At a Glance

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Overview
This chapter introduces you to some of the more basic Exchange configuration settings that apply to both the Exchange organization and server objects. It begins with a discussion of the different editions available. This is followed by discussions on preparing for and installing Exchange Server 2003. Management tools and configuration issues are covered next. The last section covers DNS configuration.

Objectives
- Differentiate between editions of Exchange Server 2003
- Prepare a Windows Server 2003 and an Active Directory environment for the installation of Exchange Server 2003
- Install Exchange Server 2003
- Identify and access Exchange Server 2003 administration and management tools
- Configure Exchange Server 2003 modes, global settings, and policies
- Configure server properties for an Exchange Server 2003 system
- Configure DNS to support Exchange Server 2003

Teaching Tips

Exchange Server 2003 Editions
1. To meet the needs of different customers, Exchange Server 2003 is offered in two different editions—Standard Edition and Enterprise Edition. The following sections outline the capabilities of each edition, including details on minimum and recommended server requirements

Exchange Server 2003, Standard Edition
1. Exchange Server 2003, Standard Edition is the Microsoft Exchange Server solution aimed at meeting the messaging and collaboration needs of small-to medium-sized businesses.
2. The main limitations of Exchange Server 2003, Standard Edition include:
   a. Support for a maximum of one storage group
   b. Support for a maximum of one mailbox store and one public folder store per storage group
   c. A maximum per-database size of 16 GB
   d. No clustering support
   e. The X.400 connector is not included
Exchange Server 2003, Enterprise Edition

1. Exchange Server 2003, Enterprise Edition is the Microsoft Exchange Server solution aimed at meeting the messaging and collaboration needs of large enterprise customers.

2. The primary features that make Exchange Server 2003, Enterprise Edition a better choice for large organizations include:
   a. Support for up to four storage groups
   b. Support for up to five databases
   c. A maximum database size of 8 TB, limited only by server hardware
   d. Support for clustering implementations of up to eight nodes
   e. Built-in X.400 connector

Preparing to Install Exchange Server 2003

1. A number of services first must be added to the Windows Server 2003 system on which you will complete the installation, and Active Directory forests and domains also must be prepared to support Exchange.

2. The basic processes that must be completed prior to installing Exchange Server 2003 include:
   a. Installing the Windows Server 2003 services required by Exchange
   b. Running the ForestPrep tool to prepare the Active Directory forest for the creation of the first Exchange organization
   c. Running the DomainPrep tool to prepare each Active Directory domain for the installation or use of Exchange Server in that domain

Installing Windows Server 2003 Services

1. To install Exchange Server 2003, a number of Windows Server 2003 services first must be installed. These include:
   a. .NET Framework
   b. ASP.NET
   c. Internet Information Services (IIS)
   d. World Wide Web Publishing service
   e. Simple Mail Transfer Protocol (SMTP) service
   f. Network News Transfer Protocol (NNTP) service

In this activity, you install the Windows Server 2003 services required to install Exchange Server 2003.

Running ForestPrep

1. Prior to installing the first Exchange server in an Active Directory forest, the Exchange Server 2003 **ForestPrep** tool must be run to prepare the environment.

2. ForestPrep must be run in the Active Directory domain where the **domain controller** holding the role of **schema** master resides.

3. The main functions carried out by ForestPrep include:
   a. Extending the Active Directory schema to include classes and attributes required by Exchange Server 2003
   b. Creating the Exchange organization container object in Active Directory
   c. Designating a user or group account that will have the Exchange Full Administrator permissions to the Exchange organization object

| Teaching Tip | A **schema** is a definition of attributes and objects. ForestPrep sets up a default schema. Use of this term may be different from how it is used in other contexts. |

Activity 2-2: Preparing an Active Directory Forest for Exchange Using ForestPrep

1. Prior to installing the first Exchange Server 2003 system in an Active Directory forest, the forest first must be prepared by running the ForestPrep tool. In this activity, you run the ForestPrep tool on your Windows Server 2003 domain controller.

