MCSE
Workstation
Server
Enterprise

Managing User Profiles and System Policy

9

About Chapter 9

This chapter explores managing user profiles and system policy in a Windows NT environment.

After a quick look at the benefits of using user profiles, the chapter details the contents of a user profile and the steps involved in creating a user profile. Two special types of user profiles—roaming user profiles and mandatory user profiles—are also discussed.

Next, Chapter 9 focuses on managing system policy, which is actually a collection of user, group, and computer policies. The System Policy Editor is introduced. The section wraps up with an explanation of the systematic manner in which system policy is applied, and step-by-step instructions for creating a system policy file.

Finally, this chapter presents a brief discussion of logon scripts and how to assign a logon script to a user.

This chapter includes two hands-on labs. In the first lab, you create and copy user profiles, and configure roaming and mandatory user profiles. In the second, you create and configure both a Windows 95 system policy and a Windows NT system policy.

Chapter 9 is a "must read," no matter which of the three Windows NT 4.0 Microsoft Certified Professional exams you're preparing for. This chapter maps to the various policies and user profiles objectives in the Managing Resources section in these exams' objectives.

Managing User Profiles

In Windows NT, a *user profile* is a collection of settings and options that specify a user's desktop and all other user-definable settings for a user's work environment.

Both users and administrators can benefit from user profiles.

Benefits to users include:

- When a user logs on, the same desktop is displayed as when the user last logged off.

- When there's more than one user on the same computer, a customized desktop is displayed for each at logon.

- Roaming user profiles can be saved on a Windows NT Server computer, and thereby apply to a user no matter which Windows NT computer on the network the user logs on at.

Benefits to administrators include:

- Administrators can develop and assign user profiles that are customized, so each user has a desktop and work environment that complies with established company standards, and can assign user profiles that are suitable for the tasks that each particular user needs to perform.

- If desired or necessary, administrators can forcibly prevent certain users from changing any of their desktop or work environment settings by assigning them mandatory user profiles.

- User profiles make it possible for administrators to assign common program items and shortcuts to all users by customizing the `All Users` profile folder.

The following sections discuss the contents of a user profile, how a user profile is created, customizing the `Default User` and the `All Users` profile folders, roaming and mandatory user profiles, and deleting user profiles.

Contents of a User Profile

Various settings are saved in a user profile. The contents of a user profile include:

- All user-specific settings for Windows NT Explorer, Notepad, Paint, HyperTerminal, Clock, Calculator, and other built-in Windows NT applications;

- User-specific desktop settings, including: screen saver, background color, background pattern, wallpaper, and other display settings;

- User-specific settings for applications written to run on Windows NT;

- User-specific settings for network drive and printer connections;

- User-specific settings for the Start menu, including program groups, applications, and recently accessed documents.

A user profile is normally stored in a subfolder of the `<winntroot>\Profiles` folder on the local computer. Each user's profile is stored in a separate folder named after the user's account. For example, the Administrator's user profile is stored in the `<winntroot>\Profiles\Administrator` folder. Figure 9-1 shows, in Windows NT Explorer, the location and contents of the Administrator's profile folder.

note **All user profiles have the same contents as those shown for the Administrator.**
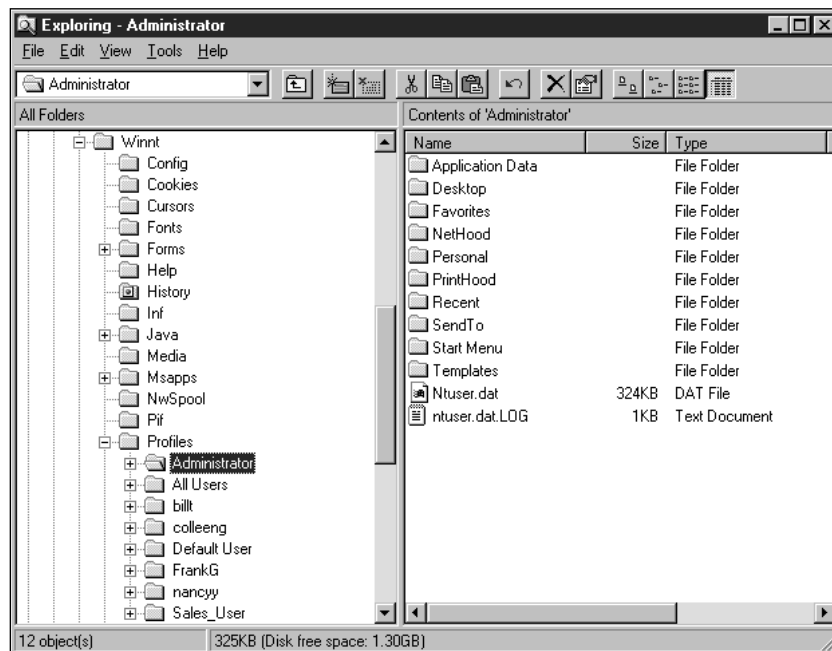

