

Exam Questions 70-764

Administering a SQL Database Infrastructure (beta)

<https://www.2passeasy.com/dumps/70-764/>



NEW QUESTION 1

- (Exam Topic 1)

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.

A company has an on-premises Microsoft SQL Server environment and Microsoft Azure SQL Database instances. The environment hosts a customer database named DB1.

Customers connect to hosted database instances by using line-of-business applications. Developers connect by using SQL Server Management Studio (SSMS).

You need to grant the developers permission to alter views for DB1 while following the principle of least privilege.

Which permission should you grant?

- A. DDLAdmin
- B. db_datawriter
- C. dbcreator
- D. dbo
- E. View Database State
- F. View Server State
- G. View Definition
- H. sysadmin

Answer: A

Explanation:

To execute ALTER VIEW, at a minimum, ALTER permission on OBJECT is required.

Members of the db_ddladmin fixed database role can run any Data Definition Language (DDL) command in a database.

References: [https://technet.microsoft.com/en-us/library/ms190667\(v=sql.90\).aspx](https://technet.microsoft.com/en-us/library/ms190667(v=sql.90).aspx)

NEW QUESTION 2

- (Exam Topic 1)

You have a database that stores information for a shipping company. You create a table named Customers by running the following Transact-SQL statement.

(Line numbers are included for reference only.)

```
01 CREATE TABLE dbo.Customers (  
02     customerId int,  
03     customerName varchar(200),  
04     salesPerson varchar(20)  
05 )  
06 CREATE FUNCTION fn_securitypredicateSalesPerson (@salesPerson sysname)  
07  
08 AS  
09 RETURN SELECT 1 AS [fn_securityPredicateOrder_result]  
10 FROM dbo.Customers  
11 WHERE @salesPerson = user_name()
```

You need to ensure that salespeople can view data only for the customers that are assigned to them. Which Transact-SQL segment should you insert at line 07?

- A. RETURNS varchar(20)WITH Schemabinding
- B. RETURNS dbo.CustomersORDER BY @salesPerson
- C. RETURNS tableORDER BY @salesPerson
- D. RETURNS tableWITH Schemabinding

Answer: D

Explanation:

The return value can either be a scalar (single) value or a table.

SELECT 1 just selects a 1 for every row, of course. What it's used for in this case is testing whether any rows exist that match the criteria: if a row exists that matches the WHERE clause, then it returns 1, otherwise it returns nothing.

Specify the WITH SCHEMABINDING clause when you are creating the function. This ensures that the objects referenced in the function definition cannot be modified unless the function is also modified.

References: <https://docs.microsoft.com/en-us/sql/t-sql/statements/create-function-transact-sql>

NEW QUESTION 3

- (Exam Topic 1)

Note: This question is part of a series of question that present the same scenario. Each question in the series contains I 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 has several Microsoft SQL Saver instance. Each instance hosts many database. You observe I/O corruption on some of the instance.

You need to perform the following actions:

- identify databases where the PAGE verity option is not set.
- Configure full page protection for the identified databases. Solution: You run the following Transact-SQL Statement:

```
SELECT NAME, page_verify_option_desc
FROM master.sys.databases
WHERE page_verify_option_desc != 'CHECKSUM'
GO
```

For each database that you identify, you run the following Transact SQL statement:

```
ALTER DATABASE <database_name>
SET PAGE_VERIFY CHECKSUM
```

Does the solution meet the goal?

- A. Yes
- B. No

Answer: A

NEW QUESTION 4

- (Exam Topic 1)

You have a database named DB1 that stores more than 700 gigabyte (GB) of data and serves millions of requests per hour.

Queries on DB1 are taking longer than normal to complete. You run the following Transact-SQL statement:

```
SELECT * FROM sys.database_query_store_options
```

You determine that the Query Store is in Read-Only mode.

You need to maximize the time that the Query Store is in Read-Write mode. Which Transact-SQL statement should you run?

- A. ALTER DATABASE DB1SET QUERY_STORE (QUERY_CAPTURE_MODE = ALL)
- B. ALTER DATABASE DB1SET QUERY_STORE (MAX_STORAGE_SIZE_MB = 50)
- C. ALTER DATABASE DB1SET QUERY_STORE (CLEANUP_POLICY = (STALE_QUERY_THRESHOLD_DAYS = 14));
- D. ALTER DATABASE DB1SET QUERY_STORE (QUERY_CAPTURE_MODE = NONE)

Answer: C

Explanation:

Stale Query Threshold (Days): Time-based cleanup policy that controls the retention period of persisted runtime statistics and inactive queries.

By default, Query Store is configured to keep the data for 30 days which may be unnecessarily long for your scenario.

Avoid keeping historical data that you do not plan to use. This will reduce changes to read-only status. The size of Query Store data as well as the time to detect and mitigate the issue will be more predictable. Use Management Studio or the following script to configure time-based cleanup policy:

```
ALTER DATABASE [QueryStoreDB]
```

```
SET QUERY_STORE (CLEANUP_POLICY = (STALE_QUERY_THRESHOLD_DAYS = 14));
```

References:

<https://docs.microsoft.com/en-us/sql/relational-databases/performance/best-practice-with-the-query-store>

NEW QUESTION 5

- (Exam Topic 1)

You administer a Microsoft SQL Server 2016 database instance.

You create a new user named UserA. You need to ensure that UserA is able to create SQL Server Agent jobs and to execute SQL Server Agent jobs.

To which role should you add UserA?

- A. Securityadmin
- B. RExecRole
- C. SQLAgentUserRole
- D. DatabaseMailUserRole

Answer: C

NEW QUESTION 6

- (Exam Topic 1)

Note: This question is part of a series of questions that use the same scenario. For your convenience, the

scenario is repeated in each question. Each question presents a different goal and answer choices, but the text of the scenario is exactly the same in each question in this series.

You are a database administrator for a company that has an on-premises Microsoft SQL Server environment and Microsoft Azure SQL Database instances. The environment hosts several customer databases, and each customer uses a dedicated instance. The environments that you manage are shown in the following table.

Customer	Cloud Type	Description
AdventureWorks Cycles	Private	The environment includes a database named Adventureworks that contains a single schema named ADVSchema. You must implement auditing for all objects in the ADVSchema schema. You must also implement auditing to record access to data that is considered sensitive by the company.
Tailspin Toys	Private	Tailspin Toys has a custom application that accesses a hosted database named TSpinDB . The application will monitor TSpinDB and capture information over time about which database objects are accessed and how frequently they are accessed.
Contoso, Ltd.	Private	The environment has a database named ConDB that was recently upgraded to Microsoft SQL Server 2016. Contoso reports that ConDB is slow to return results when the server is busy. You must modify the startup parameters to ConDB to optimize performance.
Wingtip Toys	Private	Wingtip Toys has a database named WingDB . All tables in the database have indexes. Users report system response time is slow during peak activity periods. You observe that the performance issues are related to locking. Wingtip Toys receives data updates from suppliers each week. You must implement a process for importing the data into WingDB . You must use minimal logging and minimized data loss during import process.
Wide World Importers	Public	The environment includes a database named WDWDB . Neither auditing nor statistics are configured for WDWDB . You must log any deletion of views and all database record update operations.

You need to configure monitoring for Tailspin Toys.
 In the table below, identify the monitoring tool that you must use for each activity.
 NOTE: Make only one selection in each column.

Answer Area

Monitoring option	Monitoring from application	Trend analysis
Error logs	<input type="radio"/>	<input type="radio"/>
Transact-SQL	<input type="radio"/>	<input type="radio"/>
System Monitor	<input type="radio"/>	<input type="radio"/>
Distributed Replay	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Monitoring from application: Transact-SQL
 Transact-SQL can be used to monitor a customized application. Trend analysis: System Monitor
 System Monitor can provide trend analysis. From question:

Tailspin Toys has a custom application that accesses a hosted database named TSpinDB. The application will monitor TSpinDB and capture information over time about which database objects are accessed and how frequently they are accessed.

Tailspin Toys has a custom application that accesses a hosted database named TSpinDB. The application will monitor TSpinDB and capture information over time about which database objects are accessed and how frequently they are accessed.

References:

<https://docs.microsoft.com/en-us/sql/relational-databases/performance/performance-monitoring-and-tuning-tools>

NEW QUESTION 7

- (Exam Topic 1)

You administer a Windows Azure SQL Database database named Inventory that contains a stored procedure named p_AddInventory.

Users need to be able to SELECT from all tables in the database and execute the stored procedure. You need to grant only the necessary permissions.

What should you do?

- A. Grant EXECUTE permission on p_AddInventory to all user
- B. Grant VIEW DEFINITION to all users.
- C. Grant EXECUTE permission on p_AddInventory to all user
- D. Add all users to the db_datawriter role.
- E. Add all users to the db_owner role.
- F. Grant EXECUTE permission on p_AddInventory to all user
- G. Add all users to the db_datareader role.

Answer: D

NEW QUESTION 8

- (Exam Topic 1)

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 are the database administrator for a company that hosts Microsoft SQL Server. You manage both on-premises and Microsoft Azure SQL Database environments.

You have a user database named HRDB that contains sensitive human resources data. The HRDB backup files must be encrypted.

You need to grant the correct permission to the service account that backs up the HRDB database. Which permission should you grant?

- A. DDLAdmin
- B. db_datawriter
- C. dbcreator
- D. dbo
- E. View Database State
- F. View Server State
- G. View Definition
- H. sysadmin

Answer: G

Explanation:

Restoring the encrypted backup: SQL Server restore does not require any encryption parameters to be specified during restores. It does require that the certificate or the asymmetric key used to encrypt the backup file be available on the instance that you are restoring to. The user account performing the restore must have VIEW DEFINITION permissions on the certificate or key.

References: <https://docs.microsoft.com/en-us/sql/relational-databases/backup-restore/backup-encryption>

NEW QUESTION 9

- (Exam Topic 1)

You administer a Microsoft SQL Server 2016 database.

Users report that a billing application becomes unresponsive during busy times of the day. While investigating, you notice large number of processes taking or waiting for table locks. You suspect that SQL Server is assigning stronger locks to queries.

You start a SQL Profiler trace. Which event should you select?

- A. Deadlock graph
- B. Lock: Escalation
- C. Lock: Timeout
- D. Lock: Deadlock

Answer: B

NEW QUESTION 10

- (Exam Topic 1)

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.
A company has a server that runs Microsoft SQL Server 2016 Web edition. The server has a default instance that hosts a database named DB1.
You need to ensure that you can perform auditing at the database level for DB1.
Solution: You migrate DB1 to the default instance on a server that runs Microsoft SQL Server 2016 Standard edition.
Does the solution meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

All editions of SQL Server support server level audits. All editions support database level audits beginning with SQL Server 2016 SP1. Prior to that, database level auditing was limited to Enterprise, Developer, and Evaluation editions.

References:

<https://docs.microsoft.com/en-us/sql/relational-databases/security/auditing/sql-server-audit-database-engine>

NEW QUESTION 10

- (Exam Topic 1)

You administer all the deployments of Microsoft SQL Server 2016 in your company. A database contains a large product catalog that is updated periodically. You need to be able to send the entire product catalog to all branch offices on a monthly basis. Which configuration should you use?

- A. Two servers configured in the same data center A primary server configured to perform log-shipping every 10 minutes A backup server configured as a warm standby
- B. SQL Server that includes an application database configured to perform transactional replication
- C. Two servers configured in the same data center SQL Server Availability Group configured in AsynchronousCommit Availability Mode One server configured as an Active Secondary
- D. Two servers configured in a Windows Failover Cluster in the same data center SQL Server configured as a clustered instance
- E. SQL Server that includes an application database configured to perform snapshot replication
- F. Two servers configured in different data centers SQL Server Availability Group configured in Synchronous-Commit Availability Mode One server configured as an Active Secondary
- G. Two servers configured on the same subnet SQL Server Availability Group configured in Synchronous-Commit Availability Mode
- H. Two servers configured in different data centers SQL Server Availability Group configured in AsynchronousCommit Availability Mode

Answer: E

Explanation:

Snapshot replication distributes data exactly as it appears at a specific moment in time and does not monitor for updates to the data. When synchronization occurs, the entire snapshot is generated and sent to Subscribers.

Using snapshot replication by itself is most appropriate when one or more of the following is true:

Data changes infrequently.

It is acceptable to have copies of data that are out of date with respect to the Publisher for a period of time.

Replicating small volumes of data.

A large volume of changes occurs over a short period of time.

References: <https://docs.microsoft.com/en-us/sql/relational-databases/replication/snapshot-replication>

NEW QUESTION 13

- (Exam Topic 1)

You manage a Microsoft SQL Server instance. You have a user named User1.

You need to grant the minimum permissions necessary to allow User1 to review audit logs.

For each action, which option should you use? To answer, select the appropriate options in the answer area.

Answer Area

Actions

Options

User1 server role assignment

	▼
diskadmin	
serveradmin	
securityadmin	
setupadmin	

Transact-SQL syntax

	▼
sys.server_file_audits	
sys.server_audit_specifications	
sys.server_file_permissions	
sys.server_principals	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: securityadmin

To access log files for instances of SQL Server that are online, this requires membership in the securityadmin fixed server role.

Box 2: sys.server_audit_specifications

sys.server_audit_specifications contains information about the server audit specifications in a SQL Server audit on a server instance.

NEW QUESTION 15

- (Exam Topic 1)

You deploy a Microsoft SQL Server instance to support a global sales application. The instance includes the following tables: TableA and TableB.

TableA is a partitioned table that uses an incrementing integer number for partitioning. The table has millions of rows in each partition. Most changes to the data in TableA affect recently added data. The UPDATE STATISTICS for TableA takes longer to complete than the allotted maintenance window.

Thousands of operations are performed against TableB each minute. You observe a large number of Auto Update Statistics events for TableB.

You need to address the performance issues with each table.

In the table below, identify the action that will resolve the issues for each table. NOTE: Make only one selection in each column.

