# Microsoft 70-444

# 70-444 PRO: Optimizing and Maintaining a Database Administration Solution by Using Microsoft SQL Server 2005

**Practice Test** 

Version 2.7



#### **QUESTION NO: 1**

You are a database administrator for your company. You are creating a new SQL Server Integration Services (SSIS) package. The package will import one or more text files into a database each night. These text files are provided by company vendors and are not related to one another. You need to ensure that the package always succeeds, even if no text files are provided, with the least amount of administrative effort. What should you do?

- A. In the SSIS package, use a For Loop condition to iterate through the available files.
- B. Configure the SSIS package precedence constraints to be dynamically allocated.
- C. Configure the SSIS package to use transactions.
- D. In the SSIS package, use a Merge Join transformation to combine the data from the files.

#### Answer: A

# **Explanation:**

Use the For Loop page of the For Loop Editor dialog box to configure a loop that repeats a workflow until a specified condition evaluates to false.

#### **QUESTION NO: 2**

You are the administrator of a SQL Server 2005 computer named SQL1. SQL1 runs three instances of SQL Server. Your company's disaster recovery plan includes having the ability to connect to the dedicated administrative connection on each instance of SQL Server. While testing this ability, you discover that you can connect to the dedicated administrative connection on SQL1s default instance. But you cannot connect to the dedicated administrative connection on the two other instances on SQL1. You verify that the instances are running and that client applications are able to access them. You also verify that the dedicated administrative connection is enabled for all instances. You confirm that no other administrators are attempting to connect to any dedicated administrative connections on SQL1. You need to ensure that you can connect to the dedicated administrative connection on all three instances. What should you do?

- A. Start the SQL Server Browser service. Configure the service to start automatically.
- B. Use the Sqlcmd.exe tool to make the dedicated administrative connection.
- C. Stop and restart the non-default instances of SQL Server.
- D. Reconfigure the default instance to use an administrative port number other than 1434.

### **Answer: A**

# **Explanation:**

The DAC port is assigned dynamically by SQL Server during startup. When connecting to the default instance, the DAC avoids using a SQL Server Resolution Protocol (SSRP) request to the SQL Server Browser Service when connecting. It first connects over TCP port 1434. If that fails, it makes an SSRP call to get the port. If SQL Server Browser is not listening for SSRP requests, the



connection request returns an error.

#### **QUESTION NO: 3**

You are a database administrator for your company. Your company is a large retail store chain with more than 500 outlets. Each retail store maintains its own SQL Server 2005 database that must replicate data to the corporate server each night. You need to monitor replication for each store. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

- A. Monitor the current average and worst performance ratings by using Replication Monitor.
- B. Configure warnings and alerts by using Replication Monitor.
- C. Monitor server activity by using SQL Server Profiler.
- D. Monitor replication activity by using the Activity Monitor.

# Answer: A,B

# **Explanation:**

MicrosoftSQL ServerReplication Monitor is a graphical tool that allows you to monitor the overall health of a replication topology. Replication Monitor provides detailed information on the status and performance of publications and subscriptions, allowing you to answer common questions, such as:

Is my replication system healthy?

Which subscriptions are slow?

How far behind is my transactional subscription?

How long will it take a transaction committed now to reach a Subscriber in transactional replication?

Why is my merge subscription slow?

Why is an agent not running?

#### **QUESTION NO: 4**

You are the administrator of a Microsoft Windows Server 2003 computer. Your company purchases a new enterprise sales application that runs SQL Server 2005. The application uses stored procedures that include the EXECUTE AS clause and that use Microsoft Windows accounts. The company's written security policy states that all enterprise applications must run under the context of a service account that requires the minimum amount of privileges. You need to configure the SQL Server service to run under the appropriate context for the installation of the new enterprise sales application. Under which context should the SQL Server service run?

A. under the context of the local system account.



- B. under the context of the local service account
- C. under the context of the domain user account
- D. under the context of the local Administrator account

**Answer: C** 

# **Explanation:**

When using the EXECUTE AS clause and providing a username and password, it is easiest to use a domain user account with the minimum amount of privileges needed to execute the task it should do.

