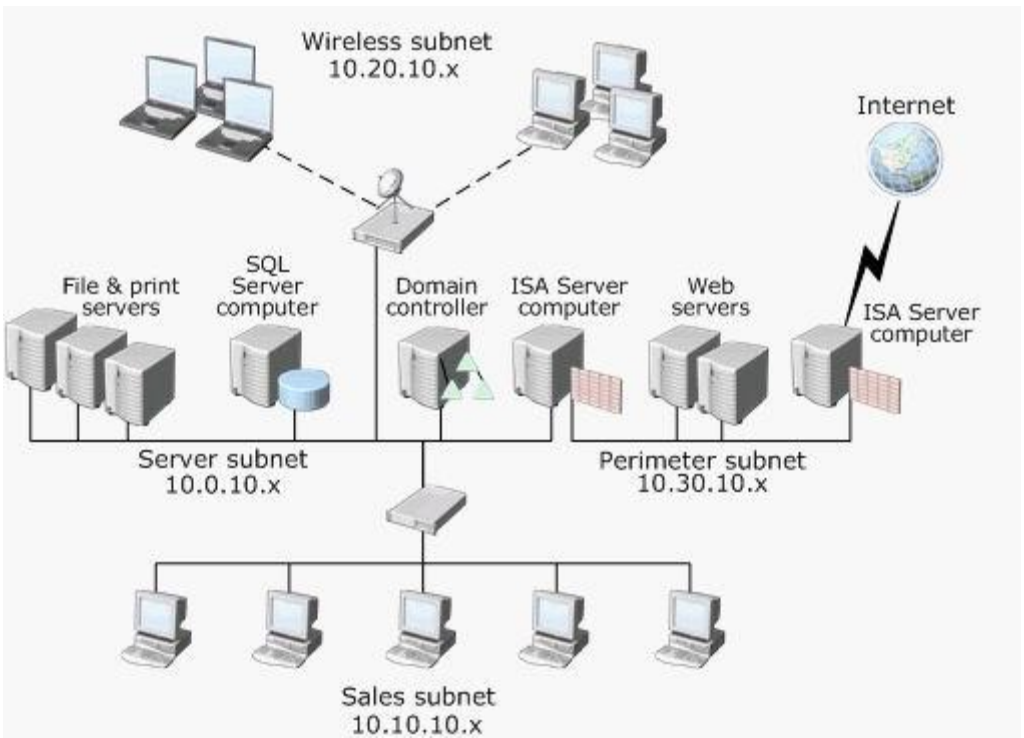


Exam : Microsoft 70-443

Title : Designing a Database Server
Infrastructure by Using Microsoft
SQL Server 2005

Update : Demo

1.BACKGROUND Company Overview A. Datum Corporation is an independent software vendor that has a worldwide customer base.The company sells its software through a combination of an e-commerce Web site and a telephone-based ordering system. Planned Changes The company plans to upgrade all of its database servers to SQL Server 2005.The BusinessDats database will be redesigned to improve manageability,and a new database named MarketionAnalysis will be created to allow marketing analysts to generate reports from sales data.The most common report that will be generated will retrieve the names of products that are sold and the cities where the customers live. Problem Statements The company wants to improve the security of its data and wants to minimize the risk of unauthorized data access or malicious attack. On several occasions,customers were unable to place an order because the database server was unavailable for na extended period of time. EXISTING DATA ENVIRONMENT Databases The HRData database contains employee data,including sensitive information such as salary and employee reviews The BusinessData database contains product and data.Analysis indicates that each user typically accesses only a subset of the tables in the database.This subset is related to the department in which the works. Business analysis indicates that approximately 4,000 new records are added to the BusinessData database each day,and that 90 percent of records are not modified after they are entered. No managed objects currently exist in any database. Database Servers The company currently has a single default instance of SQL Server 2000 in which the HRData database and the BusinessData database are stored.The SQL Server instance is installed on a server named SQL1. Written company policy to deploy a hardware RAID solution in the next six months.However,no disk redundancy solution is currently implemented. Database Client Computers Data in the HRData database is accessed through an ASP.NET application.The application runs in the security context of a Windows user named HRApp and uses Windows Authentication to connect to SQL Server. The BusinessData database is accessed by users in the sales department,who use Windows Authentication to connect to SQL Server.In addition ,users in the software development team need to access the BusinessData database from client computers that run either a Microsoft windows operatingsystem or another operating system Users on client computers that do not run Windows use SQL Server Authentication to connect to SQL Server. All client applications are configured to connect to the SQL Server instance.Terefore,users do not need to browse for a server. EXISTING INFRASTRUCTURE Network Infrastructure All computers are connected to a TCP/IP-based network.The network is configured as shown in the following diagram(The diagram can also be viewed by clicking the Case Study Exhibit button)



Correct:

2.Drag Drop question

A. Datum Corporation

You need to specify the procedure for implementing cryptographic functionality in the **HRData** database.