Running DomainPrep

1. After the ForestPrep process has completed, individual domains need to be prepared for Exchange Server 2003 by running **DomainPrep**. DomainPrep needs to be run in each of the following domains:
   a. The Active Directory **forest root domain**
   b. Any domains that will contain Exchange Server 2003 systems
   c. Any domain that will contain Exchange Server 2003 mail-enabled objects, even if no Exchange Server 2003 system will be present in those domains
   d. Any domains that include domain controllers configured as **global catalog servers**
   e. Any domains that include user or group accounts that will manage the Exchange Server 2003 organization
2. To run DomainPrep, you must have administrator privileges in the domain in which the command is being issued.

3. The main functions carried out by DomainPrep include:
   a. Creating the Exchange Domain Servers global group and Exchange Enterprise Servers local group in Active Directory
   b. Making the Exchange Domain Servers global group a member of both the Exchange Enterprise Servers and the Pre-Windows 2000 Compatible Access local groups
   c. Creating the Exchange System Objects container
   d. Configuring permissions for the Exchange Enterprise Servers group
   e. Modifying the AdminSdHolder template that sets permissions for the Administrators local group
   f. Performing preinstallation checks prior to installing Exchange Server 2003

Activity 2-3: Preparing an Active Directory Domain for Exchange Using DomainPrep

1. Prior to installing the first Exchange Server 2003 system in an Active Directory domain, the domain first must be prepared by running the DomainPrep tool. In this activity, you run the DomainPrep tool on your Windows Server 2003 domain controller.

Installing Exchange Server 2003

1. To install the first Exchange Server 2003 system in a forest, you must use an account that has the Exchange Full Administrator permission at the organization level, and is a member of the local Administrators Group on the Windows server on which the installation will be completed.


1. With the necessary Windows Server 2003 services installed, and having run ForestPrep and DomainPrep to prepare the forest and domain respectively, you are ready to install Exchange Server 2003. In this activity, you install Exchange Server 2003, Enterprise Edition on your server.

| Teaching Tip | Make sure students understand the concept of Domains as it relates to DNS and how it relates to DomainPrep. |
Unattended Installations of Exchange Server 2003

1. The unattended installation process can be used to install all but the first Exchange server in an organization. Unattended installations can be used for the following tasks:
   a. Installing Exchange Server 2003 on all but the first Exchange server in the organization
   b. Installing the Exchange Server 2003 System Management tools
   c. Running DomainPrep in all but the first domain

Deploying Exchange Server 2003 in a Cluster

1. In environments in which high levels of reliability and fault tolerance are critical, Exchange Server 2003, Enterprise Edition can be deployed as part of a cluster.

2. In simple terms, a cluster is a group of independent servers (commonly referred to as nodes) that work together to ensure system availability.

Exchange Server 2003 Administration Tools

1. The two primary tools used to manage an Exchange organization are found in this group:
   a. Exchange System Manager and
   b. Active Directory Users and Computers.

Exchange System Manager

1. Exchange System Manager is the primary administrative tool used to manage an Exchange Server environment and related system settings.

2. As a Microsoft Management Console (MMC) snap-in, the tool can also be added to custom consoles that include other administrative tools.

3. Examples of common administrative tasks that can be carried out with Exchange System Manager include:
   a. The configuration of global settings, such as message formats, message delivery options, and mobile service settings
   b. The configuration of recipient settings, including templates, address lists, update services, and policies
   c. The configuration and management of administrative groups and routing groups
   d. The configuration and management of server settings, including message queues, storage groups, and protocols
   e. The configuration of connectors between Exchange and other messaging systems
   f. The delegation of Exchange administrative roles
   g. The configuration of server and recipient policies
Quick Quiz

1. Prior to installing Exchange Sever 2003 you must run _____. (Choose all that apply)
   a. DomainPrep
   b. DNS
   c. ForestPrep
   d. Kerberos
   ANS: a and c

2. Which of the following is a limitation of Exchange Server, Standard Edition compared to Exchange Server, Enterprise Edition?
   a. Standard Edition has less Storage space
   ANS: a

3. Unattended installations can be used for which of the following tasks? (Choose all that apply)
   a. Running ForestPrep on the first node in the system
   b. Installing Exchange Server 2003 on all but the first Exchange server in the organization.
   c. Installing Exchange Server 2003 on all servers, including the first Exchange server in the organization
   d. Running DomainPrep on the first node in the system
   ANS: b and d

Activity 2-5: Exploring Exchange System Manager

1. Exchange System Manager is one of the primary administrative tools used to manage an Exchange organization. In this activity, you open and explore Exchange System Manager for the first time.

