the data files and TempDB.
Do not enable caching on disk(s) hosting the log file. Host caching is not used for log files.

Question: 7

DRAG DROP
You are building a new Always On Availability Group in Microsoft Azure. The corporate domain controllers (DCs) are attached to a virtual network named ProductionNetwork. The DCs are part of an availability set named ProductionServers1.
You create the first node of the availability group and add it to an availability set named ProductionServers2. The availability group node is a virtual machine (VM) that runs Microsoft SQL

Server. You attach the node to ProductionNetwork.
The servers in the availability group must be directly accessible only by other company VMs in Azure.
You need to configure the second SQL Server VM for the availability group.
How should you configure the VM? To answer, drag the appropriate configuration settings to the correct target locations. Each configuration setting 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.

Configuration settings

| None/Not Assigned |
| ProductionServers1 |
| ProductionNetwork |
| ProductionServers2 |
| Create a new Object |

VM settings page

Settings   — ☐ X

Storage
Disk type ❶
Standard | Premium (SSD)

* Storage account ❶   >
(new) sqlstorage3

Network

* Virtual network ❶

setting   >

* Subnet ❶   >
ProductionServers (10.1.0.0/24)

* Public IP address ❶

setting   >

* Network security group ❶
(new) SQLServers

Extensions

Extensions ❶   >
No extensions

Monitoring
Diagnostics ❶
Disabled | Enabled

Availability

* Availability set ❶

setting   >

OK

Answer:

VM settings page

Settings   _ □ X

Storage
Disk type ❗
| Standard | Premium (SSD) |

* Storage account ❗   >
   (new) sqlstorage3

Network

* Virtual network ❗

| ProductionNetwork | >

  * Subnet ❗   >

  ProductionServers (10.1.0.0/24)

