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Exam :070-225

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The following ten case studies are included:

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Case Study #1, Contoso, Ltd

Introduction:
You are hired by Contoso, Ltd., to upgrade its existing Exchange Server environment to Exchange 2000 server.

Background:
History:
Contoso, Ltd., is an agricultural research company. The company's headquarters is located in Bismarck. The company has hundreds of offices and research factories, which are located all over the world. The company employs approximately 10,000 computers.

A large company named Enchantment Lakes Corporation owns Contoso, Ltd. The headquarters Enchantment Lakes Corporation is located in New York. Contoso, Ltd., exercises complete control of over its own business.

Contoso, Ltd., recently acquired a small agricultural research company that has offices in Calcutta, Milan and Tripoli.

Company Profile:
Contoso, Ltd., specializes in crop development, generic manipulation and the sale of seeds. The company's primary customers are farmers and government agencies. The company has approximately 10,000 Exchange Server mailboxes.

Bismarck headquarters employs approximately 5,000 people. Each of the other regional offices in the following cities employs 750 and 1,000 people.

- Bonn
- Cairo
- Hong Kong
- Rio de Janeiro

The other company locations each employ between 5 and 100 people.

Network planning is preferred in Bismarck. Each regional office has an IT staff that is responsible for the day-to-day operations of the servers and network connections in that office.

Factors that influence Business Strategies:
Communication and collaboration are very important at Contoso, Ltd., The company believes that it will succeed if it can successfully communicate its message to employees, to customers and to shareholders.

Contoso, Ltd., will continue to operate as an independent company. However, employees of Contoso, Ltd., will continue to communicate much more frequently with Enchantment Lakes Corporation in the future.

Existing IT Environment:
Directory Design:
The Contoso, Ltd., Active Directory design is shown in the Exhibit.

Namespace
www.contoso.com
Corporate
N. America
S. America
Asia
Africa
Europe

Sites
Contoso
Corporate
N. America
S. America
Asia
Africa
Europe

Contoso, Ltd., keeps the Active Directory employee data, such as office location, department and phone number, up-to-date by exporting information from the Human Resources (HR) employs database to the Exchange Server 5.5 directory. The connection from the HR database to the Exchange Server 5.5 is written in Directory API (DAPI), and work is currently being done to migrate the connection to Active Directory Services.

Contoso, Ltd., keeps the Active Directory employee data, such as office location, department and phone number up-to-date by exporting information from the Human Resources (HR) employee database to the Exchange Server 5.5 directory. The connection from the Human Resources (HR) database to Exchange Server 5.5is written in Directory API (DAPI), and work is currently being done to migrate the connection to Active Directory Services Interface (ADSI). The migration will not be completed until the Exchange 2000 Server deployment is complete.

Messaging Environment:
Bismarck headquarters has two mailbox servers. BismarckMail1 and BismarckMail2. Headquarters also has bridgehead mail Server named BismarckHUB1.

Every Contoso, Ltd., location has at least one Exchange Server 5.5 computer.

Exchange Server 5.5 is configured as one Exchange organization and 12 Exchange sites. Sites that have stable bandwidth are connected to Bismarck headquarters by means of site connectors. Sites that have unreliable connections to headquarters use X400 connectors.

When Exchange Server 5.5 was installed, sites were configured according to number of users and the types use Microsoft Outlook 2000.

SMTP mail is used at all Contoso, Ltd., offices to communicate to Enchantment Lakes Corporation. However, full SMTP e-mail addresses are currently typed manually.

All of the Exchange Server computers in Contoso, Ltd., locations are members are member servers. The Contoso, Ltd., WAN is currently configured in a hub-and-spoke topology.

Public folder usage at Contoso, Ltd., is minimal. The public information store is 200 MB. Public folders are not currently backed up.

The Calcutta, Milan and Tripoli offices of the newly acquired agriculture-research company do not have e-mail servers.

- Users in Calcutta offices use the mail Server in the Hong Kong office and store the e-mail messages on the Server.
- Users in the Milan office use the mail Server in the Bonn office and download the e-mail messages from that Server.
- Users in the Tripoli office use the mail Server in Cairo office and store these e-mail messages on that Server.

Network Infrastructure:

The Contoso, Ltd., WAN design is shown in the exhibit.

Contoso, Ltd., plans to upgrade the WAN. However, the company will be unable to upgrade for at least two years.

The regional offices run Microsoft Windows 2000 Advanced Server. Offices that have lower than 500 employees run Windows 2000 Standard.

All Internet access is routed through Bismarck headquarters.

There are domain controllers at each regional office. Most of other locations use one Server for all services.

All domains are administered locally, except for the North American domains and servers. The North American domains are administered from Bismarck headquarters.

Exchange 2000 Server Requirements and Goals:
Security Requirements:
Contoso, Ltd., and Enchantment Lakes Corporation plan to use e-mail to communicate more frequently after Exchange 2000 Server is implemented. The companies want messages between executives to be encrypted in the future; they might want the ability to encrypt all messages that are sent between the two companies.

Archiving Requirements:
Contoso, Ltd., wants to backup the mailboxes and public folders every night and to create weekly and monthly archives.

Contoso, Ltd., does not currently have a recovery solution. Toe expedite the recover of e-mail company wants to install recovery servers at strategic locations.

Availability Requirements:
Contoso, Ltd., wants to cluster the servers in the regional offices and headquarters because there are more people working at those offices and because the company wants to provide high availability for mailbox access.

Contoso, Ltd., wants to implement Outlook Web Access to make the company's mail Server more accessible to employees. The Sales team in particular must have this improved accessibility.

Users must be able to connect to local e-mail servers even when WAN connections are down.

Interoperability Requirements:
Contoso, Ltd., wants SMTP e-mail addresses for Enchantment Lakes Corporation to appear in an address list.

Goals:
Bismarck headquarters has two computers that the company plans to use as dedicated instant Messaging servers. The servers will be named M1 and M2.

The company is considering the implementation of additional front- end servers in the five regional offices: Bismarck, Bonn, Cairo, Hong Kong and Rio de Janeiro.

Users in Milan office must be able to view their own calendars and some public folders. They must be able to access their e-mail when they are offline.

Contoso, Ltd., plans to use public folders as a central repository for all research documents.

The company wants to implement a backup solution for public folders. In addition, the company wants to be able to restore all public folders in the most efficient manner.

The company wants to continue storing confidential research information in same public folders and allowing employees of only the research facilities to have access to this data.

The administrative staff at Bismarck headquarters wants to limit the administrative overhead necessary for maintaining message routing throughout Contoso, Ltd.,

Client Computer Configuration:
Contoso, Ltd., wants to implement instant Messaging between the Bismarck headquarters and Contoso, Ltd., and the New York headquarters of Enchantment Lakes Corporation. The first implementation of instant Messaging will be an experimental test phase.

The Sales team frequently hosts meetings in Canberra and Athens. The Sales will require the use of Outlook Web Access, when they are not in their home office.

Contoso, Ltd., wants to acquire additional small agricultural-research firms and quickly integrate them into the company. Typically the e-mail communication between the companies will occur by means of SMTP or X400 mail systems.

Questions, Case Study #1, Contoso Ltd.

QUESTION NO: 1
How should you design an Instant Messaging solution for Contoso, Ltd., to enable communication with Enchantment Lakes Corporation?

A. Create an SRV record for _rvp service on Contoso, Ltd's internal DNS Server.
Place the Instant Messaging Router in the Perimeter Network (DMZ)
Use e-mail addresses for users to access Instant Messaging.
Create an SRV record for _rvp service on external DNS Server.
Place the Instant Messaging Router in the Perimeter Network (DMZ)
Use e-mail addresses for users to access Instant Messaging.
B. Create an SRV record for _rvp service on external DNS Server.
Place the Instant Messaging Router in the Perimeter Network (DMZ)
Use the alias@en.contoso.com address for users to access Instant Messaging.
C. Create an SRV record for _rvp service on internal DNS Server.
Place the Instant Messaging Router in the Perimeter Network (DMZ)
Use the alias@en.contoso.com address for users to access Instant Messaging.

Answer: A

QUESTION NO: 2
What should you do to enable communication between Contoso, Ltd., and newly acquired research facilities until the facilities are fully integrated into the organization?

A. Implement an X 400 connector or an SMTP connector on the front-end mail Server at Bismarck headquarters.
B. Implement an X 400 connector or an SMTP connector on the back-end mail Server at Bismarck headquarters.
C. Implement an X 400 connector, or use the current SMTP connector that is on one of the SMTP connector servers.
D. Implement a dedicated Server for foreign connectors at the regional office that is nearest to the office that needs to communicate with the new research facility.

Answer: D

QUESTION NO: 3
What should you do to add to Contoso, Ltd's DNS Server SRV records to accommodate unified namespace for instant Messaging?

A. _rvp_tcp.contoso.com SRV 0.0.80 M1.contoso.com
_rvp_tcp.contoso.com SRV 10.0.80 M2.contoso.com
B. _rvp_tcp.contoso.com SRV 10.0.443 M1.contoso.com
_rvp_tcp.contoso.com SRV 10.0.80 M2.contoso.com
C. _rvp_tcp.contoso.com SRV 0.0.80 BismarckM1.contoso.com
_rvp_tcp.contoso.com SRV 10.0.80 BismarckReg1.contoso.com
D. _rvp_tcp.contoso.com SRV 10.0.443 BismarckM1.contoso.com
_rvp_tcp.contoso.com SRV 10.0.80 BismarckReg1.contoso.com

Answer: A

QUESTION NO: 4
How should you modify the Exchange architecture to fulfill the requirements for Outlook Web Access?

A. Place front-end servers in Bismarck office to service back-end servers in all regions.
B. Place front-end servers in Bismarck, Bonn, Cairo, Hong Kong and Rio de Janeiro regional offices to service all back-end servers.
C. Place front-end servers in the Bismarck, Athens, Bonn, Canberra and Rio de Janeiro offices to back-end servers within their respective regions.
D. Place front-end servers in the Bismarck, Athens, Bonn, Canberra and Rio de Janeiro offices to service back-end servers in the Bismarck, Athens, Bonn, Canberra and Rio de Janeiro offices respectively.

Answer: B

QUESTION NO: 5
How should you configure the Active Directory Connector (ADC)for Contoso, Ltd before the company upgrades to Exchange 2000 Server?

A. Continuously replicate the directory data from Exchange Server 5.5 to Windows 2000. Continue to make revisions in the Exchange Server 5.5 directory until Exchange 2000 is fully implemented.
B. Continuously replicate the directory data from Windows 2000 to Exchange Server 5.5. Make revisions in Windows 2000 directory.
C. Perform a one-time export of the directory data from Exchange Server 5.5 to Windows 2000.

Make revisions in Windows 2000, and export the directory data back to the Exchange Server 5.5 directory.

D. Perform a one-time export of the directory data from Exchange Server 5.5 to Windows 2000.
Make revisions in Windows 2000, but do not export the directory data back to the Exchange Server 5.5 directory.

Answer: B

QUESTION NO: 6
How should you modify the Active Directory Design to provide increased availability of directory access for Exchange server?

A. Ensure that there is a global catalog server at each location that has at least one Exchange server computer.
B. Ensure that there is a DNS server at each location that has at least one Exchange server computer.
C. Ensure that there is a domain controller at each location that has at least one Exchange server computer.
D. Ensure that there is a DHCP server at each location that has at least one Exchange server computer.

Answer: A

QUESTION NO: 7
Contoso, Ltd's connection to Outlook web Access is shown in the Exhibit.

You need to modify the Contoso, Ltd., routers so that the client computers that run Microsoft Internet Explorer 5 can use Outlook Web Access. Move the appropriate modifications to the appropriate router or routers. (Use only modifications that apply. You might need to use modifications more than once).
Routers to Configure
Modifications
Collapse
Router B
Firewall
<<Move
Remove>>
Open all LDAP ports
Open all NetBIOS ports
Open all RPC ports
Open the port for HTTP
Open the port for Kerberos
Open the port for SSL

Answer:

QUESTION NO: 8
How should you design an Exchange 2000 server data recovery solution for Contoso, Ltd.?

A. Place recovery servers in the Bismarck, Cairo and Milan offices.
Restore information store databases for the Bismarck office and for offices that do not have mail servers.

B. Place recovery servers in the Bismarck, Calcutta and Tripoli offices.
Restore information store databases for the Bismarck office and for offices that do not have mail servers.

C. Place recovery servers in the Bismarck, Bonn, Cairo, Hong Kong and Rio de Janeiro offices.
Restore information store databases for the respective regions of those offices.

D. Place recovery servers in the Bismarck office.
Restore information-store databases for the entire company.

Answer: C

QUESTION NO: 9
What are the two possible ways to fulfill the security requirements for the executives? (Choose Two)

A. Implement the L2TP/IPSec between Enchantment Lakes Corporation and the client computers of the executives of Contoso, Ltd.,
B. Implement PPTP/IPSec between Enchantment Lakes Corporation and the client computers of the executives of Contoso, Ltd.,
C. Implement secure MME at Enchantment Lakes Corporation and at Contoso, Ltd.,
D. Implement digital certificates at Enchantment Lakes Corporation and at Contoso, Ltd.,
E. Require executives to use Outlook Web Access, and require SSL for all Outlook Web Access connections.

Answer: C, D

QUESTION NO: 10
The Contoso, Ltd., mail environment is shown in the exhibit.

Which of these servers should be replaced with two node server clients?
Move the appropriate servers from the Exchange 2000 server computers place to the Clustered Exchange 2000 server computer pane. (Use only servers that apply. The order of the servers is unimportant).
Clustered Exchange 2000 Server computers
Exchange 2000 Server computers
Collapse
<<Move
Remove>>
BismarckHub1
BismarckMail1
BismarckMail2
BonnHub1
BonnMail1
CairoHub1
CairoMail1
HongKong1
HongKongMail1
RioHub1
RioMail1

Answer:

QUESTION NO: 11
How should you enable users in Milan to access e-mail after Exchange 2000 server is implemented?

A. Implement Outlook Express on all client computers at the Milan office and configure the client computers for POP3 mail.
Enable POP3 protocol on the mail server at Bonn office.

B. Implement Outlook Express on all client computers at the Milan office and configure the client computers for IMAP4.
Enable IMAP4 protocol on the mail server at Bonn office.

C. Implement Outlook Express on all client computers at the Milan office.
Enable HTTP protocol on the mail server at Bonn office.