FIGURE 9-1 Contents of the Administrator's profile folder

Note in Figure 9-1 that there are several subfolders and files contained in the Administrator's profile folder. Table 9-1 lists and describes each of these folders and files. All users' profile folders (not just the Administrator's) contain the folders and files listed in Table 9-1.

TABLE 9-1 Windows NT user profile folder contents	
Folder or File	*Description*
Application Data	This folder contains any user-specific application data that an application vendor has chosen to store here. For example, a word processing application could store the user's custom dictionary in this subfolder. Currently, use of this folder is not widely implemented by application vendors.
Desktop	This folder contains all shortcuts, files, and folders stored on the user's desktop.
Favorites	This folder contains shortcuts from the user's Favorites folder in various applications. For example, when you add an Internet site to your Favorites folder in Internet Explorer, a shortcut to that site is created in this folder.
NetHood	This folder contains any shortcuts a user has created to network servers or shared folders. These shortcuts are displayed in the Network Neighborhood dialog box.
Personal	This folder contains any shortcuts a user has created to program items.
PrintHood	This folder contains any shortcuts a user has created to network printers. These shortcuts are displayed in the Printers dialog box.
Recent	This folder contains shortcuts to document files that the user has recently accessed. These shortcuts can be displayed by selecting Start ➢ Documents.
SendTo	This folder contains shortcuts to folders, briefcases, mail, and so on. These shortcuts are displayed when a user right-clicks any file or folder, and then selects Send To from the menu that appears.
Start Menu	This folder contains the Programs folder from a user's Start menu, and any additional shortcuts to programs that the user has created in the Start Menu folder or any of its subfolders. These shortcuts are displayed in the Start menu, or in the Programs folder in the Start menu, depending on where the shortcut was created.

TABLE 9-1 *(continued)*

FOLDER OR FILE	DESCRIPTION
Templates	This folder contains shortcuts to template items.
Ntuser.dat	This file contains all of the Registry settings that are specific to a user account. When a user logs on, the settings in this file are copied to the HKEY_CURRENT_USER Registry settings on the local computer.
ntuser.dat.LOG	This file is used by Windows NT to recover the user's original `ntuser.dat` file if an error occurs while updating the `ntuser.dat` file.

How a User Profile Is Created

A user profile is created in one of two ways: an Administrator can create a user profile for a new user by copying an existing user profile; or if no user profile exists when a user logs on, Windows NT creates a new user profile for the user. The next section explains how an Administrator can create a user profile by copying an existing user profile.

TO CREATE A USER PROFILE FOR A NEW USER (OR TO OVERWRITE AN EXISTING USER'S PROFILE) BY COPYING AN EXISTING USER PROFILE, FOLLOW THESE STEPS:

1. Select Start ➢ Settings ➢ Control Panel.

2. Double-click the System icon.

3. In the System Properties dialog box, click the User Profiles tab.

4. On the User Profiles tab, highlight the existing user profile that you want to copy. Figure 9-2 shows the User Profiles tab in the System Properties dialog box. Notice that the user profile for ColleenG is highlighted. Click the Copy To command button.