  * Public IP address ❗

| None/Not Assigned | >

  * Network security group ❗

  (new) SQLServers

Extensions

  Extensions ❗   >
  No extensions

Monitoring
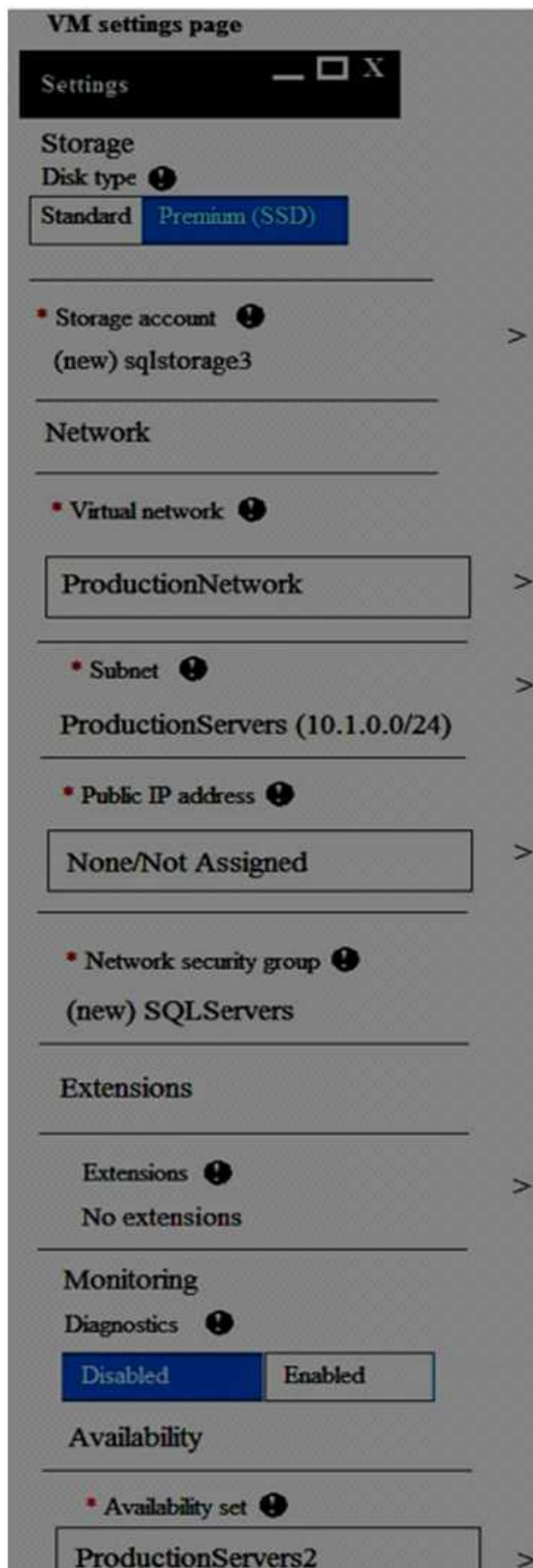Diagnostics ❗

| Disabled | Enabled |

Availability

  * Availability set ❗

| ProductionServers2 | >

Explanation:
Box 1: ProductionNetwork
The virtual network is named ProductionNetwork.

Box 2: None /Not Assigned
As the servers in the availability group must be directly accessible only by other company VMs in Azure, there should be no Public IP address.
Box 3: ProductionServer2
You create the first node of the availability group and add it to an availability set named ProductionServers2. The availability group node is a virtual machine (VM) that runs Microsoft SQL Server.

Question: 8

HOTSPOT
You plan to migrate a Microsoft SQL Server workload from an on-premises server to a Microsoft Azure virtual machine (VM). The current server contains 4 cores with an average CPU workload of 6 percent and a peak workload of 10 percent when using 2.4Ghz processors.
You gather the following metrics:

	Minimum IOPS	Average IOPS	Maximum IOPS
Data Drive	100	938	7253
Transaction Log Drive	12	145	350
TempDB Drive	300	900	1900

You need to design a SQL Server VM to support the migration while minimizing costs.
For each setting, which value should you use? To answer, select the appropriate storage option from each list in the answer area.
NOTE: Each correct selection is worth one point.

Answer Area

VM setting	Value	▼
Data drive	Local storage Premium storage Standard storage	
Transaction log drive	Local storage Premium storage Standard storage	
TempDB drive	Local storage Premium storage Standard storage	
VM size	A3 D3 DS3	

Answer:

Answer Area

VM setting	Value	▼
Data drive	Local storage **Premium storage** Standard storage	
Transaction log drive	Local storage Premium storage **Standard storage**	
TempDB drive	Local storage **Premium storage** Standard storage	
VM size	**A3** D3 DS3	

Explanation:

Data drive: Premium Storage
Transaction log drive: Standard Storage
TempDB drive: Premium Storage
Note: A standard disk is expected to handle 500 IOPS or 60MB/s.
A P10 Premium disk is expected to handle 500 IOPS.
A P20 Premium disk is expected to handle 2300 IOPS.
A P30 Premium disk is expected to handle 5000 IOPS.
VM size: A3
Max data disk throughput is 8x500 IOPS
References:
https://docs.microsoft.com/en-us/azure/virtual-machines/virtual-machines-windows-sizes

Question: 9

You plan to migrate a database To Microsoft Azure SQL Database. The database requires 500 gigabytes (GB) of storage.
The database must support 50 concurrent logins. You must minimize the cost associated with hosting the database.
You need to create the database.
Which pricing tier should you use?

A. Standard S3 pricing tier
B. Premium P2tier
C. Standard S2 pricing tier
D. Premium P1 tier

Answer: D

Explanation:
For a database size of 500 GB the Premium tier is required.
Both P1 and P2 are adequate. P1 is preferred as it is cheaper.
Note:

Premium service tier

Service tier	P1	P2	P4	P6	P11	P15
Max DTUs	125	250	500	1000	1750	4000
Max database size*	500 GB	500 GB	500 GB	500 GB	1 TB	1 TB
Max in-memory OLTP storage	1 GB	2 GB	4 GB	8 GB	14 GB	32 GB
Max concurrent workers	200	400	800	1600	2400	6400
Max concurrent logins	200	400	800	1600	2400	6400
Max concurrent sessions	30000	30000	30000	30000	30000	30000

Question: 10

HOTSPOT
You need to ensure that a user named Admin2 can manage logins.
How should you complete the Transact-SQL statements? To answer, select the appropriate Transact-SQL segments in the answer area.
Answer Area