What should you do?

To answer, move the appropriate actions from the list of actions to the answer area, and arrange them in order.

List of Actions	Answer Area
Grant the ALTER ANY SYMMETRIC KEY permission to the HRApp user.	
Create a certificate that is owned by the HRApp user.	
Create a master key.	
Create two stored procedures that use the certificate to open the symmetric key. Have one of them encrypt the data with the symmetric key, and have the other decrypt the data with the symmetric key.	
Create a symmetric key that is owned by the HRApp user and encrypted with the certificate.	
Create a stored procedure that encrypts the data with the certificate, and create another stored procedure that decrypts the data with the certificate.	

Correct:

Green choice6---->Yellow Choice1

Green choice4---->Yellow Choice2

Green choice2---->Yellow Choice3

Green choice3---->Yellow Choice4

3. You are planning the backup strategy for the BusinessData database. You need to include a strategy for backup redundancy. Which backup redundancy strategy should you include?

- A. Back up the database to a disk backup device, and then back up the database to a tape device.
- B. Use different backup devices for full backups and transaction log backups.
- C. Back up only the filegroups that are not stored in a RAID disk array.
- D. Use a mirrored media set to back up the database to multiple backup devices of the same type.

Correct: D

4. You are designing a data archival strategy for order data. The placements of data and partitions for the

Sales.Orders table at the end of July are shown in the following display. On which filegroup should you locate partition 2 of the Sales.OrderArchive table?



- A.FG1
- B.FG2
- C.FG3
- D.FG4

Correct:B

5.You need to implement the HTTP endpoint for the Sales.AddOrder and Sales.GetOrderDetails stored procedures while minimizing the risk of unauthorized access to data and the risk of execution of unauthorized Transact-SQL code. Which action or actions should you perform? (Choose all that apply.)

- A.Specify that the endpoint must support BATCHES.
- B.Specify that the endpoint must use Secure Sockets Layer (SSL) ports.
- C.Grant CONNECT permission on the endpoint to the logins in the sales department.
- D.Grant EXECUTE permission on the Sales.AddOrder and Sales.GetOrderDetails stored procedures to the users in the sales department.
- E.Specify that the endpoint must use clear ports.

Correct:B C D

6.For the MarketingAnalysis database, you are adding functionality that sends the results of a query in an e-mail message to the marketing supervisors when new sales data has been entered. You need to implement a method that fulfills this requirement and minimizes the security risks. Which method should you use?

- A.Database Mail
- B.SQL Mail
- C.a managed stored procedure
- D.a command line program that is called by xp_cmdshell

Correct:A

7.You are planning the configuration of the SQL Server 2005 instance where the BusinessData database will be stored. As a security precaution, you need to ensure that Windows services that are not essential are disabled. Which Windows service or services should be disabled? (Choose all that apply.)

- A.SQL Browser
- B.SQL Server
- C.SQL Server Analysis Services

-
- D. SQL Writer
 - E. SQL Server Integration Services
 - F. SQL Server Agent

Correct: A C D

8. You need to ensure that the company's standard password policy is enforced for all logins that are used to access SQL Server 2005. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Set the appropriate local password policies for all computers on which SQL Server is installed.
- B. Set the server authentication mode of all SQL Server instances to Windows Authentication mode.
- C. Install all instances of SQL Server 2005 on computers that run Windows Server 2003 or later.
- D. Create SQL Server logins that have CHECK_POLICY enabled.

Correct: C D

9. You are designing the backup strategy for the BusinessData database. You need to ensure that the backup strategy fulfills the business requirements for minimizing data loss and database downtime. Which three backup methods should your strategy include? (Each correct answer presents part of the solution. Choose three.)

- A. differential backup every three hours
- B. full database backup once per day
- C. transaction log backup every three hours
- D. transaction log backup every 30 minutes
- E. full database backup every 30 minutes
- F. differential backup once per day

Correct: A B D

10. You are designing the interim disk availability solution for SQL1. You plan to use Windows RAID functionality. You need to identify the most appropriate RAID configuration to fulfill the availability requirements. Which RAID configuration should you use?

