
Review Questions and Answers

Module 1: The Windows NT 4.0 Environment

Review Questions and Answers

1. You need to decide between Windows 95 and Windows NT Workstation for your desktop computer. You have a Pentium-120 with 24 MB of RAM and a 1.6-GB hard disk. All hardware is on both the Windows 95 and Windows NT Workstation Hardware Compatibility Lists (HCLs) and is detected accurately by both operating systems. You need to run 32-bit applications that you have successfully tested on both operating systems, to dial out to the Internet, to share files and folders, to protect your computer with system policies, and to allow other users to use your computer while maintaining their own desktop settings. Which operating system should you choose?

Windows NT. Although both operating systems meet every requirement in this scenario, Windows NT Workstation provides greater stability and greater growth potential in the future.

2. An editor in your graphics department has been editing photographs using a very RAM-intensive photo editing software package. The graphics department has a Pentium Pro system with 32 MB of RAM and a 1-GB hard disk. Recently they have been unable to edit large photographs that they were able to work with in the past. They now get “out of memory” error messages. They haven’t changed versions of any software, nor have they added any software. There have been no changes to their hardware. What should you check next?

Check the free disk space. A large editing job could use up the free RAM, and then use the paging file. A full disk drive could reduce the total virtual memory available on the system.

3. You are attempting to migrate your computer running Windows NT Workstation to a new domain, but you are unsuccessful. What should you check?

Make sure that you typed the name of the new domain correctly and that the PDC for the new domain is available.

When migrating your computer to a new domain, there must be a computer account for your computer in the new domain. Make sure that the PDC has a computer account for your computer, or if you are creating the computer account during the migration, that you are entering the correct administrator user name and password for the new domain.

Module 2: Installing Windows NT

Review Questions and Answers

1. You want to install Windows NT Server on an Alpha-based computer. You want to protect your files and folders with local security, and you will be supporting Macintosh clients. How should you partition your disk or disks?

A very small FAT system partition (Alpha-based computers require FAT system partitions), and the rest formatted as NTFS.

2. You are installing Windows NT Workstation and want to include Windows Messaging in the installation. What type of installation must you choose?

Custom.

3. You have been told to automate the setup of Windows NT Workstation 4.0 on multiple computers in your department. You have 40 computers in 5 different configurations. How can you do this in the easiest possible way?

Create five answer files for the five different configurations, and one UDF to handle the computer specific configurations, such as computer name.

4. You are trying to install Windows NT Server as a BDC, but Setup reports that a PDC cannot be found. What should you check?

Check the spelling of the domain name, make sure the PDC is online, make sure the BDC is using the same protocol as the PDC, and make sure that the network adapter settings for the BDC are correct.

5. Your computer runs only Windows NT Server 3.51. Its hard disk is formatted entirely with NTFS. You want to upgrade the operating system to version 4.0 while minimizing the amount of downtime necessary to perform the upgrade. What is the quickest and least disruptive way to upgrade the server?

Use Winnt32.exe, because it copies all of the files from the compact disc or network to the hard disk while the server is still running. Using the Setup disks and compact disc require the server to be inoperative for a longer period of time.

6. A user sent you e-mail, asking a question that you cannot answer. How can you get the answer in electronic form, so that you can paste it into your reply?

Look up the topic in Books Online, highlight the text, and then copy and paste it into the e-mail.

1. You have been testing Windows NT Workstation on a computer, and now want to return to running Windows 95 only. You delete all of the Windows NT operating system files, including the hidden files in the system partition. However, when you start the computer, you receive the following message:

"BOOT: Couldn't find NTLDR. Please insert another disk."
The Windows 95 boot process will not proceed. What is causing this behavior?

The Windows 95 boot sector must be restored with the Windows 95 SYS command.

Module 3: Configuring the Windows NT Environment

Review Questions and Answers

1. Based on what you know of the registry, in which subtrees do you think the following configuration parameters reside? (**HKEY_LOCAL_MACHINE** or **HKEY_CURRENT_USER**)

- TCP/IP address and subnet mask:

HKEY_LOCAL_MACHINE

- Video:

HKEY_LOCAL_MACHINE

- Hardware profiles:

HKEY_LOCAL_MACHINE

- Mouse pointer acceleration:

HKEY_CURRENT_USER

2. You use a portable computer both at home and in a docking station on the network at your office. When you start Windows NT at home, you get the following message:

One or more services failed to start. See Event Viewer for details.