D. Implement Outlook 2000 in Corporate or Workgroup mode on all client computers at the Milan office.

Answer: D

Case Study #2, ***Hiabuv Toys***

Introduction:
You are hired by Hiabuv Toys to assist the company with migrating its messaging system from Exchange Server 5.5 to Exchange 2000 Server. You need to evaluate the company's current messaging infrastructure, access current and future business needs, and design and deploy Exchange 2000 Server in the company's environment.

Background:
Company Profile:
Hiabuv Toys designs and sells high-quality electronic toys. The company sells its products through its web site, catalog distributors and rental stores. The company has 8,000 employees in five U.S locations.

Company headquarters are located in Portland. Office locations and number of employees are shown in the list.

Location	Employees
Chicago	2,000
Dallas	600
Kansas City	1,500
Los Angeles	800
Portland	3,000

Business Plan:
Hiabuv Toys currently develops new toys. The company actively seeks customer feedback on how to improve its products.

Existing IT Environment:
Network Infrastructure:
The network diagram is shown in exhibit.

Chief Information Officer (CIO):
I want to implement Exchange 2000 Server so that we can create collaboration services that will allow our employees to communicate online with our business partners and suppliers in real time.

We are planning to give all of our employees Handheld PCs. We want to ensure that employees can access their e-mail while they are in the office or in remote locations.

Director of IT:
Our environment consists of a Microsoft Windows 2000 Active Directory network. We run Windows 2000 professional on all of our client computers.

We have an Exchange Server 5.5 messaging system for the entire company. We have a separate Exchange site for each office, with at least one Exchange Server computers in each office.

I want to ensure that our high-speed data lines are not burdened with unnecessary network and messaging traffic, even if we must spend more time managing our messaging infrastructure. I want the messaging systems to use as little bandwidth as possible over our WAN connections.

E-mail manager:
All administration for the Exchange Server 5.5 computers is performed by an IT group in the Portland office Network administration for the LANs and the WAN is performed by a separate technical support group.

Each office has a LAN analyst who is responsible for resetting user passwords, managing distribution lists and Updating exchange user information, such as telephone numbers and addresses.

The deployment plan details the following deployment order:
1. Portland
2. Dallas
3. Los Angeles
4. Chicago
5. Kansas City

The company executives and designers are in the Portland office. Executives should have their mailboxes backed up daily, and the backup tapes should be retained for atleast one year. I also want to ensure that we can recover their mailboxes as quickly as possible and before those of other network users, if possible.

Designers should have their mailboxes backed up daily, and the backup tapes should be maintained for five years. We should be able to restore their mailboxes after those of the executives, but before those of all other network users.

We have an aggressive internship program that places a total of 20 to 30 interns in various departments throughout the company. I want to limit the size of each interns mailbox to 20MB.

I want to allow employees to access their e-mail by using home computers, but I do not want our technical support staff to provide equipment or install special software on these home computers.

Because the migration might take the several months, I want to ensure that out IT group can continue to use the Exchange 5.5 Administrator application until all offices are upgraded to Exchange 2000 Server.

I want to use the Exchange Server 5.5 computer in Portland office as the bridgehead Server for the Active Directory Connector (ADC) because it has a faster CPU and more disk space than the other Exchange Server 5.5 computers.

Messaging System:
Each office currently has its own Exchange Server 5.5 computer in the Portland and Chicago offices.

Exchange Server computer has approximately 30GB of data in the private information store and approximately 8GB of data in its public information store. Nightly backups of Exchange Server computers in the Portland and Chicago offices currently take 10hours each.

The total data stored on each of the Exchange Server 5.5 computer in the other company offices is between 5Gba and 10 GB.

All Exchange 2000 Server configurations should allow maximum single-instance storage and should minimize Server memory usage where possible.

Employees use Microsoft Outlook 2000 for e-mail use.

Hardware:
These benchmarks were achieved when Exchange 2000 Server was tested on the planned hardware configurations.

- Each Exchange 2000 Server computer can support 3,000 users.
- Each Exchange 2000 Server computer can generate approximately 45 global catalog queries per second.
- The global catalog Server configuration can support 240 queries per second.

Questions, Case Study #1, Contoso, Ltd

QUESTION NO: 1
How should you configure the Active Directory Connector (ADC)?

A. Configure a one-way connection agreement from Active Directory to each Exchange Server 5.5 site.
B. Configure a one-way connection agreement from Exchange Server 5.5 site to Active Directory.
C. Configure a two-way connection agreement between Exchange Server 5.5 site and Active Directory.
D. Configure a two-way connection agreement between the hub Exchange Server 5.5 site and the root domain in the Active Directory forest.

Answer: A

QUESTION NO: 2
What should you do to minimize the effect of denial of service attacks on the Server that is used by company employees for remote e-mail access?

A. Use two storage groups on the Exchange 2000 Server computer that provides Internet mail access.
B. Place two front-end Exchange 2000 Server computers in a perimeter network. (DMZ).
C. Enable IPSec on the Exchange 2000 Server computer that provides Internet mail access.
D. Enable SSL connections on the Exchange 2000 Server computer that provides Internet mail access.

Answer: B

QUESTION NO: 3
Which permission should you designate to the Exchange administrators in the Portland office?

A. Exchange Administrator
B. Exchange Full Administrator
C. Exchange View Only Administrator
D. Enterprise Administrator

Answer: B

QUESTION NO: 4
How should you implement a fault-tolerant configuration for users who access e-mail by using Outlook 2000?

A. Use two front-end servers in each office.
B. Use clustered Exchange 2000 mailbox Servers.
C. Use an Exchange 2000 directory Server in Portland office.
D. Use an Exchange 2000 public-store Server in the Chicago office.

Answer: B

QUESTION NO: 5
You are designing a collaboration service that will fulfill the company's business requirements. How should you ensure that the service could be used by internal users and with suppliers?

A. Use an Exchange 2000 Server computer running the Chat service in auditorium mode.
Create a Web site that suppliers can access.
B. Use a dedicated Exchange 2000 client Server running the Chat service in moderated mode.
Create a Web site that suppliers can access.
C. Use a dedicated exchange 2000 Instant Messaging Server.
Allow internal employees to use Instant Messaging.
Enable suppliers to access the Hiabuv Toys instant Messaging Server.
D. On an exchange 2000 Server computer, create a public folder for each supplier.
Create an SMTP connector that will be used to replicate the contents of these public folders to the suppliers.

Answer: C

QUESTION NO: 6
How should you provide a redundant front-end Server configuration to support users who access their e-mail from home?

A. Install two Windows 2000 Server computers that run Routing and Remote Access. Connect modems to each of these servers.
B. Use two storage groups on each Exchange 2000 Server computer. Use one storage group to support users who access e-mail from home, and the other storage groups to support users who access e-mail in the office.
C. Place two front-end protocol servers on the Internet. Configure these two servers to use Network Local Balancing (NLB).
D. Place the LDAP on the Internet.
E. Configure the LDAP server to have two separate ports: one for each protocol Server.

Answer: C

QUESTION NO: 7
What should you do to maximize security on the Server that is used by company employees for remote e-mail access?

A. Use the Internet Authentication Service.
B. Use digital certificates on the client computers.
C. Place the front-end Server outside the Internet firewall.
D. Require SSL connections on the front-end Server.
E. Use IPSec to encrypt traffic on port 25.

Answer: D

QUESTION NO: 9
Which two actions should u perform to implement a fault tolerant configuration for mailbox access for the handheld PCs that will be given to employees? (Choose two)

A. Use clustered Exchange 2000 mailbox servers
B. Use two front end protocol servers in each office
C. Use a separate information store on the Exchange 2000 server computers to contain the mailbox for the handheld PCs.
D. Use an exchange 2000 directory server in the Portland office
E. Use and exchange 2000 public store server in the Chicago office.

Answer: A, B

QUESTION NO: 8
Based on business priorities, when should you implement your Exchange 2000 server administrative group design?

A. Before upgrading the Portland office.
B. After Upgrading the Portland office, and before upgrading the KANSAS City office.
C. After upgrading the Los Angeles office, and before upgrading the Kansas city office.
D. After upgrading the KANSAS city office.

Answer: B

QUESTION NO: 10
Which two actions should you perform to implement a fault-tolerant configuration for mailbox access for the HandHeld PCs that will be given to employees? (Choose two)

A. Us clustered exchange 2000 mailbox servers
B. Use two front-end protocol servers in ach office
C. Use a separate information store on the Exchange 2000 Server computers to contain the mailboxes for the Handheld PCs
D. Use an exchange 2000 directory server in the Portland office
E. Use an Exchange 2000 Public-store in the Chicago office

Answer: unknown

Case Study #3, ProseWare Corporation

Introduction:
ProseWare Corporation has hired you to provide design and deployment services for the implementation of Microsoft Exchange 2000 Server throughout the company. This implementation will be in upgrade from Exchange Server 5.5, which is the company's existing e-mail system.

Background:
Company Profile:
ProseWare Corporation supplies other companies with human resources for a variety of positions. The company currently has offices in seven cities in the United States. Approximately 1,000 people work in each of six regional offices. Approximately 2,000 people work at the company headquarters in Chicago. Two hundred of the headquarters employees are executives.

History:
ProseWare Corporation has expanded by acquiring other staffing resource companies. ProseWare Corporation recently acquired a company in Boston. The Boston office employs about 800 people who use Lotus notes for e-mail.

Business Plan:
The executives at ProseWare Corporation will continue the company's expansion by acquiring other companies.

Existing IT Environment:
Directory Design:
ProseWare Corporation has a single Microsoft Windows NT 4.0 domain. The domain contains all ProseWare Corporation user accounts and computers.
ProseWare Corporation is in the process of upgrading to Windows 2000. The company has recently completed the Active Directory design and has implemented this design across the organization. Only 50 employees have been added to Active Directory. The Active Directory structure consists of one domain and one site. There are two domain controllers in each location.

Administrative Model:
The administrator of the ProseWare Corporation domain is performed in the Chicago office. All Exchange Server computers are administered from the Chicago office.

Network Infrastructure:
ProseWare Corporation has a 100-Mbps LAN for servers at each location. Client computers of each location are connected in a 10-Mbps LAN. ProseWare Corporation currently uses permanent 15-Mbps links to connect the locations. The network diagram is shown in the Exhibit.

ProseWare Corporation currently uses WINS for name resolution. There are two WINS servers at each location. After the implementation of Windows 2000, the company will use DNS for name resolution.

Servers:
All of the Exchange Server 5.5 computers are capable of running Exchange 2000 Server. The existing Exchange Server configurations are shown in the exhibit.

The IT staff at ProseWare Corporation has installed Exchange 2000 Server on a domain controller in a lab. They cannot connect to the Exchange 5.5 directory, which is also in the lab, when configuring connection agreements.

There is money in the project budget for two additional Server computers.

Client Computers:
ProseWare Corporation has recently upgraded all client computers to Windows 2000 Professional. Most of these computers run Microsoft Outlook 2000. About 200 migrating consultants use either POP3 or IMAP4 client computer software to remotely access Exchange.

Exchange Server 5.5 Outlook Web Access is available to all employees.

Messaging Environment:
ProseWare Corporation relies heavily on e-mail for communication within each location. Approximately 5% of the company's e-mail messages are sent between locations.

The executives of the ProseWare Corporation use e-mail predominately to communicate with other executives within the company. The executives store many more messages than the typical ProseWare Corporation e-mail users.

When the company installed Exchange Server 5.5, the manager in charge of the e-mail system instructed employees to use public folders. However, she has discovered that employees are not using public folders. Employees avoid using public folders because it's difficult to locate specific documents within the public folders. Also, the folders are available only to people who use Microsoft Outlook. The manager in charge of the e-mail system is concerned that if the employees did start to use public folders. The resulting increase in usage might cause a bottleneck on the Exchange Server computers and increased network traffic.

There is an internal SMTP host that relays across the existing Exchange 5.5 Internet Mail Service.

Exchange 2000 Server Requirements and Goals:
Security Requirements:
ProseWare Corporation wants to increase security to eliminate relay on undedicated commercial e-mail, to prevent forged e-mail messages, and to reduce e-mail virus attacks.

Archiving Requirements:
The Exchange 2000 Server computers should be designated to allow recovery of mailboxes without designating e-mail availability for every employee on any single Server.

All Exchange Servers must be recoverable to the point of failure.

All exchange backups should truncate and purge the log files.

Interoperability Requirements:
ProseWare Corporation wants to complete the upgrade from Exchange Server 5.5 to Exchange 2000 Server within one year.

The people in Boston who use the Nodes Server computer must have maximum interoperability between Nodes and Exchange users at ProseWare Corporation. An Exchange 2000 Server computer will replace the Nodes Server near the end of the Exchange 2000 implementation.

The manager in charge of the e-mail system wants to allow employees to access e-mail messages by using Microsoft Internet Explorer 5 when they are not in the office. She wants this solution be scalable and easy to use.

The Managing Consultants need to be able to their calendars and contacts with messaging client software.

Support Requirements:
ProseWare Corporation wants to reduce the administrator cost of supporting each of the Exchange Server computers at the six regional offices.

The company also wants to provide a single tool for the administration of Exchange Server 5.5 mailboxes and Exchange 2000 Server mailboxes.

The executives should have higher storage limits than the rest of the Exchange users. Every effort to minimize the amount of storage used by the executives should be made.

Downtime should be minimized in the event of a failed upgrade.

*Questions, Case Study #3, **ProseWare Corporation**.*

QUESTION NO: 1
You need to decide how many Exchange 2000 Server mailbox computers to use for the ProseWare Corporation and where to place these servers. Which factor or factors should influence this decision? (Choose Three)

A. Administrative Model
B. Bandwidth Utilization
C. E-mail traffic patterns
D. Firewall Configuration
E. Namespace
F. Network protocols
G. Network reliability
H. Network topology
I. Server Hardware

Answer: A, B, C

QUESTION NO: 2
How should you ensure that the Active Directory design will accommodate Exchange 2000 Server?

A. Define the single domain at a Microsoft Windows 2000 site.
Ensure there is a single global catalog Server in Chicago, which is used by all of the regional offices.
B. Define the single domain at a Microsoft Windows 2000 site.
Configure one domain controller in each location as a global catalog Server.
C. Define each location as a Microsoft Windows 2000 site.
Configure the domain controller in Chicago as global catalog Server for all locations.
D. Define each location as a Microsoft Windows 2000 site.
Configure one domain controller in each location as a global catalog Server.