Action	TableA	TableB
Run the following Transact-SQL statement: SET AUTO_UPDATE_STATISTICS_ASYNC ON	<input type="radio"/>	<input type="radio"/>
Run the following Transact-SQL statement: SET AUTO_UPDATE_STATISTICS OFF	<input type="radio"/>	<input type="radio"/>
Run the following Transact-SQL statement and then recreate all indexes and statistics using the INCREMENTAL keyword: SET AUTO_CREATE_STATISTICS on (INCREMENTAL = ON)	<input type="radio"/>	<input type="radio"/>
Run the sp_updatestats procedure instead of the following Transact-SQL statement: UPDATE STATISTICS	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Table A: Auto_update statistics off

Table A does not change much. There is no need to update the statistics on this table. Table B: SET AUTO_UPDATE_STATISTICS_ASYNC ON

You can set the database to update statistics asynchronously: ALTER DATABASE YourDBName

SET AUTO_UPDATE_STATISTICS_ASYNC ON

If you enable this option then the Query Optimizer will run the query first and update the outdated statistics afterwards. When you set this option to OFF, the Query Optimizer will update the outdated statistics before compiling the query. This option can be useful in OLTP environments

References:

<https://www.mssqltips.com/sqlservertip/2766/sql-server-auto-update-and-auto-create-statistics-options/>

NEW QUESTION 18

- (Exam Topic 1)

You administer a Microsoft SQL Server 2016 database instance.

You plan to migrate the database to Windows Azure SQL Database.

You verify that all objects contained in the database are compatible with Windows Azure SQL Database. You need to ensure that database users and required server logins are migrated to Windows Azure SQL Database.

What should you do?

- A. Use the Copy Database wizard.
- B. Back up the database from the local server and restore it to Windows Azure SQL Database.
- C. Use the Database Transfer wizard.
- D. Use SQL Server Management Studio to deploy the database to Windows Azure SQL Database.

Answer: D

NEW QUESTION 21

- (Exam Topic 1)

You administer a Microsoft SQL Server 2016 server that hosts a transactional database and a reporting database.

The transactional database is updated through a web application and is operational throughout the day. The reporting database is only updated from the transactional database.

The recovery model and backup schedule are configured as shown in the following table:

Database	Description
Transactional database	<p>Recovery model:</p> <ul style="list-style-type: none"> Full <p>Backup schedule:</p> <ul style="list-style-type: none"> Full database backup: midnight, daily Differential database backup: on the hour, every two hours starting at 02:00 hours except at 00:00 hours Log backup: every half hour, except at the times of full and differential backups
Reporting database	<p>Recovery model:</p> <ul style="list-style-type: none"> Simple <p>Backup schedule:</p> <ul style="list-style-type: none"> Full database backup: 01:00 hours daily Differential database backup: 13:00 hours daily <p>Data updates:</p> <ul style="list-style-type: none"> Changes in data are updated from the transactional database to the reporting database at 00:30 hours and at 12:30 hours The update takes 15 minutes

The differential backup of the reporting database fails. Then, the reporting database fails at 14:00 hours.

You need to ensure that the reporting database is restored. You also need to ensure that data loss is minimal.

What should you do?

- A. Restore the latest full backup, and restore the latest differential backu
- B. Then, restore the latest log backup.
- C. Perform a point-in-time restore.
- D. Restore the latest full backup.
- E. Restore the latest full backup, and restore the latest differential backu
- F. Then, restore each log backup taken before the time of failure from the most recent differential backup.
- G. Restore the latest full backu
- H. Then, restore the latest differential backup.
- I. Restore the latest full backu
- J. Then, restore each differential backup taken before the time of failurefrom the most recent full backup.
- K. Perform a page restore.
- L. Perform a partial restore.

Answer: C

Explanation:

The differential backup of the reporting database has failed, so it can't be used.

NEW QUESTION 24

- (Exam Topic 1)

You administer a Microsoft SQL Server 2016 database.

Users report that an application that accesses the database displays an error, but the error does not provide meaningful information.

No entries are found in the SQL Server log or Windows event logs related to the error. You need to identify the root cause of the issue by retrieving the error message.

What should you do?

- A. Create an Extended Events session by using the sqlserver.error_reported event.
- B. Create a SQL Profiler session to capture all ErrorLog and EventLog events.

- C. Flag all stored procedures for recompilation by using sp_recompile.
- D. Execute sp_who.

Answer: A

Explanation:

Trapping SQL Server Errors with Extended Events

One very useful usage of Extended Events is the ability to trap SQL Server error without the need to have a server trace running (which, btw, is deprecated), with the additional feature of being able to query the data as soon as it comes in. This means that we a solution to monitor and trap errors as soon as they happen can be easily created, in order to help developers to fix problems as soon as they are detected. This is really, really, really helpful especially in very big applications, where the code base is quite old and there is no-one really knowing everything of the solution.

To start a Extended Events sessions in order to trap SQL Server errors with severity greater than 10, just run the following script:

CREATE EVENT SESSION [error_trap] ON SERVER

ADD EVENT sqlserver.error_reported Etc.

References:

http://sqlblog.com/blogs/davide_mauri/archive/2013/03/17/trapping-sql-server-errors-with-extended-events.aspx

NEW QUESTION 28

- (Exam Topic 1)

You are configuring log shipping for a Microsoft SQL Server database named salesOrders. You run the following Transact-SQL script:

```
DECLARE @LS_BackupJobId AS uniqueidentifier
DECLARE @LS_PrimaryId AS uniqueidentifier
DECLARE @SP_Add_RetCode As int
EXEC @SP_Add_RetCode = master.dbo.sp_add_log_shipping_primary_database
    @database = N'salesOrders'
    ,@backup_directory = N'C:\Backup'
    ,@backup_share = N'\\localhost\Backup'
    ,@backup_job_name = N'LSBackup_salesOrders'
    ,@backup_retention_period = 4320
    ,@backup_compression = 1
    ,@backup_threshold = 60
    ,@threshold_alert_enabled = 1
    ,@history_retention_period = 5760
    ,@backup_job_id = @LS_BackupJobId OUTPUT
    ,@primary_id = @LAS_PrimaryId OUTPUT
    ,@overwrite = 1
IF (@@ERROR = 0 AND @SP_Add_RetCode = 0)
    BEGIN
        DECLARE @LS_BackUpScheduleUID As uniqueidentifier
        DECLARE @LA_BackUpScheduleID AS int
        EXEC msdb.dbo.sp_add_schedule
            @schedule_name = N'LSBackupSchedule_ADATUM-SQL11'
            ,@enabled = 1
            ,@freq_type = 4
            ,@freq_interval = 1
            ,@freq_subday_type = 4
            ,@freq_subday_interval = 15
            ,@freq_recurrence_factor = 0
            ,@active_start_date = 20160720
            ,@active_end_date = 99991231
            ,@active_start_time = 0
            ,@active_end_time = 235900
            ,@schedule_uid = @LS_BackUpScheduleUID OUTPUT
            ,@schedule_id = @LS_BackupScheduleID OUTPUT
        EXEC msdb.dbo.sp_attach_schedule
            @job_id = @LS_BackupJobId
            ,@schedule_id = @LS_BackupScheduleID
        EXEC msdb.dbo.sp_update_job
            @job_id = @LS_BackupJobId
            ,@enabled = 1
    END
EXEC master.dbo.sp_add_log_shipping_alert_job
```

You need to determine the changes that the script has on the environment.

How does the script affect the environment? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Answer Area

A dedicated file share [answer choice] used to store the backups.

▼

is

is not

A SQL Server monitor instance [answer choice] on a server named ADATUM-SQL11.

▼

runs

does not run

Backup files will be deleted after [answer choice].

▼

24 hours

48 hours

72 hours

The backup job will run every [answer choice].

▼

15 minutes

60 minutes

24 hours

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: is

The dedicated backup file share is \\localhost\Backup Box 2: does not run

The only thing with a name related to ADATM-SQL11 is the schedule name. Box 3: 72 hours

4320 minutes equals 72 hours.

Note: @backup_retention_period=] backup_retention_period

Is the length of time, in minutes, to retain the log backup file in the backup directory on the primary server. backup_retention_period is int, with no default, and cannot be NULL.

Box 4: 15 minutes.

[@freq_subday_type =] freq_subday_type

Specifies the units for freq_subday_interval. freq_subday_type is int, with a default of 0, and can be one of these values.

Here it is 4, which means minutes.

[@freq_subday_interval =] freq_subday_interval

The number of freq_subday_type periods to occur between each execution of a job. freq_subday_interval is int, with a default of 0.

Note: Interval should be longer than 10 seconds. freq_subday_interval is ignored in those cases where freq_subday_type is equal to 1.

Here it is 15. References:

<https://docs.microsoft.com/en-us/sql/relational-databases/system-stored-procedures/sp-add-schedule-transact-sql> <https://docs.microsoft.com/en-us/sql/relational-databases/system-stored-procedures/sp-add-log-shipping-primary>

NEW QUESTION 29

- (Exam Topic 1)

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 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 a database named DB1 that is 640 GB and is updated frequently.

You enabled log shipping for DB1 and configure backup and restore to occur every 30 minutes. You discover that the disks on the data server are almost full.

You need to reduce the amount of disk space used by the log shipping process.

Solution: You increase the frequency of the transaction log backups to every 10 minutes. Does this meet the goal?

- A. Yes
- B. No

Answer: B

NEW QUESTION 32

- (Exam Topic 1)

You are planning to deploy log shipping for Microsoft SQL Server and store all backups on a dedicated fileshare.

You need to configure the servers to perform each log shipping step.

Which server instance should you configure to perform each action? To answer, select the appropriate server instances in the dialog box in the answer area.

Answer Area

Action	Server instance
Complete the backup job.	<div>▼</div> <div> Primary server instance Secondary server instance Monitor server instance Backup share file server </div>
Copy the backup job.	<div>▼</div> <div> Primary server instance Secondary server instance Monitor server instance Backup share file server </div>
Restore the backup.	<div>▼</div> <div> Primary server instance Secondary server instance Monitor server instance Backup share file server </div>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Note: Before you configure log shipping, you must create a share to make the transaction log backups available to the secondary server. SQL Server Log shipping allows you to automatically send transaction log backups from a primary database on a primary server instance to one or more secondary databases on separate secondary server instances. The transaction log backups are applied to each of the secondary databases individually. An optional third server instance, known as the monitor server, records the history and status of backup and restore operations and, optionally, raises alerts if these operations fail to occur as scheduled.

Box 1: Primary server instance.

The primary server instance runs the backup job to back up the transaction log on the primary database. backup job: A SQL Server Agent job that performs the backup operation, logs history to the local server and the monitor server, and deletes old backup files and history information. When log shipping is enabled, the job category "Log Shipping Backup" is created on the primary server instance.

Box 2: Secondary server instance

Each of the three secondary server instances runs its own copy job to copy the primary log-backup file to its own local destination folder. copy job: A SQL Server Agent job that copies the backup files from the primary server to a configurable destination on the secondary server and logs history on the secondary server and the monitor server. When log shipping is enabled on a database, the job category "Log Shipping Copy" is created on each secondary server in a log shipping configuration.

Box 3: Secondary server instance.

Each secondary server instance runs its own restore job to restore the log backup from the local destination folder onto the local secondary database. restore job: A SQL Server Agent job that restores the copied backup files to the secondary databases. It logs history on the local server and the monitor server, and deletes old files and old history information. When log shipping is enabled on a database, the job category "Log Shipping Restore" is created on the secondary server instance.

References: <https://docs.microsoft.com/en-us/sql/database-engine/log-shipping/about-log-shipping-sql-server>

NEW QUESTION 34

- (Exam Topic 1)

You administer a Microsoft SQL Server 2016 server that has SQL Server Integration Services (SSIS) installed. You plan to deploy new SSIS packages to the server.

The SSIS packages use the Project Deployment Model together with parameters and Integration Services environment variables.

You need to configure the SQL Server environment to support these packages. What should you do?

- A. Create SSIS configuration files for the packages.
- B. Create an Integration Services catalog.
- C. Install Data Quality Services.
- D. Install Master Data services.

Answer: B

Explanation:

Use can use Project Deployment Model for a project, containing packages and parameters, which is deployed to the SSISDB catalog on an instance of SQL

Server.

References:

<https://docs.microsoft.com/en-us/sql/integration-services/packages/deploy-integration-services-ssis-projects-and>

NEW QUESTION 38

- (Exam Topic 1)

You create an availability group named HaContoso that has replicas named Server01/HA, Server02/HA, and Server03/HA.

Currently, Server01/HA is the primary replica.

You need to ensure that the following requirements are met:

Backup operations occur on Server02/HA.

If Server02/HA is unavailable, backup operations occur on Server03/HA.

Backup operations do not occur on Server01/HA.

How should you configure HaContoso?

- A. Set the backup preference of HaContoso to Prefer Secondar
- B. Set the backup priority of Server02/HA to20. Set the backup priority of Server03/HA to 10.
- C. Set the backup preference of HaContoso to Secondary onl
- D. Set the backup priority of Server02/HA to20. Set the backup priority of Server03/HA to 10.
- E. Set the backup preference of HaContoso to Secondary onl
- F. Set the backup priority of Server02/HA to10. Set the backup priority of Server03/HA to 20.
- G. set the exclude replica of Server01/HA to tru
- H. Set the backup priority of Server02/HA to 10. Set the backup priority of Server03/HA to 20.

Answer: B

Explanation:

Secondary only: Specifies that backups should never be performed on the primary replica. If the primary replica is the only replica online, the backup should not occur.

Backup Priority (Lowest=1, Highest=100)

Specifies your priority for performing backups on this replica relative to the other replicas in the same availability group. The value is an integer in the range of 0..100. 1 indicates the lowest priority, and 100 indicates the highest priority. If Backup Priority = 1, the availability replica would be chosen for performing backups only if no higher priority availability replicas are currently available.

References:

<https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/configure-backup-on-availab>

NEW QUESTION 40

- (Exam Topic 1)

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 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 has several Microsoft SQL Server instances, Each instance hosts many databases. You observe I/O corruption on some of the instances

You need to perform the following actions:

- Identify databases where the PAGE VERIFY option is not set
- Configure full page protection for the identified databases. Solution: You run the following Transact-SQL statement:

```
SELECT NAME, page_verify_option_desc
FROM master.sys.databases
WHERE page_verify_option_desc = 'NONE'
GO
```

For each database that you identify, you run the following Transact-SQL statement:

```
ALTER DATABASE <database_name>
SET PAGE_VERIFY TORN_PAGE_DETECTION
```

Does the solution meet the goal?