This message does not appear when you start Windows NT while your computer is docked at work. What is causing this message and what can you do to stop it?

The network services aren't loading because the network card is in the docking station. Create separate hardware profiles to solve the problem.

3. You are an application developer who uses a computer configured to dual-boot either Windows NT Workstation or Windows NT Server. Unless you are testing your application, you almost always use Windows NT Workstation rather than Windows NT Server. However, because you installed Windows NT Server after Windows NT Workstation, your computer always starts Windows NT Server by default. How can you configure Windows NT Workstation to start by default?

In Control Panel, double-click the System icon, and then click the Startup/Shutdown tab. In the Startup list, click Windows NT Workstation.

4. When you use the Registry Editor to attempt to gain remote access to the registry on a computer running Windows NT Server, you get an Access Denied message. What is the likely cause?

You are using an account that is not recognized as an administrative account on the remote computer. Computers running Windows NT Server restrict remote access to the registry to members of the Administrators group.

Module 4: Managing System Policy

Review Questions and Answers

1. Describe the purpose of system policy.

To establish a uniform set of rules to maintain computer and user environments across a domain.

2. Who can implement system policy?

An administrator.

3. Name two major functions of System Policy Editor.

Modify default settings for the computer and user policy for the domain.

Create custom settings that apply to individual users, groups of users, or individual computers.

Specify the location from which to download system policy.

4. Name two policies that you might create to secure a computer.

Create a logon banner that will be seen by anyone logging on to the computer.

Disable the display of the last user's logon name.

5. If a user logs on to a domain that has system policy, but system policy has not been defined for that user, what happens next?

Windows NT checks to see whether system policy exists for a group that the user is in. If it does exist, the group settings are merged into HKEY_CURRENT_USER, and then the default user policy settings are merged into HKEY_CURRENT_USER. If a group does not exist, the default user policy settings are merged into HKEY_CURRENT_USER.

6. Your network has 165 computers running Windows 95 and 200 computers running Windows NT Workstation. The Windows 95 users are complaining that the network is really slow when everyone is trying to log on in the morning. What can cause this problem and how do you resolve it?

A potential slowdown on the network can occur because computers running Windows 95 always search for their policies on the PDC by default. If load balancing is selected, after the initial logon, the Windows 95 client will take its policy from whichever logon server authenticates the user.

Module 5: Managing File Systems

Review Questions and Answers

1. If you must support long file names on all partitions and you need to be able to dual-boot between MS-DOS and Windows NT Workstation, which file system or systems should you choose?
 - a. FAT and NTFS
 - b. HPFS and NTFS
 - c. NTFS on all partitions
 - d. Unable to do both

Answer A, because the FAT file system is required for MS-DOS.

2. You get a phone call from a concerned user, saying that he got a message that something is wrong with the FAT file system. When you ask questions, you learn that an error was generated when a third-party disk utility was in use. What do you think caused the problem?

When a system is booted under MS-DOS, some third-party disk utilities that directly manipulate the FAT file system and long file name entries can cause an error. Check to see whether the user is using LFNs and whether the user has been warned that the disk utility could destroy the LFNs and leave only the 8.3 aliases, and possibly destroy the file itself. Determine the reason for running the utility and suggest an alternative such as SCANDISK, DEFRAG, or CHKDSK in Windows 95 or MS-DOS 6.x; these utilities will not corrupt LFN entries.

3. You get a phone call from a user who wants to know why she is unable to create a file in the root folder. She is using LFNs, and the root folder is on a FAT partition, but she has only 278 entries in the folder. What do you suspect is the problem?

The FAT root directory has a hard-coded limit of 512 entries. On FAT partitions, an LFN takes 1 directory entry for each 13 characters, plus another directory entry for its alias. For example, if a file name is 15 characters long, it will have 2 directory entries for the LFN and another for the alias. A 36-character LFN takes 3 directory entries for the LFN plus another for its alias, for a total of 4 directory entries. If a large number of the 278 entries in the root directory are LFNs, the user could have run out of entries in the root directory and could be unable to create any more files in the root directory.