Answer: D

QUESTION NO: 3
What should you do to improve employee's access e-mail by using Microsoft Internet Explorer 5?

A. Install a front-end Server at each location.
Configure each Server to use SSL, and use Outlook Web Access to connect to these servers.
B. Install two front-end servers in Chicago.
Configure each Server to use SSL, and use Outlook Web Access to connect to these servers.
C. Install an IIS Server at each location
Configure each Server to use SSL, and use Outlook Web Access to connect to these servers.
D. Install two IIS servers that use SSL in Chicago.
Install Outlook Web Access on each of these servers.

Answer: B

QUESTION NO: 4
How should you change the client computer software for the managing consultants to meet the interoperability requirements?

A. Replace the POP3 and IMAP4 with Outlook Web Access.
B. Replace the POP3 and IMAP4 software with Outlook 2000.
C. Replace the IMAP4 software with POP3 software.
D. Replace the POP3 software with IMAP4 software.

Answer: A

QUESTION NO: 5
How should you design the Active Directory Connector (ADC) Recipient Connection Agreements?

A. Create a one-way Connection Agreement for one Exchange 5.5 site.
B. Create a one-way Connection Agreement for each Exchange 5.5 site.
C. Create a two-way Connection Agreement for one Exchange 5.5 site.
D. Create a two-way Connection Agreement for each Exchange 5.5 site.

Answer: B

QUESTION NO: 6
Which upgrade method should you use to upgrade ProseWare Corporation's mailbox servers to Exchange 2000 Server?

A. Use the Exchange 2000 Server exmerge utility to move the mailboxes to Exchange 2000 Server.
B. Use the move mailbox upgrade method to a new Exchange 2000 environment.
C. Use the in place upgrade feature in Exchange 2000 Server.
D. Use the leapfrog upgrade method using the two new servers.

Answer: C

QUESTION NO: 7
The Active Directory Connector (ADC) in the labs is not updating the directory properly. What should you change to solve this problem?

A. Reinstall the Exchange 2000 Server ADC. Reconfigure the connection agreement to the one way.
B. Configure the Exchange Server 5.5 and the ADC connection agreement to use LDAP port 389.
C. Configure the Exchange Server 5.5 and the ADC connection agreement to use LDAP port 390.
D. Reinstall the Windows 2000 ADC. Reconfigure the connection agreement to be one-way.

Answer: C

QUESTION NO: 8
How should you change the current Exchange Server 5.5 routing and administrator model for Exchange 2000 Server?

A. Use an administrative group and a routing group for each existing Exchange Server 5.5 site.
B. Combine all Exchange Server 5.5 sites into one administrative group and one routing group.
C. Combine all Exchange Server 5.5 sites into one administrative group.
Use a routing group for each existing Exchange Server 5.5 site.
D. Use an administrative group for each Exchange Server 5.5 site.

Combine all Exchange Server 5.5 sites into one routing group.

Answer: C

QUESTION NO: 9
How should you design the backup strategy to allow the recovery from a corrupted database?

A. Back up each Exchange database separately.
B. Back up each Exchange storage group separately.
C. Back up the Exchange 2000 Server computer offline.
D. Back up drive M on each Exchange 2000 Server computer.

Answer: B

QUESTION NO: 10
How should you configure the Exchange 2000 Server mailbox computers in Chicago to meet archiving requirements?

A. On one Server, create one storage group with one database. Place the executive's mailboxes and 800 other mailboxes in this database. On the second Server, create one storage group with one database. Place 1000 mailboxes in this database. Backup each storage group to tape.
B. On one Server, create one storage group with one database. Place the executive's mailboxes and 800 other mailboxes in this database. On the second Server, create one storage group with one database. Place 1000 mailboxes in this database. Backup each database to tape.
C. On each Server create one storage group with five databases. Place the executive mailboxes in one database. Place 200 mailboxes in each of the remaining databases. Back up the storage group to tape.
D. On each Server create one storage group with five databases. Place the executive mailboxes in one database. Place 200 mailboxes in each of the remaining databases. Back up each database to tape.

Answer: C

Questions, Case Study #4, ***Trey Research***

Introduction:
You are an employee of Trey Research. Your current project is to provide design and deployment services for the implementation of Exchange 2000 Server as your company's primary messaging system.

Background:
Company Profile:
Trey Research is a diversified chemical company that produces household and commercial projects. Trey Research employs more than 90,000 people, in 55 countries.

Business Plan:
Trey Research plans to continue to grow. Over the next two years, the company plans to increase staff by 10 percent at each location, with the exception of the Pacific Rim area, where it plans to increase staff 50 percent.

Money is budgeted for improvements in network reliability and scalability.

Overview:
The divisions at Trey Research are autonomous. Each company location has staff assigned to support and administer the Exchange Server computers.

Directory Design:
The directory structure is a traditional Microsoft Windows NT 4.0 multi-master domain model that includes an Exchange Server 5.5 directory. The company does not use Active Directory. The planned Active Directory design implementation will migrate the current Windows n domains to a single Microsoft Windows 2000 domain.

Administrative Model:
The Exchange Server 5.5 staff at each location consists of a group of administrators who are responsible for the Exchange Server 5.5 infrastructure and the Exchange Server 5.5 directory.

The Windows staff is a separate storage group of administrators and who are responsible for the Windows NT and Windows 2000 infrastructure. The group is also responsible for the Windows NT domains.

The network staff is a third group of administrators, who are responsible the network infrastructure which includes DNS name resolution and the firewalls.

Network Infrastructure:
Trey Research has a worldwide network, which is shown in the exhibit.

The Exchange 5.5 site connections follow the physical network connections. The cost value on each site connector is 10. Bandwidth available between sites is at least 256 Kbps.

Servers:
There are Exchange Server 5.5 computers at every location. There are two Exchange Server 5.5 computer configurations

- Dual-function mailbox-public folder servers.
- Bridgehead servers.

The following lists describe the mailbox-public folder servers.
Small servers

- 500-999 mailboxes
- Priv.edb size of 5 GB to 10 GB
- Pub.edb size of 3 GB to 10 GB

Large servers

- 1,000-6,000 mailboxes
- Priv.edb size of 11 GB to 50 GB
- Pub.edb size of 11 GB to 40 GB

The large mailbox-public folder servers process a high volume of transactions. Currently, public folder usage has a negative effect on mailbox access on these servers.

Some of the small mil-box public folder servers are configured with circular logging enabled. The large mailbox-public folder servers are configured with circular logging disabled.

The bridgehead servers have 128 MB of memory.

Virus-scanning software is installed on all Exchange Server 5.5 mailbox-public folder servers.

Client Computers:
On a company-wide basis, all versions of Microsoft Outlook are used to access Exchange. Some employees use third-party POP3 client software to remotely access Exchange. Exchange Server

5.5 Outlook Web Access is available but has not been used extensively because of scalability problems.

Users in the inventory control department do not use Microsoft Office or Outlook. This group runs a custom inventory application that does not require powerful client computers. Most users in this group have Pentium computers with 100 MHz processors running Windows for Workgroups 3.11. All users in this group must have access to e-mail and public folders.

Exchange 2000 Server Requirements and Goals:
Security Requirements:
Exchange 2000 Server design must maximize the security between the Exchange 2000 Server computers and the POP3 client software that is used on the remote client computers.

Backup, Recovery, and Archiving Requirements:
These requirements must be fulfilled after a failure.

- Mailboxes for users in the Legal department must be restored within two hours.
- Mailboxes for all other users must be restored within six hours.
- Information in public folders must be restored within eight hours.

These requirements must be fulfilled for archive retention.

- Legal department messages must be retained for at least three days, with a measure of 30 days.
- All other user's messages must be retained for at least 30 days, with a maximum of one year.
- Documents in public folders must be retained for at least two years with no maximum.

The Exchange 2000 Server computers should be recoverable to point of failure.

Interoperability Requirements:
The employees who use POP3 client software must be able to remotely access public folders. The POP3 software must maintain a small footprint on these remote client computers.

Technical Support Requirements:
The Exchange Administrator staff will be split into two groups:

- The first group will administer all connections between Exchange 2000 Server sites and routing groups. This group will also administer Exchange 2000 server computers that are used as bridgehead servers and as front-end servers, and all exchanged hosted connections to outside sources.
- The second group will continue to administer the information store servers at each location. The administrators at each office will be able to administer the information store servers at only that location.

Messaging manager:
The manager in charge of messaging services wants to meet these objectives for the new exchange 2000 server implementation:

- All users must be able to quickly locate documents in all of the public folders.

- The design for exchange 2000 server public folder must accommodate documents that are stored in public folders and tat change very frequently, but are accessed infrequently.
- The back-end servers must be available 99.999 percent of the time, and hardware must be used efficiently.
- Users will log on to the active directory infrastructure by using a windows 2000 account as they are moved to exchange 2000 server.

Changes to the existing network should be avoided, and new physical network connections should be designed with capabilities that exceed the requirements for failover purposes.

Technology Specialist:
The technology specialist who is responsible for the exchange server computers wants to meet these objectives:

- The design should minimize total disk space requirements by maximizing single-instance storage.
- Only the essential items that are needed to perform a complete mailbox server recovery should be backed up to tape on a nightly basis.
- The design must protect against message storms and the misuse of distribution groups.

Questions, Case Study #4, ***Trey Research***

QUESTION NO: 1
How should you design the client computer software strategy?

A. Continue to use all versions of Outlook on the client computers.
Ensure that Exchange 2000 Outlook Web Access is available to all users.
Instruct the users in the Inventory Control department to use Outlook Web Access for all e-mail access.

B. Continue to use all versions of Outlook on the client computers.
Ensure that Exchange 2000 Outlook Web Access is available to all users.
Install Outlook 2000 for the users in the Inventory Control department, and instruct those users to use Outlook 2000 for all e-mail access.

C. Upgrade all Outlook 97 and Outlook 98 users to Outlook 2000.
Ensure that Exchange 2000 Outlook Web Access is available to all users.
Instruct the users in the Inventory Control client software for all e-mail access.

D. Continue to use all versions of Outlook on the client computers.
Ensure that Exchange 2000 Outlook Web Access is available to all users.
Install Outlook 97 for the users in the Inventory Control department and instruct these users to use Outlook 97 for all e-mail access.

Answer: A

QUESTION NO: 2
What recommendations you made for the administrative model?

A. Reorganize the IT organization to move the responsibility for the directory from the exchange Server 5.5 staff to Windows staff.
Assign the Windows staff to be accountable for the design, deployment and administrator of Active Directory services.

B. Create a directory team that includes members from only the Windows staff and the Exchange Server 5.5 staff.
Assign this team to be accountable for the design, deployment and administrator of Active Directory services.

C. Create a directory team that includes members from only the Windows staff, the Exchange Server 5.5 staff and the network staff.
Assign this team to be accountable for the design, deployment and administrator of Active Directory services.

D. Reorganize the IT organization to move the responsibility for the directory from the Windows staff to Exchange Server 5.5 staff.

Assign the Exchange Server 5.5 staff to be accountable for the design, deployment and administrator of Active Directory services.

Answer: C

QUESTION NO: 3
Which two actions should you perform to configure public folders? (Choose two)

A. Use Exchange 2000 indexing on all public folders.
B. Use Exchange 2000 to replicate all public folders to another Server.
C. Distribute all public folders across multiple public folder trees.
D. Use the Windows 2000 indexing service on drive M.
E. Replicate all public folders to an Exchange 2000 Server computer in each location.

Answer: A, E

QUESTION NO: 4
How should you design the Server disk configurations to maximize performance?

A. Create a RAID 1+0 array for each storage group.
Create a mirrored pair of disk drivers for the transaction logs.
B. Create a single RAID 1+0 array for all of storage groups.
Create a mirrored pair of disk drivers for each set of transaction logs.
C. Create a single RAID 1+0 array for all of the storage groups.
Create a mirrored pair of disk drivers for the transaction logs.
D. Create a RAID 1+0 array for each storage group.
Create a mirrored pair of disk drivers for each set of transaction logs.

Answer: D

QUESTION NO: 5
How should you design a backup solution that fulfills the company's requirements?

A. Create three storage groups: one for the Legal department, one for public folders.
Create one information store in each storage group.
Backup all three storage groups to a single tape.

B. Create three storage groups: one for the Legal department, one for public folders.
Create one information store in each storage group.
Backup each storage group to a separate tape.

C. Create two storage groups: one for Legal department and one for other mailboxes and public folders.
Back up both of the storage groups to a single tape.

D. Create two storage groups: one for Legal department and one for other mailboxes and public folders.
Back up each of the storage groups to a separate tape.

Answer: B

QUESTION NO: 6
How should you design the Exchange 2000 Server infrastructure so it will be resistant to the misuse of distribution groups?

A. Require Kerberos4 authentication.
Use encryption between the client software and the Exchange 2000 Server computers.
Create nested distribution groups.
Limit the users who can use top-level distribution groups.

B. Require Kerberos4 authentication.
Use encryption between the client software and the Exchange 2000 Server computers.
Apply recipient permissions as appropriate.
Use a firewall, and restrict the protocols that are not required.

C. Create mail enabled security groups.
Create nested distribution groups.
Limit users who can access all distribution groups.
Apply recipient permissions as appropriate.

D. Set messages size limits for distribution groups.
Create nested distribution groups.
Limit users who can access top-level distribution groups.
Apply recipient permissions as appropriate.

Answer: D

QUESTION NO: 7
How should you ensure that your Exchange 2000 Server design fulfills the interoperability requirements for public folder access?

A. Instruct the users to use a newsreader to access public folders.
B. Replace the POP3 client software with Outlook Express.
Configure Outlook Express to use IMAP4.
C. Replace the POP3 client software with Outlook 2000.
D. Instruct the users to use Outlook Web Access.

Answer: D

QUESTION NO: 8
How should you deploy the routing groups to increase performance in mixed mode?