- A. Create a mirrored volume for the system files and database logs, and a stripe set with parity for the data files.
- B. Create a mirrored volume for the system files and database logs, and a stripe set without parity for the data files.
- C. Create a mirrored volume for the system files, database logs, and data files.
- D. Create a stripe set with parity for the system files, database logs, and data files.

Correct: A

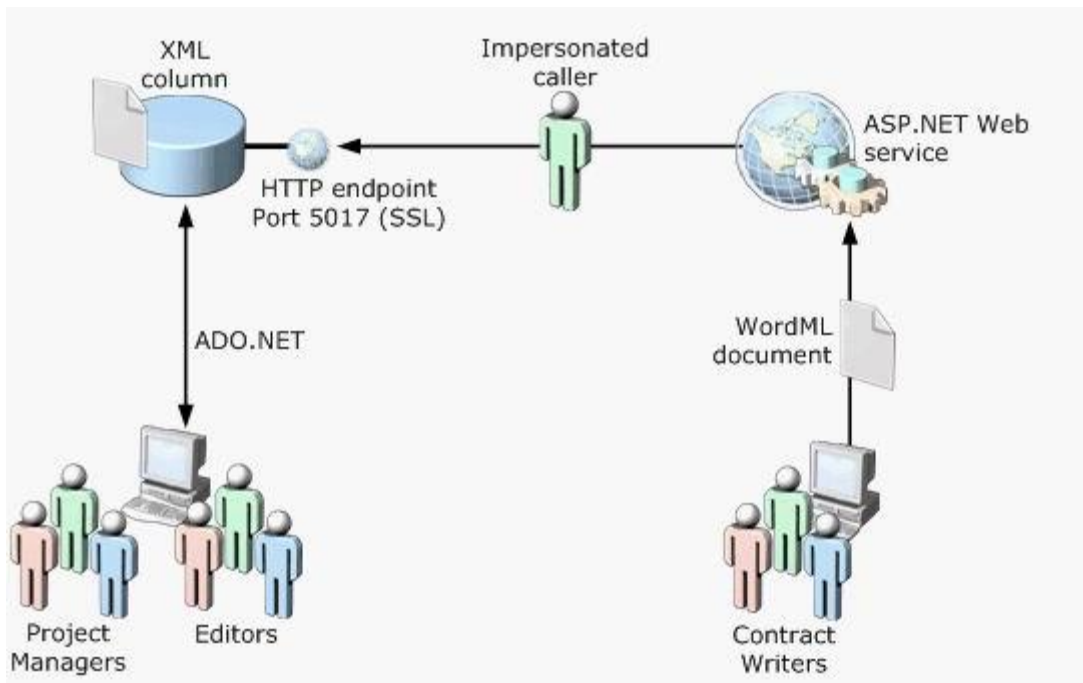
11. You want to implement database mirroring to ensure the availability of the BusinessData database. You specify SQL1 as the principal server and SQL2 as the mirror server. You need to ensure that the database mirroring solution fulfills the business requirements. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Configure SQL3 as a monitor server.
- B. Configure SQL3 as a witness server.

- C. Create a database snapshot of the BusinessData database.
- D. Configure the mirror session to use a synchronous operating mode.

Correct: B D

12. BACKGROUND Company Overview Proseware, Inc., is a technical content development company that creates documentation and training materials for various software vendors. The company currently has 26 full-time employees at its central office in Seattle, and uses more than 100 external contract writers who work from home in various locations around the world. Planned Changes The company plans to implement a new, Web service-based solution that will facilitate the process by which remote contract writers submit work. Currently, all work is submitted by e-mail as Microsoft Word document attachments, and it is stored in file shares on a file server named FP2. The new solution will allow work to be submitted to a Web service in WordML format and then stored in an xml column in a new database named proseware_projects. The Web service will be hosted on an existing Web server in the perimeter network, and it will use impersonation to access the database server. A design for the new application solution is shown in the following diagram. (The diagram can also be viewed by clicking the Case Study Exhibits button.)



Correct:

13. There are currently no permissions set on the following four objects in the proseware_biz database:
 Sales.Customers a table containing customer data
 Sales.CustomerContacts a table containing customer contact data
 Sales.ContactList a view that retrieves customer data from the Sales.Customers and Sales.CustomerContacts tables
 Sales.GetContact a stored procedure that retrieves data from the Sales.ContactList view
 You need to permit the sales_employee database role to retrieve data by using the Sales.GetContact stored procedure. Which action or actions should you perform? (Choose all that apply.)

