Chapter 19

Reviewing the Basics

1. What encryption protocol does Windows XP use when sending an account name and password to a domain controller for validation?

Kerberos

2. Which policy in Group Policy must be enabled before you can monitor failed attempts at logging onto a Windows 2000/XP system?

Audit policy

3. Define and explain the differences between viruses, worms, logic bombs, and Trojans.

A virus is a program that can replicate by attaching itself to another program. A worm can spread copies of itself throughout a network without a host program. A Trojan horse, like a worm, does not need a host program to work; it substitutes itself for, and pretends to be, a legitimate program. A logic bomb is dormant code added to software and triggered by a predetermined event.

4. Where can viruses hide?

Viruses can hide in the boot sector, in a file, in a macro within a file, or in a combination of the boot sector and a file (for a multipartite virus).

5. What is the best way to protect a computer or network against worms?

Use a firewall.

6. What is the best way to determine if an e-mail message warning about a virus is a hoax?

Check Web sites on the Internet that track virus hoaxes.

7. Are boot sector viruses limited to hard drives? Explain.

No. On a floppy disk, a boot sector virus hides in the boot program of the boot sector.

8. Which feature must you disable in the Folders Options applet of Control Panel before you can control which user group or user has access to a shared file or folder?

Simple file sharing

9. What is the most likely way that a virus will get access to your computer?

From an e-mail message

10. List three products to remove malicious software that can deal with adware and spyware.

Ad-Aware, Spybot Search and Destroy, Windows Defender

11. Why is it best to run AV software in Safe Mode?

Because malware is less likely to be running in the background to prevent AV software from detecting it

1. Which Windows tool do you use to view a recorded log of network activity?

Event Viewer

13. What registry key keeps information about services that run when a computer is booted into Safe Mode?

HKLM\System\CurrentControlSet\Control\SafeBoot

14. What does AV software look for to determine that a program or a process is a virus?

A virus signature

15. What Windows tool can you use to solve a problem of an error message displayed at startup just after your AV software has removed malware?

Msconfig

16. What folder is used by Windows to hold System Restore restore points?

\System Volume Information

17. How can you delete all restore points and clean up the restore points data storage area?

Turn off System Restore and reboot the system.

18. What two methods does anti-rootkit software use to detect a rootkit?

* The software looks for running processes that do not match up with the underlying program filename.
* The software compares files, registry entries, and processes provided by the OS to the lists it generates from the raw data. If the two lists differ, a rootkit is suspected.

19. Name two anti-rootkit products.

Rootkit Revealer by Sysinternals (*www.sysinternals.com*)

BackLight by F-Secure (*www.f-secure.com*)

20. What is the major disadvantage of using an AV software installation CD to install the AV software to rid a system of viruses?

The software on the CD will not contain the latest virus signatures and other software *updates*; therefore, the AV software will not catch new viruses. For best results, after the AV software is installed, you must download the latest updates to the software.

21. Why does having Windows display known file extensions help prevent a system from being infected with malware?

It helps prevent a system from being infected because users are less likely to be deceived that a file is actually a program or script, rather than a graphics file, some other innocent file type, or URL.

22. How does a rootkit running in user mode normally hide?

By intercepting API calls

23. What is the difference between spyware and adware?

Spyware looks for information about you to pass to a Web site. Adware is displaying annoying ads on your PC. One is stealing information; the other is giving information.

24. For what is the Windows Scripting Host utility used, and what is the command line to execute it?

The Windows Scripting Host utility uses Windows commands to execute scripts that programmers have written using a scripting language such as VBScript or Jscript. To run the script, type wscript.exe filename in the Run dialog box.

1. Why is using an ActiveX control considered a security risk?

It is considered a security risk because it allows a Web page to execute code (which may be malicious) on a user's computer.

1. What must you do before you can use the Windows Backup utility on a Windows XP Home Edition PC?

Install the utility from the Windows XP setup CD.

1. Name one browser other than Internet Explorer by Microsoft.

Firefox by Mozilla

1. Name two e-mail clients other than Outlook or Outlook Express by Microsoft.

Eudora by Qualcomm and Thunderbird by Mozilla

1. What are five file extensions that might be used for scripts?

.js, .jse, .vbe, .vbs, and .wsf

1. Why might someone see better security when using a browser other than Internet Explorer?

It is because authors of malware attack IE more than other products, IE allows Web pages to run ActiveX code, and IE is closely integrated with—and may provide access to—core components of the Windows operating system.

Chapter 21

REVIEWING THE BASICS

1. List the six steps used by a laser printer to print a page.
2. *Cleaning.* The drum is cleaned of any residual toner and electrical charge.
3. *Conditioning.* The drum is conditioned to contain a high electrical charge.
4. *Writing.* A laser beam discharges the high charge down to a lower charge, but only in places where toner should go.
5. *Developing.* Toner is placed onto the drum where the charge has been reduced.
6. *Transferring.* A strong electrical charge draws the toner off the drum onto the paper. This is the first step that takes place outside the cartridge.
7. *Fusing.* Heat and pressure fuse the toner to the paper.
8. Which document exhibits better quality, one printed with 600 dpi or one printed with 1200 dpi? Why?

1200 dpi exhibits better quality. The more dots there are per inch there, the more detail you can print and the finer the resolution.