A. Deploy Exchange 2000 Server routing groups that correspond to each Exchange Server 5.5 site.
Install an Exchange Server 5.5 bridgehead Server to connect to one of the Exchange Server 5.5 sites.
Install an Exchange 2000 Server bridgehead Server to connect to other Exchange 2000 Server routing groups.
B. Deploy Exchange 2000 Server routing groups that correspond to each Exchange Server 5.5 site.
Install an Exchange Server 5.5 bridgehead Server to connect to one of the Exchange Server 5.5 sites.
Install an Exchange 2000 Server mailbox Server in each routing group.
C. Deploy one Exchange 2000 Server computer in each Exchange Server 5.5 site.
Configure this Server as the site connector bridgehead Server to connect to the other Exchange 2000 Server bridgehead servers in each of the other sites.
D. Deploy one Exchange 2000 Server computer in each Exchange Server 5.5 site.
Configure this Server as routing group connector bridgehead Server to connect to the other Exchange 2000 Server bridgehead servers in each of the other sites.

Answer: D

QUESTION NO: 9
What changes should you make to the Exchange Server 5.5 environment to deploy Exchange 2000 Server?

A. Disable circular logging on all of the servers.
Stop the virus-scanning software services prior to upgrading to Exchange 2000 Server.
After the upgrade, restart the virus-scanning software services.
B. Enable circular logging on all of the servers.

Stop the virus-scanning software services prior to upgrading to Exchange 2000 Server.
After the upgrade, restart the virus-scanning software services.

C. Disable circular logging on all of the servers.
Uninstall the virus-scanning software services prior to upgrading to Exchange 2000 Server.

D. Enable circular logging on all of the servers.
Uninstall the virus-scanning software services prior to upgrading to Exchange 2000 Server.

Answer: C

QUESTION NO: 10
You need to deploy Exchange 2000 Server on a cluster. You install Exchange 2000 Server on the first Server node that has the Windows 2000 cluster service installed. What should you do next?

A. Create mailboxes and then start using the first Server node in production.
When clustering is required, install Exchange 2000 Server on the second Server node that has hardware identical to that of the first Server node.

B. Create an Exchange virtual Server on this node.
Create mailboxes and then start using the first Server node in production.
When clustering is required, install Exchange 2000 Server on the second Server node that has hardware identical to that of the first Server node.
Create an Exchange virtual Server on the second node.
Create mailboxes and then start using the second Server node in production.

C. Install Exchange 2000 Server on the second Server node in the cluster.
Create an Exchange virtual Server on each Server node.
Create mailboxes on each node, and then start using the clustered Servers in production.

D. Install Exchange 2000 Server on the second Server node in the cluster.
Create storage groups and mailboxes, and then start using the clustered servers in production.

Answer: C

QUESTION NO: 11
How should you design a recovery solution that fulfills the archiving requirements?

A. Ensure that circular logging is enabled on all servers. When a restore is required, perform the following steps:
   - Restore the storage group that contains the information store that must be recovered.
   - Mount the information store.
   - Re-create the index for the information store if required.

B. Ensure that circular logging is enabled on all servers. When a restore is required, perform the following steps:
   - Restore the storage group that contains the information store and the index that must be recovered.
   - Mount the information store and the index.

C. Ensure that circular logging is disabled on all servers. When a restore is required, perform the following steps:
   - Restore the information store that must be recovered.
   - Mount the information store, and replay the transaction logs.
   - Re-create the index for the information store if required.

D. Ensure that circular logging is disabled on all servers. When a restore is required, perform the following steps:
   - Restore the information store and the index that must be recovered.
   - Mount the information store and the index, and replay the transaction logs.

Answer: C

QUESTION NO: 12
What should be backed up to meet the goals of the technology specialist? (Choose two)

A. All of the Exchange 2000
B. All of the Windows 2000
C. All storage groups and databases
D. IIS Metabase
E. System State
F. Windows 2000 Active Directory
G. The complete contents of each server, backed up offline.

Answer: C, E

Case Study #5, A Datum Corporation

Introduction:
You are hired to provide services in design and deployment for A Datum Corporation. You need to evaluate the company's existing messaging infrastructure, access current and future business needs and design and deploy exchange 2000 server in the company's environment.

Background:
Company Profile:
A Datum Corporation is one of the largest manufacturers of automotive parts in the world. The company consistently places emphasis on producing quality products and keeping overhead costs as low as possible. The company sets its products exclusively through 125 distributors. Company headquarters is located in Los Angeles. The company has a total of 30,000 employees. Office locations and number of employees are shown in the list:

Location	Employees
Brisbane	2,100
Hong Kong	200
Jakarta	80
London	2,000
Los Angeles	20,000
Mexico City	720
Munich	2,200
Paris	2,500
Tokyo	125
Toronto	75

Business Plan:
The business of A Datum Corporation is to design, develop, and produce high-quality automotive parts. The company has a large engineering group that is producing parts for both the newest automobile models and the rarest automobiles.

Existing IT Environment:
Network Diagram:
The network diagram is shown in the exhibit. Click the exhibit button.

Chief Information Officer (CIO):
Our current IT environment is fairly up-to-date and is working reliably. However, we want to use exchange 2000 server to provide easier administration and greater efficiency of resources. We also want t investigate whether the services in exchange 2000 server can be used to increase our profitability and to provide enhanced services to our employees.

Our manufacturing environment operates in two shifts per day, seven days a week. We must provide a reliable computing environment for messaging, data sharing, and assembling line documentation and work orders. We want to find new ways to enhance productivity on the assembly line and also want to provide new communication channels from the assembly-line workers to managers and design engineers.

Director of IT:
Our environment consists of a Microsoft windows 2000 active directory network. All client computers on the network run windows 2000 professional. We have an exchange server 5.5 messaging system for the entire list:

- Brisbane
- Hong Kong
- Jakarta
- Tokyo

Deployment is planned in the offices in this order:
- Los Angeles
- Paris

- Brisbane
- Mexico city
- Toronto
- Hong Kong
- Jakarta
- London
- Munich
- Tokyo

After completing the upgrades, we want to change the native mode immediately.
We hire temporary employees during periods of peak demand. For temporary employees, I want to limit the mailbox to 25MB, and I want to keep the mailbox backups for one year.

I want to provide company exclusives with access to their e-mail from their home offices, but I do not want our technical support staff to provide equipment or install special software on these home computers.
I want to maximize the connectivity between our offices and ensure that our mail is replicated as efficiently as possible. Public fold are not used.
Our migration plan must allow for coexistence during the entire upgrade process.

Messaging System:
The current exchange server 5.5 environment has been divided into six exchange server 5.5 sites.
- The Los Angeles site contains the Los Angeles and Mexico City Offices.
- The Paris site contains the London, Munich, and Paris offices.
- The Brisbane, Hong Kong, Jakarta, and Tokyo sites each contain only their own offices.

Users in the Tokyo office use an exchange 2000 server computer in the Los Angeles office to store their mailboxes.
There are permanent employees, company executives, engineers, and temporary employees in all offices.

Hardware:

These benchmarks were achieved when exchange 2000 server was tested on the physical hardware configurations:
- Each exchange 2000 server computer can support 3,000 users
- Each exchange 2000 server computer can generate approximately 45 global catalog queries per second.
- The global catalog server configuration can support 140 queries per second

*Questions, Case Study #5, **A Datum Corporation***

QUESTION NO: 1
You are designing the routing infrastructure for the Exchange 2000 Server implementation. What should you do on the Exchange 2000 Server computers?

A. Install the Internet Authentication Services.
B. Install and use the Key Management Service (KMS).
C. Configure the servers to require Transport Layer Security (TLS).
D. Configure the TCP/IP settings on the servers to require IPSec.

Answer: D

QUESTION NO: 2
You are designing global catalog Server configuration for the Los Angeles office. How many global catalog servers should you implement?

A. one
B. two
C. three
D. four

Answer: C

QUESTION NO: 3
What is the maximum number of mailbox stores needed for the Brisbane office?

A. one
B. two
C. three
D. four
E. five

Answer: D

QUESTION NO: 4
You are designing Exchange 2000 Server configuration for the Los Angeles office. How many Exchange 2000 mailbox Servers should you implement?

A. one
B. two
C. three
D. four
E. five
F. six
G. seven
H. eight

Answer: G

QUESTION NO: 5
How should you provide fault tolerance for distribution group expansion and name look-ups for users in the Toronto office?

A. Ensure that there are two or more global catalog servers in the Toronto office.
B. Ensure that there are two or more domain controllers in the Toronto office domain.
C. Ensure that there are two or more global catalog servers in the same Active Directory site and domain as the Exchange 2000 Server computer in Los Angeles office.
D. Ensure that there are two or more domain controllers in the same Active Directory site and the domain as the Exchange 2000 Server computer in Los Angeles computer.

Answer: C

QUESTION NO: 6
What should you do to minimize the effect of denial-of-service attacks on the Server that is used by company executives for remote e-mail access?

A. Use two storage groups on the Exchange 2000 Server computer that runs Outlook Web Access.
B. Place two front-end Exchange 2000 Server computers in an Internet perimeter network (DMZ).
C. Enable IPSec on the Exchange 2000 Server computer that runs Outlook Web Access.
D. Enable SSL connections on the Exchange 2000 Server computer that runs Outlook Web Access and place the Server in an Internet perimeter network (DMZ).

Answer: B

QUESTION NO: 7
How should you design the Exchange 2000 Server administrative groups in native mode?

A. Use one administrative group that contains all of the Exchange 2000 Server computers for all the offices.
Delegate appropriate permissions to the technical support staff on the Paris and Brisbane office.
B. Use three administrative groups, one each for the office in Brisbane, Los Angeles and Paris.
Configure each group to include the servers that are administered by that office.
C. Use six administrative groups one for the Los Angeles and Mexico City offices and one for London, Paris and Munich offices and one each for Brisbane, Hong Kong, Jakarta and Tokyo offices.
D. Use nine administrative groups one each for the offices in Brisbane, Hong Kong, Jakarta, London, Los Angeles, Mexico City, Munich, Paris and Tokyo.

Answer: B

QUESTION NO: 8
Which two actions should u perform to allow users in the Toronto office to use an SMTP domain address of adatum.ca? (Choose Two)?

A. Place a global catalog server in the Toronto organizational Unit (OU)
B. Create a recipient policy that is filtered for the Toronto users.
C. Create a group policy for the Toronto Organizational Unit (OU)
D. Reconfigure the Recipient Update service for the Toronto Organizational Unit (OU)
E. On the external DNS server, create an MX record for the Tornoto Domain.
F. ON the external Dns server, Create an SRV record for the exchange for the exchange 2000 server computer in the LOSANGELES office.

Answer: B, E

QUESTION NO: 9
Which action or actions should u perform to maximize security on the server that is used by company executives for remote e-mail access? (Choose all that apply)?

A. Use Ipsec to encrypt traffic on port 25
B. Use Ipsec to encrypt traffic on port 80
C. Use the internet authentication service
D. Use digital certificates on client computers
E. Require SSL connections on the front end server
F. Place a front end server outside the internet firewall.

Answer: D, E

Case Study #6, MILLER TEXTILES

Introduction:
You are an employee of Miller Textiles. Your current project is to provide design and deployment services for the implementation of exchange 2000 server throughout the company.

Background:
Company profile:
Miller Textiles is one of the world's largest producers of bedding and bath products, table linens, plows, luggage, and rugs.
There are six miller textiles locations: the company headquarters and five manufacturing plants. Each plant has a combined sales staff and office staff of approximately 300 people. Each plant also has a large manufacturing staff that operates in three shifts.
The number of employees at miller textiles is slowly but steadily increasing.

History:
Miller textiles employs more than 20,000 people. Approximately two-thirds of these employees are manufacturing staff who does not have access to e-mail. There are 5,000 employees at headquarters, and they all use e-mail and public folders. The sales staff and office staff at each plant use e-mail and public folders.
Last year a failed disk array controller corrupted the exchange information store. One week was needed to detect and correct the problem, and 1,000 people were unable to use e-mail during that time.

Business Plan:
The executives at miller textiles have increased the autonomy of each plant because of this change, the executives expect to need 25 percent more office staff at each plant three years from now.
There is a limited budget for upgrades to the company's WAN.

Existing IT Environment:
Overview:
Exchange server 5.5 service pack 3 is the standard e-mail platform at miller textiles.
A single active directory forest that contains one domain has been deployed. There are two global catalog servers at headquarters. Each plant has a domain controller. Each location is a Microsoft windows 2000 site.

Administrative model:
Miller textiles is moving forward a decentralized administrative mode, but most of the administration is still performed at headquarters. Al each of the five plants, there is an IT person who performs technical support tasks and some server administration requested by headquarters. The amount of administration require for the computers that are administered in each plant will steadily increase as the plants increase their autonomy.

Network Infrastructure:
The client computers at headquarters are connected by a 10-Mbps Ethernet LAN. The servers are on a 100-Mbps switched Ethernet segment.
The WAN that connects the plants uses 512-Kbps frame replay connections with committed information rates between 64 and 128Kbps, depending upon the plant. These connections internally fail.
The miller textiles network design is shown in the exhibit. Click the exhibit button.

Servers:
There are five mailbox servers at headquarters that run Exchange Server 5.5. Each of the servers has approximately 1,000 mailboxes. At each of the plants, there is one Exchange Server computer that contains 300 mailboxes. All public folders are stored on a dedicated public folder Server named headquarters. There is a dedicated X400 bridgehead Server at headquarters that is also the Internet Mail Server computer.

The mailbox servers and public folder Server at headquarters are dual Pentium Pro 200-MHz computers that have 256 MB of memory. The bridgehead Server has 64 MB of memory.

The number of documents that are stored in public folder has increased significantly at Miller Textiles. Employees must be able to access these documents 99 percent of the time.

The mailbox servers at the plants are Pentium II 450-MHz computers that have 256 MB of memory.

The entire Windows 2000 and Exchange environment is backed up nightly. The following backup rotation is used.
There is a tape for each day of the month. Each tape is used once per month and is numbered with the date of month on which it is used. For example, Tape 1 is used on the first day of the month,

Tape 2 is used on the second day of the month and so on. Except for the tape used on the first day of the month, other tapes are overwritten during the following month. The tape used on the last day of each month is a month-end tape, which is stored for one year. A new tape will replace this tape in the tape set. The bridgehead Server is backed up on only the odd-numbered days of each month.

Client Computers:
Most Miller Textiles client computers use Microsoft Outlook 2000 and a POP3 software package to access Exchange. It is company's policy to use Outlook Web Access for remote messaging.

Exchange 2000 Server Requirements and Goals:

Security Requirements:
The company wants to reduce the likelihood that employees will create message storms.