▼	Admin2 WITH password = 'Pa$$w0rd';
CREATE USER	
ALTER SERVER ROLE	
CREATE LOGIN	

▼	Admin2User FROM
CREATE USER	
ALTER SERVER ROLE	
CREATE LOGIN	

▼	Admin2
WINDOWS	
EXTERNAL PROVIDER	
LOGIN	

ALTER ROLE '

▼
loginmanager
dbmanager
bd_ddladmin

Answer:
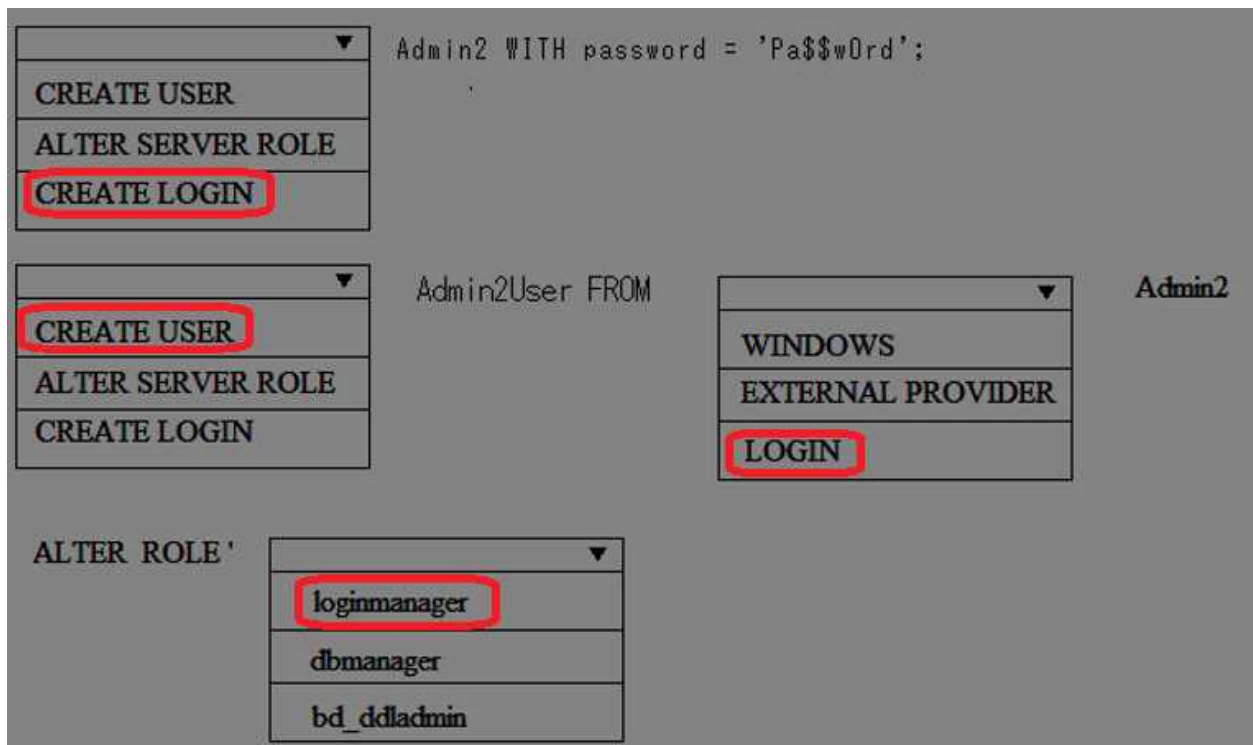
Explanation:
Step 1: CREATE LOGIN
First you need to create a login for SQL Azure, it's syntax is as follows:
CREATE LOGIN username WITH password='password';
Step 2, CREATE USER
Step 3: LOGIN
Users are created per database and are associated with logins. You must be connected to the database in where you want to create the user. In most cases, this is not the master database. Here is some sample Transact-SQL that creates a user:
CREATE USER readonlyuser FROM LOGIN readonlylogin;
Step 4: loginmanager
Members of the loginmanager role can create new logins in the master database.
References:
https://azure.microsoft.com/en-us/blog/adding-users-to-your-sql-azure-database/
https://docs.microsoft.com/en-us/azure/sql-database/sql-database-manage-logins