#### **QUESTION NO: 5**

You are a database administrator for your company. Your company uses a different company Edition. The application executes a query that uses an index query hint. The index query hint query. You need to force the application to use a different query execution plan. What should

- A. Update the statistics for all of the indexes that the query uses.
- B. Clear the procedure cache.
- C. Create a plan guide for the query.
- D. Create a new covering index on the columns that the query uses.

Answer: C

# **Explanation:**

Over the past few years, Microsoft® SQL Server has increased its presence in the industry and has reduced its TCO. This reduced TCO is a direct result, primarily, of the numerous self-tuning mechanisms built into Microsoft® SQL Server. These mechanisms automatically perform tasks that would otherwise have to be performed by experienced database administrators. One such mechanism is the cost-based optimizer (CBO) that is used to dynamically generate query execution plans. The CBO probes several system-wide resource states and employs many complex, heuristical algorithms to generate the best possible plan for a given query and the underlying table and index structures. This mechanism works well for the vast majority of user queries, but there are times when experienced users need to force a particular query plan, based on some prior knowledge or insights into future uses.

#### **QUESTION NO: 6**

You are a database administrator for your company. A new SQL Server 2005 computer named SQL2 hosts a mission-critical customer relationship management (CRM) database. All of the companies 500 employees in the sales and marketing departments access the CRM database. Your department has an annual budget for the purchase of new hardware and software. You need



to devise a monitoring strategy that enables you to make decisions about the history of server performance. The monitoring strategy should also advise you on how to best allocate funds for hardware upgrades. What should you do?

- A. UseSQLServer Profiler to capture information to a SQLServer database table. Perform this task at regular intervals during periods of peak server activity.
- B. Configure a counter log to capture information about %Processor Time, Average Disk Queue Length, Pages/sec, and Bytes Total/sec. Schedule the log to execute at regular intervals, and store the information in a comma-delimited text file.
- C. Use System Monitor in graph mode to display information about %Processor Time, Average Disk Queue Length, Pages/sec, and Bytes Total/sec. Perform this task at regular intervals during periods of peak server activity.
- D. Create a series of performance alerts to notify you when %Processor Time, Average Disk Queue Length, Pages/sec, and Bytes Total/sec exceed acceptable thresholds.

# **Answer: B**

# **Explanation:**

By the capturing the %Processor Time, Average Disk Queue Length, Pages/Sec, and Bytes Total/Sec you monitor all the relevant data needed to base your decisions on. By running them on a reoccurring interval and saving the data you provide the possibility to create graphs showing decreased performance over time.

### **QUESTION NO: 7**

You are the administrator of a Microsoft Windows Server 2003 computer named Server. SQL Server 2005 is installed on Server to host a database named MedDB. The MedDB database serves as the backend database for a new client/server application named MedDATA. Installation of the MedDATA application creates the database schema, application roles, and administrative accounts. It also sets all of the default permissions. You need to establish a permissions baseline for all objects in the MedDB database. What should you do?

- A. Use the SQL Server 2005 Management Studio to review the permissions of the default database objects.
- B. Query thesys.server permissions table on Server.
- C. Execute thesp\_helplogins system stored procedure for each of the default users that the MedDATA application creates.
- D. Query thesys.database\_permissions and sys.database\_principals tables In the MedDB database.

#### Answer: D



# **Explanation:**

sys.database\_permissions - Returns a row for every permission or column-exception permission in the database. For columns, there is a row for every permission that is different from the corresponding object-level permission. If the column-permission is the same as the corresponding object-permission, there will be no row for it and the actual permission used will be that of the object.

Sys.database\_principals - Returns a row for each principal in a database.

### **QUESTION NO: 8**

You are a database administrator for your company. You create a maintenance plan that includes shrinking your SQL Server 2005 databases and reorganizing your indexes once a week. You test the plan and discover that the database does not shrink as expected. You need to troubleshoot why the database is not shrinking. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

- A. Review the job history log.
- B. Review the maintenance plan history log.
- C. Review the job activity monitor.
- D. Configure yourself as an operator for failed jobs.
- E. Configure an alert to respond to failed jobs.

#### Answer: A,B

# **Explanation:**

Use the Database Maintenance Plan History dialog box to find information about maintenance plans configured on the server. Viewing a job's history allows you to see when the job ran, the status of the job as a whole, and the status of each job step in the job. You can see whether the job ever failed in the past, when the job last completed successfully, and what output the job created each time the job ran.

#### **QUESTION NO: 9**

You are the administrator of two SQL Server 2005 computers named SQL1 and SQL2. You were not responsible for the original installation of SQL Server on these computers. Yet you now must ensure that both computers are configured according to the following requirements. Administrators must be able to remotely connect to SQL1 and SQL2 for troubleshooting, even if the system becomes unresponsive.SQLI and SQL2 must not be able to execute commands related to the operating system. Database access must be permitted by using Simple Object Access Protocol (SOAP) messages over HTTP.SQL1 and SQL2 must not be able to use stored procedures to send e-mail. Use of the OPENROWSET and OPENDATASOURCE Transact-SQL statements must not be permitted. Stored procedures for generating HTML must not be permitted. You need to



configure SQL1 and SQL2 to meet these requirements. What should you do?

- A. Use SQL Server Configuration Manager to configure the appropriate server features on SQL1 and SQL2.
- B. Use SQL Server Surface Area Configuration for Features.
- C. Use SQL Server Surface Area Configuration for Services and Connections.
- D. Use the sp\_configure system stored procedure to configure the appropriate server features on SQL1 and SQL2.

#### Answer: B

# **Explanation:**

Use SQL Server Surface Area Configuration to enable, disable, start, or stop the features, services, and remote connectivity of your SQL Server 2005 installations. You can use SQL Server Surface Area Configuration on local and remote servers.

#### **QUESTION NO: 10**

You are the database administrator of a SQL Server 2005 computer named SQL1. The following query is run frequently. SELECT

A. City,

- B. PostalCode, S.[Name] AS StateFROM HumanResources.Employee AS E INNER JOIN HumanResources.EmployeeAddress AS EA ON E.EmployeeID = EA.EmployeeID INNER JOIN Person.Address AS A ON AAddressID = EAAddressID INNER JOIN Person.Contact AS C ON C.ContactID = E.ContactID INNER JOIN Person.StateProvince AS S ON S.StateProvinceID = C. StateProvinceIDORDER BY C.LastName All tables referenced in the query are read-intensive with very few inserts and updates. You cannot change existing objects in the database. You can add new objects to the database. You need to optimize the performance of the query. What should you do?
- D. Create a view that contains all of the columns that are used in the query.
- E. Create a partitioned table that contains all of the columns that are used in the guery.
- F. Create an indexed view that contains all of the columns that are used in the query.
- G. Alter the current indexes by setting the FILLFACTOR option to 50.

# **Answer: C**

# **Explanation:**

By creating a indexed view of the tables needed you don't need to access the tables themselves every time you execute the query and therefore you get a better performance on the query.



# **QUESTION NO: 11**

You are a database administrator for your company. The company runs a popular database-driven Web site against a SQL Server 2005 computer named SQL2. You need to ensure a quick response time and appropriate audit trail in the event that SQL2 experiences excessive traffic due to denial-of-service (DoS) attacks. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Create a new performance alert to monitor the Current Bandwidth counter.
- B. Create a new performance alert to monitor the Bytes Total/sec counter.
- C. Configure the new performance alert to start a SQL Server Profiler trace.
- D. Configure the new performance alert to start a Network Monitor capture.

Answer: B,D

# **Explanation:**

Using alerts, System Monitor tracks specific events and notifies you of these events as requested. An alert log can monitor the current performance of selected counters and instances for objects in SQL Server. When a counter exceeds a given value, the log records the date and time of the event. An event can also generate a network alert. Characteristic for a typical DoS attack is a large number of Bytes/sec. Characteristic for a DDoS attack is also a large number of Bytes/sec but also a large number of connections made from a large number of hosts.

# **QUESTION NO: 12**

You are a database administrator for your company. The company uses a SQL Server 2005 i used to produce hundreds of reports each day. You discover that the ReportServerTempDB i ReportServerTempDB database. What should you do?

- A. Decrease the time between transaction log backups of the database.
- B. Delete report snapshot history each week.
- C. Minimize the use of session caching in the reports.
- D. Minimize the use of report snapshots in the reports.

**Answer: C** 

#### **QUESTION NO: 13**

You are a database administrator for your company. You have separate SQL Server 2005 development and production environments. You use the Business Intelligence Development Studio to create a SQL Server Integration Services (SSIS) package in your development environment. Then, you use the SSIS package to import data into your development environment from one of your company's trading partners. You need to deploy the SSIS package to your



production environment. Your production environment uses different table names than your development environment. What should you do?

- A. Create a SQL Server Integration Services (SSIS) package configuration. Build a deployment utility. Copy the deployment folder for your SSIS project to your production server Execute the manifest file.
- B. Save the SQL Server Integration Services (SSIS) package to a file. Copy the file to the production server. Configure the SSIS package on the production server to use the new file.
- C. Back up the master database and restore it to the production server. Rename the appropriate tables inside the master database.
- D. Back up themsdb database and restore it to the production server. Rename the appropriate tables inside the msdb database.

#### Answer: A

# **Explanation:**

You have to use a SSIS package to accomplish this but you can not use the package built for your development environment as the table names differ.

#### **QUESTION NO: 14**

You are a database administrator for your company. You review the error log for a SQL Server 2005 Enterprise Edition computer. You notice torn page errors for one database. You need to resolve the torn page problem as quickly as possible. What should you do?

- A. Use the latest database backup to restore only the torn page Then restore any transaction logs that have been made since the full backup.
- B. Restore the latest full database backup and then restore any transaction logs that have been made since the full backup.
- C. Restore the database from the most recent database snapshot.
- D. Run DBCC CHECKDB.

#### Answer: A

# **Explanation:**

In page restore, the goal is to restore one or more damaged pages without restoring the entire database. Typically, pages that are candidates for restore have been marked as "suspect" due to an error encountered when accessing the page. Suspect pages are identified in the suspect\_pages table. For the restore to succeed, the restored pages must be recovered to a state consistent with the database. An unbroken chain of log backups must be available up to the current log file, and all the log backups must be applied to bring the pages up to date with the current log file.



#### **QUESTION NO: 15**

You are a database administrator for your company. Your SQL Server 2005 computer contains one user database that holds sales transaction information. Users report that the queries and stored procedures that they use every day are taking progressively longer to execute. You also notice that the amount of free disk space on the SQL Server computer is decreasing. You need to create a maintenance plan to correct the performance and storage problems. What are two possible ways to achieve this goal? (Each correct answer presents a complete solution. Choose two.)

- A. In the SQL Server Maintenance Plan Wizard, use the Check Database Integrity option.
- B. In the SQL Server Maintenance Plan Wizard, use the Shrink Database option.
- C. In the SQL Server Maintenance Plan Wizard, use the Reorganize Index option
- D. In the SQL Server Maintenance Plan Wizard, use the Clean Up History option.
- E. In the SQL Server Maintenance Plan Wizard, use the Execute SQL Server Agent Job option.

# Answer: B,C

# **Explanation:**

When you indexes are not heavily fragmented you can reorganize indexes, which uses few system resources and runs automatically online. In SQL Server 2005, certain operations such as large delete operations or -one-time data loads might leave database files larger than they need to be. SQL Server 2005 enables a DBA to shrink each file within a database to remove unused pages and regain disk space.

#### **QUESTION NO: 16**

You are a database administrator for your company. Your company owns a chain of 10 retail stores. Each retail store maintains point-of-sale transactions on its own SQL Server 2005 computer, in a database table named Sales. The Sales table also contains sales data from other stores to enable customer returns to any of the 10 retail stores. The sales data is refreshed from the main office to each retail store hourly. A trigger named trg\_Coupon on the Sales table is used to generate sales coupons based on customer sales and buying patterns. You need to configure replication between the server in each retail store and a central server in the main office by using the fewest number of steps. Replication does not have to be in real time. What should you do?

- A. Use snapshot replication. Configure thetrg\_Coupon trigger on the server in each retail store to use the NOT FOR REPLICATION option.
- B. Use merge replication. Configure thetrg\_Coupon trigger on the server in each retail store to use the NOT FOR REPLICATION option.