4. You install Windows NT Workstation on a computer that previously ran Windows 95. One of your FAT partitions is not accessible under Windows NT Workstation. Why not? How can you make this partition accessible under Windows NT?

The partition is probably FAT32, which is supported by some versions of Windows 95, but not by Windows NT. The partition must be reformatted before Windows NT can access it.

5. You create a folder called Archives on an NTFS partition and compress it. You use this folder to store files that will eventually be backed up to tape, but when you move files into this folder, some get compressed and some do not. Why is the compression status not consistent?

The files are probably being moved from multiple partitions. Moving files within the same partition does not change the compression setting, so uncompressed files stay uncompressed even when they are moved into a compressed folder. Moving a file from one partition to another actually creates a new instance of the file and deletes the original. New files inherit the compression setting from their parent folder.

Module 6: Managing Partitions

Review Questions and Answers

1. A user asks for help to better understand the differences between volume sets and stripe sets, and to know when to use each. Fill out the following table to help him get a better understanding of the characteristics of volume sets and stripe sets.

Characteristic	Stripe set	Volume set
Can be created on one physical drive.	No	Yes
Can contain the system partition.	No	No
Number of areas that can be combined.	32	32
Areas combined must be the same approximate size.	Yes	No
Can combine areas on different types of drives, such as SCSI, ESDI, and IDE.	Yes	Yes
Area on one physical drive is filled before starting on the next physical drive.	No	Yes
Improves I/O performance.	Yes	No

2. A user changes the format of a partition from FAT to NTFS by using the **Format** command in Disk Administrator, and is surprised when he finds that all of his data on the partition has been erased. Why did the conversion fail?

The Format command is actually a “reformat” command, and does not do an in-place conversion. All data will be erased from a partition when using the Format command. The user should have used Convert.exe.

3. You receive a call from a user who tried to extend a volume set but could not. He then decided to delete and recreate the volume set, but now some of his data seems to be missing. What are some of the problems he probably encountered as he tried to extend, delete, and create a volume set?

Extending a volume set is possible only with NTFS. If his volume set was not formatted with NTFS, he would not be able to extend it. He could have converted his volume set to NTFS, and then extended it without losing data.

When he deleted the volume set, he deleted all of the information in it.

When he recreated his volume set, the areas of disk space partitions included should have been marked as free space. After he created a volume set, he would then have had to format it for the file system. He should also have backed up his data so that he could restore it.

Module 7: Managing Fault Tolerance

Review Questions and Answers

1. A computer running Windows NT Server has the following disk configuration:

- Disk 0: drive C (300 MB, system/boot partition), drive D (700 MB, data), and 500 MB of free space.
- Disk 1: 750 MB of free space.
- Disk 2: 1 GB of free space.

You want to install additional Microsoft BackOffice™ components on this computer. What is the best way to both protect your computer's data and to optimize its performance by using Windows NT fault tolerance?

Mirror drive C on disk 2, and create a 1.5-GB stripe set with parity that spans all three disks.

2. The disk containing the system/boot partition for your computer running Windows NT Server failed. The system/boot partition was part of a mirror set, but your computer only tries to boot from the original system/boot partition. How can you successfully boot Windows NT Server from the mirrored system/boot partition?

With a fault-tolerance boot disk. The Boot.ini file must point to the mirrored boot partition.

Module 8: Supporting Applications

Review Questions and Answers

1. You are running several Win32-based applications on a computer running Windows NT Workstation. One of your Win32-based applications encounters an error and stops responding. What impact does this have on the rest of the operating system, and how can you terminate the unresponsive application?

All other applications, and the rest of the operating system, continue to be processed normally, because each Win32-based application maintains its own threads, separate from all other processes. Use Task Manager to end the unresponsive application.

2. You are running two Win16 applications on a computer running Windows NT Workstation. Your computer has two microprocessors, but Task Manager shows that only one is being heavily utilized, while the other is relatively idle. How can you improve your system's performance so that both microprocessors are executing application code?

The Win16 applications are most likely running in the same NTVDM. Because the Win16 applications alternate use of a common thread, the microkernel can only schedule this thread on one microprocessor. To optimize performance, start each Win16 application in its own NTVDM.

3. You want to configure the Config.sys file to support an OS/2 application on your computer running Windows NT Workstation. You use Notepad to edit C:\Config.sys and then save the file, but Windows NT ignores your changes. Why is this happening, and how can you successfully modify the OS/2 Config.sys file?

The OS/2 Config.sys file is not really a file at all; the information that is normally stored in this file is maintained in the Windows NT registry. When an OS/2 program (including the OS/2 subsystem) calls for the C:\Config.sys file, Windows NT traps that call, and then retrieves the information from the registry. You cannot access this information by using Notepad, because Notepad is not an OS/2 application. You must use an OS/2 text editor to edit the OS/2 Config.sys file, or you can use the Registry Editor to edit the registry directly.

4. You download a Win32-based application from the Internet, but it will not run on your PowerPC-based computer running Windows NT Workstation. Why?

The application is probably specific to the Intel platform. Win32-based applications are source-compatible across Windows NT platforms; they must be compiled for a specific platform in order to function on that platform.

1. Your company uses a suite of multi-tier client/server applications. What Microsoft Windows NT service would you configure to let these applications run in a fully distributed, multiple-computer environment? What default parameters must be changed?

DCOM. The service must first be enabled, and permissions need to be set so that the appropriate users have permissions to access, change, or delete components as needed.

2. You have a graphics-intensive program that takes a long time to render while operating in the background. You need to be able to check e-mail and work in other applications, but you don't want to slow the rendering process. How can you optimize your system's performance?

Use the System program in Control Panel to set your dynamic priorities so that the threads for the foreground application receive a one-level priority boost rather than a two-level priority boost. The actual setting is the middle setting of the Boost setting under Application Performance.

Module 9: The Windows NT Networking Environment

Review Questions and Answers

1. Your network consists of clients running Windows NT, Windows 95, NetWare, UNIX, and Macintosh operating systems. Which of these clients can be used to connect to your computer running Windows NT Server?

All of them. Windows NT Server can interoperate with all of these computers simultaneously.

2. Your network includes NetWare servers and UNIX computers. Your computer running Windows NT Server needs to run both the IPX and TCP/IP protocols so that it can support all of the computers on the network. How many network adapter cards will you need to install in the computer running Windows NT Server?

One. NDIS 4.0 enables multiple protocols to be bound to a single network adapter card.

3. You are able to connect from your computer running Windows NT Workstation to shared folders on any other computers running Windows NT. However, no other computers can connect to the shared folders on your computer. In addition, although you are logged on as Administrator, your shared folders do not appear with the shared symbol in Windows NT Explorer. What is the likely cause of the problem?

The Server service is probably disabled. Without the Server service, your computer cannot share resources.

Module 10: Configuring Windows NT Protocols

Review Questions and Answers

1. You install Windows NT Workstation on your computer. Upon starting Windows NT Workstation for the first time after installation, you see an error message, stating that "One or more services failed to start." You check Event Viewer and discover that none of the network services have started. What is the likely cause of the problem and how would you fix it?

The settings for the network adapter card are probably incorrect. Use the Adapters tab of the Network program in Control Panel to change the settings. In addition, check if the wrong driver was installed, or if the adapter itself is not working.

2. Your computer running Windows NT Workstation was configured manually for TCP/IP. You can connect to any host on your own subnet, but you cannot connect to or even ping any host on a remote subnet. What is the likely cause of the problem and how would you fix it?

The default gateway is probably missing or incorrect. It can be added or changed in the Microsoft TCP/IP Properties dialog box accessed through the Network program in Control Panel. Other possibilities: the default gateway is offline or the subnet mask is incorrect.

3. Your computer running Windows NT Workstation can communicate with some, but not all, of the NetWare servers on your network. Some of the NetWare servers are running frame type 802.2 and some are running 802.3. What is the likely cause of the problem?

Although the NWLink implementation in Windows NT can automatically detect a frame type for IPX/SPX compatible protocols, it can only automatically detect one frame type. This network uses two frame types, and the additional frame type (802.3) will need to be configured manually.

4. Your computer running Windows NT Server runs TCP/IP as its primary protocol. The server also has NWLink installed, for the sole purpose of hosting connections from NetWare clients. How would you optimize the bindings for this server?