5. In the Copy To dialog box, type in the full path to the new user's profile folder. For example, to create a new user profile for FrankG, you might type the path `<winntroot>\Profiles\FrankG` in the Copy profile to text box. (Remember, `<winntroot>` is the drive letter and folder in which you installed Windows NT.) Figure 9-3 shows the Copy To dialog box. Notice the user listed in the Permitted to use section of this dialog box. Click the Change command button.
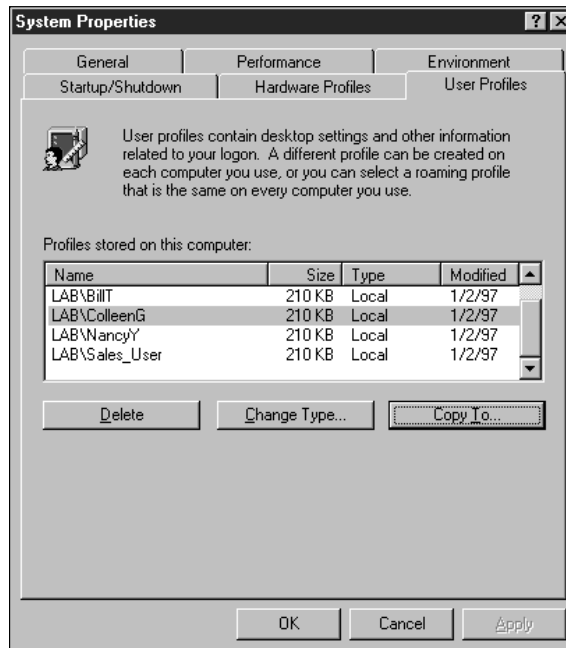
FIGURE 9-2 **Copying an existing user profile**
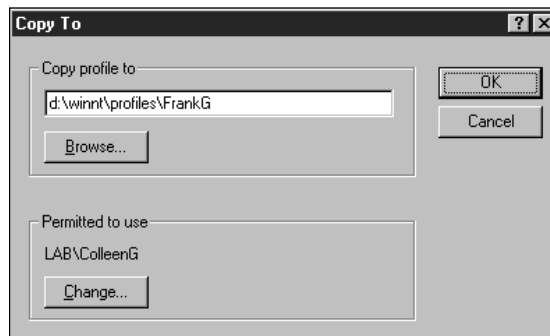
FIGURE 9-3 **Specifying the new user's profile path**

6. The Choose User dialog box appears. Click the Show Users command button. Scroll down and highlight the new user (FrankG in the previous example), and then click the Add command button. Click OK.

7. The Copy To dialog box reappears. Figure 9-4 shows the Copy To dialog box at this point in the process. Notice that FrankG is now permitted to use this profile. Click OK.

8. The User Profiles tab reappears. The newly created profile will not appear in the Profiles stored on this computer list box until the new user (FrankG) logs on for the first time. Click OK.

9. Exit Control Panel.

FIGURE 9-4 New user permitted to use copied profile
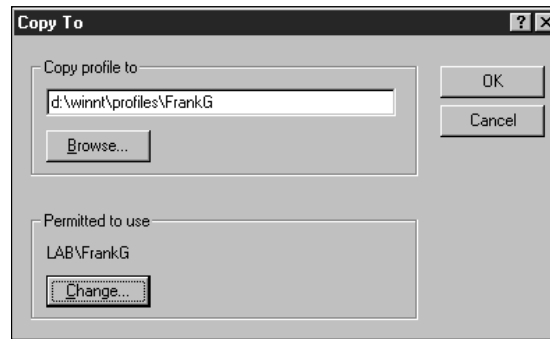
tip You can't use Windows NT Explorer to copy user profiles. You can only copy user profiles using the System application in Control Panel.

If no user profile exists when a user logs on, Windows NT creates a new user profile folder for the user by copying the entire contents of the Default User profile folder to a new folder named after the user's account. When Windows NT creates a new user's profile, the new user's initial profile is an exact copy of the Default User profile folder.

The Default User profile folder can also be customized by an Administrator, as described in the next section.

Customizing the Default User Profile Folder

Administrators can customize the Default User profile folder so new users, at first logon, have the appropriate desktop and work environment settings. For example, you might want to place a shortcut to a network application on the desktop of all new users. Or, you might want to add a shortcut that will appear in the Start menu for all new users.

You can customize the local Default User profile folder on a Windows NT computer, or you can create a domain-wide Default User profile folder for all Windows NT Workstation computers and member servers in a domain. Changes to the local Default User profile folder on a Windows NT computer affect only new users that log on to that computer. The domain-wide Default User profile folder affects all new domain users when they log on to Windows NT Workstation computers (that are domain members) and member servers.

To customize the local `Default User` profile folder on a Windows NT computer, an Administrator can either copy an existing user profile to the local `Default User` profile folder, or create shortcuts in the `Default User` profile subfolders.