Active Directory Users and Computers

1. Active Directory Users and Computers is the main administrative tool used to manage user, group, and computer account objects in a Windows Server 2003 Active Directory environment. Installing Exchange Server 2003 adds the following tabs to the properties of a user account:
   a. Exchange General
   b. Exchange Addresses
   c. Exchange Features
   d. Exchange Advanced
2. The primary Exchange-related administrative tasks carried out with Active Directory Users and Computers include:
   a. Configuring e-mail addresses for users and groups
   b. Enabling or disabling user access to Exchange features
   c. Configuring user delivery options, delivery restrictions, and storage limits
   d. Configuring mailbox rights
   e. Creating and managing distribution groups

Activity 2-6: Exploring Exchange-related Changes to Active Directory Users and Computers
1. Active Directory Users and Computers is another administrative tool used to manage Exchange settings related to users and groups. In this activity, you open and explore Active Directory Users and Computers for the first time.

Customized Consoles
1. Although both Active Directory Users and Computers and Exchange System Manager are both easily accessible from the Microsoft Exchange menu under All Programs, many administrators prefer to work with both tools from a single, consolidated management console.

Activity 2-7: Creating a Custom MMC
1. Many administrators prefer to create their own custom MMCs as a way to consolidate administrative tools within a single environment. In this activity, you create a custom MMC console that can be used to manage Exchange-related settings.

Picking a Server Management Location
1. The administrative tools required to manage both a Windows server and Exchange Server 2003 can both be installed on a Windows XP Professional system running Service Pack 1 or higher.

Managing Exchange Server 2003
1. Managing an Exchange organization consists of a variety of tasks ranging from policy and server configuration through to mailbox and user management.
2. Management-related tasks to be explored in this section include:
   a. Switching an Exchange organization from mixed mode to native mode
   b. Configuring Exchange global settings
   c. Configuring Exchange server property settings
   d. Working with system policies
Switching from Mixed Mode to Native Mode

1. After Exchange Server 2003 is installed, the Exchange organization runs in **mixed mode** by default. When running in mixed mode, an organization can support and coexist with Exchange servers running previous versions, such as Exchange Server 5.5.

2. If your Exchange organization does not need to support interoperability with Exchange Server 5.5 systems, you should change the organization to **native mode**.

3. The benefits of switching an organization to Exchange Server 2003 native mode include:
   - The ability to create query-based distribution groups
   - Bandwidth savings, because bridgehead servers will use 8BITMIME data transfers rather than the 7-bit exchanges used in Exchange Server 5.5 environments
   - The ability for routing groups to contain servers for different administrative groups
   - The ability to move Exchange Server 2003 systems between routing groups
   - The ability to move mailboxes between administrative groups
   - SMTP is used as the default routing protocol

| Teaching Tip | Switching to native mode is a one-way process and cannot be reversed. Make sure there will not be any compatibility issues before switching. |

Activity 2-8: Switching Exchange Server 2003 to Native Mode

1. Many Exchange Server 2003 features are not available until an Exchange organization is promoted from mixed mode to native mode. In this activity, you promote your Exchange organization from mixed mode to native mode.

Configuring Global Settings

1. The Global Settings node in Exchange System Manager allows you to configure system wide settings for your Exchange organization.

2. The Global Settings node consists of three main configuration areas:
   - Internet Message Formats
   - Message Delivery
   - Mobile Services
Internet Message Formats

1. When a message is sent from a Messaging Application Programming Interface (MAPI) e-mail client such as Microsoft Outlook to an Internet client such as Outlook Express or Eudora, SMTP converts the message from Microsoft Rich Text Format (RTF) to Multipurpose Internet Mail Extensions (MIME) format.

2. MIME message formatting information is included in messages so that the receiving client can determine which “helper” applications might be necessary to read the message or access attachments.