- A. Yes
- B. No

Answer: B

NEW QUESTION 45

- (Exam Topic 1)

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 observe that several indexes are fragmented. You need to rebuild the indexes.

What should you use?

- A. Activity Monitor
- B. Sp_who3 stored procedure
- C. Object Explorer in the SQL Server Management Studio (SSMS)
- D. SQL Server Data Collector
- E. SQL Server Data Tools (SSDT)
- F. SQL Server Configuration Manager

Answer: C

Explanation:

How to: Rebuild an Index (SQL Server Management Studio) To rebuild an index

In Object Explorer, connect to an instance of the SQL Server Database Engine and then expand that instance.

Expand Databases, expand the database that contains the table with the specified index, and then expand Tables.

Expand the table in which the index belongs and then expand Indexes.

Right-click the index to rebuild and then click Rebuild.

To start the rebuild operation, click OK.

References: [https://technet.microsoft.com/en-us/library/ms187874\(v=sql.105\).aspx](https://technet.microsoft.com/en-us/library/ms187874(v=sql.105).aspx)

NEW QUESTION 46

- (Exam Topic 1)

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 are the database administrator for a company that hosts Microsoft SQL Server. You manage both on-premises and Microsoft Azure SQL Database environments.

You plan to delegate encryption operations to a user.

You need to grant the user permission to implement cell-level encryption while following the principle of least privilege.

Which permission should you grant?

- A. DDLAdmin
- B. db_datawriter
- C. dbcreator
- D. dbo
- E. View Database State
- F. View ServerState
- G. View Definition
- H. sysadmin

Answer: G

Explanation:

The following permissions are necessary to perform column-level encryption, or cell-level encryption.

CONTROL permission on the database.

CREATE CERTIFICATE permission on the database. Only Windows logins, SQL Server logins, and application roles can own certificates. Groups and roles cannot own certificates.

ALTER permission on the table.

Some permission on the key and must not have been denied VIEW DEFINITION permission. References:

<https://docs.microsoft.com/en-us/sql/relational-databases/security/encryption/encrypt-a-column-of-data>

NEW QUESTION 51

- (Exam Topic 1)

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 need to examine information about logins, CPU times, and Disk I/O on a particular database in Microsoft Azure.

What should you use?

- A. Activity Monitor
- B. Sp_who3
- C. SQL Server Management Studio (SSMS) Object Explorer
- D. SQL Server Data Collector
- E. SQL Server Data Tools (SSDT)
- F. SQL Server Configuration Manager

Answer: A

Explanation:

Activity Monitor displays information about SQL Server processes and how these processes affect the current instance of SQL Server.

Activity Monitor is a tabbed document window with the following expandable and collapsible panes: Overview, Active User Tasks, Resource Waits, Data File I/O, and Recent Expensive Queries.

The Activity User Tasks Pane shows information for active user connections to the instance, including the following column:

* Login: The SQL Server login name under which the session is currently executing.

The Recent Expensive Queries Pane shows information about the most expensive queries that have been run on the instance over the last 30 seconds, including the following column:

* CPU (ms/sec): The rate of CPU use by the query

References: [https://technet.microsoft.com/en-us/library/cc879320\(v=sql.105\).aspx](https://technet.microsoft.com/en-us/library/cc879320(v=sql.105).aspx)

NEW QUESTION 53

- (Exam Topic 2)

Overview

Application Overview

Contoso, Ltd., is the developer of an enterprise resource planning (ERP) application.

Contoso is designing a new version of the ERP application. The previous version of the ERP application used SQL Server 2008 R2.

The new version will use SQL Server 2014.

The ERP application relies on an import process to load supplier data. The import process updates thousands of rows simultaneously, requires exclusive access to the database, and runs daily.

You receive several support calls reporting unexpected behavior in the ERP application. After analyzing the calls, you conclude that users made changes directly to the tables in the database.

Tables

The current database schema contains a table named OrderDetails.

The OrderDetails table contains information about the items sold for each purchase order. OrderDetails stores the product ID, quantities, and discounts applied to

each product in a purchase order.

The product price is stored in a table named Products. The Products table was defined by using the SQL_Latin1_General_CP1_CI_AS collation.

A column named ProductName was created by using the varchar data type. The database contains a table named Orders.

Orders contains all of the purchase orders from the last 12 months. Purchase orders that are older than 12 months are stored in a table named OrdersOld.

The previous version of the ERP application relied on table-level security. Stored Procedures

The current version of the database contains stored procedures that change two tables. The following shows the relevant portions of the two stored procedures:

```
CREATE PROC Sales.Proc1
AS
BEGIN TRAN
UPDATE Sales.Table1 ...
UPDATE Sales.Table2 ...
COMMIT TRAN
GO
```

```
CREATE PROC Sales.Proc2
AS
BEGIN TRAN
UPDATE Sales.Table2 ...
UPDATE Sales.Table1 ...
COMMIT TRAN
GO
```

Customer Problems Installation Issues

The current version of the ERP application requires that several SQL Server logins be set up to function correctly. Most customers set up the ERP application in multiple locations and must create logins multiple times.

Index Fragmentation Issues

Customers discover that clustered indexes often are fragmented. To resolve this issue, the customers defragment the indexes more frequently. All of the tables affected by fragmentation have the following columns that are used as the clustered index key:

Column	Data type
id	uniquedentifier
lastModified	datetime
modifiedBy	Varchar(200)

Backup Issues

Customers who have large amounts of historical purchase order data report that backup time is unacceptable. Search Issues

Users report that when they search product names, the search results exclude product names that contain accents, unless the search string includes the accent.

Missing Data Issues

Customers report that when they make a price change in the Products table, they cannot retrieve the price that the item was sold for in previous orders.

Query Performance Issues

Customers report that query performance degrades very quickly. Additionally, the customers report that users cannot run queries when SQL Server runs maintenance tasks. Import Issues During the monthly import process, database administrators receive many supports call from users who report that they cannot access the supplier data. The database administrators want to reduce the amount of time required to import the data.

Design Requirements

File Storage Requirements

The ERP database stores scanned documents that are larger than 2 MB. These files must only be accessed through the ERP application. File access must have the best possible read and write performance.

Data Recovery Requirements

If the import process fails, the database must be returned to its prior state immediately. Security Requirements

You must provide users with the ability to execute functions within the ERP application, without having direct access to the underlying tables.

Concurrency Requirements

You must reduce the likelihood of deadlocks occurring when Sales.Prod and Sales.Proc2 execute. You need to recommend a solution that resolves the missing data issue.

The solution must minimize the amount of development effort. What should you recommend?

- A. Denormalize the Products table.
- B. Denormalize the OrderDetails table.
- C. Normalize the OrderDetails table.
- D. Normalize the Products table.

Answer: D

Explanation:

- Scenario:

- Missing Data Issues

Customers report that when they make a price change in the Products table, they cannot retrieve the price that the item was sold for in previous orders.

- The current database schema contains a table named OrderDetails. The OrderDetails table contains information about the items sold for each purchase order. OrderDetails stores the product ID, quantities, and discounts applied to each product in a purchase order.

The product price is stored in a table named Products.

NEW QUESTION 54

- (Exam Topic 2)

You plan to deploy SQL Server 2014.

You identify the following security requirements for the deployment:

Users must be prevented from intercepting and reading the T-SQL statements sent from the clients to the database engine.

All database files and log files must be encrypted if the files are moved to another disk on another server.

You need to identify which feature meets each security requirement. The solution must minimize processor overhead.

Which features should you identify? To answer, drag the appropriate feature to the correct requirement in the answer area.

Features	Answer Area
Encrypting File System (EFS)	Users must be prevented from intercepting and reading the T-SQL statements sent from the clients to the database engine. <div>Feature</div>
Policy-Based Management	
Secure Socket Layer (SSL)	All database files and log files must be encrypted if the files are moved to another disk on another server. <div>Feature</div>
Transparent Data Encryption (TDE)	
Windows BitLocker Drive Encryption (BitLocker)	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

- Secure Sockets Layer (SSL) encryption enables transmitting encrypted data across the network between an instance of SQL Server and a client application.
- Transparent data encryption (TDE) performs real-time I/O encryption and decryption of the data and log files.

NEW QUESTION 55

- (Exam Topic 2)

Overview

General Overview

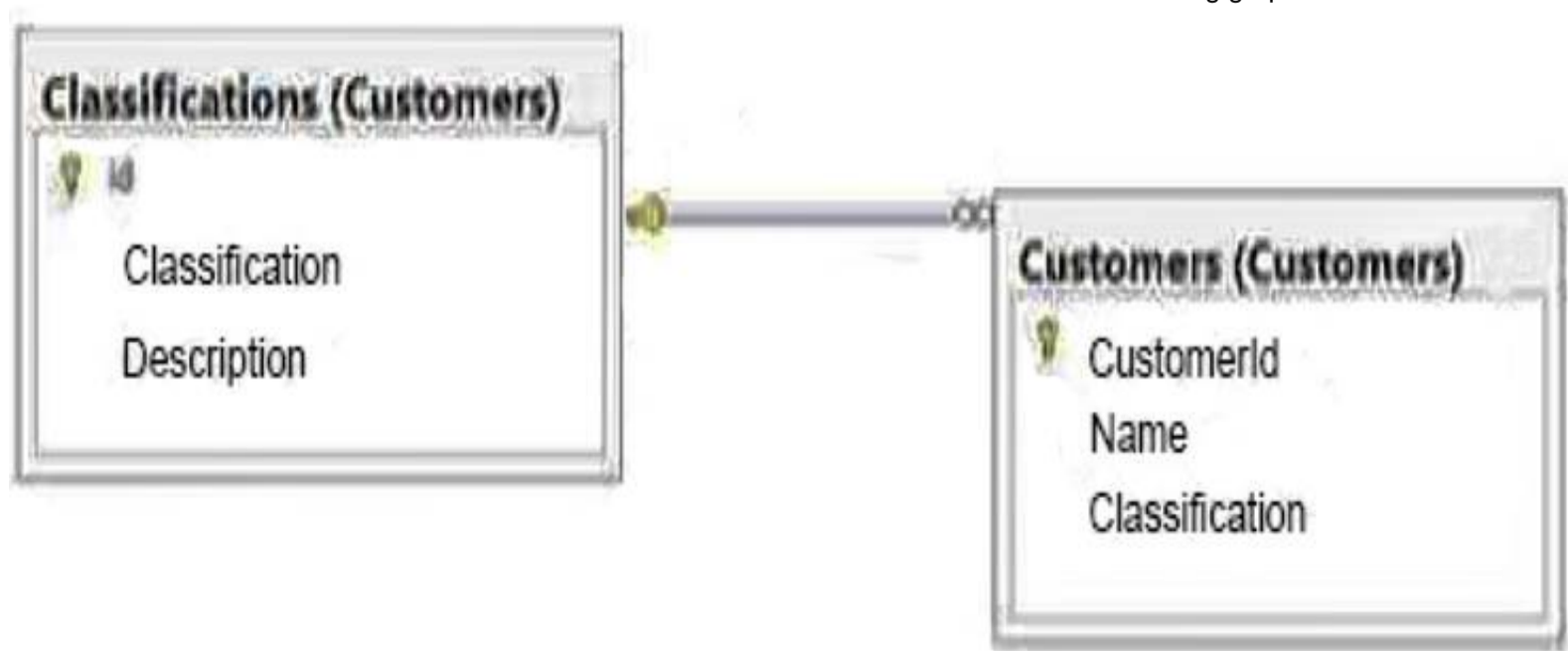
ADatum Corporation has offices in Miami and Montreal.

The network contains a single Active Directory forest named adatum.com. The offices connect to each other by using a WAN link that has 5-ms latency. A. Datum standardizes its database platform by using SQL Server 2014 Enterprise edition.

Databases

Each office contains databases named Sales, Inventory, Customers, Products, Personnel, and Dev. Servers and databases are managed by a team of database administrators. Currently, all of the database administrators have the same level of permissions on all of the servers and all of the databases.

The Customers database contains two tables named Customers and Classifications. The following graphic shows the relevant portions of the tables:



The following table shows the current data in the Classifications table:

ID	Classification	Description
1	Platinum	Yearly sales over 1,000,000
2	Gold	Yearly sales over 500,000
3	Silver	Yearly sales over 100,000

The Inventory database is updated frequently. The database is often used for reporting.

A full backup of the database currently takes three hours to complete. Stored Procedures

A stored procedure named USP_1 generates millions of rows of data for multiple reports. USP_1 combines data from five different tables from the Sales and Customers databases in a table named Table1.

After Table1 is created, the reporting process reads data from Table1 sequentially several times. After the process is complete, Table1 is deleted.

A stored procedure named USP_2 is used to generate a product list. The product list contains the names of products grouped by category.

USP_2 takes several minutes to run due to locks on the tables the procedure accesses. The locks are caused by USP_1 and USP_3.

A stored procedure named USP_3 is used to update prices. USP_3 is composed of several UPDATE statements called in sequence from within a transaction.

Currently, if one of the UPDATE statements fails, the stored procedure fails. A stored procedure named USP_4 calls stored procedures in the Sales, Customers, and Inventory databases.

The nested stored procedures read tables from the Sales, Customers, and Inventory databases. USP_4 uses an EXECUTE AS clause.

All nested stored procedures handle errors by using structured exception handling. A stored procedure named USP_5 calls several stored procedures in the same database. Security checks are performed each time USP_5 calls a stored procedure.

You suspect that the security checks are slowing down the performance of USP_5. All stored procedures accessed by user applications call nested stored procedures.

The nested stored procedures are never called directly. Design Requirements

Data Recovery

You must be able to recover data from the Inventory database if a storage failure occurs. You have a Recovery Time Objective (RTO) of 5 minutes.