Archiving Requirements:
The back up plan should allow for the recovery of computed information store database without affecting more than 500 e-mail users.

The company wants to allow recovery to the point of failure.

Messaging Requirements:
Messages should continue to be delivered between locations in the event of the WAN connection failure.

The company wants to ensure access to frequently used public folders.

All users must be allowed to configure Server-based rules and to access their own calendars and calendars of other users.

The originator of the e-mail upgrade project wants to meet the following objectives.

- Enable easier remote access to e-mail and calendars for travelling employees.
- Minimize downtime caused by hardware problem or data corruption.
- Minimize the potential legal liability that can result when e-mail messages are stored for more than 30 days.
- Maximize performance that is achieved when messages are sent between each plant and headquarters.

The manager responsible for the e-mail environment wants to meet the following objectives.

- Decrease WAN traffic caused by people accessing frequently used public folders that are homed or Server at headquarters.
- The IT person at each plant should administer the Exchange Server computer at that plant.
- Consolidate the headquarters Exchange Server computers if possible.

Technical Support Requirements:

The IT department wants to reduce technical support tasks by eliminating the third part POP3 client software usage.

Questions, Case Study #6, ***MILLER TEXTILES***

QUESTION NO: 1
How should you design server recovery?

A. Back up drive Microsoft of each exchange server computer to tape. Restore Windows 2000 Server, install Exchange 2000 Server in disaster recovery mode, stop exchange services, restore the tape to drive M, and start exchange services.
B. Separately back up each exchange server storage group to tape. Restore Windows 2000 Server, install Exchange 2000 Server, restore each storage group, and mount each database after the restore process is complete.
C. Separately back up each exchange server database to tape. Restore Windows 2000 Server, install Exchange 2000 Server in disaster recovery mode, copy the logs to the logfile directories, restore each database, and mount each database after the restore process is complete.
D. Separately back up each exchange server storage group to tape. Restore Windows 2000 Server, install Exchange 2000 Server in disaster recovery mode, copy the logs to the logfile directories, restore each storage group, and mount each database after the restore process is complete.
E. Separately back up each exchange server database to tape.
Restore Windows 2000 Server, install Exchange 2000 Server in disaster recovery mode, restore each database, and mount each database after the restore process is complete.

Answer: B

QUESTION NO: 2
How should you design the disk configurations for the mailbox servers at headquarters to achieve the best performance and fault tolerance?

A. Place the operating system and the transaction logs for all storage groups on a single mirrored pair of disk drives. Place each information store on its own RAID-5 volume.
B. Place the operating system on a mirrored pair of disk drives.
Place transaction logs for all storage groups on a single mirrored pair of disk drives.
Place the information stores on a single RAID-5 volume.
C. Place the operating system on a mirrored pair of disk drives.
Place transaction logs for each storage group on their own RAID-1 mirrored pair of disk drives.
Place the information stores on a single RAID-5 volume.
D. Place the operating system and the transaction logs for all storage groups on a single RAID-5 volume.
Place each information store on its own RAID-5 volume.

Answer: C

QUESTION NO: 3
How should you design the administrative groups for Miller Textiles for native mode?

A. Create a single administrative group.
Delegate control of the administrative group to the administrator at the plants.
Delegate permissions for administrators at headquarters to administer this group.
B. Create one administrative group for each company location.
Delegate control of the administrative group at each plant to the administrator at the plants.
Delegate permissions for administrators at headquarters to administer these groups.
C. Create a single administrative group.
Delegate control of the servers in this administrative group to the administrators of those servers.
Delegate permissions for administrators at headquarters to administer this group.
D. Create one administrative group for each company location.
Delegate control of the Server objects in the administrative group at each plant to the administrator of those servers.
Delegate permissions for administrators at headquarters to administer these groups.

Answer: B

QUESTION NO: 4
Which two configurations of messaging client computers software should you implement to fulfill the Miller Textiles messaging requirements? (Choose two)

A. Outlook 2000 in corporate or Workgroup mode
B. Outlook 2000 in Internet Only Mode
C. Outlook Express with IMAP4
D. Outlook Express with POP3
E. Outlook Web Access

Answer: A, C

QUESTION NO: 5
Which action or actions should you perform to deploy the administrative group for Miller Textiles? (Choose all that apply)

A. Run setup.exe/forestprep
B. Run setup.exe/domainprep
C. Install the Windows 2000 Server Active Directory Connector (ADC).
D. Install the Active Directory Migration tool (ADMT).
E. Install the Exchange 2000 Server Active Directory Connector (ADC).

Answer: A, B

QUESTION NO: 6
How should you modify the mailbox server hardware for the Exchange 2000 Server computers?

A. Replace the five mailbox servers at headquarters with one new Pentium III-based computer.
Use the old mailbox severs as front-end servers a headquarters.
Add memory to the bridgehead server.
B. Replace the five mailbox servers at headquarters with two new Pentium III-based computers.
Move the public folders to the new mailbox servers.
Use the old public folder server as a bridgehead server.
C. Replace the mailbox servers at each location with one new Pentium III-based computer for each location.
Move the public folders to the new mailbox servers.
Use the old public folder server as a bridgehead server.
D. Replace the five mailbox servers at headquarters with two new Pentium III-based computers.
Use the old mailbox servers as X.400 bridgehead servers that connect to the plants.

Answer: D

QUESTION NO: 7
You need to recover a mail-enabled user account that was deleted from Active Directory. Which recovery method should you use to recover this account as quickly as possible?

A. Re-create the account Active Directory.

On the exchange server computer, re-associate the mailbox to this account.

B. Re-create the account in Active Directory.
Re-create the mailbox.
Re-associate the re-created mailbox to this account.

C. Restore he user account to Active Directory from tape.
On the exchange server computer, re-associate the mailbox to this account.

D. Restore the mailbox from tape.
Restore the user account to Active Directory from tape.
Re-associate the restored mailbox to this account.

Answer: A

QUESTION NO: 8
How should you design the mailbox servers that run Exchange 2000 Server at headquarters to fulfill recovery requirements?

A. Use one Exchange 2000 Server computer.
Create one storage group that contains four mailbox stores.
Back up the storage group, and purge the transaction logs.

B. Use one Exchange 2000 Server computer.
Create two storage groups that contains four mailbox stores.
Back up each mailbox store, and purge the transaction logs.

C. Use two Exchange 2000 Server computers.
On each of these servers, create one storage group that contains five mailbox stores.
Back up the storage group, and purge the transaction logs.

D. Use two Exchange 2000 Server computers.
On each of these servers, create four storage groups that each contain one mailbox store.
Back up each mailbox store, and purge the transaction logs.

Answer: C

QUESTION NO: 9
How should MMC be used during the upgrade?

A. Use the Exchange 2000 Server Active Directory Connector for two-way directories.
Use MMC to administer the Exchange Server 5.5 mailboxes.

B. Use the Windows 2000 Server Active Directory Connector for two-way directory updates.

Use MMC to administer the Exchange Server 5.5 mailboxes.

C. Use the Exchange 2000 Server Active Directory connector for one-way directory updates from Exchange to Active Directory.
Use MMC to administer the Exchange Server 5.5 mailboxes.

D. Use the Windows 2000 Server Active Directory connector for a one-way directory update from Exchange to Active Directory.
Use MMC to administer the Exchange Server 5.5 mailboxes.

Answer: A

QUESTION NO: 10
How should you design the administrative groups for Miller Textiles for native mode?

A. Create a single administrative group.
Delete gate control of this administrative group to administrators at the plants.
Delete permissions for administrators at headquarters to administer this group.

B. Create one administrative group for each company location.
Delete control of this administrative group at each plant to the administrators at that plant.
Delete permissions for administrators at headquarters to administer these groups.

C. Create a single administrative group.
Delegate control of the servers in this administrative group to the administrators of the servers at the plants.
Delegate permissions for administrators at headquarters to administer this group.

D. Create one administrator group for each company location.
Delete control of the server objects in the administrator group at each plant to the administrator of those servers.
Delegate permissions for the administrators at headquarters to administrator these groups.

Answer: B

QUESTION NO: 11
How should you design the Miller Textiles public folders in a manner that will ensure fault tolerance?

A. Add a second public folder server, and replicate all public folders to this server.
Replicate all public folders to the exchange server computers at each plant. Disable public folder referrals for the connectors between headquarters and the plants.

B. Add a second public folder server, and replicate all public folders to this server. Replicate only the public folders that are used at each plant to the exchange server computers at that plant.
C. Replicate each public folder to the exchange server computer at each plant. Disable public folder referrals between the plants and headquarters.
D. At headquarters create a two-node cluster server for all public folders. Use affinity to access the public folders from the plants.

Answer: B

QUESTION NO: 12
Which factor or factors should you consider when planning the use of Exchange 2000 Server administrative groups at Miller Textiles for native mode? (Choose all that apply)

A. The use of public folders at each plant
B. The skill level of the IT person at each plant
C. Adherence to policies and standards set by headquarters
D. Size of mailboxes at each plant
E. Available network bandwidth between headquarters and each plant
F. The number of exchange server computers at each plant

Answer: B, C

QUESTION NO: 13
How should you design the routing groups for Miller Textiles?

A. Use a single routing group. All exchange 2000 server computers will be members of this routing group.
B. Use a single routing group. All exchange server 5.5 computers will be members of this routing group.
D. Use one routing group for the Exchange 2000 Server computers at headquarters. Use one routing group for each plant.
The Exchange 2000 Server computers at each plant will be members of the routing group for that plant.
E. Use six routing groups at headquarters.
Place one mailbox server in each of the first five routing groups.
Place the bridgehead server and the public folder server in the sixth routing group.
Use one routing group for each plant.
The exchange server 5.5 computers at each plant will be members of the routing group for that plant.

Answer: C

QUESTION NO: 14
In your design of the Exchange 2000 Server environment, you need to minimize the possibility of message storms. What should you do? (Choose all that apply)

A. Instruct users to store large attachments in public folders.
B. Mail-enable the universal security groups.
C. Set message size limits for distribution groups.
D. Set permissions to limit the use of distribution groups.
E. Reduce the maximum recipient limit.
F. Use nested distribution groups
G. Mail-enable the global security groups.

Answer: A, C, E

QUESTION NO: 15
How should you design a recovery solution that fulfils the archiving requirements?

B. Ensure that circular logging is enabled on all servers.
When a restore is required, perform the following steps:
- Restore the storage group that contains the information store that must be recovered.
- Mount the information store
- Re-create the index for the information store if required

C. Ensure that circular logging is enabled on all servers.
When a restore is required, perform the following steps:
- Restore the storage group that contains the information store and the index that must be recovered.
- Mount the information store and the index

D. Ensure that circular logging is enabled on all servers.
When a restore is required, perform the following steps:
- Restore the information store that must be recovered.
- Mount the information store, and reply the transaction logs.
- Re-create the index for the information store if required

E. Ensure that circular logging is enabled on all servers.
When a restore is required, perform the following steps:
- Restore the information store and the index that must be recovered.

- Mount the information store and the index, and reply the transaction logs.

Answer: C

QUESTION NO: 16
Which change or changes should you make to the miller textiles network infrastructure to support Exchange 2000 Server? (Choose all that apply)

A. Configure the Exchange 2000 Server as a global catalog server at each plant
B. Increase the available bandwidth on connections between each plant and headquarters
C. Ensure that a redundant connection exists between each plant and headquarters
D. Decrease the number of mailboxes on each Exchange 2000 Server computer
E. Combine the plants into a single Windows 2000 Site.

Answer: B, C, D

QUESTION NO: 17
How should you modify the network resources to fulfill the requirements of Miller textiles?

A. Increase the Committed Information rate of all frame relay connections to 256 Kbps
B. Increase the Committed Information rate of all frame relay connections to 512 Kbps
C. Install line connections and exchange connectors between plant 1 and 2, between plants 2 and 3, between plants 3 and 4, between 4 and 5, and between plant 5 and headquarters
D. Install line connections and exchange connectors between plant 1 and 2, between plants 3 and 4, and between plant 5 and headquarters
E. Install leased line connections and exchange connectors between each plant and every other plant

Answer: B

QUESTION NO: 18
How should you plan for coexistence between e3s and the exchange server 5.5 computers during migration?

A. Use the Exchange 2000 Server Active Directory Connector for two-way directory upgrades.

Use MMC to administer the exchange server 5.5 mailboxes.

B. Use the Windows 2000 Server Active Directory connector for two-way directory updates.
Use MMC to administer the exchange server 5.5 mailboxes.

C. Use the Exchange 2000 Server Active Directory connector for one-way directory updates from exchange to Active Directory. Use MMC to administer the exchange server 5.5 mailboxes.

E. Use the Windows 2000 Server Active Directory connector for one-way directory update from exchange to Active Directory.
Use MMC to administer the exchange server 5.5 mailboxes.

Answer: D

Case Study #7, Litware,Inc.

Introduction:
You are hired by Litware,Inc.,to upgrade the company's exchange server 5.5 (service Pack 3) environment to Exchange 2000 Server. All client computers currently run Microsoft Windows 2000 Professional. All servers run Windows 2000 advanced server.

Background:
History:
Litware,Inc., is a law firm that has its headquarters in Washington, D.C. The company has branch offices in 15 other cities around the world.

- Brussels
- Cairo
- London
- New Delhi
- Moscow
- North America
    - Denver
    - Los Angeles
    - Miami
    - Minneapolis
    - New York
    - San Francisco
    - Seattle
- Seoul
- Shanghai
- Tehran

Company Profile:
Litware,Inc., specializes in corporate law, government regulations, and international law. Overall, the company employs approximately 7,000 people.
The Washington, D.C, headquarters employs approximately 2,000 people. The Los Angeles and New York utilities each employ approximately 1,000 people. All other offices each employ between 200 and 250 people.

Business Plan:
Litware,Inc., wants to improve the efficiency of its business by using the internet and the world wide web.
The company has not added any new offices during the past five years. The company plans to grow by acquiring two or three smaller companies in the next three years.

Factors that influence Business Strategies:

Litware,Inc., has two primary business strategies:

- Make use of technology
- Expand the types of services that are offered by the company.

Existing IT environment:
Network Environment
The Litware Inc. WAN design is shown in the exhibit below:

Administrative Model:
The executive committee at the Washington, D.C., headquarters makes all company-wide decisions Technology decisions for all offices are also made at headquarters.
These company-wide functions are performed at the headquarters office:

- Administration
- Accounting
- Human resources
- IT

The Los Angeles and New York offices each have a staff of ten IT people who are responsible for local user needs. The responsibilities of this staff includes the creation and deletion of user

accounts, LAN troubleshooting, and client-computer decisions. The IT staff in the Los Angeles office also provides backup support for the Seattle, san Francisco, and Denver offices.

Each of the other branch offices has an IT staff of three people who are responsible for resetting local passwords, creating local accounts, and turning on and off the local routers.

Messaging Environment at Headquarters:
The Washington D.C headquarters office has two exchange server computers that are used for mailboxes. These servers are named EXSERVER1 and EXSERVER2. Each serves approximately 1,000 mailboxes. Both servers are configured as domain controllers.

ExSERVER1 and EXSERVER2 each have 256MB of memory. Each one has two 4-GB hard disks configured in a RAID-1 pair mirrored disks to store the operating system. There are two additional 4-GB hard disks configured in a RAID-1 pair of mirrored disks to store exchange binary files and transaction log files. Each of the servers also has five 9-GB hard disks configured in a RAID-5 disks array to store the Exchange database.

Two additional servers named CONN1 and CONN2 are located at headquarters. These servers are used for all foreign mail connectors. They also run the Internet mail service and the key management service. There is a PROFS connector on CONN2.

There are also two servers that are dedicated to providing Microsoft outlook web access. They are named QWA1 and QWA2. Currently, only the headquarters office uses outlook web access. The hardware of these two servers has the same configuration as the hardware for the servers at the branch office. Public folder are not currently backed up.

Messaging Environment at Branch Offices:
Each branch office has two Windows 2000 advanced server computers for file and print services. Each branch office also has a global catalog server and an exchange server 5.5 computer to meet the needs of the local office.

Most of the exchange server computers at the branch office has 128MB of memory. These servers each have two 4-GB disks configured in a RAID-1 pair of mirrored disks to store the operating system. Each one also has four9-GB hard disks configured in a RAID5 disk array. On these computers, the binary files and log files are stored in one logical partition. The database files are stored in another partition on the RAID-5 disk array.

Client computers in all branch offices run Microsoft outlook 2000 and Microsoft Internet explorer 5.
The exchange server computers at the Los Angeles and New York offices are named LosAngelesMail and NewYorkMail, respectively. The hardware for the exchange server computers in these two offices has the same configuration as the hardware for the mailbox servers at headquarters.

The existing exchange server 5.5 environment includes a site named Far West. This site includes the Denver, Los Angeles, Miami, Minneapolis, New York, San Francisco, Seattle, and Washington, D.C, offices. The exchange server computer in the Brussels, Cairo, London, and Moscow offices are named BrusselsMail, CairoMail, LondonMail, and MoscowMail respectively. These servers are all in their own exchange server 5.5 sites.

The exchange server computers in the New Delhi, Seoul, Shanghai, and Tehran office are named New DelhiMail, SeoulMail, ShanghaiMail, and TehranMail respectively. These servers are all in their own exchange server 5.5 sites.

Network Infrastructure:
The Litware,Inc. network diagram is shown in the exhibit. . click the exhibit button , and then click the network diagram tab.
The Moscow, New Delhi, and Tehran offices each connect to the Frame Relay service by means of 128-Kbps satellite links. The satellite connections temporarily become inoperable approximately twice each week.

The links between the Los Angeles and Shanghai offices, between the London and Seoul offices, and between the Cairo and Washington, D.C offices are only to provide redundancy.

Exchange 2000 Server Requirements and Goals:
Security Requirements:
The two outlook access servers, OWA1 and OWA2 require secure access.
Data encryption is required for all communications to or from the Moscow, New York, and Tehran offices. Litware.Inc., global address list. (GAL)

Archiving Requirements:
Backups are scheduled to occur once per week. Messages should not be saved for more than one week. Additional backups should also be performed prior to system maintenance.
The executive system team wants to limit legal liability associated with their archived messages. Therefore, executives' mailboxes must not be backed up.

Availability Requirements:
Litware.Inc, wants to keep the mailboxes of the executive team separate from the rest of the company's mailboxes to protect the company and to provide increased mailbox availability for the executive team.

Litware.Inc., wants to extend outlook web access to the New York and Los Angeles offices. Currently, all internet mail is sent by means of CONN1.Litware,Inc. plans to add two additional connector servers named CONNLA and CONNY. The company wants to add these servers to provide greater fault tolerance for internet mail routing, in the event that CONN1 becomes available.

Interoperability Requirements:

Customers of Litware,Inc. use various e-mail systems Litware,Inc., wants to continue to communicate by using the e-mail system that is most convenient for each customer.

Goals:
The use of public folders has dramatically increased during the past four months. The company wants to achieve faster performance without adding new hardware.
At a minimum, Litware,Inc. plans to create the following routing group:

- East
- Far west
- West

Litware,Inc., wants to provide better e-mail connectivity to a new customer named Woodgrove Bank. Woodgrove Bank runs exchange server 5.5 on Windows 2000. The connection to Woodgrove Bank is set up on CONN2. CONN2 is currently overutilized Woodgrove Bank is considering upgrading to Exchange 2000 Server, but has not yet done any preparation work.

Litware,Inc., receives too much unsolicited commercial e-mail (UCE). The company wants to use an automated process to reject all UCE.

Questions, Case Study #7, ***Litware,Inc.***

QUESTION NO: 1
How you should implement e-mail communications between Woodgrove Bank and Litware,Inc, after Exchange 2000 Server is implemented?

A. Configure Woodgrove bank users as mail-enabled contacts in the Litware,Inc, global address list. Ensure that Woodgrove Bank configures Litware,Inc, users as SMTP custom recipients in the Woodgrove Bank GAL.
B. Configure Woodgrove Bank users as mail-enabled contacts in the Litware,Inc, global address list. Ensure that Woodgrove bank configures Litware,Inc, users as contacts in the Woodgrove band Active Directory services.
C. Delegate mailbox and remote access permission for Litware,Inc, to Woodgrove Bank users. Ensure that Woodgrove bank delegates mailbox and remote access permissions to Litware,Inc. users.
D. Ensure the that each Woodgrove bank user has a mailbox and a virtual private network connection to Litware,Inc.
E. Ask Woodgrove Bank to ensure that each Litware,Inc. , user has a mailbox and a VPN connection to Woodgrove bank.

Answer: A

QUESTION NO: 2
You need to decide which servers to place in the West routing group after changing Exchange 2000 Server to native mode.
Which of the following servers should be places in the West routing group?

A. BrusselsMail
B. CiaroMail
C. LondonMail
D. MoscovMail
E. SeoulMail
F. ShanghaiMail
G. CONN1

Answer: A. B. C

QUESTION NO: 3
How should you implement encryption to fulfil the requirements of Litware,Inc?

A. Configure an IP security rule to encrypt all traffic to and from the mail servers in the Moscow, New Delhi, and Tehran offices.
B. Configure the exchange server computers in the Moscow, New Delhi, and Tehran offices to use encrypted RPCs to communicate with headquarters.
C. Use exchange 2000 key management service to enable users to encrypt messages.
D. Configure users in the Moscow, New Delhi, and Tehran offices to connect to OWA1 and OWA2 by using Internet explorer 5 and SSL.

Answer: A

QUESTION NO: 4
How should you protect the exchange 2000 server computers against unsolicited commercial e-mail (UCE)?

A. Require TLS for all external connections.
B. Use reverse DNS lookups to deny connections from domains and IP addresses that transmit UCE.
C. Disable connections over Extended SMTP.
D. Modify the Active Directory schema to deny connections from domains and IP addresses that transmit UCE.

Answer: B

QUESTION NO: 5
How should you increase public folder performance for all users at Litware,Inc?

A. Restrict permissions to allow only managers to create public folders.
B. Replicate frequently used public folders to additional servers.
C. Restrict permissions to allow only managers to create objects in public folders.
D. Regulate the number of public folders by setting age limits for public folders.

Answer: B

QUESTION NO: 6
You change Exchange 2000 server to native mode. How should you delegate administrative authority to the IT staff in the Los Angeles office?

A. Delegate all Exchange 2000 Resources to the Los Angeles office.
B. Delegate Exchange 2000 Resources in the Denver, San Francisco, and Seattle offices to the Los Angeles office.
C. Delegate Exchange 2000 Resources in the Denver, San Francisco, Seattle, and Washington D.C offices to the Los Angeles office.
D. Delegate no exchange 2000 resources to the Los Angeles office.

Answer: B

QUESTION NO: 7
How should you implement Exchange 2000 Server at headquarters to meet the needs of the executive team?

A. Cluster the Exchange 2000 Server computers for the executive team's mailboxes.
B. On one of the existing mailbox servers, add a new public-store database for the executive team.
C. On one of the existing mailbox servers, add a new mailbox-store database for the executive team.
D. On one of the existing mailbox servers, add a new storage group for the executive team.

Answer: D

QUESTION NO: 8
How should you configure OWA1?

A. As a connector server.
B. As a front-end server.
C. As a bridgehead server.
D. As a back-end server.

Answer: B

QUESTION NO: 9
The existing mail server configuration for Litware,Inc., is shown in the exhibit. Click the exhibit button, and then click the existing mail server configuration tab. How should you deploy routing groups for the mail servers in native mode?

A. Place the NewDelhiMail, SeoulMail, ShanghaiMail, TehranMail servers in separate routing groups.
B. Place the SeoulMail, ShanghaiMail, and TehranMail servers in the East routing group. Place the NewDehliMail server in a separate routing group.
C. Place the NewDehliMail, SeoulMail, and ShanghaiMail servers in the East routing group. Place the TehranMail server in a separate routing group.
D. Place the SeoulMail and ShanghaiMail servers in the East routing group. Place the NewDehliMail and the TehranMail servers in separate routing groups.

Answer: D

QUESTION NO: 10
What should you configure the MX records to fulfil Litware,Inc's Exchange 2000 Server requirements?

A. MX 10 CONN1
MX 20 CONNNY
MX 30 CONNLA
B. MX 10 CONNLA
MX 20 CONN1
MX 30 CONNNY
C. MX 10 CONNNY
MX 20 CONN1
MX 30 CONNLA
D. MX 10 CONNNY
MX 20 CONNLA
MX 30 CONN1

Answer: A

QUESTION NO: 11

How should you change the Litware,Inc. , outlook web access design after all servers are updated to Exchange 2000 Server?

A. Use OWA1 and OWA2 as front-end servers for all mailbox servers for the Far West Windows 2000 site.
B. Use OWA1 as front-end servers for EXSERVER1 and EXSERVER2.
Use OWA2 as front-end servers for LosAngelesMail and NewYorkMail.
C. Use OWA1 and OWA2 as front-end servers for EXSERVER1 and EXSERVER2.
Use OWA3 as front-end servers for LosAngelesMail
Use OWA4 as front-end servers for NewYorkMail.
Locate both new servers at headquarters.
C. Use OWA1 as front-end servers for EXSERVER.
Use OWA2 as front-end servers for EXSERVER2.
Use OWA3 as front-end servers for LosAngelesMail
Use OWA4 as front-end servers for NewYorkMail.
Locate both new servers at headquarters.

Answer: C

QUESTION NO: 12

Answer:

QUESTION NO: 13
You change Exchange 2000 Server to native mode. How should you delegate administrative authority to the IT staff in the Los Angeles office?

A. Delegate all Exchange 2000 Resources to the Los Angeles
B. Delegate Exchange 2000 Resources in the Denver, San Francisco and Seattle offices to the Los Angeles office
C. Delegate Exchange 2000 Resources in the Denver, San Francisco, Seattle and Washing D.C offices to the Los Angeles office
D. Delegate no Exchange 2000 Resources to the Los Angeles Office.

Answer: B

QUESTION NO: 14
The existing mail server network configuration for Litware,Inc. , is shown in the exhibit.

Answer: UNKNOWN

Case Study #8, Fabrikam, Inc

Background:
Introduction:
You are hired to provide design and deployment consulting services to Fabrikam,Inc. You need to evaluate the company's existing messaging infrastructure, access current and future business needs, and design and deploy Exchange 2000 Server in the company's environment. You also need to implement the Microsoft Windows 2000 infrastructure that will be needed for exchange 2000.

Company Profile:
Fabrikam,Inc. is an internet service provider that recently became a subsidiary of a larger parent organization.

Fabricam,Inc., has 14 offices throughout the United State.

Company headquarters is in Chicago. Other company offices are located in the following cities:

- Atlanta
- Cincinnati
- Dallas
- Denver
- Detroit
- Kansas city
- Los Angeles
- Miami
- Minneapolis
- New York
- Phoenix
- Seattle
- Washington, D.C

Business Plan:
Fabricam,Inc., will continue to provide internet access services. The parent organization also wants Fabricam,Inc., to be an application service provider that provides messaging and collaboration services to businesses that have from 50 to 1,000 users.

Fabricam,Inc., must have a scalable server and messaging infrastructure that will accommodate planned company growth.

Fabricam,Inc., plans to offer varying levels of minimum downtime and recoverability, customized according to customer need and cost to the customer. Fabricam,Inc., will also provide application-development services as a part of its web hosting services. These development services will be applied to messaging if needed by the customer. To support interoperability, the messaging system will provide standards-based services to the customer.

Services Provided:
Basic Services:

Fabricam,Inc., will offer the following services:
- Message hosting services
- Support for standards-based messaging client software
- Support for Microsoft Outlook
- Dial-up dedicated internet access at speeds up to 45Mbps
- DNS hosting
- E-commerce and web site hosting and development
- Public-folders hosting
- Collaboration services including Chat, Instant Messaging, and online conference capabilities
- Secure web access
- X.509 certificate services.

Service Levels Provided:
Fabricam,Inc., will off two service levels for message hosting and web site hosting gold and bronze.

Gold-Level Service:
- Will be more expensive than bronze level service
- Will provide a unique domain name
- Will ensure a maximum of one hour of downtime per year
- Will guarantee that no more than the most recent four hopurs of data will be lost, in the event of catastrophic system failure or natural disaster.
- Will provide the customer with a customized SMTP e-mail domain

Bronze-Level Service:
- Will provide an economy level service
- Will provide web pages on fabricam.com
- Will ensure a maximum of 24 hours of downtime per year.
- Will guarantee that no more than the recent 24 hours of data will be lost in the event of catastrophic system failure or natural disaster
- Will provide the customer with an e-mail address at the fabricam.com SMTP e-mail domain.