3. SMTP policy settings are configured from the Message Format and Advanced tabs. Settings found on the Message Format tab include:
   a. Message encoding—these settings allow you to configure the encoding type to be used with messages. Set to MIME by default, you also control whether outgoing messages are sent as plain text or Hypertext Markup Language (HTML). Plain text messages use less storage space, but lack formatting such as italic, hyperlinks, and so forth. It’s worth noting that not all e-mail clients support HTML formatting.
   b. Character sets—these settings allow you to specify a character set to be used for both MIME and non-MIME messages. Be careful not to choose an incorrect character set, as it might stop recipients from being able to read sent messages.

| Teaching Tip | Make sure the class discusses the difference between message formats (such as MIME, S/MIME and RTF) and message passing protocols (such as SMTP, X.400 and IMAP). |

Message Delivery

1. The Global Settings Message Delivery node allows you to configure message delivery options for your Exchange organization.

2. The Message Delivery Properties dialog box consists of six tabs: General, Defaults, Sender Filtering, Connection Filtering, Recipient Filtering, and Details. Configurable message delivery settings are found on the following tabs:
   a. Defaults—Settings on this tab allow you to configure maximum sending and receiving message sizes (each 10 MB by default) and the maximum number of recipients per message (5000 by default).
   b. Sender Filtering—This tab allows you to filter messages from certain senders. If a sender’s e-mail address or display name appears on this tab, messages are not delivered to the recipient. Wildcards like *@domain.com can also be added to block messages from all senders at a given domain.
   c. Connection Filtering—This tab allows you to configure the IP addresses of SMTP servers with which Exchange server allows or denies connections, as well as configure rules that determine how servers found on block lists are handled.
d. **Recipient Filtering**—This tab allows you to filter messages to certain recipients. If a recipient’s e-mail address or display name appears on this tab, messages are not delivered to that recipient. Wildcards like *@domain.com can also be added to block messages to all recipients at a given domain. Authenticated users are not subject to recipient filtering.

**Activity 2-9: Configuring Exchange Global Settings**

1. Configurable Global Settings in Exchange System Manager include Internet Message Formats and Message Delivery settings. In this activity, you configure these settings and explore the contents of the Default SMTP policy.

**Configuring Server Property Settings**

1. Whereas global settings impact an entire Exchange organization, server-specific settings are used to control the functions of a particular Exchange Server 2003 system. Server settings are configured from the Properties pages of a server in Exchange System Manager.

2. The Server Properties dialog box consists of 11 tabs, as outlined in the following list:
   a. **General**—This tab allows you to configure e-mail subject and message tracking, a feature that allows the contents and subject fields of e-mail messages to be searched by administrators using tools such as Message Tracking Center. Other options available on this tab include the ability to designate the Exchange server as a front-end server and to control whether fatal service error information should be forwarded to Microsoft.
   b. **Locales**—This tab allows you to configure locale settings that determine how elements such as currency, time, and date settings are displayed to clients of the server.
   c. **Mailbox Management**—This tab allows you to start the mailbox management process that is used to create reports about recipient policies that set age and size limits for messages. You also use this tab to schedule when the mailbox management process should run, and specify the mailbox to which reports should be delivered.
   d. **Directory Access**—This tab allows you to view and manipulate information about the domain controllers in the Directory Access topology.
   e. **Policies**—This tab allows you to view any system policies that currently apply to the server. System policies are looked at later in this chapter.
   f. **Security**—This tab allows you to view the user and group permissions applied to the server object.
   g. **Full-Text Indexing**—This tab allows you to control the server resource usage levels to be applied to indexing Exchange databases for the purpose of conducting searches.
   h. **Monitoring**—This tab allows you to define which resources on the server (such as CPU threshold, free disk space, and so on) should be actively monitored.
i. **Diagnostics Logging**—This tab allows you to configure the levels of diagnostic logging for different Exchange services. Messages about Exchange services are ultimately logged to the application log in Event Viewer.

j. **Public Folder Referrals**—This tab allows you to configure the manner in which the Exchange server redirects users to public folders.

k. **Details**—This tab allows you to add messages or notes about the configuration of the server object that might be helpful to other users.