Disable the binding between the Workstation service and NWLink, because the computer will never need to establish connections or authenticate users over NWLink.

Module 11: Windows NT Network Services

Review Questions and Answers

1. You installed a new computer running Windows NT Server version 4.0 in your test lab. The computer is stopped and restarted after each test and as many as 6 tests are run each day. The test lab has a total of seven computers and runs on its own subnet. Since installing this new computer, when you browse through the network for network resources in the lab, the list is often blank or missing several computers. What may have caused this problem and how can it be fixed?

The new computer running Windows NT Server is winning the browser elections. Because it is being tested, it is being restarted often. This is causing the browse list to be recreated often. To fix this, specify that this server not be allowed to participate in browser elections. This will allow a computer that isn't under current test to take over that service. (Other answers are possible.)

2. You cannot use your new computer running Windows NT Workstation to view or gain access to any network resources. You have tried pinging other hosts unsuccessfully. Upon examining your TCP/IP configuration, you discover that your IP address is 0.0.0.0, even though it is a DHCP client. What do you suspect is the cause of the problem?

Either a DHCP server is unavailable or all IP addresses in the scope for your subnet are already being leased.

3. You have a Windows NT network with TCP/IP as the only available protocol. Your computer running Windows NT Workstation is configured to use DNS and WINS. Although you can use FTP to connect to any UNIX host on your network by using the host name for the UNIX host, you are unable to connect to the computers running Windows NT Server in your domain. What do you suspect is the cause of the problem?

The WINS server is unavailable. UNIX hosts do not register with WINS, so that is why connections to these hosts are successful.

4. You have a Windows NT network with TCP/IP as the only protocol. You have a computer running Windows NT Workstation that is configured to use DNS and WINS. Although you can connect to the computers running Windows NT Server in your domain, you are unable to use FTP to connect to any UNIX host on your network by using the host name for the UNIX host. What do you suspect is the cause of the problem?

The DNS server is either unavailable or does not contain a resource record for the UNIX host. Because DNS is not dynamic, you must manually enter resource records for your hosts. Connections to computers running Windows NT are successful because these connections use WINS, not DNS.

Module 12: Remote Access Service

Review Questions and Answers

1. You would like to enable remote users to connect to your company's LAN through the Internet. However, your manager is concerned about potential unauthorized access from the Internet. How would you implement your plan while allaying his concerns?

Implement PPTP, which uses the Internet as a connection medium but does not necessarily expose your network on the Internet. Only the RAS server needs to be on the Internet, and PPTP filtering can be enabled to prevent any packets other than PPTP packets from reaching the internal network.

2. You are a frequent traveler, and you require dial-up access to your company's network through any of five remote access phone numbers maintained by a RAS server. Changing all five access number properties to match your area code and dialing conditions is tedious; how can you simplify the process?

Configure a TAPI location with your local country and area code and any other necessary dialing properties. This location can be applied to all five of the Dial-Up Networking connections.

3. You use Dial-Up Networking frequently to access your company's network from home. You use a 28.8 Kbps modem to connect, and it takes a very long time to log on. Without buying another modem, how can you speed up the process?

Configure your computer so that it does not download your server-based profile during the logon process across RAS.

4. Your network supports users who often work from home. These users only require remote access to their home directories, which are maintained on a RAS server. For security reasons, you do not want these users to be able to access the rest of your intranetwork from a remote location. What is the best way to implement this?

Configure the RAS server so that it only allows access to itself and not to the rest of the network. Although you could simply apply permissions to other network servers and resources to restrict the remote users, these permissions would also apply when the users work at the office, restricting them unnecessarily.

5. You receive a help desk call from a remote user who is having trouble connecting to the RAS server using PPP. How would you troubleshoot the problem?

Enable PPP logging for the RAS server and see how far the user is able to get in the connection process.

Module 13: Internetworking and Intranetworking

Review Questions and Answers

1. Your company has an intranet for disseminating project information. Some of the executives have been hearing about security on the Internet and are concerned about external hackers breaking into the corporate network through this intranet. What difference between intranets and the Internet should ease their worries?