Both levels of message hosting services will be set up to allow each customer to assign personnel to create and manage mailboxes and the user properties associated with them.

Technical Support Structure:
Human Resources:
There will be a technical support staff at each Fabrikam,Inc. office
A centralized IT staff at the Chicago office will provide support for the entire company and will be available 24 hours a day, seven days a week.

The centralized IT staff will consist of five IT teams. Each the five teams will have sole responsibility for one of the following tasks:

- Administer the Windows 2000 Server computers
- Manage the Exchange 2000 Server implementation
- Manage the Web Sites
- Perform custom web development
- Manage the connectivity between all company offices, the UNIX-based Web servers, and the DNS infrastructure.

During the Windows 2000 and Exchange 2000 Server implementation and deployment, one administrator will be a member of the schema administrators security group, the enterprise administrators security group, and the domain administrator security group. Neither the enterprise administrator nor any of members of the domain administrator security group will manage Exchange 2000 Server. The exchange 2000 administrators will be in the domain administrators security group.

Server Infrastructure:
The new Windows 2000 infrastructure will consists of one domain. Initially, there will be at least two Exchange 2000 Server computers at each office.

The services that are provided to each customer will be hosted from one specific office. All documents that need to be available to all customers will be created as web page on the Fabricam,Inc. Web server.

All IT infrastructure will be designed to minimize cost and administration Exchange 2000 Server computers will be designed to optimize fault tolerance, performance, and security. Only required ports will be opened on the firewalls.

The IT infrastructure at all Fabrikam,Inc., offices will be designed to allow customers to access their e-mail servers even if the WAN connections to the Fabrikam,Inc., office are not functioning. Exchange public folders will be created for each customer who wants them.

Name Resolution;
Fabricam,Inc., will be hasting many web sites and DNS domains for its customers. Currently, the company has two UNIX-based BIND DNS servers. One of these servers is in the Chicago office and one is in the Denver office. The Chicago office hosts the primary zones, and the Denver office hosts the secondary zones. The existing DNS servers support SRV records and dynamic update.

Network Infrastructure:
All Fabrikam,Inc., offices will be connected by means of a partial-mesh topology of 45-Mbps links, as shown in the exhibit. Click the exhibit button, and then click the network diagram tab.

There will be two connections to the Internet. One of these connections will be in the Chicago office, and one will be in the Denver office.
Each company office will have two firewalls that are deployed as shown in the exhibit. Click the exhibit button, and then click the Internet connection diagram tab.

Network Diagram

Internet Connection Diagram

Questions, Case Study #8, Fabrikam, Inc.

QUESTION NO: 1
You are working with the Windows 2000 design team to design the implementation of DNS for Fabrikam,Inc. how should you recommend that DNS complemented?

A. Move the DNS from the UNIX-based servers to Windows 2000. Add a Windows 2000-based DNS server at each office that does not currently have one. Use Active Directory integrated zones for all zones. Create an MX record for fabricam.com
B. Move the DNS from the UNIX-based servers to Windows 2000. Continue to use the UNIX-based BIND DNS servers in the Chicago and Denver offices. Use Active Directory integrated zones for all zones. Create an MX record for each domain that will be represented on the fabricam,Inc., internet mail servers.
C. Continue to use the UNIX-based BIND DNS servers in the Chicago and Denver offices. Configure all primary DNS zones on the DNS server in the Chicago office, and configure the secondary DNS zones on the DNS server in the Denver office. Create an MX record for fabricam.com
D. Continue to use the UNIX-based BIND DNS servers in the Chicago and Denver offices. Add a UNIX-based BIND DNS server at each office that does not currently have one. Configure all primary DNS zones on the DNS server in the Chicago office, and configure the secondary DNS zones on the DNS servers in the other offices. Create an MX record for each domain that will be represented on the Fabrikam,Inc., Internet Mail Servers.

Answer: B

QUESTION NO: 2
How should you design the placement of domain controllers and global catalog servers?

A. Place one domain controller in each office. Configure the domain controllers in only the Chicago and Denver offices as global catalog servers.
B. Place two domain controllers in each office. Configure the domain controllers in only the Chicago and Denver offices as global catalog servers.
C. Place one domain controller in each office and configure them as global catalog servers.
D. Place two domain controllers in the Chicago office, and place two domain controllers in the Denver office. Configure one of the domain controllers in each of these offices as a global catalog server.

Answer: C

QUESTION NO: 3
For which customers are the e-mail service offerings that are hosted at Fabrikam,Inc appropriate? (Choose all that apply)

A. Customers that have 768Kbps DSL connections and who want to post to newsgroups or send via e-mail documents that are associated with more than one application.
B. Customers who have connections of 56-Kbps or slower and who frequently want to post to newsgroups or send via e-mail documents that are larger than 2MB.
C. Customers who have 128-Kbps two-channel ISDN connections and who usually access their e-mail by using HTTP.
D. Customers who do not currently use Windows client computers.
E. Customers who currently use network address translation to gain access to the Internet.

Answer: A, D, E

QUESTION NO: 4
What should you do to provide fault tolerance for public folders for Bronze-level customers?

A. Perform a backup of the public folder store every 12 hours.
B. Replace each public folder to an Exchange 2000 Server computer in a separate office.
C. Provide a two-node cluster for running the Exchange 2000 Server computer that hosts the public folders.
D. Implement a host standby backup of the Exchange 2000 Server computer on a server in a separate office.

Answer: C

QUESTION NO: 5
How should you design storage and backup?

A. For gold-level customers, perform a full backup every four hours.
For bronze-level customers, perform an offline backup every 24 hours.
Create a mailbox store for each customer, and set a maximum of 500 users for each store.

Set a default maximum size of 50MB for each mailbox.

B. For gold-level customers, perform a full backup every four hours.
For bronze-level customers, perform a full backup every 24 hours.
Create a appropriate number of mailbox stores for each customer, and set a maximum of 250 users for each store.
Set a default maximum size of 100MB for each mailbox.

C. For gold-level customers, perform a full backup every four hours.
For bronze-level customers, perform an offline backup every 24 hours.
Create a appropriate number of mailbox stores for each customer, and set a maximum of 250 users for each store.
Set a default maximum size of 100MB for each mailbox.

Answer: B

QUESTION NO: 6
Which two actions should you perform to implement e-mail for customers who want to have their own e-mail domain? (Choose two)

A. Create a new POP3 virtual server to host the customer's domain.
B. Create a new SMTP virtual server to host the customer's domain.
C. Create a new web site to host the customer's domain.
D. Create a new recipient policy to add the appropriate domain alias to the SMTP address for each mailbox user.
E. In the DNS zone file for the customer's zone, create an A record that points to the SMTP virtual server that hosts the customer's domain.
F. In the DNS zone file for the customer's zone, create an MX record that points to the Fabrikam,Inc., mail server that hosts the customer's domain.
G. In the DNS zone file for the customer's zone, create a CNAME record that points to the Fabrikam,Inc., mail server that hosts the customer's domain.

Answer: D, F

QUESTION NO: 7
Which three business requirements should have the greatest influence on your Exchange 2000 Server design for Fabrikam,Inc? (Choose Three)

A. Requirements to provide for availability of customer data.
B. Requirements to provide for recovery of customer data.

C. Requirements to provide for secure access to customer data from several different types of messaging software.
D. Requirements to provide custom development services for web customers and messaging customers.
E. Requirements to provide Internet services and message-hosting services from a single IT infrastructure.
F. Required time for implementation of Fabrikam,Inc's e-mail infrastructure.

Answer: A, B, F

QUESTION NO: 8
How should you implement fault tolerance to recover from database corruption for Gold Service customers?

A. Divide the messaging database among more than one storage group
B. Run Exchange 2000 Server on a two-node cluster
C. Use a hot standby server to provide backup.
D. Place the messaging database on a hardware-based RAID 5 disk array

Answer: A

QUESTION NO: 9
How should you design the placement of Windows 2000 support services for Fabrikam,Inc?

A. Continue to use the DNS server service at the Chicago and Denver office. At each of the 14 Fabrikam,Inc., offices, place the domain controllers and the Exchange 2000 Server computers on the internal network. Place a front-end server for HTTP, SMTP, IMAP, and POP3 on the perimeter network. To support VPN connections, enable Routing and Remote access on a server on the perimeter network.
B. Continue to use the DNS server service at the Chicago and Denver office. At each of the 14 Fabrikam,Inc., offices, place the domain controllers and the Exchange 2000 Server computers on the internal network. Place a front-end server for HTTP, SMTP, IMAP, and POP3 on the external network, outside both firewalls. To support VPN connections, enable Routing and Remote access on a server on the perimeter network and one connection on the internal network.
C. Implement the DNS server service at each office that does not currently have it. At each of the 14 Fabrikam,Inc, office, place the domain controllers and the Exchange 2000 Server computers on the internal network. Place a front-end server for HTTP,

SMTP, IMAP, and POP3 on the perimeter network. To support VPN connections, enable Routing and Remote access on a server on the perimeter network.

D. Implement the DNS server service at each office that does not currently have it. At each of the 14 Fabrikam,Inc, office, place the domain controllers and the Exchange 2000 Server computers on the internal network. Place a front-end server for HTTP, SMTP, IMAP, and POP3 on the external network, outside both firewalls. To support VPN connections, enable Routing and Remote access on a server on the perimeter network and one connection on the internal network.

Answer: C

QUESTION NO: 10
How should you design the server disk configuration for Fabrikam, Inc?

A. Create four partitions on a single hardware based RAID 5 disk array.
Place Operating System on the first partition.
Place each transaction log on it own partition.
Place each store on it own partition.

B. Create four partitions on a single Microsoft Windows 2000 RAID 5 volume.
Place the operating system on the first partition.
Place each transaction log on its own partition
Place each store on it own partition.

C. Place the operating system on mirrored disks.
Place each transaction log on a set of mirrored disks.
Place each storage group on a dedicated hardware based RAID 5 controller

D. Place the operating system on the mirrored disks.
Place each transaction log on the set of mirrored disks
Place each storage group on five disks grouped together as Microsoft Windows NT raid 5 volume.

E. Place the operating system on a single disk.
Place each transaction log on its own disk.
Place each storage group on the dedicated hardware based RAID 5 controller

Answer: C

Case Study #9, Arbor Shoes

Introduction:
You are implementing a messaging situation for a company named arbor shoes. The company is upgrading its current mainframe-based e-mail environment to Exchange 2000 Server.
The company does not plan to retain any information from the old messaging system. The new system will provide messaging services to company headquarters, distribution centers, and retail stores.

Background:
History:
Arbor shoes is a distributor or brake shoes and brake-related components for automobiles and large trucks. It has 110 retail stores and site distribution centers throughout the United States. The company headquarters is located in Boston.

Company Profile:
Arbor shoes sells its products directly to automotive repair facilities. The company also sells products at company retail stores. Arbor shoes employs approximately 8,500 people nationwide. Its Boston headquarters employs 2,000 people.

The company has distribution centers in the following cities:

- Boston
- Chicago
- Dallas
- Los Angeles
- Miami
- Seattle

Each distribution center has 500 to 750 employees.
Each retail store has 10 to 30 sales clerks and two retail managers. Sales clerks usually are employed at arbor shoes for less than a year.

The IT department is located at headquarters. Each distribution center has three to five IT personnel on site who are skilled in the day-to-day IT operations of the distribution centers.

Business Plan:
Arbor shoes plans to expand the business aggressively to opening 25 new retail stores each year in new regions, including international stores. The company also wants to expand into markets such as aviation, farm implements, and heavy equipment.

Factors that Influence Business Strategies:
Most of the company's administration and strategic planning occur at Boston headquarters.

Arbor shoes wants to improve administration, reduce costs, and support innovative ideas and new opportunities for growth.

Existing IT environment:
Directory Design:
Arbor shoes has one domain namespace, which is named arborshoes.com. The company is running Microsoft Windows 2000 in native mode.

There is a single Windows 2000 site named ArborShoes. There are three top-level Organizational Units within the ArborShoes site:

- Corporate
- Distribution centers
- Retail stores

Departments at headquarters are set up as separate OUs within the corporate OU.
Each distribution center is set up as a separate OU within the distribution centers OU. Each distribution center OU also contains OUs for separate departments.
Each retail store is set up as a separate OU within the retail stores OU.

Messaging Requirements:
Arbor shoes frequently communicates by using e-mail. Usually, SMTP mail is used, and it is used over the Internet.

Retail managers receive their e-mail from the corporate mainframe computer. Sales clerks do not have e-mail and do not have access to the Internet.

All inbound and outbound e-mail is forwarded to an SMTP smart host that belongs to the company's Internet service provider. The ISP provides virus scanning services over a gateway. However, the ISP is not currently routing SMTP mail through this mail gateway.

Network Infrastructure:
A Frame Relay network is used to connect all company locations. Distribution centers by means of 512-Kbps links. Retail stores connect by means of either 65-Kbps links or 128-Kbps links.

Pricing information for the retail products is stored on three older mainframe computers at headquarters. Employees in the retail stores can scan a product and quickly find out pricing information and product availability. These mainframe computers will remain functional.

Arbor shoes has recently implemented a T1 connection to the internet.
Network traffic is steady, but it consumes only 8Kbps.
Global catalog servers are located only at Boston headquarters.
Each retail store has a Windows 2000 Server computer the functions as a file and print server.

Each of these servers is a Pentium Pro 266-MHz computer that has 128MB of memory and two 8GB disks in mirrored configuration.
Each distribution center has two domain controllers.

Arbor shoes has an internal-only DNS server named CorpDNS1. the company also has a DNS server named CorpDNS2, which is in a perimeter network that is connected to the internet.

Exchange 2000 Server Requirements and Goals:
Security Requirements:
Arbor shoes wants to have a secure connections to the internet. The company wants to protect SMTP mail from attacks from the Internet.

Archive Requirements:
Arbor shoes needs to implement a backup plan. Storage and archiving of data are important to the company. The company wants to have frequent, reliable backups.

Availability Requirements:
Servers in retail stores must be available during the stores standard business hours. The company is investigating high-availability solutions.

The IT personnel at the distribution centers need to be able to change storage-group configurations.
IT staff is not available to administer computer and accounts at retail stores.
Cash registers in retail stores run a local sales application on Windows 2000. he cash registers must be able to process sales whether or not the network is available.