- A. Grant the SELECT permission on the Sales.Customers object to the sales_employee role.
- B. Grant the SELECT permission on the Sales.CustomerContacts object to the sales_employee role.

-
- C. Grant the SELECT permission on the Sales.ContactList object to the sales_employee role.
D. Grant the EXECUTE permission on the Sales.GetContact object to the sales_employee role.

Correct:D

14. You are creating a management plan for the proseware_biz database. You need to specify the steps that must be performed to fail over to the secondary server in order to take the primary server offline for planned maintenance. The primary server will resume its role after the maintenance task has been completed. Which step or steps should you specify? (Choose all that apply.)

- A. Create a full database backup of the database on the primary server.
- B. Back up the active transaction log on the primary server.
- C. Restore the database on the secondary server from the most recent full backup that was taken on the primary server.
- D. Apply, in sequence, existing unapplied transaction log backups to the secondary server.

Correct: B D

15. You need to design a high-availability strategy for the proseware_projects database. Your design must fulfill all business and technical requirements. Which strategy should you use?

- A. log shipping
- B. failover clustering
- C. database mirroring
- D. replication

Correct: C

16. You are creating a management plan for the proseware_biz database. You need to specify the action that must be taken before manually inserting data through a bulk load process. Your plan must fulfill the availability and recoverability business requirements, and it also must require minimal administrative effort. Which action should you specify?

- A. Create a full backup.
- B. Create a differential backup.
- C. Configure replication.
- D. Create a database snapshot.

Correct: D

17. You need to specify the changes to the existing firewall configuration settings that are required by the HTTP endpoint that will be used by the proseware_projects database. What should you do?

- A. Create a Web publishing rule on ISA2 that allows HTTP traffic on port 5017 from IIS1 to the SQL Server computer.
- B. Create a Web publishing rule on ISA1 that allows HTTP traffic on port 5017 from IIS1 to the SQL Server computer.
- C. Create a Web publishing rule on ISA2 that allows HTTPS traffic on port 5017 from IIS1 to the SQL Server computer.
- D. Create a Web publishing rule on ISA1 that allows HTTPS traffic on port 5017 from IIS1 to the SQL Server computer.

Correct:D

18.You plan to use a managed assembly in the proseware_projects database that includes a method to save the contents of an xml column as a local file. You need to import the assembly without granting it unnecessary permissions. Which permission level should you assign to the assembly?

- A.EXTERNAL_ACCESS
- B.the default permission level
- C.SAFE
- D.UNSAFE

Correct:A

19.You are designing the data archiving strategy for the proseware_projects database. You need to identify the data that should be archived when a project is completed. Your design must ensure that minimal storage space is used, and it must fulfill the business requirements for the solution. What should you do?

- A.Archive all versions of all documents that belong to the completed project.
- B.Archive the earliest version of all documents that belong to the completed project.
- C.Archive the most recent version of all documents that belong to the completed project.
- D.Archive the earliest and most recent versions of the documents that belong to the completed project.

Correct:C

20.BACKGROUND Company Overview Coho Vineyard & Winery began as a small business that supplied wine to local retailers and restaurants.The company has grown substantially,and it now sells wine to customers all over the world. The company is based in California.The main office is located in San Francisco,and the vineyard is 60 miles to the north. Users at the vineyard access th Sales database by using an ASP.NET Web application.Customers order acses of wine by mailing or faxing a sales order form,and the details are entered manually into the database. Planned Changes The accompany recently decided to create a customer relationship management (CRM) application that will use a SQL Server 2005 database.Customer data that is currently held in the Sales database will moved to the new CRM database ,and a stored procedure will be added to the Sales database to retrieve customer data from the CRM database by using the security credentials of the original caller. The CRM database will be to all company operations.The most frequently accessed table will be the CustomerData.Customers table. The definition of this table is shown in the following code statement. CREATE TABLE CustomerData.Customers (Customer ID int PRIMARY KEY CLUSTERED, FirstName nvarchar (25) NOT NULL, LastName nvarchar (25) NULL, MiddleName nvarchar?????25??NULL) During the company??s growth,small deparemental databases have been created to store specific kinds of data.the company plans to migrate these databases to SQL Server 2005 and centralize them into a single data center that will include the Sales and CRM databases. The company recently created a central ITdepartment,The IT department has deployed a Windows Server Update Services(WSUS) server named WSUS1 to keep all computers in the main office up-to-date with the latest service packs and patches.All computers in the main office will be configured to download from this server. Problem statements The company uses log shipping to provide a redundant copy of the Sales database on second server.This secondary server must be configured to allow the swapping of log shipping roles.The two servers have not previously swapped