You must be able to recover data from the Dev database if data is lost accidentally. You have a Recovery Point Objective (RPO) of one day.

Classification Changes

You plan to change the way customers are classified. The new classifications will have four levels based on the number of orders. Classifications may be removed or added in the future. Management requests that historical data be maintained for the previous classifications. Security A group of junior database administrators must be able to manage security for the Sales database. The junior database administrators will not have any other administrative rights. A. Datum wants to track which users run each stored procedure.

Storage

ADatum has limited storage. Whenever possible, all storage space should be minimized for all databases and all backups. Error Handling

There is currently no error handling code in any stored procedure.

You plan to log errors in called stored procedures and nested stored procedures. Nested stored procedures are never called directly.

You need to recommend a disaster recovery solution for the Dev database. What should you include in the recommendation?

- A. The simple recovery model and full backups
- B. The full recovery model, full backups, and transaction log backups
- C. The full recovery model, full backups, and differential backups
- D. The bulk-logged recovery model and full backups

Answer: A

Explanation:

Scenario:

You must be able to recover data from the Dev database if data is lost accidentally. You have a Recovery Point Objective (RPO) of one day.

- The simple recovery model provides the simplest form of backup and restore. This recovery model supports both database backups and file backups, but does not support log backups. Transaction log data is backed up only with the associated user data.

The absence of log backups simplifies managing backup and restore. However, a database can be restored only to the end of the most recent backup.

NEW QUESTION 59

- (Exam Topic 2)

Overview

General Overview

ADatum Corporation has offices in Miami and Montreal.

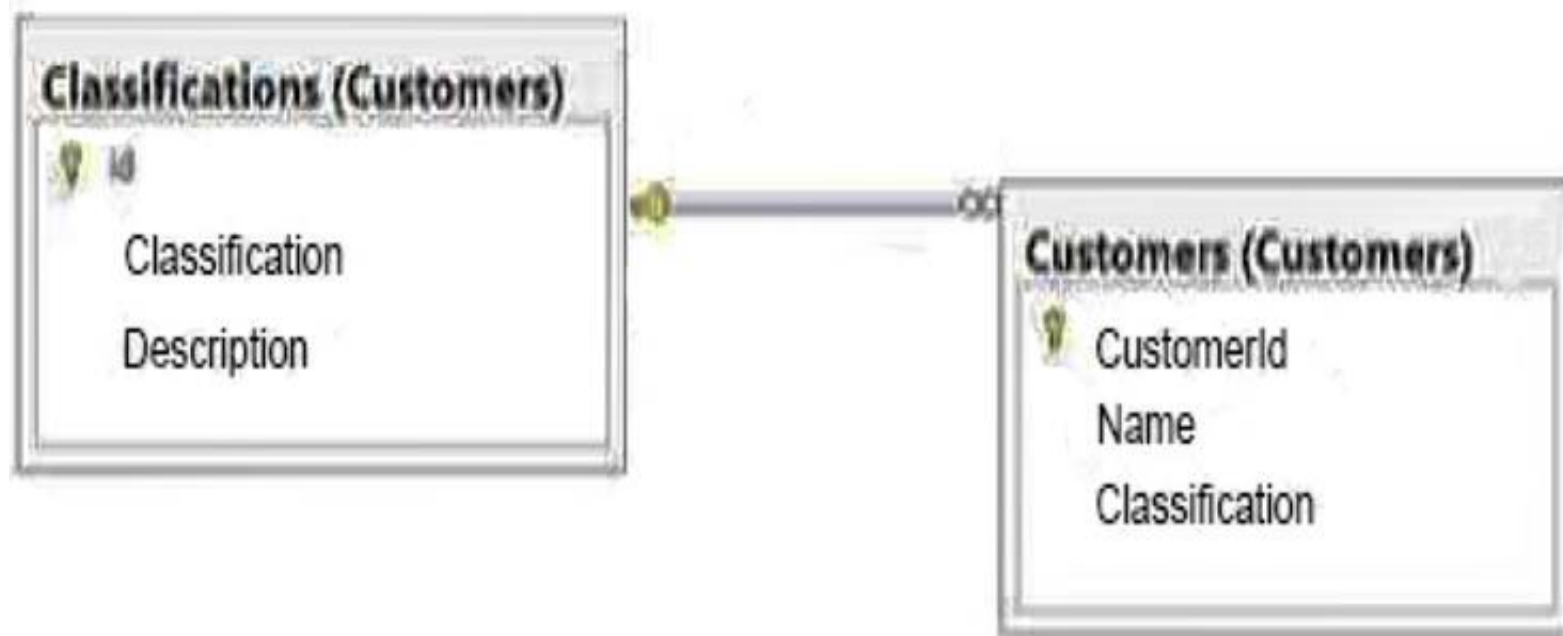
The network contains a single Active Directory forest named adatum.com. The offices connect to each other by using a WAN link that has 5-ms latency. A. Datum standardizes its database platform by using SQL Server 2014 Enterprise edition.

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Each office contains databases named Sales, Inventory, Customers, Products, Personnel, and Dev.

Servers and databases are managed by a team of database administrators. Currently, all of the database administrators have the same level of permissions on all of the servers and all of the databases.

The Customers database contains two tables named Customers and Classifications. The following graphic shows the relevant portions of the tables:



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The Inventory database is updated frequently. The database is often used for reporting.

A full backup of the database currently takes three hours to complete. Stored Procedures

A stored procedure named USP_1 generates millions of rows of data for multiple reports. USP_1 combines data from five different tables from the Sales and Customers databases in a table named Table1.

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A stored procedure named USP_3 is used to update prices. USP_3 is composed of several UPDATE statements called in sequence from within a transaction.

Currently, if one of the UPDATE statements fails, the stored procedure fails. A stored procedure named USP_4 calls stored procedures in the Sales, Customers, and Inventory databases.

The nested stored procedures read tables from the Sales, Customers, and Inventory databases. USP_4 uses an EXECUTE AS clause.

All nested stored procedures handle errors by using structured exception handling. A stored procedure named USP_5 calls several stored procedures in the same database. Security checks are performed each time USP_5 calls a stored procedure.

You suspect that the security checks are slowing down the performance of USP_5. All stored procedures accessed by user applications call nested stored procedures.

The nested stored procedures are never called directly. Design Requirements

Data Recovery

You must be able to recover data from the Inventory database if a storage failure occurs. You have a Recovery Time Objective (RTO) of 5 minutes.

You must be able to recover data from the Dev database if data is lost accidentally. You have a Recovery Point Objective (RPO) of one day.

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You plan to change the way customers are classified. The new classifications will have four levels based on the number of orders. Classifications may be removed or added in the future. Management requests that historical data be maintained for the previous classifications. Security A group of junior database administrators must be able to manage security for the Sales database. The junior database administrators will not have any other administrative rights. A. Datum wants to track which users run each stored procedure.

Storage

ADatum has limited storage. Whenever possible, all storage space should be minimized for all databases and all backups.

Error Handling

There is currently no error handling code in any stored procedure.

You plan to log errors in called stored procedures and nested stored procedures. Nested stored procedures are never called directly.

You need to recommend a change to USP_3 to ensure that the procedure continues to execute even if one of the UPDATE statements fails.

Which change should you recommend?

- A. Set the XACT_ABORT option to off.
- B. Set the XACT_ABORT option to on.
- C. Set the IMPLICIT_TRANSACTIONS option to off.
- D. Set the IMPLICIT_TRANSACTIONS option to on.

Answer: A

Explanation:

- Scenario: A stored procedure named USP_3 is used to update prices. USP_3 is composed of several UPDATE statements called in sequence from within a transaction. Currently, if one of the UPDATE statements fails, the stored procedure continues to execute.

- When SET XACT_ABORT is OFF, in some cases only the Transact-SQL statement that raised the error is rolled back and the transaction continues processing.

NEW QUESTION 63

- (Exam Topic 2)

You plan to deploy a database by using SQL Server 2014. Your company identifies the following requirements for the database:

The name of all stored procedures must start with "usp_"always.

All distribution statistics must be updated daily

You need to identify which feature must be used to meet each database requirement.

Which features should you identify? To answer, drag the appropriate feature to the correct database requirement in the answer area.

Features	Answer Area
Change data capture	The name of all stored procedures must start with "usp_" always.
The CHECK constraint	
Extended Event	All distribution statistics must be updated daily.
A maintenance plan	
Policy-Based Management	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

- Policy-Based Management Each Stored Procedure that are created and that will be created has to have prefix "USP_".
- Maintenance plans create a workflow of the tasks required to make sure that your database is optimized, regularly backed up, and free of inconsistencies.

NEW QUESTION 65

- (Exam Topic 2)

Overview

You are a database administrator for a company named Litware, Inc.

Litware is a book publishing house. Litware has a main office and a branch office.

You are designing the database infrastructure to support a new web-based application that is being developed. The web application will be accessed at www.litwareinc.com. Both internal employees and external partners will use the application.

You have an existing desktop application that uses a SQL Server 2008 database named App1_DB. App1_DB will remain in production.

Requirements Planned Changes

You plan to deploy a SQL Server 2014 instance that will contain two databases named Database1 and Database2.

All database files will be stored in a highly available SAN. Database1 will contain two tables named Orders and OrderDetails.

Database1 will also contain a stored procedure named usp_UpdateOrderDetails.

The stored procedure is used to update order information. The stored procedure queries the Orders table twice each time the procedure executes.

The rows returned from the first query must be returned on the second query unchanged along with any rows added to the table between the two read operations.

Database1 will contain several queries that access data in the Database2 tables. Database2 will contain a table named Inventory.

Inventory will contain over 100 GB of data.

The Inventory table will have two indexes: a clustered index on the primary key and a nonclustered index. The column that is used as the primary key will use the identity property.

Database2 will contain a stored procedure named usp_UpdateInventory. usp_UpdateInventory will manipulate a table that contains a self-join that has an unlimited number of hierarchies. All data in Database2 is recreated each day and does not change until the next data creation process. Data from Database2 will be accessed periodically by an external application named Application1. The data from Database2 will be sent to a database named Appl_Dbl as soon as changes occur to the data in Database2. Litware plans to use offsite storage for all SQL Server 2014 backups.

Business Requirements

You have the following requirements:

Costs for new licenses must be minimized.

Private information that is accessed by Application must be stored in a secure format.

Development effort must be minimized whenever possible.

The storage requirements for databases must be minimized.

System administrators must be able to run real-time reports on disk usage.

The databases must be available if the SQL Server service fails.

Database administrators must receive a detailed report that contains allocation errors and data corruption.

Application developers must be denied direct access to the database tables. Applications must be denied direct access to the tables.

You must encrypt the backup files to meet regulatory compliance requirements.

The encryption strategy must minimize changes to the databases and to the applications. You need to recommend a database reporting solution that meets the business requirements. What should you include in the recommendation?

- A. Data collection
- B. Performance Monitor
- C. A maintenance plan
- D. A dynamic management view

Answer: A

Explanation:

1. Scenario: System administrators must be able to run real-time reports on disk usage.

2. The data collector provides an historical report for each of the System Data collection sets. Each of the following reports use data that is stored in the management data warehouse:

You can use these reports to obtain information for monitoring system capacity and troubleshooting system performance.

NEW QUESTION 69

- (Exam Topic 2)

Overview

Application Overview

Contoso, Ltd., is the developer of an enterprise resource planning (ERP) application.

Contoso is designing a new version of the ERP application. The previous version of the ERP application used SQL Server 2008 R2.

The new version will use SQL Server 2014.

The ERP application relies on an import process to load supplier data. The import process updates thousands of rows simultaneously, requires exclusive access to the database, and runs daily.

You receive several support calls reporting unexpected behavior in the ERP application. After analyzing the calls, you conclude that users made changes directly to the tables in the database.

Tables

The current database schema contains a table named OrderDetails.

The OrderDetails table contains information about the items sold for each purchase order. OrderDetails stores the product ID, quantities, and discounts applied to each product in a purchase order.

The product price is stored in a table named Products. The Products table was defined by using the SQL_Latin1_General_CP1_CI_AS collation.

A column named ProductName was created by using the varchar data type. The database contains a table named Orders.

Orders contains all of the purchase orders from the last 12 months. Purchase orders that are older than 12 months are stored in a table named OrdersOld.

The previous version of the ERP application relied on table-level security. Stored Procedures

The current version of the database contains stored procedures that change two tables. The following shows the relevant portions of the two stored procedures:

```
CREATE PROC Sales.Proc1
AS
BEGIN TRAN
UPDATE Sales.Table1 ...
UPDATE Sales.Table2 ...
COMMIT TRAN
GO
```

```
CREATE PROC Sales.Proc2
AS
BEGIN TRAN
UPDATE Sales.Table2 ...
UPDATE Sales.Table1 ...
COMMIT TRAN
GO
```

Customer Problems Installation Issues

The current version of the ERP application requires that several SQL Server logins be set up to function correctly. Most customers set up the ERP application in multiple locations and must create logins multiple times.

Index Fragmentation Issues

Customers discover that clustered indexes often are fragmented. To resolve this issue, the customers defragment the indexes more frequently. All of the tables affected by fragmentation have the following columns that are used as the clustered index key:

Column	Data type
id	uniquedentifier
lastModified	datetime
modifiedBy	Varchar(200)

Backup Issues

Customers who have large amounts of historical purchase order data report that backup time is unacceptable. Search Issues

Users report that when they search product names, the search results exclude product names that contain

accents, unless the search string includes the accent. Missing Data Issues

Customers report that when they make a price change in the Products table, they cannot retrieve the price that the item was sold for in previous orders.

Query Performance Issues

Customers report that query performance degrades very quickly. Additionally, the customers report that users cannot run queries when SQL Server runs maintenance tasks. Import Issues During the monthly import process, database administrators receive many supports call from users who report that they cannot access the supplier data. The database administrators want to reduce the amount of time required to import the data.

Design Requirements

File Storage Requirements

The ERP database stores scanned documents that are larger than 2 MB. These files must only be accessed through the ERP application. File access must have the best possible read and write performance.