Reliable messaging connectivity to customers is important.

Interoperability Requirements:
Arbor shoes needs to be able to send e-mail SMTP recipients over the Internet. The company wants to implement other forms of communication to its customers by using the Internet.

Goals:
Arbor shoes wants to improve communications among employees in retail stores by implementing a messaging solution.
Each distribution center will have its own exchange mailbox server. The servers will have the following names:

- BostonMail1
- ChicagoMail1
- DallasMail1
- Los AngelesMail1
- MiamiMail1
- SeattleMail1

All retail managers need calendaring features and will be required to store messages on the exchange server computer.
Sales clerks need to be able to communicate electronically with their managers and with other sales clerk, but they do not need to store messages.

Arbor shoes will open 25 new retail stores and new distribution center in the Toronto metropolitan area within the next 12 months.
Six Exchange 2000 Server computers are currently installed at headquarters:

- CorpMail1 and CorpMail2 will house corporate mailboxes.
- CorpMail3 is an additional server that was initially used for testing mailbox load simulations in the lab.
- CorpSMTP1 will be a dedicated external SMTP connector server.
- CoprOWA1 and CorpOWA2 will be dedicated for implementing access to Microsoft Outlook Web Access.

Headquarters also has four computers that will be used as servers for Instant Messaging:

- IMHome1
- IMHome2
- IMHome3
- IMRouter1

The president of arbor shoes is receptive to customer comments and criticism in the past, comments came directly to her mailbox. Under the new mail system, she wants the comments to be initially viewed by a Comment Committee, through she will occasionally view some of the comments herself.

Questions, Case Study #9, Arbor Shoes

QUESTION NO: 1
How should you implement a messaging client software solution for Arbor Shoes?

A. Configure Outlook 2000 for retail managers to connect to Exchange 2000 Server computers at the distribution centers. Ensure that employees at the distribution centers and at headquarters use only Outlook Express
B. Configure outlook 2000 for retail managers to connect to Exchange 2000 Server computers at the distribution centers. Ensure that employees at the distribution centers and at headquarters use Outlook 2000
C. Configure outlook express 2000 for retail managers to connect to Exchange 2000 Server computers at the distribution centers. Ensure that employees at the distribution centers and at the headquarters use Outlook 2000
D. Configure outlook express for retail managers to connect to Exchange 2000 Server computers at the distribution centers. Ensure that employees at the distribution centers and at headquarters use only outlook web access.

Answer: B

QUESTION NO: 2
How should you implement the Exchange 2000 Server administrative model for each distribution center?

A. Implement group policies
B. Create Windows 2000 sites
C. Create administrative groups
D. Create routing groups

Answer: C

QUESTION NO: 3
Which changes should you make to the network to accomplish Exchange 2000 Server?

A. Implement additional global catalog servers at each distribution center.
B. Implement additional DNS servers at each distribution center.
C. Implement additional WINS servers at each distribution center.
D. Implement additional domain controllers at each distribution center.

Answer: A

QUESTION NO: 4
How should you design a messaging solution to fulfill the customer-comment requirements?

A. Create a mail-enabled group for receiving customer comments. Add the company president to this group. Limit the users who can send messages directly to the president's mailbox.
B. Implement a public folders solution that allows customers to post comments anonymously and that allows the company president and comment committee members to read the comments at their convenience.
C. Implement a chat server that customers can use to log on and post comments in real time. Deploy chat client software to the company president and to members of the Comment Committee.
D. Create a mail-enabled group for receiving customer comments. Add the company president to this group. Use rules and fibres to drop these messages into another folder.

Answer: B

QUESTION NO: 5
How should you configure the hardware that was previously used for CorpMail3?

A. Configure CorpMail3 to be an additional company mailbox server.
B. Configure CorpMail3 to be an Instant Messaging home server.
C. Configure CorpMail3 to be a bridgehead server.
D. Configure CorpMail3 to be a backup SMTP server.

Answer: A

QUESTION NO: 6
What is required so that all retail stores can use the instant messaging servers at headquarters?

A. Network bandwidth to retail stores must be doubled.

B. A DNS server must be present in each retail store.
C. A domain controller must be present in each retail store.
D. The WAN link must be reliable and must be completely utilized.

Answer: B

QUESTION NO: 7
How should you design a high-availability solution to fulfill the requirements for Internet mail?

A. Implement two additional SMTP connector servers in each distribution center. Set the MX records for that server at a cost value that is higher than the MX records for CorpSMTP1. Cluster the new SMTP connector server with CorpSMTP1.
B. Implement an additional SMTP connector server at headquarters. Set the MX records for that server at a cost value that is higher than the MX records for CorpSMTP1.
C. Implement an additional SMTP connector server in each distribution center. Set the MX records for that server at a cost value that is higher than the MX records for CorpSMTP1. load-balance with the SMTP connector server at headquarters.
D. Implement an additional SMTP connector server at headquarters. Set the MX records for that server at a cost value that is higher than the MX records for CorpSMTP1. Cluster the new SMTP connector server with CorpSMTP1.

Answer: C

QUESTION NO: 8
How should you design a backup solution to fulfill the requirements of the distribution centers?

A. Back up Exchange 2000 Server system files and Windows 2000 system files and registry keys each night, and make weekly and monthly archives of the files.
B. Back up exchange server transaction logs and Exchange 2000 Server system files each night, and make weekly and monthly archives of these files.
C. For each Exchange 2000 Server computer, back up all files on the local hard disks each night, and make weekly and monthly archives of these files.
D. Back up Exchange 2000 Server storage groups and system state data each night, and make weekly and monthly archives of this data.

Answer: D

QUESTION NO: 9

Answer:

QUESTION NO: 10
How should you implement fault-tolerance for arbor shoes?

A. Implement clustering for the public folder servers. Use network Load Balancing on the front-end servers.
B. Use replication for the public folders. Use network Load Balancing on the front-end servers.
C. Use replication for the public folders. Implement clustering for the front-end servers.
D. Implement clustering for the front-end servers. Implement clustering for the public folder servers.

Answer: A

QUESTION NO: 11

How should you design Exchange 2000 Server environment to fulfill the messaging requirements of the retail stores?

A. Implement and install Exchange 2000 Server on an additional server in each retail store. Add global catalog at each retail store.
B. Place the retail managers' mailboxes onto the existing Exchange 2000 Server computers at all of the distribution centers and at headquarters, and upgrade the bandwidth.
C. Place the retail managers' mailboxes onto the existing Exchange 2000 Server computers at the closest distribution centers and at headquarters, and do not upgrade the bandwidth.
D. Upgrade the hardware on the existing Windows 2000 Server computers, and install Exchange 2000 Server on these servers. Add global catalog at each retail store.

Answer: C

Case Study #10, ***Hanson Brother***

Introduction:
You are hired to provide design and deployment consulting services to the Hanson Brothers investment company. You need to evaluate the company's existing messaging infrastructure, to assess current and future business needs, and to design and deploy Exchange 2000 Server in the company's environment.

Background:
Company profile:
Hanson Brothers has more than 500,000 customers and manages more than $100 billion in funds. The company has 16,000 employees in six offices dispersed around the world. The company has executives in each of its offices.

Company headquarters is located in New York, New York, and has 8,000 employees. Other office locations and number of employees are as follows:

- Bonn, Germany, has 1,750 employees
- Hang Kong, china, has 1,000 employees
- London, England, has 3,000 employees
- Tokyo, Japan, has 1,600 employees
- Zurich, Switzerland, has 650 employees

Business Plan:
The business of Hanson Brother is to protect customer funds while seeking to maximize return on customer investments. The company specializes in foreign currency stocks, so it requires constant and reliable connections to stock market information sources throughout in the world.

Existing IT Environment:
Network Diagram:
The network diagram is shown in the exhibit. Click the exhibit button.

Chief Information Office (CIO):
We are adversely affected by competition from other companies that use newer technologies to offer great solutions. We want to provide new services to attract new customers and to retain our current customers.
We plan to launch a new service named CurrencyNow. This service will offer live, online discussions that will allow hundreds of our best customers to communicate with senior investment advisors and other industry analysts. We would like to allow our customers to submit questions to be answered while using the service without other users seeing the questions.

Investment advisors have e-mail addresses, but only can be contacted when they are in the office. We want to be able to offer e-mail access to our brokers when they are out of the office.

Director of IT:
We currently use Lotus cc:Mail for e-mail, and employees can use e-mail only when they are in the office.
I want to enforce mailbox limits of 50MB for each employee, with the exception of company executives. Company executives should not be affected by this limit.

We recently completed upgrading our company-wide network infrastructure. We now have 1,544-mbps or higher connections between all of our offices. The connections average 40-percent utilization during peak usage. We are running only Microsoft Windows 2000 Professional and Windows 2000 Server. The Windows 2000 Server computers run Active Directory in native mode.

E-mail Manager:
I want to ensure that the IT group at company headquarters in New York will be able to manage the Exchange 2000 Server environment. This IT group will be only group allowed to assign exchange permissions.

The London and Hong Kong office each have an IT group to share the responsibility to support messaging information, such as telephone numbers and addresses, and to change backup tapes.
I want to ensure that we design our Exchange 2000 Server computers to achieve optimal performance and recoverability. I also want to minimize server memory usage. I want to ensure that we can always recover a database without taking the server offline or affecting other databases in a storage group.

I want to enable employees to access their e-mail by using their home computers or public kiosks.
I want to accomplish this as efficiently and as economically as possible.
We want to implement Exchange 2000 Server in the New York office first. We will then implement Exchange 2000 Server in the following offices, in this order Bonn, Hong Kong, Tokyo, London, and Zurich.

We have a company-wide distribution list named MarketUpdate. This distribution list is used every hour to send market updates to the entire company.
I want to be able to recover mailboxes up to the point of failure at any time. To minimize Exchange 2000 Server mailbox configuration, I want to use store-level settings whenever possible.
Each office has its own Active Directory site public folders are not used in the company.
A full Exchange 2000 Server backup will occur on a weekly basis and the tapes reused the following week.

Hardware:
Exchange 2000 Server will be used on existing hardware. The following performance benchmarks were achieved when testing Exchange 2000 on the planned hardware configurations:

- Each Exchange 2000 Server computer can support 2,000 users

- Exchange 2000 Server computer will generate approximately 35 global catalog queries per second
- The global catalog server configuration can support 200 queries per second

Archiving Requirements:
Legal Counsel:
Because we have offices internationally, we are required to meet the regulations of each country's government regarding the archive and backup of investment-related information. These regulations pertain only to the information in the mailboxes that reside on computers in each location.
The new Exchange 2000 Server implementation must accommodate these specific archiving and backup requirements.

New York:
Mailboxes of company executives must be backed up every day and retained for a minimum of one year and a maximum of three years. Mailboxes for other users must be backed up every week and retained for a minimum of one year.

London:
Mailboxes for all users must be backed up every day and retained for a minimum of three years

Zurich and Bonn:
Mailboxes for investment advisors must be backed up every day and retained for a maximum of three months. Mailboxes for other users must be backed you every day and retained for a minimum of one year and a maximum of three years.

Hong Kong and Tokyo:
Mailboxes of company executives must be backed up every database and retained for a minimum of one year and a maximum of three years. Mailboxes for investment advisors must be backed up every hour and retained for a minimum of six months and a maximum of nine months. Mailboxes for other users must be backed up every week and retained for a minimum of one year.

Questions, Case Study #10, Hanson Brother

QUESTION NO: 1
How should you implement the CurrencyNow service?

A. Use public folders
B. Use instant messaging
C. Use a chat community in private mode
D. Use a chat community in Auditorium mode

Answer: D

QUESTION NO: 2
How should you design the Exchange 2000 Server computer for the Zurich office?

A. Use one storage group that contains one mailbox store
B. Use one storage group that contains two mailbox stores
C. Use one storage group that contains three mailbox stores
D. Use two storage groups that each contain one mailbox store

Answer: B

QUESTION NO: 3
How many routing groups should you implement for Hanson Brother?

A. One
B. Two
C. Three
D. Four

Answer: B

QUESTION NO: 4
How should you design the Exchange 2000 Server computer for the company headquarters in New York?

A. Use one storage group that contains one mailbox store
B. Use one storage group that contains two mailbox stores
C. Use one storage group that contains three mailbox stores
D. Use two storage groups that each contain one mailbox store

Answer: D

QUESTION NO: 5
How many global catalog servers should you install at the New York office if you install four Exchange 2000 Servers in the New York?

A. One
B. Two
C. Three
D. Four

Answer: B

QUESTION NO: 6
How should you design the Exchange 2000 Server computer for the London office?

A. Use one storage group that contains one mailbox store
B. Use one storage group that contains two mailbox stores
C. Use one storage group that contains three mailbox stores
D. Use two storage groups that each contain one mailbox store

Answer: C

QUESTION NO: 7
What should you do to minimize the effect of denial-of-service attacks on the remote e-mail access service for company employees?

A. Place two VPN server computers in an perimeter network
B. Place two front-end Exchange 2000 Server computers in an internet perimeter network
C. Enable SSL connections on the Exchange 2000 Server computer that provides internet access

D. Use two storage groups on the Exchange 2000 Server computer that provides internet mail access

Answer: B

QUESTION NO: 8
When a client computer in Bonn connects to a mailbox that is on an Exchange 2000 Server computer in the New York office, which global catalog server should service their address book queries?

A. A global catalog server in the Bonn office
B. A global catalog server in the London office
C. A global catalog server in the Active Directory site as the Exchange 2000 Server computer in the Bonn office.
D. A global catalog server in the Active Directory site as the Exchange 2000 Server computer in the new York office.

Answer: D

QUESTION NO: 9
How should you design the Exchange 2000 Server computer for the Hong Kong office?

A. Use one storage group that contains one mailbox store
B. Use one storage group that contains two mailbox stores
C. Use one storage group that contains three mailbox stores
D. Use two storage groups that each contain one mailbox store

Answer: C

QUESTION NO: 10
What should you do to implement the MarketUpdate distribution list in Exchange 2000 Server?

A. Place a global catalog server in each office location
B. Place a global catalog server on the same network segment as the Active Directory Connector server

C. Create the distribution list as a mail-enabled universal group. Add global groups to the universal group. Add recipients to the global groups.
D. Create the distribution list as a mail-enabled universal group. Add global groups to the universal group. Add recipients to the global groups.

Answer: D