log shipping server roles. EXISTING DATA ENVIRONMENT Databases The Sales database is configured for log shipping. The risk of minor data loss in the event of server failure is tolerable because sales orders can be manually re-entered from the paper forms. There are three small departmental databases. Each of these databases has only a small number of users. These databases are described in the following table.

Database	Description
DeliveryVans	An MSDE database that contains details about the company's fleet of delivery vans. It is used by the shipping department to track vehicle service history.
AirlinePreferences	A Microsoft Access database that is used by the administration department when booking business travel for executives.
SeasonalContractors	A Microsoft Excel spreadsheet that contains contact details for temporary workers who are employed for the harvest season.

Correct:

21. You plan to create a unique nonclustered index on the CustomerID, LastName, and FirstName columns of the CustomerData.Customers table in the CRM database. To aid in estimating the space requirements for the index, you identify the following variables: Estimated number of rows Clustered index key Number of columns in the index Fixed data size Number of variable-length columns Average variable-length data size You need to identify the most significant additional variable that will increase the estimated index size. Which additional variable should you identify?

- A. current number of rows
- B. null bitmap
- C. fill factor
- D. automatically generated uniqueifier value

Correct: C

22. You design the view through which users can retrieve and update active orders in the Sales database as shown in the following code segment. CREATE VIEW OrderData.ActiveOrders AS SELECT OrderID, OrderDate, CustomerID, Status FROM Orders WHERE Status IN (1, 2, 3) You need to modify the view definition to enforce the business requirements for updating order status. What should you do?

- A. Add a WITH ENCRYPTION clause.
- B. Add a WITH SCHEMABINDING clause.
- C. Add a WITH VIEW_METADATA clause.
- D. Add a WITH CHECK OPTION clause.

Correct: D

23. You need to configure the Sales database to fulfill the backup requirements. Which Transact-SQL statement should you use?

- A. ALTER DATABASE Sales SET RECOVERY SIMPLE

- B.EXEC sp_dboption 'autoclose', 1
- C.ALTER DATABASE Sales SET RECOVERY FULL
- D.EXEC sp_dboption 'trunc. log on chkpt.', 1

Correct:C

24.Drag Drop question

Coho Vineyard & Winery

The data files in the **Sales** database were lost at 17:00. The transaction log is still available. You back up log to a backup named **TailBackup**, using the NO_TRUNCATE option. The regularly scheduled backups are .

You need to identify which backups to restore and the correct order in which they must be restored in order to restore the number of restore operations.

What should you do?

To answer, move the appropriate backups from the list of actions to the answer area, and arrange them in order.

List of Actions	Answer Area
TailBackup	
DiffBackup1	
FullBackup	
LogBackup1	
LogBackup2	
LogBackup3	

Correct:

Green choice6---->Yellow Choice1

Green choice1---->Yellow Choice2

Green choice2---->Yellow Choice3

Green choice3---->Yellow Choice4

25.You need to identify the most appropriate archiving strategy for the SalesData.Orders table in the Sales database. The archiving strategy must have the minimum impact on performance. What should you do?

A.Create a table named ArchivedData.Orders. Partition the SalesData.Orders table and its indexes, and use MERGE, SPLIT, and SWITCH functions every three months to move old order data into ArchivedData.Orders.

B.Create a table named ArchivedData.Orders. Every three months use an INSERT statement to copy data from the SalesData.Orders table into ArchivedData.Orders, and then use a DELETE statement to remove archived data from SalesData.Orders.

C.Create a database snapshot of the Sales database every three months, and then use a DELETE statement to remove archived data from the SalesData.Orders table.

D.Back up the Sales database to tape every three months, and then use a DELETE statement to remove archived data from the SalesData.Orders table.

Correct:A

26.You are configuring SQL1 so that the distributed query in the Sales database can access data in the CRM database on SQL2. You create a linked server for SQL2, and you create a linked server login that uses impersonation. Now, you need to ask the network administrator to configure SQL1. Which two tasks should you ask the administrator to perform? (Each correct answer presents part of the solution. Choose two.)