Data Recovery Requirements

If the import process fails, the database must be returned to its prior state immediately. Security Requirements

You must provide users with the ability to execute functions within the ERP application, without having direct access to the underlying tables.

Concurrency Requirements

You must reduce the likelihood of deadlocks occurring when Sales.Prod and Sales.Proc2 execute. You need to recommend a solution that addresses the installation issues.

What should you include in the recommendation?

A. Windows logins

B. Server roles

- C. Contained users
- D. Database roles

Answer: C

Explanation:

- Scenario: Installation Issues The current version of the ERP application requires that several SQL Server logins be set up to function correctly. Most customers set up the ERP application in multiple locations and must create logins multiple times.
- Creating contained users enables the user to connect directly to the contained database. This is a very significant feature in high availability and disaster recovery scenarios such as in an AlwaysOn solution. If the users are contained users, in case of failover, people would be able to connect to the secondary without creating logins on the instance hosting the secondary. This provides an immediate benefit.

NEW QUESTION 74

- (Exam Topic 2)

You administer a Microsoft SQL Server 2016 instance.

You need to stop a blocking process that has an SPID of 64 without stopping other processes. What should you do?

- A. Execute the following Transact-SQL statement: EXECUTE sp_KillSPID 64
- B. Restart the SQL Server service.
- C. Execute the following Transact-SQL statement: KILL 64
- D. Execute the following Transact-SQL statement: ALTER SESSION KILL '64'

Answer: C

Explanation:

KILL can be used to terminate a normal connection, which internally terminates the transactions that are associated with the specified session ID.

References:

<http://msdn.microsoft.com/en-us/library/ms173730.aspx>

NEW QUESTION 75

- (Exam Topic 2)

Overview

You are a database administrator for a company named Litware, Inc.

Litware is a book publishing house. Litware has a main office and a branch office.

You are designing the database infrastructure to support a new web-based application that is being developed. The web application will be accessed at www.litwareinc.com. Both internal employees and external partners will use the application.

You have an existing desktop application that uses a SQL Server 2008 database named App1_DB. App1_DB will remain in production.

Requirements Planned Changes

You plan to deploy a SQL Server 2014 instance that will contain two databases named Database1 and Database2.

All database files will be stored in a highly available SAN. Database1 will contain two tables named Orders and OrderDetails.

Database1 will also contain a stored procedure named usp_UpdateOrderDetails.

The stored procedure is used to update order information. The stored procedure queries the Orders table twice each time the procedure executes.

The rows returned from the first query must be returned on the second query unchanged along with any rows added to the table between the two read operations.

Database1 will contain several queries that access data in the Database2 tables. Database2 will contain a table named Inventory.

Inventory will contain over 100 GB of data.

The Inventory table will have two indexes: a clustered index on the primary key and a nonclustered index. The column that is used as the primary key will use the identity property.

Database2 will contain a stored procedure named usp_UpdateInventory. usp_UpdateInventory will manipulate a table that contains a self-join that has an unlimited number of hierarchies. All data in Database2 is recreated each day and does not change until the next data creation process. Data from Database2 will be accessed periodically by an external application named Application1. The data from Database2 will be sent to a database named Appl_Db1 as soon as changes occur to the data in Database2. Litware plans to use offsite storage for all SQL Server 2014 backups.

Business Requirements

You have the following requirements:

Costs for new licenses must be minimized.

Private information that is accessed by Application must be stored in a secure format.

Development effort must be minimized whenever possible.

The storage requirements for databases must be minimized.

System administrators must be able to run real-time reports on disk usage.

The databases must be available if the SQL Server service fails.

Database administrators must receive a detailed report that contains allocation errors and data corruption.

Application developers must be denied direct access to the database tables. Applications must be denied direct access to the tables.

You must encrypt the backup files to meet regulatory compliance requirements.

The encryption strategy must minimize changes to the databases and to the applications.

You need to recommend a feature to support your backup solution. What should you include in the recommendation?

- A. Transparent Data Encryption (TDE)
- B. Column-level encryption
- C. An NTFS file permission
- D. A Secure Sockets Layer (SSL)

Answer: A

Explanation:

- Scenario: You must encrypt the backup files to meet regulatory compliance requirements. The encryption strategy must minimize changes to the databases and to the applications.

- Transparent data encryption (TDE) performs real-time I/O encryption and decryption of the data and log files. The encryption uses a database encryption key (DEK), which is stored in the database boot record for availability during recovery.

Transparent Data Encryption (TDE)

NEW QUESTION 78

- (Exam Topic 2)

You have a SQL Server 2014 environment That contains 20 servers.

The corporate security policy states that all SQL Server 2014 instances must meet specific security standards. You need to recommend a management strategy for the SQL Server 2014 servers.

What should you include in the recommendation? More than one answer choice may achieve the goal. Select the BEST answer.

- A. Multi server jobs
- B. Policy-Based Management
- C. Common criteria compliance
- D. Maintenance plans

Answer: B

Explanation:

Policy-Based Management is a system for managing one or more instances of SQL Server. When SQL Server policy administrators use Policy-Based Management, they use SQL Server Management Studio to create policies to manage entities on the server, such as the instance of SQL Server, databases, or other SQL Server objects.

NEW QUESTION 79

- (Exam Topic 2)

You administer a Microsoft SQL Server 2016 database named Contoso on a server named Server01. You need to be notified immediately when fatal errors occur on Server01.

What should you create?

- A. an Alert
- B. a Server Audit Specification
- C. an Extended Event session
- D. a Resource Pool
- E. a Policy
- F. a SQL Profiler Trace
- G. a Database Audit Specification

Answer: A

Explanation:

References:

<http://www.sqlskills.com/blogs/glenn/creating-sql-server-agent-alerts-for-critical-errors/>

NEW QUESTION 82

- (Exam Topic 2)

You are implementing a SQL Server 2016 five-node failover cluster. You need to choose a quorum configuration.

Which configuration should you use?

- A. Distributed File System (DFS)
- B. Node Majority
- C. Cluster Shared Volume (CSV)
- D. Node and Disk Majority

Answer: D

Explanation:

Node and Disk Majority (recommended for clusters with an even number of nodes)

NEW QUESTION 84

- (Exam Topic 2)

Overview

Application Overview

Contoso, Ltd., is the developer of an enterprise resource planning (ERP) application.

Contoso is designing a new version of the ERP application. The previous version of the ERP application used SQL Server 2008 R2.

The new version will use SQL Server 2014.

The ERP application relies on an import process to load supplier data. The import process updates thousands of rows simultaneously, requires exclusive access to the database, and runs daily.

You receive several support calls reporting unexpected behavior in the ERP application. After analyzing the calls, you conclude that users made changes directly to the tables in the database.

Tables

The current database schema contains a table named OrderDetails.

The OrderDetails table contains information about the items sold for each purchase order. OrderDetails stores the product ID, quantities, and discounts applied to each product in a purchase order.

The product price is stored in a table named Products. The Products table was defined by using the SQL_Latin1_General_CP1_CI_AS collation.

A column named ProductName was created by using the varchar data type. The database contains a table named Orders.

Orders contains all of the purchase orders from the last 12 months. Purchase orders that are older than 12 months are stored in a table named OrdersOld.

The previous version of the ERP application relied on table-level security. Stored Procedures

The current version of the database contains stored procedures that change two tables. The following shows the relevant portions of the two stored procedures:

```
CREATE PROC Sales.Proc1
AS
BEGIN TRAN
UPDATE Sales.Table1 ...
UPDATE Sales.Table2 ...
COMMIT TRAN
GO

CREATE PROC Sales.Proc2
AS
BEGIN TRAN
UPDATE Sales.Table2 ...
UPDATE Sales.Table1 ...
COMMIT TRAN
GO
```

Customer Problems Installation Issues

The current version of the ERP application requires that several SQL Server logins be set up to function correctly. Most customers set up the ERP application in multiple locations and must create logins multiple times.

Index Fragmentation Issues

Customers discover that clustered indexes often are fragmented. To resolve this issue, the customers defragment the indexes more frequently. All of the tables affected by fragmentation have the following columns that are used as the clustered index key:

Column	Data type
id	uniquedentifier
lastModified	datetime
modifiedBy	Varchar(200)

Backup Issues

Customers who have large amounts of historical purchase order data report that backup time is unacceptable. Search Issues

Users report that when they search product names, the search results exclude product names that contain accents, unless the search string includes the accent.

Missing Data Issues

Customers report that when they make a price change in the Products table, they cannot retrieve the price that the item was sold for in previous orders.

Query Performance Issues

Customers report that query performance degrades very quickly. Additionally, the customers report that users cannot run queries when SQL Server runs maintenance tasks. Import Issues During the monthly import process, database administrators receive many supports call from users who report that they cannot access the supplier data. The database administrators want to reduce the amount of time required to import the data.

Design Requirements

File Storage Requirements

The ERP database stores scanned documents that are larger than 2 MB. These files must only be accessed through the ERP application. File access must have the best possible read and write performance.

Data Recovery Requirements

If the import process fails, the database must be returned to its prior state immediately. Security Requirements

You must provide users with the ability to execute functions within the ERP application, without having direct access to the underlying tables.

Concurrency Requirements

You must reduce the likelihood of deadlocks occurring when Sales.Prod and Sales.Proc2 execute.

You need to recommend a solution that addresses the security requirement. What should you recommend?

- A. Revoke user permissions on the table
- B. Create stored procedures that manipulate dat
- C. Grant the users the EXECUTE permission on the stored procedures.
- D. Grant the users the SELECT permission on the table
- E. Create views that retrieve data from the tables.Grant the users the SELECT permission on the views.
- F. Deny the users SELECT permission on the table
- G. Create views that retrieve data from the table
- H. Grant the users the SELECT permission on the views.
- I. Deny the users the SELECT permission on the table
- J. Create stored procedures that manipulate data.Grant the users the EXECUTE permission on the stored procedures.

Answer: C

Explanation:

- Security Requirements

You must provide users with the ability to execute functions within the ERP application, without having direct access to the underlying tables.

NEW QUESTION 89

- (Exam Topic 2)

Which feature should you enable and configure so session requests addressed to a specific instance can be allocated different processor resources based on

session request properties?

- A. Resource Governor
- B. Windows System Resource Manager
- C. Processor affinity
- D. I/O affinity

Answer: A

Explanation:

Resource Governor enables you to allocate session requests to different resources based on the characteristics of the session request properties.

References: <https://docs.microsoft.com/en-us/sql/relational-databases/resource-governor/resource-governor>

NEW QUESTION 94

- (Exam Topic 2)

You are creating a database that will store usernames and passwords for an application. You need to recommend a solution to store the passwords in the database.

What should you recommend? More than one answer choice may achieve the goal. Select the BEST answer.

- A. One-way encryption
- B. Transparent Data Encryption (TDE)
- C. Encrypting File System (EFS)
- D. Reversible encryption

Answer: B

Explanation:

Transparent Data Encryption (TDE) is a special case of encryption using a symmetric key. TDE encrypts an entire database using that symmetric key called the database encryption key. The database encryption key is protected by other keys or certificates which are protected either by the database master key or by an asymmetric key stored in an EKM module.

SQL Server provides the following mechanisms for encryption:

Transact-SQL functions
Asymmetric keys
Symmetric keys
Certificates
Transparent Data Encryption

NEW QUESTION 99

- (Exam Topic 2)

Overview

You are a database administrator for a company named Litware, Inc.

Litware is a book publishing house. Litware has a main office and a branch office.

You are designing the database infrastructure to support a new web-based application that is being developed. The web application will be accessed at www.litwareinc.com. Both internal employees and external partners will use the application.

You have an existing desktop application that uses a SQL Server 2008 database named App1_DB. App1_DB will remain in production.

Requirements Planned Changes

You plan to deploy a SQL Server 2014 instance that will contain two databases named Database1 and Database2.

All database files will be stored in a highly available SAN. Database1 will contain two tables named Orders and OrderDetails.

Database1 will also contain a stored procedure named usp_UpdateOrderDetails.

The stored procedure is used to update order information. The stored procedure queries the Orders table twice each time the procedure executes.

The rows returned from the first query must be returned on the second query unchanged along with any rows added to the table between the two read operations.

Database1 will contain several queries that access data in the Database2 tables. Database2 will contain a table named Inventory.

Inventory will contain over 100 GB of data.

The Inventory table will have two indexes: a clustered index on the primary key and a nonclustered index. The column that is used as the primary key will use the identity property.

Database2 will contain a stored procedure named usp_UpdateInventory. usp_UpdateInventory will manipulate a table that contains a self-join that has an unlimited number of hierarchies. All data in Database2 is recreated each day and does not change until the next data creation process. Data from Database2 will be accessed periodically by an external application named Application1. The data from Database2 will be sent to a database named Appl_Dbl as soon as changes occur to the data in Database2. Litware plans to use offsite storage for all SQL Server 2014 backups.

Business Requirements

You have the following requirements:

Costs for new licenses must be minimized.

Private information that is accessed by Application must be stored in a secure format.

Development effort must be minimized whenever possible.

The storage requirements for databases must be minimized.

System administrators must be able to run real-time reports on disk usage.

The databases must be available if the SQL Server service fails.

Database administrators must receive a detailed report that contains allocation errors and data corruption.

Application developers must be denied direct access to the database tables. Applications must be denied direct access to the tables.

You must encrypt the backup files to meet regulatory compliance requirements.

The encryption strategy must minimize changes to the databases and to the applications.

You need to recommend a solution to allow application users to perform UPDATE operations on the database tables. The solution must meet the business requirements.

What should you recommend?

- A. Create stored procedures that use EXECUTE AS clauses.
- B. Create a user-defined database role and add users to the role.
- C. Create functions that use EXECUTE AS clauses.
- D. Create a Policy-Based Management Policy.

Answer: A

Explanation:

- EXECUTE AS Clause (Transact-SQL)

In SQL Server you can define the execution context of the following user-defined modules: functions (except inline table-valued functions), procedures, queues, and triggers.

NEW QUESTION 104

- (Exam Topic 2)

You are planning on deploying a server that will be dedicated for ETL (Extraction, Transformation, and Loading) processes.

You want to ensure that SSIS (SQL Server Integration Services) packages will run on this dedicated ETL server and not on any other server on which they were started.

Which of the following features must you install on the ETL server in addition to SSIS to accomplish this goal?

- A. Database Engine
- B. SQL Server Reporting Services
- C. SQL Server Analysis Services
- D. Client Tools SDK

Answer: A

NEW QUESTION 106

- (Exam Topic 2)

You have four databases that are accessed by using an Online Transaction Processing (OLTP) application. The databases are stored on a server named SQL1 that has SQL Server 2014 installed. You plan to deploy an additional server that has SQL Server 2014 installed. You need to design a high-availability solution for the databases that meets the following requirements:

If SQL1 fails, the databases must be available.

Users must be able to run reports against a secondary copy of the databases.

What should you include in the design? More than one answer choice may achieve the goal. Select the BEST answer.

- A. AlwaysOn availability groups
- B. Database mirroring
- C. Log shipping
- D. Failover Clustering

Answer: A

Explanation:

The AlwaysOn Availability Groups feature is a high-availability and disaster-recovery solution that provides an enterprise-level alternative to database mirroring.

Introduced in SQL Server 2012, AlwaysOn Availability Groups maximizes the availability of a set of user databases for an enterprise. An availability group supports a failover environment for a discrete set of user databases, known as availability databases, that fail over together.

NEW QUESTION 107

- (Exam Topic 2)

Overview

Application Overview

Contoso, Ltd., is the developer of an enterprise resource planning (ERP) application.

Contoso is designing a new version of the ERP application. The previous version of the ERP application used SQL Server 2008 R2.

The new version will use SQL Server 2014.

The ERP application relies on an import process to load supplier data. The import process updates thousands of rows simultaneously, requires exclusive access to the database, and runs daily.

You receive several support calls reporting unexpected behavior in the ERP application. After analyzing the calls, you conclude that users made changes directly to the tables in the database.

Tables

The current database schema contains a table named OrderDetails.

The OrderDetails table contains information about the items sold for each purchase order. OrderDetails stores the product ID, quantities, and discounts applied to each product in a purchase order.

The product price is stored in a table named Products. The Products table was defined by using the SQL_Latin1_General_CP1_CI_AS collation.

A column named ProductName was created by using the varchar data type. The database contains a table named Orders.

Orders contains all of the purchase orders from the last 12 months. Purchase orders that are older than 12 months are stored in a table named OrdersOld.

The previous version of the ERP application relied on table-level security. Stored Procedures

The current version of the database contains stored procedures that change two tables. The following shows the relevant portions of the two stored procedures:

```
CREATE PROC Sales.Proc1
AS
BEGIN TRAN
UPDATE Sales.Table1 ...
UPDATE Sales.Table2 ...
COMMIT TRAN
GO
```

```
CREATE PROC Sales.Proc2
AS
BEGIN TRAN
UPDATE Sales.Table2 ...
UPDATE Sales.Table1 ...
COMMIT TRAN
GO
```

Customer Problems Installation Issues

The current version of the ERP application requires that several SQL Server logins be set up to function correctly. Most customers set up the ERP application in multiple locations and must create logins multiple times.

Index Fragmentation Issues

Customers discover that clustered indexes often are fragmented. To resolve this issue, the customers defragment the indexes more frequently. All of the tables affected by fragmentation have the following columns that are used as the clustered index key:

Column	Data type
id	uniquedentifier
lastModified	datetime
modifiedBy	Varchar(200)

Backup Issues

Customers who have large amounts of historical purchase order data report that backup time is unacceptable. Search Issues

Users report that when they search product names, the search results exclude product names that contain accents, unless the search string includes the accent.

Missing Data Issues

Customers report that when they make a price change in the Products table, they cannot retrieve the price that the item was sold for in previous orders.

Query Performance Issues

Customers report that query performance degrades very quickly. Additionally, the customers report that users cannot run queries when SQL Server runs maintenance tasks. Import Issues During the monthly import process, database administrators receive many supports call from users who report that they cannot access the supplier data. The database administrators want to reduce the amount of time required to import the data.

Design Requirements

File Storage Requirements

The ERP database stores scanned documents that are larger than 2 MB. These files must only be accessed through the ERP application. File access must have the best possible read and write performance.

Data Recovery Requirements

If the import process fails, the database must be returned to its prior state immediately. Security Requirements

You must provide users with the ability to execute functions within the ERP application, without having direct access to the underlying tables.

Concurrency Requirements

You must reduce the likelihood of deadlocks occurring when Sales.Prod and Sales.Proc2 execute.

You need to recommend a solution that meets the data recovery requirement. What should you include in the recommendation?

- A. A differential backup
- B. A transaction log backup
- C. Snapshot isolation
- D. A database snapshot

Answer: D

NEW QUESTION 111

- (Exam Topic 2)

Overview

Application Overview

Contoso, Ltd., is the developer of an enterprise resource planning (ERP) application.

Contoso is designing a new version of the ERP application. The previous version of the ERP application used SQL Server 2008 R2.

The new version will use SQL Server 2014.

The ERP application relies on an import process to load supplier data. The import process updates thousands of rows simultaneously, requires exclusive access to the database, and runs daily.

You receive several support calls reporting unexpected behavior in the ERP application. After analyzing the calls, you conclude that users made changes directly to the tables in the database.

Tables

The current database schema contains a table named OrderDetails.

The OrderDetails table contains information about the items sold for each purchase order. OrderDetails stores the product ID, quantities, and discounts applied to each product in a purchase order.

The product price is stored in a table named Products. The Products table was defined by using the SQL_Latin1_General_CP1_CI_AS collation.

A column named ProductName was created by using the varchar data type. The database contains a table named Orders.

Orders contains all of the purchase orders from the last 12 months. Purchase orders that are older than 12 months are stored in a table named OrdersOld.

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AS
BEGIN TRAN
UPDATE Sales.Table1 ...
UPDATE Sales.Table2 ...
COMMIT TRAN
GO
```

```
CREATE PROC Sales.Proc2
AS
BEGIN TRAN
UPDATE Sales.Table2 ...
UPDATE Sales.Table1 ...
COMMIT TRAN
GO
```

Customer Problems Installation Issues

The current version of the ERP application requires that several SQL Server logins be set up to function correctly. Most customers set up the ERP application in multiple locations and must create logins multiple times.

Index Fragmentation Issues

Customers discover that clustered indexes often are fragmented. To resolve this issue, the customers defragment the indexes more frequently. All of the tables affected by fragmentation have the following columns that are used as the clustered index key:

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Backup Issues

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Customers report that query performance degrades very quickly. Additionally, the customers report that users cannot run queries when SQL Server runs maintenance tasks. Import Issues During the monthly import process, database administrators receive many supports call from users who report that they cannot access the supplier data. The database administrators want to reduce the amount of time required to import the data.

Design Requirements

File Storage Requirements

The ERP database stores scanned documents that are larger than 2 MB. These files must only be accessed through the ERP application. File access must have the best possible read and write performance.

Data Recovery Requirements

If the import process fails, the database must be returned to its prior state immediately. Security Requirements

You must provide users with the ability to execute functions within the ERP application, without having direct access to the underlying tables.

Concurrency Requirements

You must reduce the likelihood of deadlocks occurring when Sales.Prod and Sales.Proc2 execute. You need to recommend a solution that addresses the backup issue.

The solution must minimize the amount of development effort. What should you include in the recommendation?

- A. Indexed views
- B. Filegroups
- C. Table partitioning
- D. Indexes

Answer: B

Explanation:

- Backup Issues

Customers who have large amounts of historical purchase order data report that backup time is unacceptable.

- For very large databases (and by that, I mean, at least 500gb, but more like 5-10tb or more), it can become too expensive to regularly run a straight full backup. So, where needed, you can choose to backup smaller pieces of the database by choosing to back up one of the files or file groups that make up a database.

NEW QUESTION 116

- (Exam Topic 2)

You have a SQL Server 2014 instance named SQL1. SQL1 creates error events in the Windows Application event log.

You need to recommend a solution that will run an application when SQL1 logs a specific error in the Application log.

Which SQL elements should you include in the recommendation? (Each correct answer presents part of the solution. Choose all that apply.)

- A. A policy
- B. A maintenance plan
- C. An alert
- D. A job
- E. A trigger

Answer: DE

Explanation:

Use a trigger that starts a job which executes the application.

References:

http://technet.microsoft.com/en-us/library/hh849759.aspx

NEW QUESTION 118

- (Exam Topic 2)

You plan to deploy SQL Server 2014.

Your company identifies the following monitoring requirements for the database:

An e-mail message must be sent when a user logs in.

An e-mail message must be sent if CPU utilization exceeds 90 percent

You need to identify which feature meets each monitoring requirement.

Which features should you identify? To answer, drag the appropriate feature to the correct monitoring requirement in the answer area.

Policy-Based Management

A SQL Server Agent alert

SQL Server Integration Services (SSIS)

trace flags

triggers

An e-mail message must be sent when a user logs in.

Feature

An e-mail message must be sent if CPU utilization exceeds 90 percent.

Feature

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Policy-Based Management

A SQL Server Agent alert

SQL Server Integration Services (SSIS)

trace flags

triggers

An e-mail message must be sent when a user logs in.

Policy-Based Management

An e-mail message must be sent if CPU utilization exceeds 90 percent.

A SQL Server Agent alert

NEW QUESTION 119

- (Exam Topic 2)

You administer a Microsoft SQL Server database named Sales. The database is 3 terabytes in size.

The Sales database is configured as shown in the following table. You discover that all files except Sales_2.ndf are corrupt.

You need to recover the corrupted data in the minimum amount of time. What should you do?

Filegroup	File
PRIMARY	<ul style="list-style-type: none"> Sales.mdf
XACTIONS	<ul style="list-style-type: none"> Sales_1.ndf Sales_2.ndf Sales_3.ndf
ARCHIVES	<ul style="list-style-type: none"> SalesArch_1.ndf SalesArch_2.ndf

- A. Perform a restore from a full backup.
- B. Perform a transaction log restore.
- C. Perform a file restore.
- D. Perform a filegroup restore.

Answer: A

Explanation:

References:

<http://technet.microsoft.com/en-us/library/ms187048.aspx>

NEW QUESTION 120

- (Exam Topic 3)

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 sections, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You attempt to restore a database on a new SQL Server instance and receive the following error message: "Msg 33111, Level 16, State 3, Line 2

Cannot find server certificate with thumbprint '0x7315277C70764B1F252DC7A5101F6F66EFB1069D.'" You need to ensure that you can restore the database successfully.

Solution: You add the backup set password to the restore command. Does this meet the goal?

- A. Yes
- B. No

Answer: B

Explanation:

The error is related to the certificate.

References: <https://dba.stackexchange.com/questions/3388/restore-encrypted-database-to-another-server?rq=1>

NEW QUESTION 123

- (Exam Topic 3)

General Overview

You are the Senior Database Administrator (DBA) for a software development company named Leaffield Solutions. The company develops software applications custom designed to meet customer requirements.

Requirements Leaffield Solutions has been asked by a customer to develop a web-based Enterprise Resource Planning and Management application. The new application will eventually replace a desktop application that the customer is currently using. The current application will remain in use while the users are trained to use the new webbased application.

You need to design the SQL Server and database infrastructure for the web-based application. Databases

You plan to implement databases named Customers, Sales, Products, Current_Inventory, and TempReporting. The Sales database contains a table named OrderTotals and a table named SalesInfo.

A stored procedure named SPUpdateSalesInfo reads data in the OrderTotals table and modifies data in the SalesInfo table.

The stored procedure then reads data in the OrderTotals table a second time and makes further changes to the information in the SalesInfo table.

The Current_Inventory database contains a large table named Inv_Current. The Inv_Current table has a clustered index for the primary key and a nonclustered index. The primary key column uses the identity property.

The data in the Inv_Current table is over 120GB in size. The tables in the Current_Inventory database are accessed by multiple queries in the Sales database.

Another table in the Current_Inventory database contains a self-join with an unlimited number of hierarchies. This table is modified by a stored procedure named SPUpdate2.

An external application named ExternalApp1 will periodically query the Current_Inventory database to generate statistical information. The TempReporting database contains a single table named GenInfo.

A stored procedure named SPUPdateGenInfo combines data from multiple databases and generates millions of rows of data in the GenInfo table.

The GenInfo table is used for reports.

When the information in GenInfo is generated, a reporting process reads data from the Inv_Current table and queries information in the GenInfo table based on that data.

The GenInfo table is deleted after the reporting process completes. The Products database contains tables named ProductNames and ProductTypes.

Current System

The current desktop application uses data stored in a SQL Server 2005 database named DesABCOppAppDB. This database will remain online and data from the Current_Inventory database will be copied to it as soon as data is changed in the Current_Inventory database.

SQL Servers

A new SQL Server 2012 instance will be deployed to host the databases for the new system. The databases will be hosted on a Storage Area Network (SAN) that provides highly available storage.

Design Requirements

Your SQL Server infrastructure and database design must meet the following requirements:

Confidential information in the Current_Inventory database that is accessed by ExternalApp1 must be securely stored.

Direct access to database tables by developers or applications must be denied.
The account used to generate reports must have restrictions on the hours when it is allowed to make a connection.
Deadlocks must be analyzed with the use of Deadlock Graphs.
In the event of a SQL Server failure, the databases must remain available.
Software licensing and database storage costs must be minimized.
Development effort must be minimized.
The Tempdb databases must be monitored for insufficient free space.
Failed authentication requests must be logged.
Every time a new row is added to the ProductTypes table in the Products database, a user defined function that validates the row must be called before the row is added to the table.
When SPUpdateSalesInfo queries data in the OrderTotals table the first time, the same rows must be returned along with any newly added rows when SPUpdateSalesInfo queries data in the OrderTotals table the second time.
The performance of the SPUpdate2 stored procedure needs to be improved. Your solution must meet the design requirements.
What should your solution include?

- A. A common table expression.
- B. A derived table.
- C. A Cursor.
- D. A table variable.

Answer: A

NEW QUESTION 124

- (Exam Topic 3)

You work as a Developer at ABC.com.

All databases are hosted on Windows Server 2012 servers running SQL Server 2012. The company has a database named Products.

Tables in the Products database contain data including part numbers, product name, color, type and size. Users in the Marketing department have created brochures for each product.

The brochures have been created in the XML Paper Specification (XPS) format.

You have been asked to add a table to the Products database to store the product brochures. The brochures need to be stored in a folder structure.

Company users will also need to access the brochures from Windows applications using UNC paths. How can you meet these requirements?

- A. By implementing the XMLNAMESPACES feature.
- B. By implementing the FILEGROUP feature.
- C. By implementing the FILETABLE feature.
- D. By implementing the FILESTREAM feature.

Answer: C

NEW QUESTION 128

- (Exam Topic 3)

Overview

General Overview

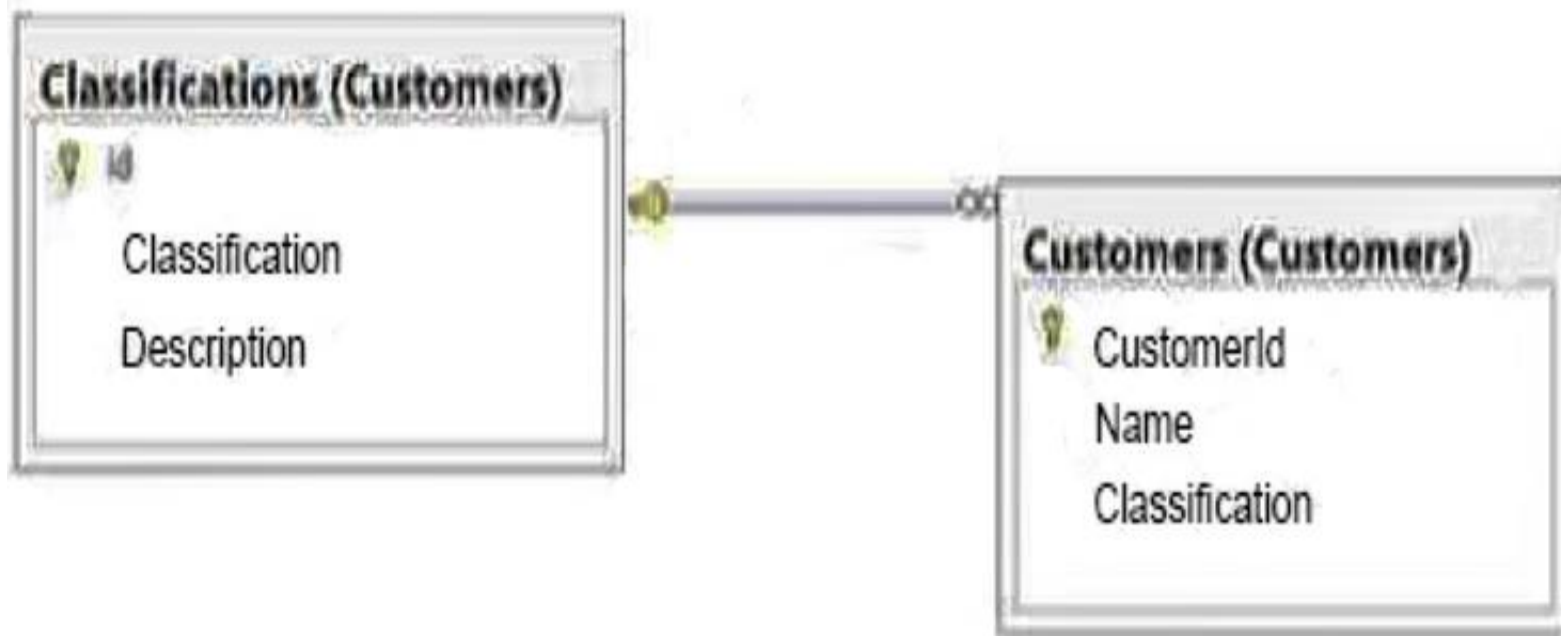
ADatum Corporation has offices in Miami and Montreal.

The network contains a single Active Directory forest named adatum.com. The offices connect to each other by using a WAN link that has 5-ms latency. A. Datum standardizes its database platform by using SQL Server 2014 Enterprise edition.

Databases

Each office contains databases named Sales, Inventory, Customers, Products, Personnel, and Dev. Servers and databases are managed by a team of database administrators. Currently, all of the database administrators have the same level of permissions on all of the servers and all of the databases.

The Customers database contains two tables named Customers and Classifications. The following graphic shows the relevant portions of the tables:



The following table shows the current data in the Classifications table:

ID	Classification	Description
1	Platinum	Yearly sales over 1,000,000
2	Gold	Yearly sales over 500,000
3	Silver	Yearly sales over 100,000

The Inventory database is updated frequently.

The database is often used for reporting.

A full backup of the database currently takes three hours to complete. Stored Procedures

A stored procedure named USP_1 generates millions of rows of data for multiple reports. USP_1 combines data from five different tables from the Sales and Customers databases in a table named Table1.

After Table1 is created, the reporting process reads data from Table1 sequentially several times. After the process is complete, Table1 is deleted.

A stored procedure named USP_2 is used to generate a product list. The product list contains the names of products grouped by category.

USP_2 takes several minutes to run due to locks on the tables the procedure accesses. The locks are caused by USP_1 and USP_3.

A stored procedure named USP_3 is used to update prices. USP_3 is composed of several UPDATE statements called in sequence from within a transaction.

Currently, if one of the UPDATE statements fails, the stored procedure fails. A stored procedure named USP_4 calls stored procedures in the Sales, Customers, and Inventory databases.

The nested stored procedures read tables from the Sales, Customers, and Inventory databases. USP_4 uses an EXECUTE AS clause.

All nested stored procedures handle errors by using structured exception handling. A stored procedure named USP_5 calls several stored procedures in the same database. Security checks are performed each time USP_5 calls a stored procedure.

You suspect that the security checks are slowing down the performance of USP_5. All stored procedures accessed by user applications call nested stored procedures.

The nested stored procedures are never called directly. Design Requirements

Data Recovery

You must be able to recover data from the Inventory database if a storage failure occurs. You have a Recovery Time Objective (RTO) of 5 minutes.

You must be able to recover data from the Dev database if data is lost accidentally. You have a Recovery Point Objective (RPO) of one day.

Classification Changes

You plan to change the way customers are classified. The new classifications will have four levels based on the number of orders. Classifications may be removed or added in the future. Management requests that historical data be maintained for the previous classifications. Security A group of junior database administrators must be able to manage security for the Sales database. The junior database administrators will not have any other administrative rights. A. Datum wants to track which users run each stored procedure.

Storage

ADatum has limited storage. Whenever possible, all storage space should be minimized for all databases and all backups.

Error Handling

There is currently no error handling code in any stored procedure.

You plan to log errors in called stored procedures and nested stored procedures. Nested stored procedures are never called directly.

You need to recommend a solution for the error handling of USP_3. The solution must minimize the amount of custom code required. What should you recommend?

- A. Use the @@ERROR variable in the nested stored procedures.
- B. Use a TRY CATCH block in the called stored procedures.
- C. Use the @@ERROR variable in the called stored procedures.
- D. Use the RAISERROR command in the nested stored procedures.

Answer: B

Explanation:

- Must catch and handle the error. Scenario:

A stored procedure named USP_3 is used to update prices. USP_3 is composed of several UPDATE statements called in sequence from within a transaction.

Currently, if one of the UPDATE statements fails, the stored procedure continues to execute.

NEW QUESTION 131

- (Exam Topic 3)

You need to move a database in between servers.

You need to guarantee database users will be able to login in the database with a minimum of management effort.

- A. Application role
- B. Database user
- C. Server login
- D. Server role

Answer: B

NEW QUESTION 134

- (Exam Topic 3)

You work as a Database Administrator (DBA) at ABC.com.

All databases are hosted on Windows Server 2012 servers running SQL Server 2012. The Sales department uses a database named SalesDB.

SalesDB contains a large table named Orders that lists every order ever received by the company. You want to improve the performance of SalesDB.

You want to configure the database to provide the fastest possible access to the most recent orders. Historical orders can be stored using a slower storage solution.

How can you achieve this goal?

- A. By configuring database mirroring.
- B. By configuring a failover cluster.
- C. By partitioning the Orders table.
- D. By partitioning a partitioned view of the Orders table.

Answer: C

NEW QUESTION 135

- (Exam Topic 3)

Background Corporate Information

Fabrikam, Inc. is a retailer that sells electronics products on the Internet. The company has a headquarters site and one satellite sales office. You have been hired as the database administrator, and the company wants you to change the architecture of the Fabrikam ecommerce site to optimize performance and reduce downtime while keeping capital expenditures to a minimum. To help with the solution, Fabrikam has decided to use cloud resources as well as on-premise servers.

Physical Locations

All of the corporate executives, product managers, and support staff are stationed at the headquarters office. Half of the sales force works at this location. There is

also a satellite sales office. The other half of the sales force works at the satellite office in order to have sales people closer to clients in that area. Only sales people work at the satellite location.

Problem Statement

To be successful, Fabrikam needs a website that is fast and has a high degree of system uptime. The current system operates on a single server and the company is not happy with the single point of failure this presents. The current nightly backups have been failing due to insufficient space on the available drives and manual drive cleanup often needing to happen to get past the errors. Additional space will not be made available for backups on the HQ or satellite servers. During your investigation, you discover that the sales force reports are causing significant contention.

Configuration Windows Logins

The network administrators have set up Windows groups to make it easier to manage security. Users may belong to more than one group depending on their role. The groups have been set up as shown in the following table:

Group	Members
OurDomain\Management	All corporate executives
OurDomain\SalesStaff	All sales people
OurDomain\ProductionStaff	All product managers and support staff
OurDomain\AllUsers	Everyone
OurDomain\CustomerSupport	Customer support representatives

Server Configuration The IT department has configured two physical servers with Microsoft Windows Server 2012 R2 and SQL Server 2014 Enterprise Edition and one Windows Azure Server. There are two tiers of storage available for use by database files only a fast tier and a slower tier. Currently the data and log files are stored on the fast tier of storage only. If a possible use case exists, management would like to utilize the slower tier storage for data files. The servers are configured as shown in the following table:

Location	Server
Company headquarters	HQ_Server
Satellite sales office	Satellite_Server
Microsoft Windows Azure (cloud)	Cloud_File Server

Database

Currently all information is stored in a single database called ProdDB, created with the following script:

```
CREATE DATABASE ProdDB
GO
ALTER DATABASE ProdDB SET RECOVERY SIMPLE
GO
```

The Product table is in the Production schema owned by the ProductionStaff Windows group. It is the main table in the system so access to information in the Product table should be as fast as possible. The columns in the Product table are defined as shown in the following table:

Column	Data type
ProductID	INT
ProductName	VARCHAR(100)
ProductDescription	VARCHAR(MAX)
ProductPrice	SMALLMONEY
QuantityOnHand	INT
ProductCost	SMALLMONEY
ProductSupplierID	INT

The SalesOrderDetail table holds the details about each sale. It is in the Sales schema owned by the SalesStaff Windows group. This table is constantly being updated, inserted into, and read. The columns in the SalesOrderDetail table are defined as shown in the following table:

Column	Data type
SalesOrderDetailID	INT
ProductID	INT
SalePrice	SMALLMONEY
SaleQuantity	INT

Database Issues

The current database does not perform well. Additionally, a recent disk problem caused the system to go down, resulting in lost sales revenue. In reviewing the

current system, you found that there are no automated maintenance procedures. The database is severely fragmented, and everyone has read and write access.

Requirements Database

The database should be configured to maximize uptime and to ensure that very little data is lost in the event of a server failure. To help with performance, the database needs to be modified so that it can support in-memory data, specifically for the Product table, which the CIO has indicated should be a memoryoptimized table. The auto-update statistics option is set off on this database. Only product managers are allowed to add products or to make changes to the name, description, price, cost, and supplier. The changes are made in an internal database and pushed to the Product table in ProdDB during system maintenance time. Product managers and others working at the headquarters location also should be able to generate reports that include supplier and cost information.

Customer data access

Customers access the company's website to order products, so they must be able to read product information such as name, description, and price from the Product table. When customers place orders, stored procedures called by the website update product quantity on-hand values. This means the product table is constantly updated at random times.

Customer support data access

Customer support representatives need to be able to view and not update or change product information. Management does not want the customer support representatives to be able to see the product cost or any supplier information.

Sales force data access

Sales people at both the headquarters office and the satellite office must generate reports that read from the Product and SalesOrderDetail tables. No updates or inserts are ever made by sales people. These reports are run at random times and there can be no reporting downtime to refresh the data set except during the monthly maintenance window. The reports that run from the satellite office are process intensive queries with large data sets. Regardless of which office runs a sales force report, the SalesOrderDetail table should only return valid, committed order data; any orders not yet committed should be ignored.

Historical Data

The system should keep historical information about customers who access the site so that sales people can see how frequently customers log in and how long they stay on the site. The information should be stored in a table called Customer Access. Supporting this requirement should have minimal impact on production website performance.

Backups

The recovery strategy for Fabrikam needs to include the ability to do point in time restores and minimize the risk of data loss by performing transaction log backups every 15 minutes.

Database Maintenance

The company has defined a maintenance window every month when the server can be unavailable. Any maintenance functions that require exclusive access should be accomplished during that window.

Project milestones completed

Revoked all existing read and write access to the database, leaving the schema ownership in place.

Configured an Azure storage container secured with the storage account name MyStorageAccount with the primary access key StorageAccountKey on the cloud file server.

SQL Server 2014 has been configured on the satellite server and is ready for use.

On each database server, the fast storage has been assigned to drive letter F:, and the slow storage has been assigned to drive letter D:.

You need to create a job to automate some database maintenance tasks. Which code fragment should you use in each location in the command to complete one of the commands you will need to include in the job? To answer, drag the appropriate lines of code to the correct locations in the command. Each line of code 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.

Lines of Code

STATISTICS

CONSTRAINT

MEMBER

WITH FULLSCAN

WITH SAMPLE 50 PERCENT

WITH SAMPLE 1000 ROWS

RECOMPUTE

NOCOMPUTE

NORECOMPUTE

Answer Area

UPDATE

Line of Code

Production.Product

Line of Code

Line of Code

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Lines of Code

STATISTICS

CONSTRAINT

MEMBER

WITH FULLSCAN

WITH SAMPLE 50 PERCENT

WITH SAMPLE 1000 ROWS

RECOMPUTE

NOCOMPUTE

NORECOMPUTE

Answer Area

UPDAT. STATISTICS Production.Product

WITH FULLSCAN

NORECOMPUTE

NEW QUESTION 138

- (Exam Topic 3)

Background Corporate Information

Fabrikam, Inc. is a retailer that sells electronics products on the Internet. The company has a headquarters site and one satellite sales office. You have been hired as the database administrator, and the company wants you to change the architecture of the Fabrikam ecommerce site to optimize performance and reduce downtime while keeping capital expenditures to a minimum. To help with the solution, Fabrikam has decided to use cloud resources as well as on-premise servers.

Physical Locations

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Server Configuration The IT department has configured two physical servers with Microsoft Windows Server 2012 R2 and SQL Server 2014 Enterprise Edition and one Windows Azure Server. There are two tiers of storage available for use by database files only a fast tier and a slower tier. Currently the data and log files are stored on the fast tier of storage only. If a possible use case exists, management would like to utilize the slower tier storage for data files. The servers are configured as shown in the following table:

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Microsoft Windows Azure (cloud)	Cloud_File Server

Database

Currently all information is stored in a single database called ProdDB, created with the following script:

CREATE DATABASE ProdDB

GO

ALTER DATABASE ProdDB SET RECOVERY SIMPLE

GO

The Product table is in the Production schema owned by the ProductionStaff Windows group. It is the main table in the system so access to information in the Product table should be as fast as possible. The columns in the Product table are defined as shown in the following table:

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ProductPrice	SMALLMONEY
QuantityOnHand	INT
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ProductSupplierID	INT

The SalesOrderDetail table holds the details about each sale. It is in the Sales schema owned by the SalesStaff Windows group. This table is constantly being updated, inserted into, and read. The columns in the SalesOrderDetail table are defined as shown in the following table:

Column	Data type
SalesOrderDetailID	INT
ProductID	INT
SalePrice	SMALLMONEY
SaleQuantity	INT

Database Issues

The current database does not perform well. Additionally, a recent disk problem caused the system to go down, resulting in lost sales revenue. In reviewing the current system, you found that there are no automated maintenance procedures. The database is severely fragmented, and everyone has read and write access.

Requirements Database

The database should be configured to maximize uptime and to ensure that very little data is lost in the event of a server failure. To help with performance, the database needs to be modified so that it can support in-memory data, specifically for the Product table, which the CIO has indicated should be a memoryoptimized table. The auto-update statistics option is set off on this database. Only product managers are allowed to add products or to make changes to the name, description, price, cost, and supplier. The changes are made in an internal database and pushed to the Product table in ProdDB during system maintenance time. Product managers and others working at the headquarters location also should be able to generate reports that include supplier and cost information.

Customer data access

Customers access the company's website to order products, so they must be able to read product information such as name, description, and price from the Product table. When customers place orders, stored procedures called by the website update product quantity-on-hand values. This means the product table is constantly updated at random times.

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maintenance window. The reports that run from the satellite office are process intensive queries with large data sets. Regardless of which office runs a sales force report, the SalesOrderDetail table should only return valid, committed order data; any orders not yet committed should be ignored.

Historical Data

The system should keep historical information about customers who access the site so that sales people can see how frequently customers log in and how long they stay on the site.

The information should be stored in a table called Customer Access. Supporting this requirement should have minimal impact on production website performance.

Backups

The recovery strategy for Fabrikam needs to include the ability to do point in time restores and minimize the risk of data loss by performing transaction log backups every 15 minutes.

Database Maintenance

The company has defined a maintenance window every month when the server can be unavailable. Any maintenance functions that require exclusive access should be accomplished during that window.

Project milestones completed

Revoked all existing read and write access to the database, leaving the schema ownership in place.

Configured an Azure storage container secured with the storage account name MyStorageAccount with the primary access key StorageAccountKey on the cloud file server.

SQL Server 2014 has been configured on the satellite server and is ready for use.

On each database server, the fast storage has been assigned to drive letter F:, and the slow storage has been assigned to drive letter D:.

You are designing your maintenance plan.

Which command should you use only during the monthly maintenance window?

- A. DBCC INDEXDEFRAG (ProdDB, SalesOrderDetail, SODIndex)
- B. ALTER INDEX SODIndex ON SalesOrderDetail REORGANIZE
- C. ALTER INDEX SODIndex ON SalesOrderDetail REBUILD
- D. ALTER INDEX SODIndex ON SalesOrderDetail REBUILD WITH (ONLINE * ON)

Answer: D

Explanation:

- Scenario: Database Issues The current database does not perform well. Additionally, a recent disk problem caused the system to go down, resulting in lost sales revenue. In reviewing the current system, you found that there are no automated maintenance procedures. The database is severely fragmented, and everyone has read and write access.
- After the degree of fragmentation is known, use the following table to determine the best method to correct the fragmentation.

```
avg_fragmentation_in_percent value
/ > 5% and < = 30%
then use
ALTER INDEX REORGANIZE
/ > 30%
then use
ALTER INDEX REBUILD WITH (ONLINE = ON)
ALTER INDEX (Transact-SQL)
```

NEW QUESTION 142

- (Exam Topic 3)

You have a SQL Server 2014 environment That includes four servers. The servers are configured as shown in the following table.

Server name	SQL Server 2014 edition	SQL Server version	Details
Server1	Enterprise	SQL Server 2014	A production Online Transaction Processing (OLTP) server
Server2	Web	SQL Server 2014	A test server
Server3	Standard	SQL Server 2012	A production report server
Server4	Express	SQL Server 2008 R2	A witness server

You plan to configure Policy-Based Management to enforce the following rules:

On Server1, enable SQL Server password policies and enable the default trace.

On Server3, ensure that the names of user-defined stored procedures begin with the prefix "usp_" and ensure that all databases use a casesensitive collation.

You need to recommend which server you must configure as a Central Management Server.

Which server should you recommend? (Each correct answer presents a complete solution. Choose all that apply.)

- A. Server1
- B. Server2
- C. Server3
- D. Seiver4

Answer: AC

Explanation:

Need Standard or Enterprise edition of SQL Server.

NEW QUESTION 144

- (Exam Topic 3)

You plan to install two SQL Server 2012 environments named Environment1 and Environment2. Your company identifies the following availability requirements for each environment:

Environment1 must have mirroring with manual failover implemented.

Environment2 must have AlwaysOn with automatic failover implemented.

You need to identify the minimum number of SQL Server 2012 servers that must be deployed to each environment to ensure that all data remains available if a physical server fails.

How many servers should you identify? To answer, drag the appropriate number to the correct environment in the answer area

Number of Servers	Answer Area
<div>2</div> <div>3</div> <div>4</div>	<div>Environment1</div> <div>#</div>
	<div>Environment2</div> <div>#</div>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Environment1 – 2; Environment2 - 2 References:

<http://msdn.microsoft.com/en-us/library/ms189852.aspx>

<http://msdn.microsoft.com/en-us/library/hh510230.aspx>

NEW QUESTION 149

- (Exam Topic 3)

You need to provide a group of users from the IT and Manufacturing departments the minimum administrative rights to view database information and server state for the Manufacturing database on MainDB1.

What should you do?

- A. You should configure a Database Role.
- B. You should configure a Server Role.
- C. You should configure a Shared SQL Server Login.
- D. You should configure a Local Security Group.

Answer: B

NEW QUESTION 150

- (Exam Topic 3)

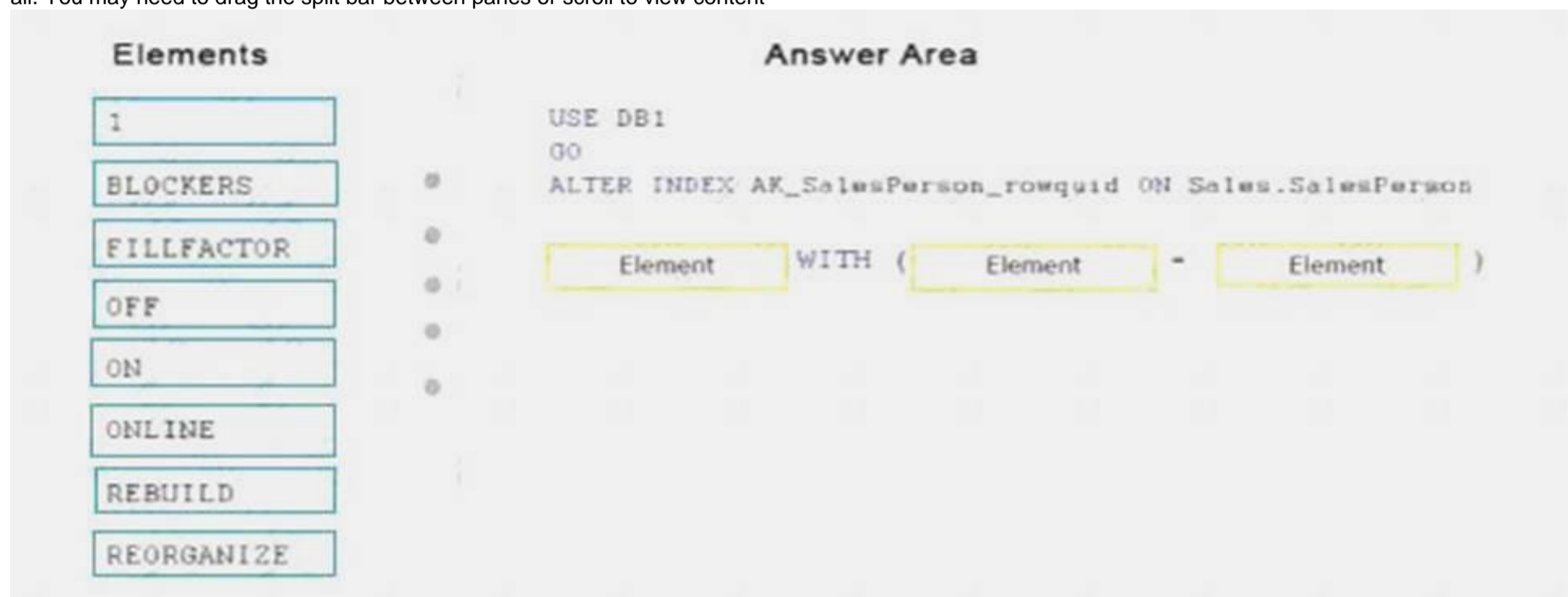
You have a database named DB1.

DB1 contains a table named Sales.SalesPerson that has an index named AK_SalesPerson_rowguid. Queries that do not use the index take approximately 10 times longer to complete than queries that use the

index. You discover that AK_SalesPerson_rowguid has severe fragmentation. You need to recommend a solution to defragment the index.

The solution must ensure that the index can be used by queries during the defragmentation.

What statement should you use? To answer, drag the appropriate elements to the correct locations. Each element 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



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Rebuilding an index can be executed online or offline. Reorganizing an index is always executed online. To achieve availability similar to the reorganize option, you should rebuild indexes online.

Use: ALTER INDEX REBUILD WITH (ONLINE = ON)

References: Reorganize and Rebuild Indexes <https://msdn.microsoft.com/en-us/library/ms189858.aspx>

NEW QUESTION 154

- (Exam Topic 3)

Background Corporate Information

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Database Issues

The current database does not perform well. Additionally, a recent disk problem caused the system to go down, resulting in lost sales revenue. In reviewing the current system, you found that there are no automated maintenance procedures. The database is severely fragmented, and everyone has read and write access.

Requirements Database

The database should be configured to maximize uptime and to ensure that very little data is lost in the event of a server failure. To help with performance, the database needs to be modified so that it can support in-memory data, specifically for the Product table, which the CIO has indicated should be a memoryoptimized table. The auto-update statistics option is set off on this database. Only product managers are allowed to add products or to make changes to the name, description, price, cost, and supplier. The changes are made in an internal database and pushed to the Product table in ProdDB during system maintenance time. Product managers and others working at the headquarters location also should be able to generate reports that include supplier and cost information.

Customer data access

Customers access the company's website to order products, so they must be able to read product information such as name, description, and price from the Product table. When customers place orders, stored procedures called by the website update product quantity-on-hand values. This means the product table is

constantly updated at random times.

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Historical Data

The system should keep historical information about customers who access the site so that sales people can see how frequently customers log in and how long they stay on the site.

The information should be stored in a table called Customer Access. Supporting this requirement should have minimal impact on production website performance.

Backups

The recovery strategy for Fabrikam needs to include the ability to do point in time restores and minimize the risk of data loss by performing transaction log backups every 15 minutes.

Database Maintenance

The company has defined a maintenance window every month when the server can be unavailable. Any maintenance functions that require exclusive access should be accomplished during that window.

Project milestones completed

Revoked all existing read and write access to the database, leaving the schema ownership in place.

Configured an Azure storage container secured with the storage account name MyStorageAccount with the primary access key StorageAccountKey on the cloud file server.

SQL Server 2014 has been configured on the satellite server and is ready for use.

On each database server, the fast storage has been assigned to drive letter F:, and the slow storage has been assigned to drive letter D:.

You need to recommend a solution to back up DB1. What should you include in the recommendation?

- A. Azure Table Storage
- B. Azure Queue storage
- C. Azure Blob storage
- D. Azure Document DB

Answer: C

Explanation:

For SQL Server the Azure Blob Storage service offers a better alternative to the often used tape option to archive backups. Tape storage might require physical transportation to an off-site facility and measures to protect the media. Storing your backups in Azure Blob Storage provides an instant, highly available, and a durable archiving option.

References:

<https://azure.microsoft.com/en-us/documentation/articles/storage-use-storage-sql-server-backup/restore>

NEW QUESTION 155

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