Intranets, by definition, are internal to an organization. Adding the WWW, FTP, and Gopher services doesn't change the security of the site.

2. Your software company has many customers located throughout the world and must ensure that software updates are available to all customers worldwide. Should you install IIS or PWS? Which publishing service would you use?

IIS, because it is optimized for heavy Internet traffic, and the WWW and FTP services.

3. Your manager is concerned about implementing a corporate intranet because not all clients on your network are running Windows NT. Some are running Windows 3.1, and some are using Apple Macintosh computers. What would you tell your manager to allay his concerns?

Microsoft Internet Explorer is available for all of the platforms used in this company (and for Windows 95, too).

4. Your manager is concerned about allowing access to the corporate intranet from the Internet, because some internal Web pages contain confidential information. What would you tell your manager?

Windows NT security is fully integrated with IIS and PWS. Both IIS and PWS can be configured to require a valid user account and an encrypted authentication in order to gain access to the site. Specific resources can be protected by granting permissions to appropriate users and groups.

Module 14: Interoperating with Novell NetWare

Review Questions and Answers

1. Your company is deploying Windows NT Workstation on its desktop computers. Users of these computers need to access NetWare servers on the network. What components should be installed on the computers running Windows NT Workstation in order for them to gain access to the NetWare servers?

NWLink and CSNW.

2. You have established a gateway on a computer running Windows NT Server to a NetWare volume. You have assigned Full Control permission to your Domain Users group and yet your users are complaining that they cannot save files to a directory through the gateway. What is the likely cause of the problem?

The NTGATEWAY group on the NetWare server has not been assigned the appropriate level of rights on the NetWare server. The gateway cannot grant greater permissions than the NetWare rights allow.

Module 15: Implementing Network Clients

Review Questions and Answers

1. You have recently added 50 new desktop computers to your network, and purchased 50 additional CALs. Each of these computers requires access to the computers running Windows NT Server on the network. Your servers are licensed in the Per Seat mode. What utility must you use to add the new CALs?

You must use License Manager to enter the information for the new licenses.

2. You are evaluating the client software included on the Windows NT Server compact disc. Your network uses both DHCP and WINS, and you require support for these protocols on your clients. Which of the clients included with Windows NT Server would you deploy?

Windows 95 and Microsoft Network Client 3.0 for MS-DOS are the only included clients that support both DHCP and WINS. In addition, TCP/IP-32 for Windows for Workgroups (which is included with Windows NT Server) can be added to Windows for Workgroups to provide DHCP and WINS support.

3. You must deploy 50 new desktop computers on your network. These computers will all run Windows NT Workstation, and the installation files are located in a shared folder on a computer running Windows NT Server. However, the new computers do not have network client software installed and therefore cannot connect to the server to download Windows NT Workstation. How would you enable the computers to make a connection to the server to start the installation?

Use Network Client Administrator to create a network installation startup disk.

4. You're in charge of Network Operations. You have many different administrators using various operating systems. In order for your administrators to apply file and directory permissions to an NTFS file server, what operating systems can they run?

There are Windows NT administrative tools available that run on Windows 95 and Windows NT Workstation.

5. Your computer running Windows NT Server provides file and print services to both Windows-based and Macintosh clients. You have installed Services for Macintosh and created a volume in which Macintosh users store their documents. You would like these documents to also be accessible from the Windows-based clients. What must you do?

Share the folder from which the volume was created. Then users at both types of clients will be able to access the files contained within the folder.

Module 16: Implementing Directory Replication

Review Questions and Answers

1. You are one of several administrators for your network. Your network has been using directory replication successfully for some time. Today, you needed to modify some of the files in one of the export folders, so you placed a lock on that folder. When you finished making your changes, you noticed that there were now two locks on the folder. Why would this happen, and should you remove both of them?

Assuming that you didn't accidentally add two locks yourself, another administrator is probably working on the files and placed her own lock on the folder. You should only remove one lock, and leave the other alone. When the other administrator is finished, she will remove the remaining lock. Removing both locks will cause the folder to begin replicating again.

2. You are one of several administrators for your network. Your network has been using directory replication successfully for some time. You receive several pieces of e-mail from the Vice President of Human Resources, indicating that access to the new Employee Phonebook and the new Employee Handbook is unacceptably slow. The administrator who set up directory replication to replicate these resources to 12 servers on the network is gone on vacation. You need to fix the problem fast. You check and find that the files `Emp_phbk.xls` and `Emp_hndbk.doc` are in the export directory: `systemroot\System32\Repl\Export`. What is the problem?

For replication to occur, files must be placed in *subdirectories* of the `systemroot\System32\Repl\Export` directory. Any files placed *directly* in the `systemroot\System32\Repl\Export` directory are *not* replicated. You need to create a subdirectory, and then place `Emp_phbk.xls` and `Emp_hndbk.doc` in the subdirectory so that they will be replicated.

Module 17: The Windows NT Boot Process

Review Questions and Answers

1. One of the computers that you support can no longer boot MS-DOS, even though it appears on the boot menu. You have identified the problem as a corrupted MS-DOS boot sector. Which file, containing the old MS-DOS boot sector, should you suspect has been corrupted?

Bootsect.dos

2. You created a Windows NT boot disk that contains the following files:
 - Ntldr
 - Ntdetect.com
 - Boot.ini
 - Ntbootdd.sys

When you try to boot Windows NT with the disk, you receive the following error message:

```
Non-System disk or disk error  
Replace and press any key when ready
```

What did you do wrong?

The disk that you used was not formatted while running Windows NT.

3. You change the settings for your network adapter. When you reboot, you receive the following message before logging on to Windows NT: "One or more services failed to start." When you attempt to log on you receive a message, stating that a domain controller could not be found, but you were logged on using cached credentials. After logging on, you discover that you cannot connect to network resources. You shut down your computer, and then restart it by using the Last Known Good configuration, but the same behavior results. What went wrong?

Last Known Good is updated with the current control set following the first successful log on after a reboot. When you notice something wrong following a restart, don't log on.

4. You need to perform an emergency repair on your computer that is running Windows NT Workstation, but even though you have a CD-ROM drive, you originally installed Windows NT Workstation over the network and you do not have the original Setup disks. You still have the original Windows NT Workstation compact disc, however, and can access it on other computers. How can you perform the emergency repair?

Using another computer, run the Winnt.exe or Winnt32.exe program from the original Windows NT Workstation compact disc using the /ox switch. This will make the three setup disks that can be used to start the repair process.

1. You receive a call from a user who tells you that he forgot the Administrators password and used the Emergency Repair disk to restore it. Now no one else can log on to the system. What happened?

The emergency repair process replaces the entire directory database with the original directory database that was created during installation, or with the last updated version when Rdisk.exe was used. If he had never updated the directory database stored on the Emergency Repair disk, the only accounts present after the repair would be the Administrators and the Guest accounts (and possibly an initial user account) created during installation. If this were the case, he would then use the original Administrators password to log on, and then restore the directory database from a tape backup.

2. You have restarted a computer running Windows NT Workstation, and the following message appears:

```
BOOT: Couldn't find NTLDR  
Please insert another disk
```

You suspect that Ntldr is missing. How can you replace the file?

Use a Windows NT boot disk or the emergency repair process.

Module 18: Troubleshooting Resources

Review Questions and Answers

1. Your computer running Windows NT Workstation uses a SCSI adapter with its BIOS disabled. The Ntbootdd.sys file in the root of your computer's system partition was accidentally deleted, and you need to replace it. How can you do this?

If you have a boot disk, copy the Ntbootdd.sys file from the disk to your hard disk. If not, you can copy this file from another computer running Windows NT, as long as the computer uses the same SCSI adapter as your computer. Otherwise, if you know which SCSI adapter your computer uses, you can copy and rename its driver from the original Windows NT Workstation compact disc.

2. A network user calls you and complains that her computer, which is running Windows NT Workstation, is unusually slow. Without going to her computer, what steps can you take to diagnose the problem?

Use Event Viewer to examine the remote computer's Event log to see if any errors have been reported; use Performance Monitor to see if any devices report a bottleneck; or use Windows NT Diagnostics to document the computer's configuration.

3. You are having a problem configuring a device to work with Windows NT. Where can you look for any reported problems?

Look in the Microsoft Knowledge Base available on TechNet, the Internet, or MSN.