1. What type port will a desktop scanner most likely use?

USB

1. What two types of scanning technologies does a scanner use?

CCD (higher quality) and CIS (lower quality)

1. What are two possible settings in CMOS for parallel port mode?

ECP or bidirectional

1. During the laser printing process, what determines when the toner sticks to the drum and when it does not stick to the drum?

During the writing phase, the uniform high charge is discharged only in the places where toner is meant to stick to the drum.

1. Why is it less expensive to maintain an inkjet printer that has a black ink cartridge than one that does not?

If an inkjet printer does not have a black ink cartridge, then it combines all colors of ink to produce a dull black. Having a separate cartridge for black ink means that it prints a true black and, more importantly, does not use the more expensive colored ink. You can replace the black cartridge without also replacing the colored ink cartridge.

1. What technology makes an inkjet printer a photo-quality printer?

It is the ability to mix different colors of ink to create a new color that then makes a single dot. HP calls this PhotoREt II color technology.

1. What should you do if an inkjet printer prints with missing dots or lines on the page?

Clean the inkjet nozzles (manually for older inkjet printers or automatically for newer ones).

1. What can you do to help a dot-matrix printer last longer?

Keep the print head cool.

1. List two possible ways to improve printing speed.

Lower the printer resolution and the print quality, add more memory to the printer, add more memory to the PC, or upgrade the PC’s CPU.

1. When a laser printer is short on memory, what is a possible symptom of this problem?

Printing is slow, an error occurs, or a portion of the page does not print.

1. What two Windows components are used to share resources on a network and access those shared resources?

Client for Microsoft Networks and File and Printer Sharing

1. How do you share a local printer with others in the workgroup?

Open the Printers window. Right-click the printer you want to share and select Sharing from the shortcut menu.

1. What are two ways to install a printer that is being shared by another computer on the network?

You can perform the installation using the Printers window and the Add Printer Wizard, or you can locate the printer in My Network Places or Network Neighborhood, right-click the printer, and select Connect or Install from the shortcut menu.

1. What company developed PostScript? PCL?

Adobe Systems, Hewlett-Packard

1. When you are isolating a printer problem, what are the four major possible sources of the problem?

* The application attempting to use the printer
* The OS and printer drivers
* Connectivity between the PC and the printer
* The printer itself

1. How can you eliminate the printer as the source of a printing problem?

Check the following:

* Is the printer turned on and online?
* Is the correct printer selected as the default printer?
* Can an application other than the current program use the printer?
* Is the printer using the correct driver? Does the driver need updating? Is the driver correctly installed?
* Can you move the printer to another computer and print from it? Will another printer work on this computer?

1. How can you be sure that a printer cable is not the source of a printer problem?

* Check that the cable is firmly connected at both ends.
* Remove the switch box in older systems that use one to share a printer.
* Try a different cable.
* Try printing using the same printer and printer cable, but a different PC.
* Enter CMOS setup of the PC and check how the parallel port is configured. Try setting the port to bidirectional.

1. Why is it important not to remove ink cartridges from an inkjet printer and leave the cartridges outside the printer for an extended period of time?

The cartridges will dry out.

Thinking Critically

1. A Windows XP computer has a locally installed printer that you must make available to eight other Windows XP computers on the network. What is the best way to do this?
2. Use the Add Printer icon in the Printers window for each of the eight PCs.
3. Use My Network Places to install the printer on each of the eight PCs.
4. Use the printer manufacturer’s setup program from the printer’s CD on each of the eight PCs.
5. Install the printer on each of the eight PCs while sitting at the host PC. Use My Network Places on the host PC.

b. Use My Network Places to install the printer on each of the eight PCs.

1. You are not able to print a Word document on a Windows XP computer to a network printer. The network printer is connected directly to the network, but when you look at the Printers and Faxes window, you see the name of the printer as \\SMITHWIN2K\HP LaserJet 8100. In the following list, select the possible sources of the problem.
2. The SMITHWIN2K computer is not turned on.
3. The HP LaserJet 8100 printer is not online.
4. The SMITHWIN2K printer is not online.
5. The Windows XP computer has a stalled printer spool.
6. The HP LaserJet 8100 computer is not logged on to the workgroup.

Possible answers: a, b, and d

1. You are not able to print a test page from your Windows 2000 PC to your local HP DeskJet printer. Which of the following are possible causes of the problem?
2. The network is down.
3. The printer cable is not connected properly.
4. The Windows print spool is stalled.
5. You have the wrong printer drivers installed.
6. File and Printer Sharing is not enabled.

Possible answers: b, c, and d

CHAPTER 22

Thinking Critically

1. You own a small PC repair company and a customer comes to you with a PC that will not boot. After investigating, you discover the hard drive has crashed. What should you do first?
   1. Install a hard drive the same size and speed as the original.
   2. Ask the customer’s advice about the size drive to install, but select a drive the same speed as the original drive.
   3. Ask the customer’s advice about the size and speed of the new drive to install.
   4. If the customer looks like he can afford it, install the largest and fastest drive the system can support.

c. Ask the customer’s advice about the size and speed of the new drive to install.

1. You have repaired a broken LCD panel in a notebook computer. However, when you disassembled the notebook, you bent the hinge on the notebook lid so that it now does not latch solidly. When the customer receives the notebook, he notices the bent hinge and begins shouting at you. What do you do first? Second?

a. Explain to the customer you are sorry but you did the best you could.

b. Listen carefully to the customer and do not get defensive.

c. Ask the customer what he would like you to do to resolve the problem.

d. Tell the customer he is not allowed to speak to you like that.

First b, then c