**Activity 2-10: Exploring and Configuring Server Settings**

1. A large number of configurable settings are available in the Properties pages of an Exchange server. In this activity, you exchange and change configuration settings in your Exchange server’s Properties.

**Working with System Policies**

1. A **system policy** is simply a collection of settings that can be applied to these objects once, rather than individually on each and every object.

2. When system policy settings are applied to an object (such as a server), those settings can no longer be configured manually for the object to which the policy is applied.

3. Exchange Server 2003 supports three kinds of system policies:
   a. Mailbox store policies
   b. Public folder store policies
   c. Server policies

**Activity 2-11: Creating and Applying Server Policies**

1. Server system policies help administrators to apply and enforce configuration settings on multiple servers simultaneously, without the need to configure each server individually. In this activity, you create a server policy and then apply it to your Exchange server.

**Configuring DNS to Support Exchange Server 2003 Internet E-Mail**

1. When you selected the option to have DNS automatically configured, the Active Directory installation process installs the **Domain Name Service (DNS)** and creates what is known as an Active Directory integrated DNS zone.

2. The primary purpose of DNS is to provide name resolution services on a Transmission Control Protocol/Internet Protocol (TCP/IP) network.

3. Mail servers are listed in DNS using a special type of resource record known as a **Mail Exchanger (MX)**. When a sending mail server is attempting to contact the mail server of the message’s recipient, it queries a DNS server that is authoritative for that domain to find the associated MX record.

4. The MX record associated with a mail server does not list the mail server’s IP address. Instead, MX records act as a pointer to the mail server’s fully qualified name.
Teaching Tip
Examples of DNS are useful. Identify DNS server in the student settings and become familiar with the name resolution rules for your locale.

Activity 2-12: Configuring DNS to Support Exchange Server 2003 Internet E-mail

1. DNS MX records are used to designate mail servers within the DNS infrastructure on the Internet. In this activity, you add an MX record for your server in DNS.

Quick Quiz

1. Which of the following is a management related task for Exchange Server 2003?
   a. Switching an Exchange organization from mixed mode to native mode.
   c. Creating LDAP queries
   d. Creating Users.
   ANS: a

2. Which of the following is the default standard for message encoding?
   a. POP3
   b. MAPI
   c. MIME
   d. S/MIME
   ANS: c

3. System policies can be set to configure which of the following?
   a. Mailbox store policies
   b. Public folder store policies
   c. Server Policies
   d. All of the above
   ANS: d

Class Discussion Topics

1. Discuss how to determine whether to any given organization should use Standard Edition or Enterprise Edition of Exchange Server.
Additional Projects

1. If possible, set up the lab environment with two domains. For example, leftside.org and rightside.com. This will require a node that acts as a DNS server and not just a DNS client. Then require the students to determine the steps to make sure message get from one domain to the other via setup as a DNS client and use of DomainPrep. The DNS server node may or may not run Exchange but it is useful if it does.

Key Terms

Active Directory Users and Computers—The primary user and group administrative tool in Active Directory environments.

cluster—A group of independent servers (commonly referred to as nodes) that work together to ensure system availability.

domain controller—A Windows server that stores a copy of the Active Directory database.

Domain Name Service (DNS)—The distributed database system that provides name resolution services on TCP/IP networks.

DomainPrep—The tool used to prepare each Active Directory domain prior to the installation of Microsoft Exchange Server 2003.


forest root domain—The first domain created in an Active Directory forest.

ForestPrep—The tool used to prepare an Active Directory forest prior to the installation of Microsoft Exchange Server 2003.

global catalog server—An Active Directory domain controller that stores information about all objects in a forest.

Mail Exchanger (MX)—The DNS resource record used to designate a mail server.

Microsoft Management Console (MMC)—The management environment into which different snap-in tools can be added for the purpose of managing system and application settings. mixed mode—The default Exchange Server 2003 organizational mode that supports environments running Exchange 5.5 servers.