A.Add the user account that is used by the SQL Server service to the local Administrators group.

B.Enable the Do not trust this user for delegation Active Domain property for the user account that is used by the SQL Server service.

C.Create a Service Principal Name (SPN) for the user account that is used by the SQL Server service.

D.Enable the Trusted for delegation Active Domain property for the user account that is used by the SQL Server service.

Correct:C D

27.Drag Drop question

Coho Vineyard & Winery

You are documenting the steps that are necessary to ensure that the servers in the data center are updated and service packs and patches become available. You want to ensure that the risk of service interruption due to incompatibilities is minimized.

You need to identify the steps that your patch management process should include to install and verify correct updates.

What should you do?

To answer, move the appropriate actions from the list of actions to the answer area, and arrange them in the correct order.

List of Actions

Use the WSUS console to approve compatible updates for the SQL Production computer group.

On each SQL Server 2005 computer, download SQL Server updates from the Microsoft SQL Server Web site.

Use the WSUS console to approve updates for the SQL Test computer group.

Use the WSUS Group Policy template to disable client-side targeting.

Run the validation scripts on the test servers to verify correct operation.

Use the WSUS console to verify that updates have been installed on the test servers.

Use the WSUS console to verify that updates have been installed on the production servers.

Answer Area

Correct:

Green choice1---->Yellow Choice1

Green choice7---->Yellow Choice2

Green choice5---->Yellow Choice3

Green choice6---->Yellow Choice4

Green choice3---->Yellow Choice5

28.You are planning the configuration of SQL1. You need to use the most appropriate Windows account for the SQL Server service. Which account should you use?

A.a domain user account

-
- B.a local user account
 - C.the NETWORK SERVICE account
 - D.the LOCAL SYSTEM account

Correct:A

29.You need to implement a high-availability solution for the CRM database to fulfill the availability requirements. Which high-availability technology should you use?

- A.database mirroring
- B.database snapshot
- C.replication
- D.log shipping

Correct:A

30.BACKGROUND Company Overview Consolidated Messenger coordinates package deliveries throughout the United States.The company partners with multiple regional delivery companies to distribute packages of all sizes to both business and residential addresses. The company is located in Chicago.Its regional delivery partners are located throughout the United States.The company partners with multiple regional delivery companies to distribute packages of all sizes to both business and residential addresses. The company is located in Chicago.Its regional delivery partners are located throughout the United States. Planned Changes Specifications are being written for a new application to manage employee benefits for Consolidated Messenger.This application will use the users?? Active Directory credentials to authenticate the users to SQL Server .Some of the benefits data is sensitive and should be viewable only from the benefits management application.However,users are allowed to view other,less sensitive benefits data when they use Microsoft Access to issue ad hoc queries against the benefits data. In order to reduce expenses , the Promotions database and the Partners database will be consolidated onto a single SQL Server computer.Both of these databases are accessed by employees of the regional delivery companies by using SQL Server-authenticated logins.All users who have access to the Promotions database can access the Partners database ,but not all users of the Partners database are allowed to access the Promotions database.This SQL Server computer should have the fewest number of instances possible while still meeting these requirements. Problem Statements Users report that browser response time is slow in the Shipment Tracking application,which uses the Tracking database .The Shipment Tracking application uses a large number of global temporary tables.Application diagnostics show that the delays are caused by performance issues in the database server named SQL1.Results of running the performance MMC snap-in (PerfMon) reveal high values for following counters in the tempdb database on SQL1: . Log Flush Waits/sec . Log Growths The main tables in the Orders database on a server named SQL5 frequently experience heavy data modification and heavy report generation concurrently.leading to performance problems for the reports due to excessive blocking. EXISTING DATA ENVIRONMENT Database Servers The SQL Server computers,all of which are running SQL Server 2005 , are shown in the following table

Server	Operating system	Database (size)
SQL1	Windows Server 2003	Tracking (500 GB)
SQL2	Windows Server 2003	Promotions (30 GB)
SQL3	Windows 2000 Advanced Server	Partners (50 GB)
SQL4	Windows Server 2003	ExtraNet (100 GB)
SQL5	Windows Server 2003	Orders (150 GB)
SQL6	Windows Server 2003	CRM (250 GB)
SQL7	Windows Server 2003	ERP (100 GB)
SQL8	Windows Server 2003	Reporting Services (SSRS) databases

Correct: