

**LAB ANSWERS:
MANAGING AND
MAINTAINING A
MICROSOFT
WINDOWS SERVER
2003 ENVIRONMENT
LAB MANUAL**

LAB 1

UNDERSTANDING THE ROLE OF MICROSOFT WINDOWS SERVER 2003

LAB REVIEW QUESTIONS

1. A user sends you e-mail saying that he needs to install Windows Server 2003 but has a server computer that requires special mass storage drivers that are not part of the Windows 2000 Server disk set. The problem is that you must load the drivers in order for the drives to be recognized by the Installation Setup program. What should you do?

ANSWER

At the beginning of the installation, press F6 to install SCSI drivers.

2. Why was the DNS Server service installed as part of the installation of Active Directory?

ANSWER

Active Directory requires a DNS server that is capable of hosting the records required for the domain to be present on the network. When no such DNS server was found, the DNS Server service was installed along with Active Directory.

3. What is the file system type that Windows Server 2003 uses by default?

ANSWER

NTFS.

LAB 2 ADMINISTERING MICROSOFT WINDOWS SERVER 2003

EXERCISE 2-1: GETTING FAMILIAR WITH WINDOWS SERVER 2003

Viewing System Properties

- Record the system information.

ANSWER

Microsoft Windows Server 2003.

- Record the computer information.

ANSWER

Sample answer: Intel Pentium 4 CPU, 1800 MHz, 576 MB of RAM.

- Record the full computer name.

ANSWER

Serverxx.contosoxx.com.

- Record the domain name.

ANSWER

contosoxx.com.

Accessing the Help and Support Utility

- Record the steps for shutting down your computer:

ANSWER

- Click Start, and select Shut Down or Restart.
- Under “What do you want the computer to do,” click Restart or Shut Down.
- If you did not anticipate having to restart or shut down the computer at this time, clear the Planned check box.
- Select the appropriate reason from the list.
- If a comment is required, the OK button will not function until you type at least one character in the text box.

EXERCISE 2-2: CREATING AN ORGANIZATIONAL UNIT AND USER OBJECT IN ACTIVE DIRECTORY

- Type **ContosoOU**, and then click OK. The New Object—Organizational Unit window closes, and the new OU is created in the domain.

QUESTION What is the purpose of an OU?

ANSWER

An OU is a container object used for organizing the objects in Active Directory.

EXERCISE 2-3: USING THE MICROSOFT MANAGEMENT CONSOLE (MMC)

10. To save the MMC file, click File and then click Save As. The Save As dialog box opens.

QUESTION What is the extension of the filename?

ANSWER

.msc, for Microsoft Console.

15. Scroll through the modes in the Console Mode drop-down list, and record the difference between Author Mode and User Mode—Limited Access, Single Window.

ANSWER

Author Mode grants full access to all MMC functionality, including the ability to add and remove snap-ins, create new windows, create taskpad views and tasks, and view all portions of the console tree. User Mode Limited Access, Single Window grants users access only to the areas of the console tree that were visible when the console was saved, which prevents users from opening other windows.

29. Within Computer Management (Local), experiment with three of the tools for the local computer, but do not change anything.

QUESTION List the three tools you used, and identify their purpose.

ANSWER

The answer will vary. Here are a few acceptable answers:

1. Event Viewer—manage the events log files on the local computer.
2. Shared Folders—manage shares on the local computer.
3. Device Manager—view devices on the local computer.

EXERCISE 2-4: USING REMOTE DESKTOP CONNECTION

7. Have your lab partner enter the Administrator password for his computer in the Password text box, and then click OK. Your lab partner's desktop appears on your screen.

QUESTION Will the system allow you to use local programs while a Remote Desktop Connection window is open?

ANSWER

Yes. You can minimize the Remote Desktop Connection on the connection bar. Or, by double-clicking the connection bar, you can reduce your lab partner's desktop to a window on your desktop. Then you can manage both local and remote resources.

EXERCISE 2-5: USING TERMINAL SERVICES

14. Have your lab partner remain idle for at least a minute.

QUESTION After a minute or so, your partner should receive a message. What is the text of this message?

ANSWER

"Session has now exceeded its time limit. It will be disconnected in 2 minutes. Save all your files now."

LAB REVIEW QUESTIONS

1. When you first logged on using the TTester account that you created in Exercise 2-2, you had to change the password for the account. Why?

ANSWER

When you created the account, you left the default option of User Must Change Password At Next Logon selected.

2. What is the purpose of a Domain User Account?

ANSWER

A Domain User Account is required for each user to be able to log on and access domain resources.

3. What is the purpose of Remote Desktop Connection?

ANSWER

To remotely control a remote computer's desktop. It allows an administrator to take control of the user's desktop.

4. What is the default mode of MMC, and what permission does it allow?

ANSWER

Author mode, which gives full access.

5. What is the purpose of Terminal Services Manager, and what tasks did you perform with it?

ANSWER

The purpose of Terminal Services Manager is to monitor remote sessions. You used it to view the session statistics of your lab partner's remote RDP-Tcp type session, to send him a message, and to log him off your server.

6. Where does a domain user account reside?

ANSWER

A domain user account resides in Active Directory.

7. Name a group to which a user object can be added in order to allow the user to log on to the domain controller.

ANSWER

A nonadministrator user must have the Allow Log On Locally right. One group that has this right for the domain controller is the Print Operators group.

LAB CHALLENGE 2-1: ADMINISTERING A SERVER REMOTELY

Contoso, Ltd. has hired an intern named Wendy Wheeler. You need to create a user account for her on the domain. You need to create a user account for her on the domain, and add her to the built-in Guest group.

You are away from the domain controller when your manager asks you to create an account for Wendy, but a colleague offers you the use of his server, which also runs Windows Server 2003. You make a connection to your domain controller, but the task takes more than 5 minutes and you receive a message saying, “The remote session ended because the total logon time limit was reached.”

Create the remote connection from your lab partner’s machine to yours. Configure Terminal Services so you aren’t disconnected after 5 minutes, and create an appropriate account for Wendy.

ANSWER

Here is a sample procedure that accomplishes this lab challenge.

1. Your lab partner must be logged on to his computer. Open the Remote Desktop Connection utility on his computer, enter the IP address for your machine in the Computer text box, and click Connect.
2. Log on to your computer remotely by entering your Administrator account and password.
3. On the remote desktop, start the Terminal Services Configuration MMC console.
4. Browse to the Connections folder in the scope pane. In the details pane, right-click the RDP-Tcp object and select Properties to open the RDP-Tcp Properties dialog box.
5. Clear the Override User Settings check box on the Sessions tab, and then click OK. A message box appears, telling you that “Configuration changes have been made to the system registry; however, the user session now active on the RDP-Tcp connection will not be changed.”
6. Close the session by clicking the button marked with an X on the connection bar.
7. Restart your Remote Desktop Connection session by repeating steps 1 and 2.
8. Start Active Directory Users And Computers.
9. Expand the contosoxx.com object in the scope pane, right-click the ContosoOU object, point to New, and click User.
10. Enter **Wendy** in the First Name text box, and enter **Wheeler** in the Last Name text box. Enter **Wwheeler** in the User Login Name text box, and click Next.
11. Enter and confirm a temporary password that meets your complexity requirements. This password will need to be sent to Wendy. Leave the default password options selected. This means that Wendy will need to change her password the

first time she logs on to a computer on the domain. Click Next, and then click Finish to create the account.

12. Select the ContosoOU object in the scope pane.
13. In the details pane, right-click Wendy's account and select Add To A Group.
14. In the Select Group dialog box, type **Guests** in the Enter The Object Name To Select text box, and then click OK.

A message box informs you that "The Add to Group operation was successfully completed."

15. Click OK, and close Active Directory Users And Computers.
16. Close the Remote Desktop Connection to end your remote session.

LAB 3

MONITORING MICROSOFT WINDOWS SERVER 2003**EXERCISE 3-1: USING TASK MANAGER TO MONITOR WINDOWS SERVER 2003**

8. Record the task and its status.

ANSWER

The Calculator task shows a status of "Running."

11. Record the new status.

ANSWER

The Calculator task shows a status of "Not Responding."

15. Record the list of applications in the Application tab of Task Manager.

ANSWER

No applications are running.

18. Sort the CPU column in descending order. Record the first three processes.

ANSWER

Possible answers: System Idle Process, taskmgr.exe, and Windows Explorer.

19. Click the Mem Usage column in descending order. Record the first three processes.

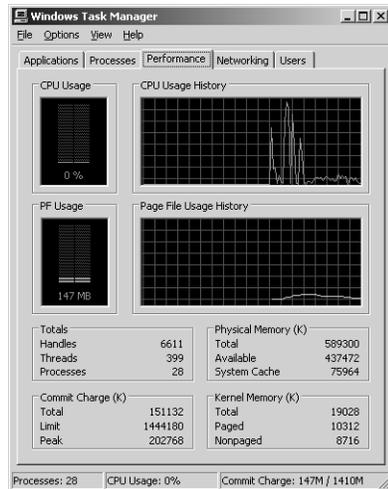
ANSWER

Possible answers: explorer.exe, svchost.exe, and services.exe.

22. Make a screen capture of Task Manager's Performance tab and save it in C:\Lab Manual\Lab 03\Labwork as Exercise3-1.bmp.

ANSWER

The screen capture should resemble the one shown here.



24. Select the Networking tab to look at the Networking page in Task Manager. A graph appears displaying the Local Area Connection status. The graph goes up and down as network activity occurs on the network card. Record the state of your connection.

ANSWER

The connection state should read as Operational. It would read as Non Operational for a network card that is not connected or faulty.

26. Record the user(s).

ANSWER

The Administrator is logged on to the system.

29. Record what occurred.

ANSWER

The Administrator was logged off. The Welcome To Windows logon screen appears.

EXERCISE 3-2: USING THE PERFORMANCE CONSOLE

4. Record the objects and their associated counters. You might have to widen the columns (by clicking the vertical bar separating the column names) to view the complete names.

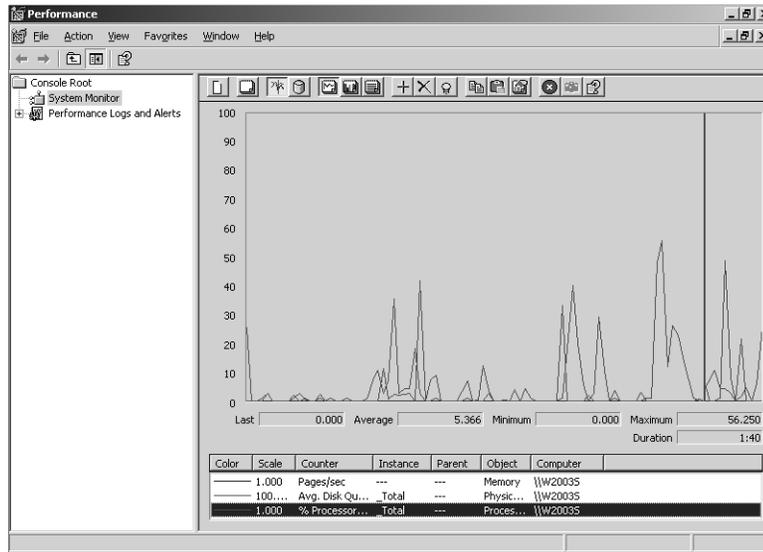
ANSWER

The counter for the Memory object is Pages/sec. The counter for the PhysicalDisk object is Avg. Disk Queue Length. The counter for the Processor object is % Processor Time.

6. Make a screen capture of the Performance console showing the graph for the Processor object and the % Processor counter, and save it in C:\Lab Manual\Lab 03\Labwork as Exercise3.2a.bmp.

ANSWER

The screen capture should resemble the one shown here.



24. In your own words, record the explanation.

ANSWER

The Percent time that the disk was busy handling read and write requests.

27. Record the drive letters under the _Total instance that are included in the Total.

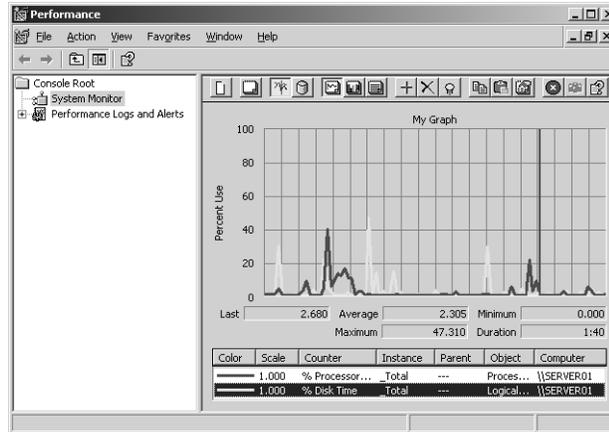
ANSWER

Possible answers include drive letters such as C, D, and E.

38. Make a screen capture of the Performance console showing the graph for the %Disk Time, and save it in C:\Lab Manual\Lab 03\Labwork as Exercise3.2b.bmp.

ANSWER

The screen capture should resemble the one shown here.



EXERCISE 3-3: USING EVENT VIEWER

- Record the logs in the scope pane.

ANSWER

Application, Security, System, Directory Service, DNS Server, and File Replication Service. Every Windows Server 2003 computer has Application, System, and Security logs. Domain controllers have Directory Service and File Replication Service logs, and DNS servers have a DNS Server log.

- Record the event types you see in the details pane for the System log.

ANSWER

Depending on what has happened on your system, possible answers include: Warning, Information, and Error type events.

- Record the maximum log size in KB.

ANSWER

Possible answer: 16384.

- In the When Maximum Log Size Is Reached area, record the default value for the When Maximum Log Size Is Reached setting.

ANSWER

The default setting is Overwrite Events As Needed.

- Record the event types that are filtered.

ANSWER

The event types that are filtered are Information, Warning, Error, Success Audit, and Failure Audit.

- Record the extension of the log file.

ANSWER

The extension is .evt, for event log.

EXERCISE 3-4: CREATING AND VIEWING AN ALERT

16. Record the actual processor percentage (the counter value).

ANSWER

Possible answer: 4.

19. Record what happened to the color of the associated icon.

ANSWER

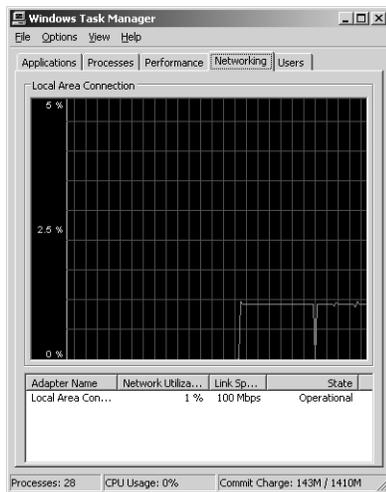
It changed color from green to red.

EXERCISE 3-5: USING THE PING COMMAND TO TRIGGER NETWORK ACTIVITY

6. Make a screen capture of Task Manager, and save it in C:\Lab Manual \Lab 03\Labwork as Exercise3-5.bmp.

ANSWER

The screen capture should resemble the one shown here.



13. Record the change to the graph.

ANSWER

The networking activity decreased and might be nonexistent.

LAB REVIEW QUESTIONS

1. What is the purpose of Task Manager?

ANSWER

The purpose of Task Manager is to manage running tasks on the system. It allows you to create and end tasks as well as assign task priority. It has a performance graph that depicts CPU activity and Page File usage at a glance. You can also view Networking activity, and disconnect and log off users using Task Manager.

2. If your server is a domain controller, which logs appear in Event Viewer?

ANSWER

Application, Security, System, Directory Service, and File Replication Service. If the server is acting as a DNS server as well as a domain controller, it also has a DNS Server log.

3. What can you do with the Performance console?

ANSWER

With the Performance console, you can add various objects and their associated counters to view graphs on the screen. You can also trigger alerts to be sent to a user and sent to Event Viewer.

4. Which log file in Event Viewer are performance alerts sent to?

ANSWER

An alert triggered in the Performance console is sent to the Application log in Event Viewer.

5. What is the purpose of filtering events in Event Viewer?

ANSWER

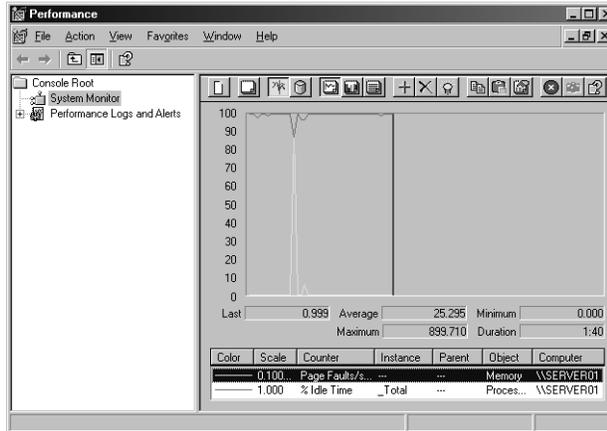
By filtering events in Event Viewer, you can view a subset of the activity that you see in Event Viewer. For example, you can view only Error or Warning events to limit the amount of events you have to review.

LAB CHALLENGE 3-1: CONFIGURING THE PERFORMANCE CONSOLE

Configure the Performance console to monitor the Memory object with the average number of pages faulted per second, and the Processor object with the percentage of time the processor is idle. Open any file on the hard drive to generate some activity in the system. Make a screen capture showing the Performance console monitoring this activity, and save it in C:\Lab Manual\Lab 03\Labwork as Challenge3-1.bmp.

ANSWER

The screen capture should show the Performance console configured to monitor the Memory object with the Page Faults/sec counter, and the Processor object with the % Idle Time counter, as shown in the sample screen capture. There should be a spike in the memory performance counter, with a corresponding dip in the processor performance counter, as shown in the following graphic.



LAB 4 BACKING UP AND RESTORING DATA

EXERCISE 4-1: BACKING UP AND RESTORING A DIRECTORY USING THE NORMAL BACKUP TYPE

Backing Up Data

3. To view the attributes of the files located within this folder, select Details from the View menu.

QUESTION What attribute is listed in the Attributes column for each file?

ANSWER

The A attribute is listed for each file. The purpose of the A (or Archive) attribute is to indicate to the Backup utility that the file needs to be archived or backed up. This is set by default when you create or modify a file.

9. Click the BackupNormal folder name in the folder tree. The two file names, NormalA.txt and NormalB.txt, are displayed in the file view (the right pane of the tree view). These files also have a check mark to the left of their names.

QUESTION What is the significance of the check mark?

ANSWER

The blue check mark next to a filename indicates that the file is selected for backup. Any file that needs to be backed up should be marked for backup in this way. If you select a folder for backup, all files or folders within it are also selected for backup.

11. Click Start Backup. The Backup Job Information dialog box opens.

QUESTION What is the default setting of the If The Media Already Contains Backups option?

ANSWER

The default setting is Append This Backup To The Media. This means that the files selected for backup will be added to the current backup file. However, because this is the first time you are backing up to Normal.bkf, it contains no other files.

Restoring Backed-Up Data

8. Click Close to close the Restore Progress window.

QUESTION Were the files restored?

ANSWER

Yes. The files were backed up and then deleted to simulate loss of data. Then the files were restored to their original location. You can verify this in Windows Explorer by browsing to the C:\Lab Manual\Lab 04\Labwork\BackupNormal folder.

EXERCISE 4-2: BACKING UP AND RESTORING A DIRECTORY USING THE INCREMENTAL BACKUP TYPE

2. To view the attributes of the files in this folder, select Details from the View menu.

QUESTION What attribute is listed in the Attributes column for each file?

ANSWER

The A (or Archive) attribute is listed for each file.

14. In Windows Explorer, browse to the C:\Lab Manual\Lab 04\Labwork\Backup Incremental folder.

QUESTION Record whether the A (for Archive) attribute is set for the files in the folder.

ANSWER

The A (for Archive) attribute is not listed for either file. The A (for Archive) attribute is not set because the incremental backup cleared this attribute after it backed up each file. Incremental backups clear the Archive attribute.

18. Close the file by selecting Exit from the File menu.

QUESTION Was the A attribute reset?

ANSWER

Yes, the A (for Archive) attribute for the file named IncrementalA.txt was reset because the file was modified. When a file is created or modified, the Archive attribute is set, indicating that it needs to be backed up. When the next backup occurs, IncrementalA.txt will be backed up.

23. Click Start Backup to initiate the incremental backup process. The Backup Progress dialog box opens. Within a minute or two, the status indicates that the backup is complete.

QUESTION The Backup Progress dialog box indicates that only one file was processed. Why was only one file backed up?

ANSWER

When you performed the first incremental backup of the files, the Archive attribute was cleared. However, once you modified the file, the Archive attribute was reset, causing the file to be backed up by the second incremental backup process. Only one file, IncrementalA.txt, was modified (and its Archive attribute reset) since the

previous backup, so only that file needed to be backed up. The other file, IncrementalB.txt, was not backed up during the second incremental backup process because it was not modified.

EXERCISE 4-3: BACKING UP AND RESTORING A DIRECTORY USING THE DIFFERENTIAL BACKUP TYPE

- To view the attributes of the files located within this folder, select Details from the View menu.

QUESTION What attribute is listed in the Attributes column for each file?

ANSWER

The A (for Archive) attribute is listed for each file.

- In Windows Explorer, browse to the C:\Lab Manual\Lab 04\Labwork\BackupDifferential folder.

QUESTION Record whether the A (for Archive) attribute is set for the files in the folder.

ANSWER

The A (for Archive) attribute is listed for each file. This attribute is still set because the differential backup process did not clear this attribute after each file was backed up. Differential backups do not clear the Archive attribute, as incremental and normal backups do.

- Click Start Backup to initiate the differential backup process. The Backup Progress dialog box opens. Within a minute or two, the status indicates that the backup is complete.

QUESTION The Backup Progress dialog box indicates that two files were processed. Why were both files backed up when neither one was modified after the previous differential backup?

ANSWER

Both files still had their Archive attribute set. Since a differential backup does not reset the Archive attribute, files backed up in a differential backup are also backed up in subsequent differential backups.

EXERCISE 4-4: SCHEDULING A BACKUP

- Click Next. The What To Back Up page of the Backup Wizard appears.

QUESTION What can you back up?

ANSWER

The three options are:

- Back Up Everything On This Computer
- Back Up Selected Files, Drives Or Network Data
- Only Back Up The System State Data

16. In the Select The Type Of Backup box, select Copy and read the description.

QUESTION Record the difference between Normal and Copy.

ANSWER

The Normal backup type backs up selected files and marks each file as backed up. The Copy backup type backs up selected files but does not mark any as backed up. In other words, the Normal type clears the Archive attribute for each backed-up file, and the Copy backup type does not clear the Archive attribute.

20. Select the Disable Volume Shadow Copy check box.

QUESTION Explain what volume shadow copy is.

ANSWER

Volume shadow copy allows files to be backed up even if they are in the process of being written to. This feature enables the backup process to back up files that are open.

36. In Windows Explorer, browse to the C:\Lab Manual\Lab 04\Labwork\BackupNormal folder.

QUESTION What do you notice about the Archive attribute for the files NormalA.txt and NormalB.txt?

ANSWER

The Archive attribute is no longer set because the scheduled normal backup procedure cleared it. This indicates that the scheduled backup was performed.

LAB REVIEW QUESTIONS

1. What is the benefit of backing up data stored on disk?

ANSWER

The benefit of backing up data is that you protect the data. Data is stored in files in folders. Both files and folders are stored on disk drives. In the event of a disk drive failure, the data might be lost. If a backup has been performed (to a device other than the failed one) prior to the failure, once the failed disk has been replaced, the data can be restored from the backup.

2. How does the incremental backup type work?

ANSWER

The incremental backup type backs up a file that has the Archive attribute set. Once the file is backed up, the incremental backup type clears the Archive attribute.

3. Your backup schedule includes a normal backup of a hard drive every Sunday at 9 P.M. and a differential backup at 9 P.M. on all other days. You store your backups on a tape drive. If your hard drive fails on a Saturday morning, how many restore operations will you need to restore all the lost data? Explain your answer.

ANSWER

Two. Because differential backups do not clear the Archive attribute for the files they back up, each differential backup contains copies of all files that have been modified since the last normal backup. You must first perform a restore operation using the tape for the normal backup made on Sunday. You can then perform a restore operation using the tape with Friday's differential backup.

4. What is the purpose of volume shadow copy?

ANSWER

Volume shadow copy allows files to be backed up even if the file is being written to by another program or application.

5. How can you perform a differential backup every Friday at 4 P.M. when users are still writing to data files?

ANSWER

Schedule a differential backup to run and enable volume shadow copy.

6. What is the purpose of verifying your data after performing a backup?

ANSWER

If you verify the data after backing it up, the backup process reads the backed-up data to verify its integrity. This takes additional time, but it ensures your backup was successful.

7. Your backup schedule includes a normal backup of a hard drive every Sunday at 9 P.M. and an incremental backup at 9 P.M. on all other days. You store your backups on a tape drive. If your hard drive fails on a Saturday morning, how many restore operations will you need to restore all the lost data? Explain your answer.

ANSWER

Six. Because incremental backups clear the Archive attribute for the files they back up, each incremental backup contains only copies of the files that have been modified since the last normal or incremental backup. You must first perform a restore operation using the tape for the normal backup made on Sunday, followed by a restore operation for each of the tapes with the incremental backups made on Monday, Tuesday, Wednesday, Thursday, and Friday.

LAB CHALLENGE 4-1: BACKING UP THE SYSTEM STATE DATA

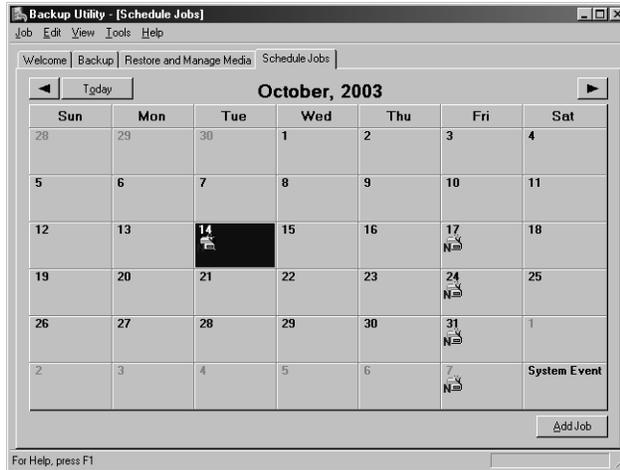
Sample Procedure for Lab Challenge 1: Backing Up the System State Data

1. Log on to the domain as Administrator with the appropriate password.
2. Start the Backup utility in advanced mode.
3. Select the Schedule Jobs tab.
4. Click Add Job to open the Backup Wizard.
5. Click Next.

6. Select the Only Back Up The System State Data option.
7. Click Next four times.
8. In the When Do You Want To Run The Backup options area, verify that Later is selected.
9. In the Schedule Entry area, in the Job Name text box, type **Scheduled System State**.
10. Click Set Schedule to open the Schedule Job dialog box.
11. In the Schedule tab, select Weekly in the Schedule Task drop-down list and set the Start Time to 9 P.M.
12. In the Schedule Task Weekly section, clear the Mon check box and select the Fri check box.
13. Click OK.
14. In the Run As dialog box, verify that the domain name and the administrator user are entered.
15. Enter the password and confirm it, and then click OK to close the Run As dialog box.
16. Click Next.
17. Make a screen capture of the Completing The Backup Wizard page. Your screen shot should be similar to the following graphic.



18. Click Finish.
19. Take a screen capture of the Backup Utility with the Schedule Jobs tab selected. Your screen shot should be similar to the following graphic.



20. Close the Backup utility and log off as Administrator.

LAB 5 MAINTAINING THE OPERATING SYSTEM

EXERCISE 5-3: PREPARING YOUR MACHINE TO INSTALL MICROSOFT SUS

6. Scroll to the bottom of the list, and select the check box next to World Wide Web Services.

QUESTION What other options are selected in the Internet Information Services dialog box if you select World Wide Web Services?

ANSWER

The Common Files and Internet Information Services Manager options are selected. The Enable Network Com+ Access option is selected in the Application Server dialog box.

EXERCISE 5-7: ADMINISTERING SITE LICENSES

Starting the License Logging Service

2. Scroll down the list of services and select License Logging.

QUESTION What is the current status of the License Logging service?

ANSWER

The License Logging service is currently stopped and disabled.

Adding Licenses

2. Select the Products View tab.

QUESTION Are any of the products listed not in compliance with legal licensing requirements?

ANSWER

Yes, there is a warning icon next to Windows Server, indicating that it is not in compliance with legal licensing requirements.

10. Click OK.

QUESTION Is Windows Server compliant with your licensing requirements?

ANSWER

Yes, the Windows Server is now compliant because we added 25 new licenses.

LAB REVIEW QUESTIONS

1. In your own words, describe what you learned during this lab.

ANSWER

In this lab, you should have learned:

- How to install the Microsoft Baseline Security Analyzer
- How to use MBSA to scan your machine for security vulnerabilities
- How to prepare your machine for installation of Microsoft Software Update Service
- How to install SUS
- How to change your licensing mode from Per Server to Per Device or Per User
- How to add licenses to your licensing service

2. What did you have to install on your Windows Server 2003 before you could install Microsoft Software Update Service?

ANSWER

You had to first install the World Wide Web Publishing service.

3. What is the purpose of the Microsoft Baseline Security Analyzer?

ANSWER

MBSA is designed to scan a single machine or multiple machines to detect possible security vulnerabilities.

4. To use the Licensing MMC, what service must you start?

ANSWER

You must start the License Logging Service.

5. You have been asked to create a weekly log of possible security risks on your server. What is the best way to do this?

ANSWER

Run MBSA weekly, and produce and save a report.

LAB CHALLENGE 5-2: INSTALLING A MICROSOFT HOTFIX

Sample procedure for Lab Challenge 2: Installing a Microsoft HotFix

1. In Windows Explorer, browse to the C:\Lab Manual\Lab 05\Tools\Hotfix folder.
2. Double-click KB824105.exe to begin the installation. The Windows Server 2003 KB824105 Setup Wizard opens.
3. Click Next.
4. Select the I Agree option in the License Agreement page, and click Next.

The Updating Your System page shows the installation progress. Once the hotfix installation is complete, the Finish page of the wizard appears.

5. If the Finish page informs you that you must restart Windows, select the Do Not Restart check box. Click Finish.
6. To verify that the hotfix was installed, open Add Or Remove Programs in Control Panel. It should have an entry for the KB824105 hotfix. Take a screen capture, and save it as C:\Lab Manual\Lab 05\Labwork\Challenge5-2.bmp.
7. If you were informed that you must restart Windows to complete the installation, do so now.

LAB 6 WORKING WITH USER ACCOUNTS

EXERCISE 6-2: CREATING DOMAIN USER ACCOUNTS

Human Resources has just sent you a list of new employees who will be joining the company's newly formed Marketing department. You have been asked to create network accounts for these new employees. The company has decided that users should log on using the first character of their first name plus their surname. The new employees' passwords will be given to them on their start dates and will require management's permission to be changed, because company policy requires the use of complex passwords. A complex password is one that contains at least three of the following four elements: uppercase letters, lowercase letters, numbers, and symbols. The new employees are listed in the following table.

First Name	Middle Initial	Last Name
Stephen	Y	Jiang
Brannon		Jones
Frank		Lee
Jeffrey	L	Ford
Maria		Hammond

QUESTION What would be the logon name for each of these new users?

ANSWER

Stephen Y. Jiang: sjiang; Brannon Jones: bjones; Frank Lee: fle; Jeffrey L. Ford: jford; Maria Hammond: mhammond.

EXERCISE 6-6: IMPORTING USER ACCOUNTS FROM A CSV FILE

- At the command prompt, type **csvde -i -f contoso.xx.csv -k**, and then press Enter.

QUESTION How many new accounts were added to your Active Directory?

ANSWER

Seven new accounts were added.

- Open Active Directory Users And Computers, and select the Accounts OU.

QUESTION How many accounts are listed in the Accounts OU?

ANSWER

Three accounts are listed in the Accounts OU: Axel Delgado, Diane Margheim, and Shane DeSeranno.

11. Select the Sales OU.

QUESTION How many accounts are listed in the Sales OU?

ANSWER

Four accounts are listed in the Sales OU: David Campbell, Deb Waldal, Shane Kim, and Wendy Kahn.

EXERCISE 6-7: MOVING USERS

6. In Active Directory Users And Computers, select the Marketing OU.

QUESTION How many accounts are listed in the Marketing OU?

ANSWER

Nine accounts are listed in the Marketing OU.

EXERCISE 6-8: CREATING AND USING A TEMPLATE ACCOUNT

Activity 1: Creating a Template Account

15. Review the information in the summary page of the New Object – User wizard, and click Finish.

QUESTION Why do you think we placed an underscore at the beginning of the Executives Template Full Name?

ANSWER

The underscore places the template account at the top of the user list.

Activity 2: Using the Template Account

5. Click Next.

QUESTION Why is the Account Is Disabled check box selected?

ANSWER

The Account Is Disabled check box is selected because it is one of the properties that is copied over when you copy an account to create a new account.

12. Select the Organization tab.

QUESTION Have the three properties (Title, Company, and Department) we set on the Executives Template account been copied over to this new account?

ANSWER

No. The Title field has not been copied over.

EXERCISE 6-9: MANAGING USER PROFILES

1. Open Windows Explorer and browse to the C:\Documents And Settings directory.

QUESTION What directories are listed below the Documents And Settings directory?

ANSWER

Administrator, All Users, and a hidden Default User folder.

7. Open Windows Explorer, and browse to the C:\Documents And Settings directory.

QUESTION What directories are listed below the Documents And Settings directory?

ANSWER

The directories listed are those in the previous answer and a new directory called mhammond.

15. Log on as Administrator using your password.

QUESTION Has the Administrator's desktop changed? Why or why not?

ANSWER

The Administrator's desktop has not changed because the desktop settings are saved in the user's local profile.

LAB REVIEW QUESTIONS

1. What benefit do you gain by creating Account templates?

ANSWER

Using Account templates simplifies the creation of new accounts with prepopulated fields.

2. What is the purpose of the -k switch when you use CSVDE?

ANSWER

The -k switch causes CSVDE to ignore errors during the import process and continue processing the next entry in the CSV file.

3. You need to move a user account from one OU to another. What steps do you take?

ANSWER

Open Active Directory Users And Computers, right-click the account that needs to be moved, and select Move.

4. What is a complex password?

ANSWER

A complex password is one that contains at least three of the following four elements: uppercase letters, lowercase letters, numbers, and symbols.

LAB CHALLENGE 6-1: USING DSADD.EXE AND DSMOD.EXE

You have been asked to investigate the use of Dsadd and Dsmod to manage user accounts on your network. You will create a new user in the Sales OU named David So. David's logon name will be dso, and his display name will be David So.

Sample Procedure for Lab Challenge 1: Using Dsadd.exe and Dsmod.exe

1. Open a command prompt and type the following (where *xx* is your computer number):

```
dsadd user "CN=David So,OU=Sales,DC=Contosoxx,DC=com" -samid dso -ln  
So -fn David -upn dso@contosoxx.com
```

2. Press Enter.
3. Having created an account for David So in Active Directory using Dsadd, you want to change his Description to Sales Manager. Type the following at the command prompt (where *xx* is your computer number).

```
dsmod user "CN=David So,OU=Sales,DC=Contosoxx,DC=com" -desc "Sales Manager"
```

4. Press Enter.
5. Open Active Directory Users And Computers, and verify that the account for David So has been created and that the Description property is set to Sales Manager.
6. You now need to create another user named Wendy Wheeler in the Marketing OU. The Description property should be set to Marketing Executive, the Department property set to Marketing, and the Company property set to Contoso. Her password needs to be set to MOAC@LM#1, and her account needs to be enabled.

QUESTION Write down the command line you would use to perform this task.

ANSWER

```
add user "CN=Wendy Wheeler,OU=Marketing,DC=Contosoxx,DC=com" -samid  
wwheeler -upn wwheeler@contosoxx.com -fn Wendy -ln Wheeler -desc  
"Marketing Executive" -dept Marketing -company Contoso -pwd MOAC@LH#1  
-disabled No
```

7. Open a command prompt, and create the user named Wendy Wheeler using the command you just wrote.
8. Take a screen capture showing the account in Active Directory Users And Computers to verify that the account has been created. Save the screen capture as C:\Lab Manual\Lab 06\Labwork\Challenge6-1.bmp.

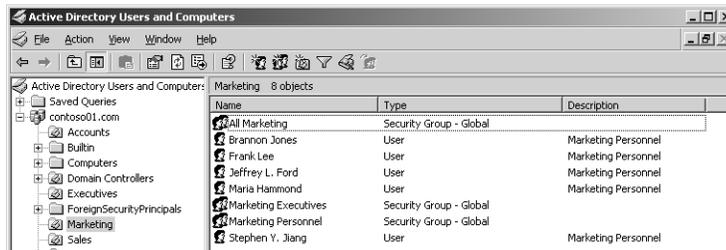
LAB 7 WORKING WITH GROUPS

EXERCISE 7-2: CREATING GLOBAL SECURITY GROUPS

- When you have created all three groups, take a screen capture of the Active Directory Users and Computers console, ensuring that all three groups in the Marketing OU are visible. Save the screen capture as C:\Lab Manual\Lab 07\Labwork\Exercise7-2.bmp.

ANSWER

The screen capture should resemble the following:

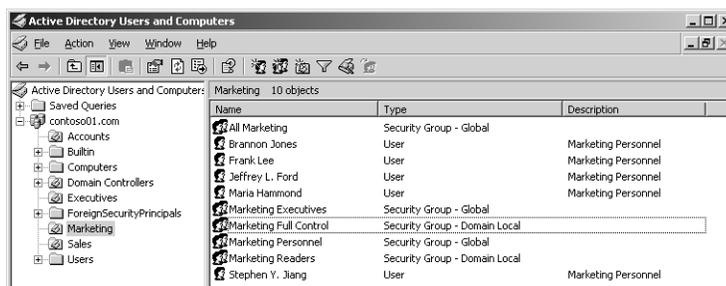


EXERCISE 7-3: CREATING DOMAIN LOCAL SECURITY GROUPS

- When you have created both of the domain local security groups, take a screen capture of Active Directory Users and Computers in the Marketing OU are visible. Save the screen capture as C:\Lab Manual\Lab 07\Labwork\Exercise7-3.bmp.

ANSWER

The screen capture should resemble the following:



EXERCISE 7-4: CREATING GROUPS USING DSADD

- In Active Directory Users and Computers, navigate to the Accounts OU.

QUESTION What is the scope and type (found in the Type column) of the Accounts Users group?

ANSWER

The Accounts Users group has been created as a global security group.

11. In Active Directory Users and Computers, navigate to the Sales OU.

QUESTION What is the scope and type of the Sales User group?

ANSWER

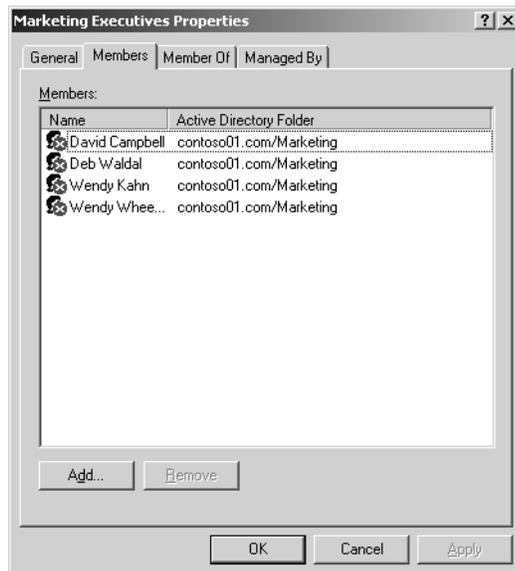
The Sales User group has been created as a domain local security group.

EXERCISE 7-5: ADDING MEMBERS TO THE GROUP

9. Select the Members tab. You should see the four members listed. Take a screen capture, and save it as C:\Lab Manual\Lab 07\Labwork\Exercise7-5a.bmp.

ANSWER

The screen capture should resemble the following:



EXERCISE 7-6: ADDING GLOBAL GROUPS TO DOMAIN LOCAL GROUPS

10. Select the Member Of tab.

QUESTION Of what groups is the Marketing Executives group a member?

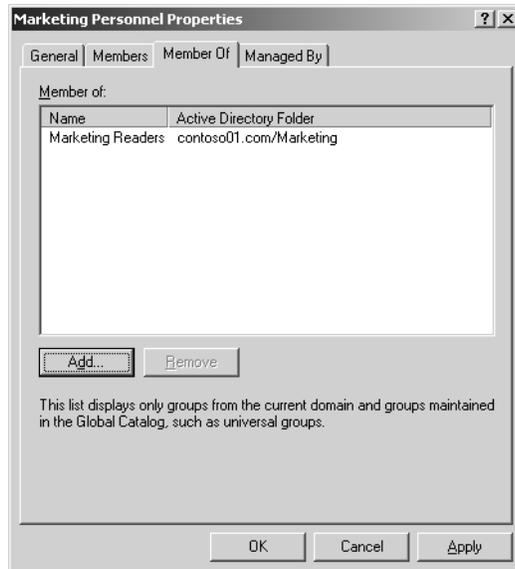
ANSWER

The Marketing Executives group is a member of the Marketing Full Control domain local group.

- Take a screen capture of the Member Of tab for the Marketing Personnel group, and save it as C:\Lab Manual\Lab 07\Labwork\Exercise7-6.bmp.

ANSWER

The screen capture should resemble the following:



EXERCISE 7-7: USING DSGET TO FIND GROUP MEMBERSHIPS

- Press ENTER.

QUESTION What groups does Maria Hammond currently belong to?

ANSWER

Maria Hammond belongs to the Domain Users, Account Operators, and Marketing Personnel groups.

LAB REVIEW QUESTIONS

- What is the benefit of using Dsadd to create groups instead of using Active Directory Users and Computers?

ANSWER

By using Dsadd to create groups, you can create a script to automate the process.

- What are three ways that you can add members to a group?

ANSWER

You can use Active Directory Users and Computers, open the properties for the group, and then add the users in the Members tab; you can select the users in Active Directory Users and Computers and then select Add To Group from the context menu or the Action menu; or you can use Dsmod from the command line.

- What command-line utility do you use to get a list of groups that the administrator account is a member of? Give an example of the syntax.

ANSWER

The command-line utility you use is *Dsget*, and the syntax is:

```
dsget user
    "cn=administrator,cn=users,dc=contosoxx,dc=com" -memberof
```

4. What administrative tool do you use to raise the functional level of your domain?

ANSWER

You use *Active Directory Domains and Trusts*.

5. What were the scopes of the groups that you created during this lab?

ANSWER

The group scopes that created were *Domain Local* and *Global*.

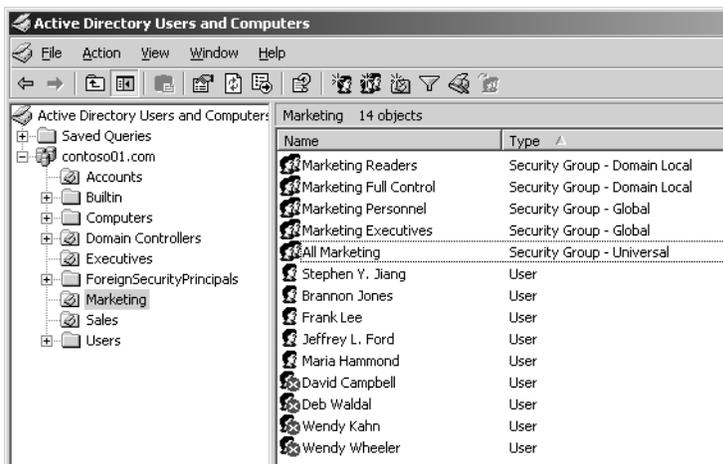
LAB CHALLENGE 7-1: CHANGING THE SCOPE OF A GROUP

When the All Marketing group was created, it was created as a Global group. However, it should have been created as a universal group. After changing the scope of the group, take a screen capture of the Marketing OU in Active Directory Users and Computers, showing that the All Marketing group is now a universal group. Save the screen capture as C:\Lab Manual\Lab 07\Labwork\Challenge7-1.bmp.

ANSWER

Sample procedure for Lab Challenge 7-1: Changing the Scope of a Group

1. Open Active Directory Users and Computers, and select the Marketing OU.
2. Right-click the All Marketing group in the details pane, and select Properties to open the All Marketing Properties option for the group scope, and click OK.
3. In the General tab, select the Universal option for the group scope, and click OK.
4. Take a screen capture of the Marketing OU, showing that the All Marketing group is now a universal group:



LAB CHALLENGE 7-2: USING DSMOD TO ADD MEMBERS TO A GROUP

You have been instructed to add the Marketing Executives and Marketing Personnel groups to the All Marketing universal group. You must do this using the Dsmod command-line utility.

1. What is the syntax for adding the Marketing Executives and Marketing Personnel groups to the All Marketing universal group?

ANSWER

The syntax is:

```
dsmod group "cn=All Marketing,ou=Marketing,dc=contosoxx,dc=com"  
-addmbr "cn=Marketing Executives,ou=Marketing,dc=contosoxx,dc=com"  
"cn=Marketing Personnel,ou=Marketing,dc=contosoxx,dc=com"
```

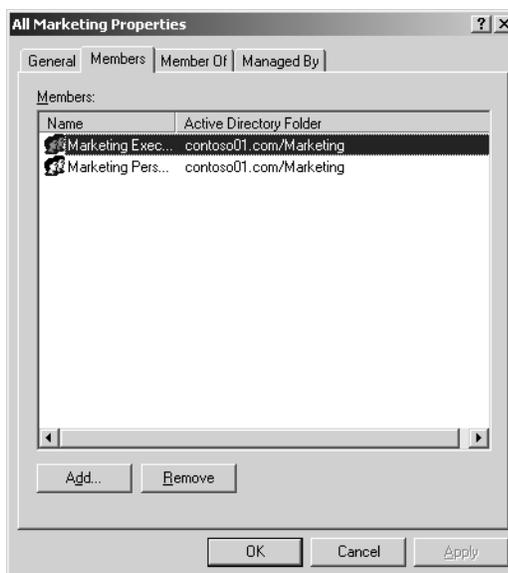
2. Run the Dsmod command from the command prompt using the syntax that you listed above. If it is successful, take a screen capture of the result and save it as C:\Lab Manual\Lab 07\Labwork\Challenge7-2a.bmp.

ANSWER



```
Microsoft Windows [Version 5.2.3790] (C) Copyright 1985-2003 Microsoft Corp.  
C:\Documents and Settings\Administrator>dsmod group "cn=All Marketing,ou=Marketing,dc=contoso01,dc=com" -addmbr "cn=Marketing Executives,ou=Marketing,dc=contoso01,dc=com" "cn=Marketing Personnel,ou=Marketing,dc=contoso01,dc=com"  
dsmod succeeded:cn=All Marketing,ou=Marketing,dc=contoso01,dc=com
```

3. Using Active Directory Users and Computers, open the properties for the All Marketing group and select the Members tab. Take a screen capture showing the two groups that are listed, and save it as C:\Lab Manual\Lab 07\Labwork\Challenge7-2b.bmp.



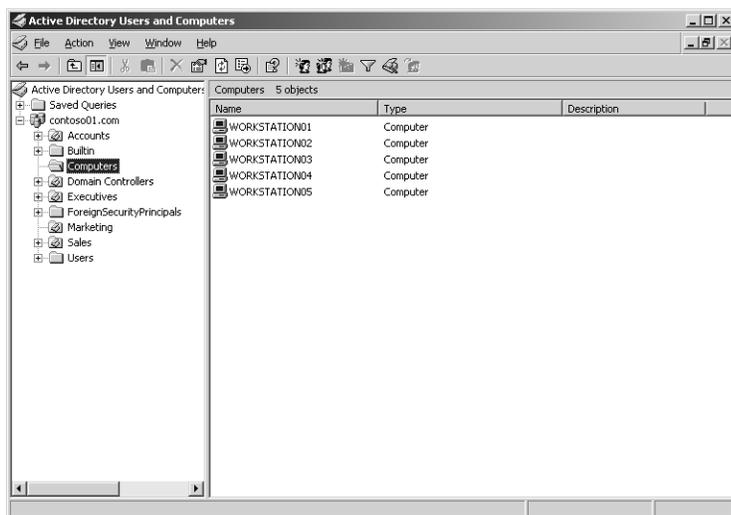
LAB 8 WORKING WITH COMPUTER ACCOUNTS

EXERCISE 8-1: CREATING COMPUTER ACCOUNTS USING ACTIVE DIRECTORY USERS AND COMPUTERS

9. Take a screen capture of the Computer container in Active Directory Users and Computers, showing the five workstation accounts. Save the screen capture as C:\Lab Manual\Lab 08\Labwork\Exercise8-1.bmp.

ANSWER

The screen capture should resemble the following:

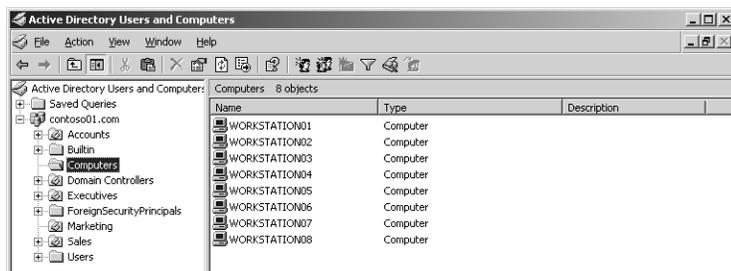


EXERCISE 8-2: CREATING COMPUTER ACCOUNTS USING DSADD

5. Take a screen capture of the Computers container, showing the eight computer accounts, and save it as C:\Lab Manual\Lab 08\Labwork\Exercise8-2.bmp.

ANSWER

The screen capture should resemble the following:

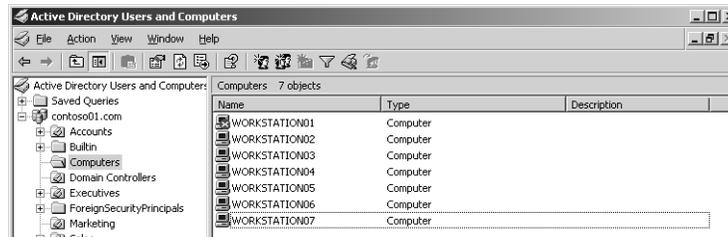


EXERCISE 8-3: DELETING, DISABLING, AND RESETTING COMPUTER ACCOUNTS

10. Take a screen capture of Active Directory Users and Computers showing the Computers container, and save it as C:\Lab Manual\Lab 08\Labwork\Exercise8-3.bmp.

ANSWER

The screen capture should resemble the following:



LAB REVIEW QUESTIONS

1. Can a user whose account is enabled log on from a workstation whose account is disabled?

ANSWER

No. The user can log on only from workstations that have an enabled account.

2. List two ways that you can create Computer accounts in Active Directory.

ANSWER

You can use Active Directory Users and Computers or DSADD. You can also use netdom or create the account when you join the workstation to the domain.

3. You have a machine on your network that was rebuilt after its hard disk failed. When you try to join the workstation to the domain, you receive an error message. How do you solve this problem?

ANSWER

Use Active Directory Users and Computers, locate the workstation's account, and select to reset it.

4. You have to install a new workstation for a user. While you are at her desk working on joining the workstation to the domain, you remember that you did not create an account in Active Directory for this machine. Is it still possible to join this workstation to the domain without first creating an account for it in Active Directory?

ANSWER

Yes. When joining the workstation to the domain, you can select to create the Active Directory account at the same time you join the domain.

LAB CHALLENGE 8-1: CHANGING THE PROPERTIES OF COMPUTER ACCOUNTS

Management is keen on using the Active Directory search feature to locate resources on the network based on description, so you must populate the description field for all the workstations. WORKSTATION01 through WORKSTATION04 are laptops, and WORKSTATION05 through WORKSTATION07 are desktop machines.

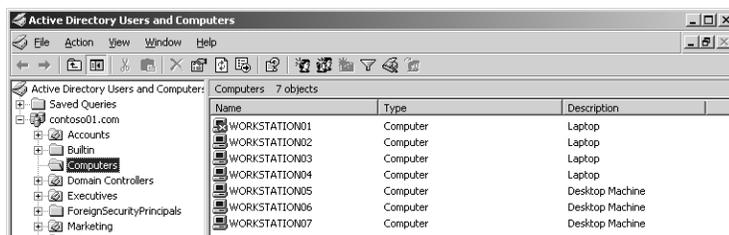
Sample Procedure for Lab Challenge 8-1: Changing the Properties of Computer Accounts

1. Open Active Directory Users and Computers.
2. Navigate to the Computers container.
3. Select WORKSTATION01 through WORKSTATION04, right-click, and select Properties.

The Properties On Multiple Objects dialog box appears.

4. Select the Change The Description Text For All Selected Objects check box.
5. In the Description text box, type **Laptop**.
6. Click OK to close the Properties On Multiple Objects dialog box.
7. Repeat the steps to change the description of WORKSTATION05 through WORKSTATION07 to Desktop Machine.
8. Take a screen capture of the Computer container in Active Directory Users and Computers, and save it as C:\Lab Manual\Lab 08\Labwork\Challenge8-1.bmp.

ANSWER



9. Close Active Directory Users and Computers.
10. Log off your machine.

LAB 9 SHARING FILE SYSTEM RESOURCES

EXERCISE 9-1: CREATING A SHARED FOLDER

- Click OK to close the Accounting Data Properties dialog box.

QUESTION What indication do you get from the Windows Explorer file view that the Accounting Data directory is now shared?

ANSWER

There is a hand under the icon for the Accounting Data folder, indicating that this directory is shared.

EXERCISE 9-2: VIEWING THE NTFS AND SHARE PERMISSIONS ON A DIRECTORY

- Select the Security tab.

QUESTION List the groups or users that have permissions for this directory. What standard permissions does each group or user have?

ANSWER

Administrators	Full Control, Modify, Read & Execute, List Folder Contents, Read, Write Also has special permissions
Creator Owner	Special permissions only
System	Full Control, Modify, Read & Execute, List Folder Contents, Read, Write
Users	Read & Execute, List Folder Contents, Read Also has special permissions

- Click Permissions.

QUESTION What are the default Share permissions for the Accounting Data directory?

ANSWER

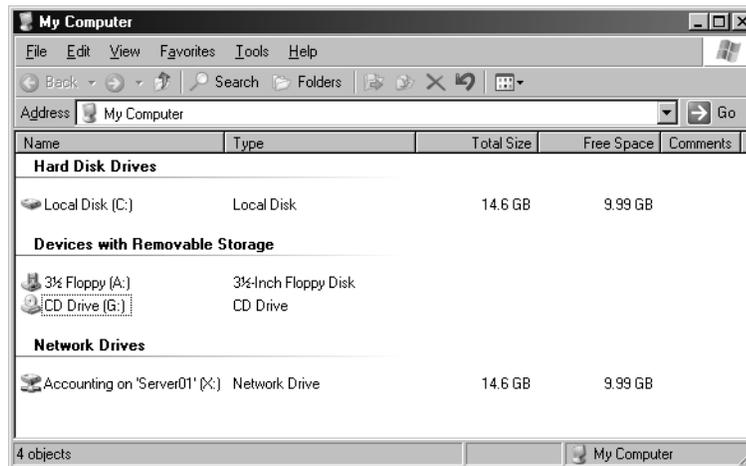
The Everyone special identity has Allow Read permissions.

EXERCISE 9-3: CONNECTING TO THE SHARE FROM THE RUN COMMAND AND MAPPING A DRIVE TO THE SHARE

- Take a screen capture of the My Computer window, and save it as C:\Lab Manual\Lab 09\Labwork\Exercise9-3.bmp.

ANSWER

The screen capture should resemble the following:

**EXERCISE 9-4: SETTING SHARE PERMISSIONS**

- Right-click in the blank area, point to New, and select Text Document.

QUESTION What is the text in the message box that is displayed when you try creating the new file?

ANSWER

Unable to create the file 'New Text Document.txt'
Access is denied.

QUESTION Why does this message appear?

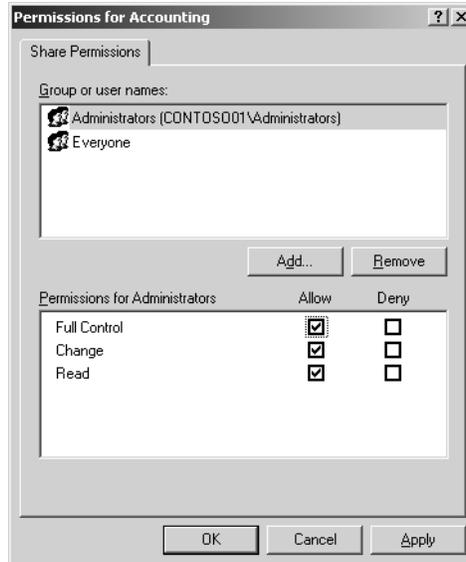
ANSWER

The message appears because the default share permission is set to Everyone (Read) and the default NTFS permission for the Administrator is Full Control. When combined, the most restrictive permission applies—in this case, Read.

- Take a screen capture of this dialog box and save it as C:\Lab Manual\Lab 09\Labwork\Exercise9-4a.bmp.

ANSWER

The screen capture should resemble the following:



20. Right-click in the blank area, point to New, and select Text Document.

QUESTION Where you able to successfully create a new document in the X network drive?

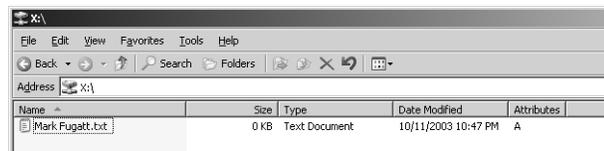
ANSWER

Yes.

23. Take a screen capture of the X:\ window and save it as C:\Lab Manual \Lab 09\Labwork\Exercise9-4b.bmp.

ANSWER

The screen capture should resemble the following:

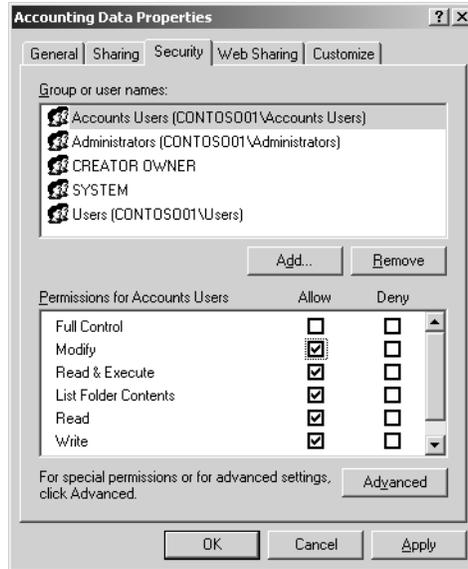


EXERCISE 9-5: SETTING NTFS PERMISSIONS

21. Take a screen capture of your security settings and save it as C:\Lab Manual \Lab 09\Labwork\Exercise9-5a.bmp.

ANSWER

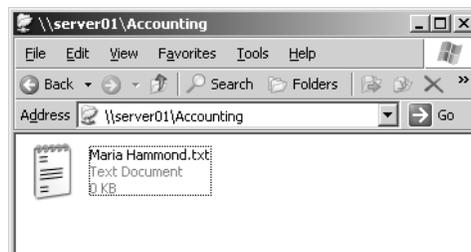
The screen capture should resemble the following:



22. Take a screen capture of Windows Explorer showing the Accounting share, and save it as C:\Lab Manual\Lab 09\Labwork\Exercise9-5b.bmp.

ANSWER

The screen capture should resemble the following:

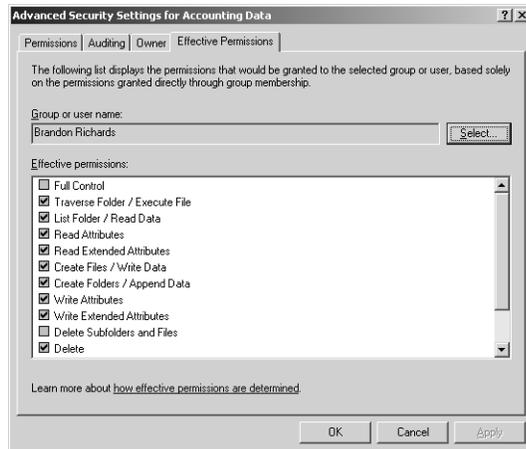


EXERCISE 9-6: VIEWING EFFECTIVE PERMISSIONS

9. Take a screen capture of the Effective Permissions tab and save it as C:\Lab Manual\Lab 09\Labwork\Exercise9-6.bmp.

ANSWER

The screen capture should resemble the following:

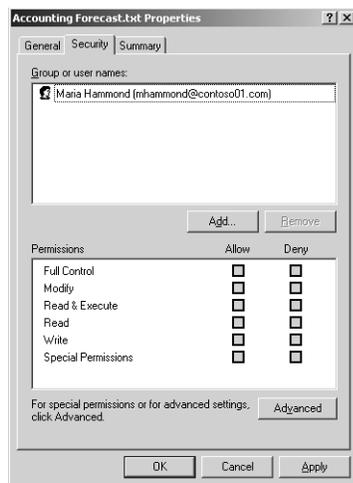


EXERCISE 9-8: TAKING OWNERSHIP OF A FILE

10. Take a screen capture showing the permissions that you applied and save it as C:\Lab Manual\Lab 09\Labwork\Exercise9-8a.bmp.

ANSWER

The screen capture should resemble the following:



11. Log off and log on as Administrator.

QUESTION Try to open the Accounting Forecast.txt file. Were you successful?

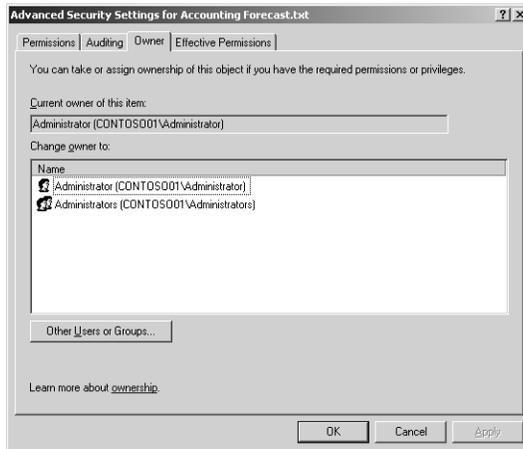
ANSWER

No. You cannot open the file, even if you're logged on as Administrator because Maria set it so that she is the only user with Full Control.

20. Take a screen capture of the Owners tab and save it as C:\Lab Manual\Lab 09\Labwork\Exercise9-8b.bmp.

ANSWER

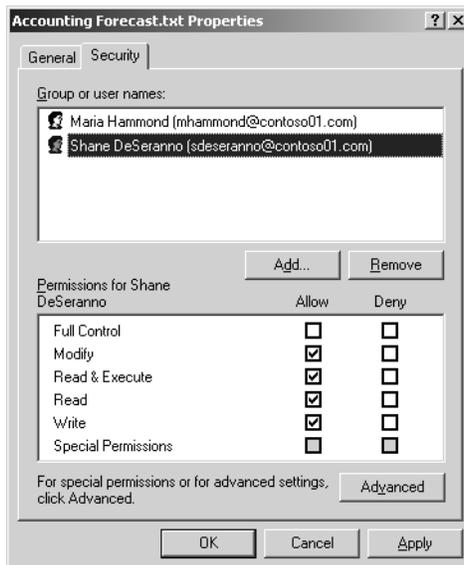
The screen capture should resemble the following:



23. Take a screen capture of the Permissions tab and save it as C:\Lab Manual \Lab 09\Labwork\Exercise9-8c.bmp.

ANSWER

The screen capture should resemble the following:

**LAB REVIEW QUESTIONS**

1. If you have the share permission of Change and the NTFS permission of Read, what are your effective permissions?

ANSWER

Your effective permission is Read when you combine Share and NTFS permissions. It's the most restrictive permission applied.

2. You are a member of two groups, GroupA and GroupB. GroupA has the NTFS permission of Read & Execute to a file, and GroupB has the NTFS permissions Allow Write and Allow Modify. What are your effective permissions?

ANSWER

Your effective permissions are Read & Execute, Write, and Modify because your effective NTFS permissions are a combination of the two groups.

3. What are the five types of authentication methods available in Internet Information Server?

ANSWER

The five authentication methods available with Internet Information Server are: Anonymous, Integrated Windows Authentication, Digest Authentication, Basic Authentication, and .NET Passport Authentication.

4. One of your users requires access to a share on the server on a daily basis. You have been asked to ensure that the user can access the share via a drive letter from My Computer. What steps would you take?

ANSWER

Access the server holding the share from the Run command, right-click over the share that the user needs access to and click on Map Network Drive from the task menu, and select an appropriate drive letter for the share.

5. You have been asked to ensure that all members of your Marketing department have access to a share on your server. What would be the simplest method to assign the Marketing department permissions to the share?

ANSWER

Create a group in Active Directory Users And Computers, add the members of the Marketing department to the group, and assign the group permissions to the share.

LAB CHALLENGE 9-1: ADDING A FILE TO THE COMPANY INTRANET AND SETTING PERMISSIONS

5. Take a screenshot of the permissions that you applied and save it as C:\Lab Manual\Lab 09\Labwork\Challenge9-1.bmp.

ANSWER

The screen capture should resemble the following:



6. Open Internet Explorer and enter the URL *http://server:xx/demographics.htm*. When prompted for a username and password, enter the Administrator account and password.

QUESTION Were you able to access the file?

ANSWER

No, the administrator does not have access to the demographics.htm file.

9. The Marketing Demographics page should now be displayed.

QUESTION What is the total number of leads?

ANSWER

The total number of leads is 34,766.

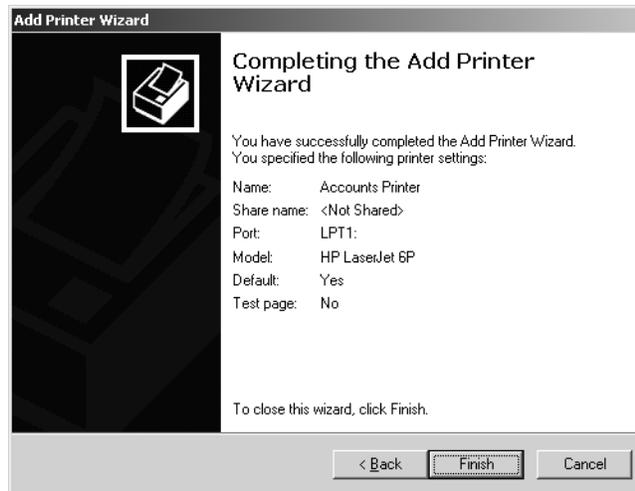
LAB 10 WORKING WITH PRINTERS

EXERCISE 10-1: CREATING A LOCALLY ATTACHED PRINTER

15. Take a screen capture of the Completing The Add Printer Wizard and save it as C:\Lab Manual\Lab 10\Labwork\Exercise10-1.bmp.

ANSWER

The screen capture should resemble the following:

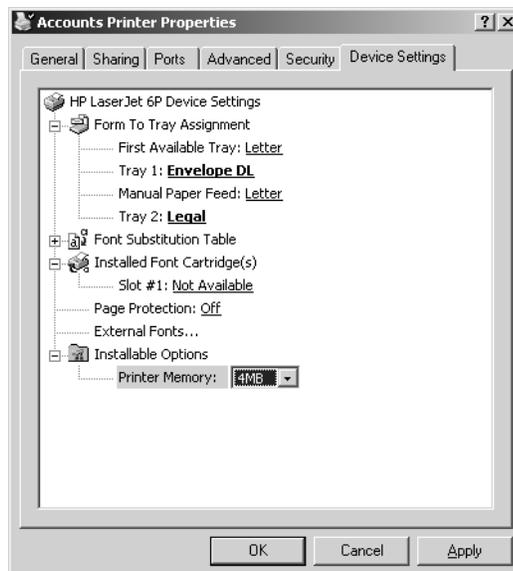


EXERCISE 10-2: CONFIGURING THE PROPERTIES FOR A LOCAL PRINTER

8. Take a screen capture of the Device Settings page and save it as C:\Lab Manual\Lab 10\Labwork\Exercise10-2.bmp.

ANSWER

The screen capture should resemble the following:

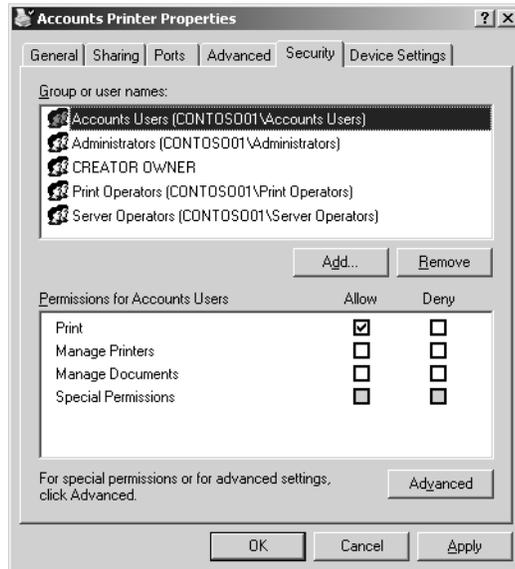


EXERCISE 10-3: SHARING A PRINTER

- Take a screen capture of the Security page showing the permissions for the Accounts Users group and save it as C:\Lab Manual\Lab 10\Labwork\Exercise10-3.bmp.

ANSWER

The screen capture should resemble the following:



EXERCISE 10-4: CONNECTING TO A PRINTER

- Click Start, and select Printers And Faxes.

The Printers And Faxes window appears.

QUESTION What indication do you get that the Accounts Printer is the default printer?

ANSWER

The Accounts Printer has a white check mark next to its icon.

EXERCISE 10-5: MANAGING A PRINT QUEUE

- Right-click Maria Hammond.txt – Notepad, and select Pause.

QUESTION What else can you do to Maria's document from the context menu?

ANSWER

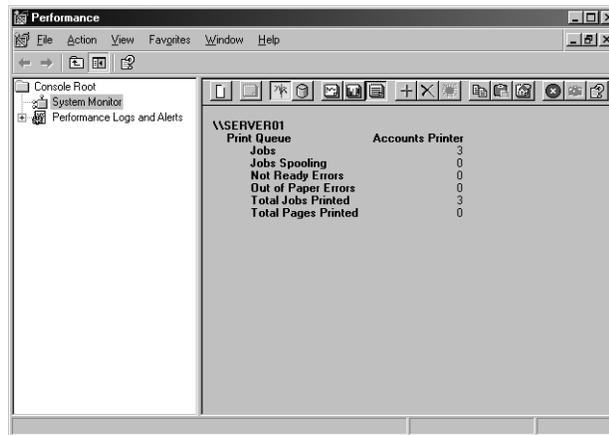
You can restart or cancel the print job.