Multipurpose Internet Mail Extensions (MIME)—A message formatting method that includes information in messages such that the receiving client can determine which “helper” applications might be necessary to read the message or access attachments.

native mode—The primary Exchange Server 2003 organizational mode for environments that do not include Exchange 5.5 servers that makes it possible to take advantage of all Exchange Server 2003 features.

schema—The group of all defined object classes and attributes supported by Active Directory. The Active Directory schema must be extended (via ForestPrep) to support Exchange Server 2003.

system policy—The settings that simplify the administration of groups of servers, mailbox stores, and public folder stores by centralizing the configuration of multiple objects.
Additional Resources

2. DNS information [www.dns.net](http://www.dns.net).
3. X.400 protocol [www.alvestrand.no/x400](http://www.alvestrand.no/x400)
4. MIME encoding [www.mhonarc.org/~ehood/MIME](http://www.mhonarc.org/~ehood/MIME)

Technical Notes for Hands-On Projects

Chapter 2 contains hands-on projects to install MS-Exchange. Make sure you have on hand:
1. The type of Mail server being used (POP, IMAP or SMTP)
2. IP address of the server
3. Protocol for establishing users in the class setting.
4. Notes on local network and routing configuration
5. OPTIONAL: a mail server of a different type (Linux, for example) to show interaction with other systems.
6. The local DNS configuration and name resolution rules.
1. On which of the following operating systems can Exchange Server 2003, Enterprise Edition be installed? (Choose all that apply.)
   Answer: A, C

2. On which of the following operating systems can Exchange Server 2003, Standard Edition be installed? (Choose all that apply.)
   Answer: C, D

3. What is the Microsoft recommended amount of RAM that should be available to install Exchange Server 2003 on a Windows Server 2003 system?
   Answer: B

4. How much free disk space is required on the installation drive to install Exchange Server 2003?
   Answer: C

5. ForestPrep needs to be run on every Exchange Server 2003 system installed in the same Active Directory forest. True or False?
   Answer: False

6. Which of the following processes creates the Exchange Enterprise Servers group?
   Answer: B

7. Which of the following processes modifies the Active Directory schema?
   Answer: B

8. Which of the following file systems is required for the system partition on an Exchange Server 2003 system?
   Answer: A

9. Which of the following groups must you be a member of in order to run ForestPrep? (Choose all that apply.)
   Answer: A, B

10. Which of the following groups must you be a member of in order to run DomainPrep? (Choose all that apply.)
    Answer: B

11. Which of the following tasks are carried out as part of the ForestPrep process? (Choose all that apply.)
    Answer: A, B, D

12. Which of the following tasks are carried out as part of the DomainPrep process? (Choose all that apply.)
    Answer: A, B, C

13. Which of the following statements about unattended Exchange Server 2003 setups are true? (Choose all that apply.)
    Answer: B, D

14. Which of the following switches is used with the Exchange Server 2003 setup program to create the answer file to be used in conjunction with an unattended setup? (Choose all that apply.)
    Answer: B

15. Which of the following groups are created during the DomainPrep process? (Choose all that apply.)
    Answer: A, C

16. What type of DNS resource record is used to identify an e-mail server?
    Answer: B
17. Exchange Server 2003, Standard Edition can be installed in a Windows cluster configuration. True or False?
   Answer: False

18. A user granted Exchange Administrator permissions at the Exchange organization level has the ability to change permissions for all Exchange objects. True or False?
   Answer: False

19. Which of the following pieces of information is returned by a DNS server in response to a query for an MX record?
   Answer: B

20. An Exchange organization running in native mode cannot be switched back to mixed mode. True or False?
   Answer: True

Activities

Activity 2-1

The student will have installed the Windows Server 2003 services required to install Exchange Server 2003.

Activity 2-2

The student will have run ForestPrep on his server to prepare Active Directory for Exchange Server 2003.

Activity 2-3

The student will have run DomainPrep on his server to prepare Active Directory for Exchange Server 2003.

Activity 2-4

The student will have installed Exchange Server 2003, Enterprise Edition.

Activity 2-5

The student will have opened and explored Exchange System Manager.

Activity 2-6

The student will have opened and explored Active Directory Users and Computers.
Activity 2-7

The student will have created and saved a custom MMC that contains both the Active Directory Users and Computers and Exchange System Manager snap-ins.

Activity 2-8

The student will have promoted his Exchange organization from mixed to native mode.

Activity 2-9

The student will have used Exchange System Manager to explore and configure the organization’s Global Settings.

Activity 2-10

The student will have used Exchange System Manager and the Exchange server’s Properties dialog box to configure the Exchange server’s properties.

Activity 2-11

The student will have created and applied a server policy named Tracking.

Activity 2-12

The student will have added a DNS MX record to their server.

Case Projects

Case Study 2-1

Because Super Siding Corporation is a smaller company (with limited projected growth) and has already installed Windows Server 2003, Standard Edition, Exchange Server 2003, Standard Edition is the most logical choice in this case.

Case Study 2-2

Because the network administrator is installing Exchange Server 2003 on a Windows 2000 Server system, he will first need to ensure that Windows 2000 Service Pack 3 is installed. Next, he will need to install the IIS-related services required by Exchange Server 2003, and then run both ForestPrep and DomainPrep to prepare the Active Directory environment for the Exchange installation.
Case Study 2-3

CHAPTER 2

INSTALLING AND CONFIGURING EXCHANGE SERVER 2003

Answer Key for Review Questions

Lab 2.1:

1. Suppose you have created an answer file named myanswer.ini on one server and have already copied that file to the D: drive of another server on which you want to perform an unattended setup. Which of the following commands would you use to begin the unattended setup on the target server?
   
   a. `E:\setup\i386\setup /createunattend c:\myanswer.ini`
   
   b. `E:\setup\i386\setup /unattendfile c:\myanswer.ini`
   
   c. `E:\setup\i386\setup /createunattend d:\myanswer.ini`
   
   d. `E:\setup\i386\setup /unattendfile d:\myanswer.ini`

2. Your colleague Bill is in the process of creating an answer file so that he can perform an unattended setup of Exchange on three servers in his department. He tells you that he is stuck at the Component Selection dialog box and can’t seem to find the Install option in the Action column next to Microsoft Exchange. What do you tell him is the likely cause?
   
   a. He forgot to use the /unattendfile switch when running the Setup program.
   
   b. **He is trying to create the answer file on a server that already has Exchange installed.**
   
   c. He needs to create the answer file on the actual servers on which he will be installing Exchange.
   
   d. He is trying to perform an unattended installation in native mode, which is not possible.
4. You of the servers are virtually identical, your colleague suggests that you perform an unattended setup on all four servers to save time. How do you respond?

   a. All four servers can indeed be set up via an unattended setup, as long as there is already at least one Exchange server in the organization.

   b. The first server in a cluster needs to be installed manually; the other three servers can be set up via an unattended setup.

   c. Only the first server can be set up via unattended setup; the others need to be set up manually in order to configure specific settings related to the cluster.

   d. Unattended setup cannot be used to install Exchange in a cluster.

Lab 2.2:

5. In the Server Properties dialog box, on which tab do you control the server resource usage level?

   a. Monitoring

   b. Policies

   c. Mailbox Management

   d. Full-Text Indexing

6. Making configuration changes in the Server Properties dialog box impacts your entire Exchange organization. True or False? Changes made in the Server Properties dialog box are server-specific, not global, settings and are used to control the functions of that particular Exchange Server 2003 system.

7. A front-end server is used to relay and manage traffic to back-end servers. True or False?

Lab 2.3:

1. Service packs may typically contain:

   a. driver updates

   b. security fixes

   c. additional software components

   d. all of the above

Page 2 of 3
2. If you install Service Pack 2 of a Microsoft product without first installing Service Pack 1, you must go back install all hotfixes and updates included in Service Pack 1 to bring your product completely up to date. True or False?

   False – Each service pack contains all hotfixes and updates released since the last service pack, plus all hotfixes and updates included in all previous service packs. When you install Service Pack 2, all available updates and hotfixes are installed.

3. Where can you find information about the known issues with a Microsoft service pack?
   Information about known issues is available in the service pack’s release notes either available on the service pack’s page on the Microsoft site or bundled in with the service pack installation files.

4. In the Component Selection dialog box, what option should be displayed in the Action column in order to install Exchange 2003 Service Pack 1?

   a. Update
   b. Install
   c. Repair
   d. Reinstall