EXERCISE 10-6: MONITOR A PRINT QUEUE USING PERFORMANCE MONITOR

26. Take a screen capture and save it as C:\Lab Manual\Lab 10\Labwork\Exercise10-6.bmp.

ANSWER

The screen capture should resemble the following:



LAB REVIEW QUESTIONS

1. How do you configure the printer to use Tray 1 for envelopes?

ANSWER

Open the printer Properties dialog box, select the Device Settings tab, and set Tray 1 to Envelopes.

2. The Accounting department in your company has five printers. Management has asked you to give them a report on the number of print jobs each printer produces so they can decide if all of the printers in use are necessary. How do you do this?

ANSWER

Use Performance Monitor and monitor the Total Jobs Printed counter for each printer.

3. One of your users has three printers available to her (one color, one laser, one dot matrix). The user complains that she can only print to the dot matrix printer. How can you get her jobs to print to the laser printer?

ANSWER

Have the user set the laser printer as their default printer.

LAB CHALLENGE 10-1: CREATING A PRINTER POOL

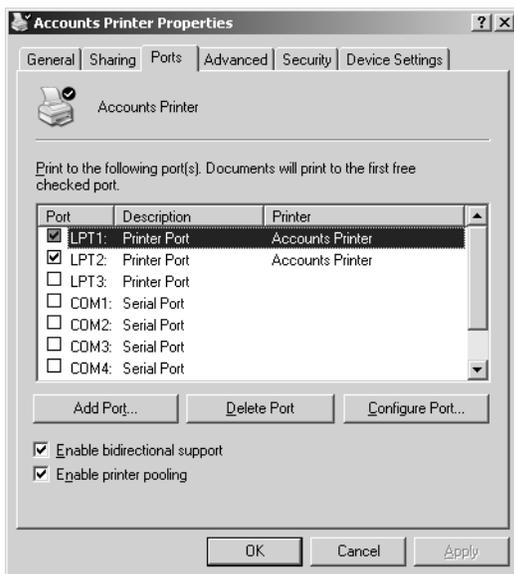
You have just taken delivery of a new HP LaserJet 6P, and the Accounting department wants you to configure the logical printer for the Accounts Printer so that you have a printer pool comprising the original HP LaserJet 6P and the new one. The new printer will be connected to the LPT2 port.

After you're finished, take a screen capture showing the printer pool using both the old printer and the new one, and save it as C:\Lab Manual\Lab 10\Labwork\Challenge10-2.bmp.

ANSWER

Sample procedure:

1. Click Start, and select Printers And Faxes.
2. Open the Properties dialog box for the Accounts Printer.
3. Select the Ports tab.
4. Enable printer pooling by selecting the Enable Printer Pooling check box.
5. Check the LPT2 port.
6. Click OK.
7. Open the Properties dialog box for the Accounts Printer and take a screen capture of the Ports tab and save it. It should look something like the following:



8. Close all open windows and log off your machine.

LAB 11 MANAGING DEVICE DRIVERS

EXERCISE 11-2: INSTALLING AN UNSIGNED DEVICE DRIVER

14. Take a screen capture of this message box, and save it as C:\Lab Manual\Lab 11\Labwork\Exercise11-2.bmp.

ANSWER

The screen capture should resemble the following:

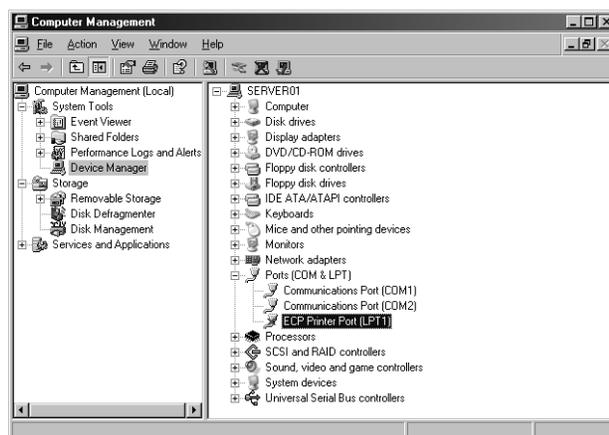


EXERCISE 11-3: MANAGING DEVICE PROPERTIES

7. Take a screenshot of Device Manager in the Computer Management console, and save it as C:\Lab Manual\Lab 11\Labwork\Exercise11-3.bmp.

ANSWER

The screen capture should resemble the following:



EXERCISE 11-4: USING LAST KNOWN GOOD CONFIGURATION

12. Double-click the Ports (COM & LPT) node in the details pane to expand it.

QUESTION Is the LPT1 port still disabled? Explain why or why not.

ANSWER

No. The LPT1 port is no longer disabled because we started the machine using the Last Known Good Configuration, and the last time this machine was logged on to, the LPT1 port was enabled.

LAB REVIEW QUESTIONS

1. Why did we set the driver signing options to Block?

ANSWER

We set the driver signing options to Block for security reasons, so drivers that have not been signed by Microsoft or the manufacture are not installed on our system.

2. You just added a new device driver to your system, and every time you try to log in, the system hangs. How can you fix this problem?

ANSWER

Boot the system using the Last Known Good Configuration. Because you have not successfully logged on, you will be able to return the machine to a good working state.

3. What two methods can you use to access Device Manager?

ANSWER

You can use Computer Management from the Administrative Tools menu or use System from Control Panel, and then select the Hardware tab.

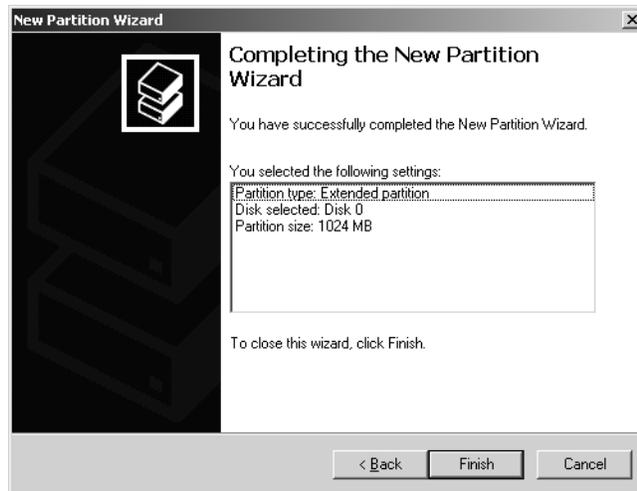
LAB 12 MANAGING DISK STORAGE

EXERCISE 12-1: CREATING A NEW EXTENDED PARTITION

7. Take a screen capture of the Completing The New Partition Wizard summary page, and save it as C:\Lab Manual\Lab 12\Labwork\Exercise12-1.bmp.

ANSWER

The screen capture should resemble the following:

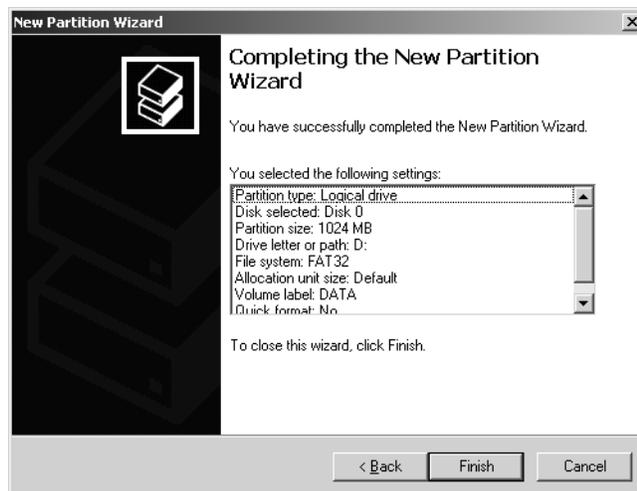


EXERCISE 12-2: CREATING A NEW LOGICAL DRIVE

11. The Completing The New Partition Wizard summary page appears. Take a screen capture and save it as C:\Lab Manual\Lab 12\Labwork\Exercise12-2.bmp.

ANSWER

The screen capture should resemble the following:



EXERCISE 12-3: CONVERTING A DISK FROM BASIC TO DYNAMIC

10. Open the Disk Management MMC.

QUESTION Based on the information provided by Disk Management, what are the volume types of your two partitions?

ANSWER

They are simple volumes.

EXERCISE 12-4: CREATING A SIMPLE VOLUME

12. The Completing The New Volume Wizard summary page appears. Take a screen capture of the page and save it as C:\Lab Manual\Lab 12\Labwork\Exercise12-4.bmp.

ANSWER

The screen capture should resemble the following:



EXERCISE 12-5: EXTENDING A SIMPLE VOLUME

7. Take a screen capture of your Disk Management MMC and save it as C:\Lab Manual\Lab 12\Labwork\Exercise12-5.bmp.

ANSWER

The entry for Disk 0 in the lower pane should resemble the following:

Disk 0 Dynamic 6.00 GB Online	(C:)	DATA (E:)	HOME (F:)	HOME (F:)
	3.91 GB NTFS Healthy (System)	1.00 GB FAT32 Healthy	500 MB NTFS Healthy	500 MB NTFS Healthy

LAB REVIEW QUESTIONS

1. You have been asked to administer the disks on a remote server. What steps do you take?

ANSWER

Create a new MMC, add the Disk Management snap-in to it, and select the remote machine when prompted.

2. You need to extend a simple volume. When you are prompted to select the drives to use, not all of your drives appear in the Available list box. What could be the reason for this?

ANSWER

Only dynamic disks appear in the Available list box.

3. You have been asked to convert one of your server's disks to dynamic. Why should you schedule this operation for nonworking hours?

ANSWER

When you convert a disk from basic to dynamic, the server requires a reboot.

LAB CHALLENGE 12-1: ERROR-CHECKING AND DEFRAGMENTING A VOLUME

2. Perform the Error-Checking task on the volume called DATA.

QUESTION *What steps did you take to perform this task?*

ANSWER

Right-click over the volume and select Properties from the context menu. Select the Tools tab, and then click Check Now in the Error-Checking section.

QUESTION *What options are available to you when you perform an error check on the volume?*

ANSWER

Automatically Fix File System Errors and Scan For And Attempt Recovery Of Bad Sectors.