**TO CREATE SHORTCUTS IN THE DEFAULT USER
PROFILE SUBFOLDERS, FOLLOW THESE STEPS:**

1. Select Start ➢ Programs ➢ Windows NT Explorer.

2. In the All Folders section of the Exploring dialog box, click the + sign next to the drive letter that you installed Windows NT on. (This is often the C: drive.) Then click the + sign next to the folder in which Windows NT is installed. (This folder is `\Winnt` by default, but you installed Windows NT Server in `\Winntsrv` and Windows NT Workstation in `\Winntwks` in the labs in this book.) Next click the + sign next to the `Profiles` folder, and then click the + sign next to `Default User`. Figure 9-5 shows the `Default User` profile folder in Windows NT Explorer.
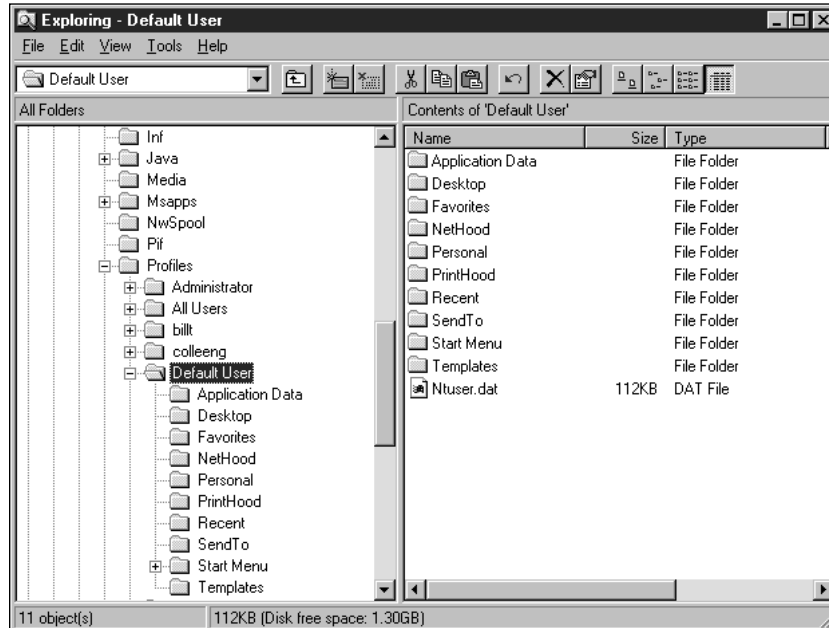

FIGURE 9-5   The `Default User` **profile folder**

3. Highlight the subfolder of the `Default User` profile folder that you want to create shortcuts in. Select File ➢ New ➢ Shortcut

4. In the Create Shortcut dialog box, type in the full path to the application in the Command line text box. Click the Next command button.

5. In the Select a Title for the Program dialog box, type the name of the shortcut the way you want it to appear on the new users' desktops. Click the Finish command button.

6. Repeat Steps 3–5 until you have created all the shortcuts you want in the `Default User` profile folder. Exit Windows NT Explorer.

To create a domain-wide `Default User` profile folder for all Windows NT Workstation computers and member servers in a domain, customize and copy an existing user profile to a subfolder named `Default User` in the `<winntroot>\System32\Repl\Import\Scripts` folder on the *primary domain controller* (PDC). (Remember, the `Import\Scripts` folder is shared as `Netlogon`.)

caution ▽ **If you have configured directory replication on your PDC, copy the existing user profile to the `<winntroot>\System32\Repl\Export\Scripts\Default User` folder on the PDC, *not* to the `<winntroot>\System32\Repl\Import\Scripts\Default User` folder. If you copy it to the `Import\Scripts` folder and directory replication is configured, the Directory Replicator service will delete any files or folders in the `Import\Scripts` folder that do not exist in the `Export\Scripts` folder.**

To copy an existing user profile, use the steps outlined in the section on "How a User Profile is Created" earlier in this chapter. When choosing the user that is permitted to use this copied profile in the Choose User dialog box, select the Everyone group, and ensure that the Everyone group is listed in the Permitted To Use section of the Copy To dialog box.

After a `Default User` profile folder is created on the `Netlogon` share on the PDC, the domain-wide `Default User` profile folder is available to all Windows NT computers that are members of the domain. When a Windows NT Workstation computer (that is a member of the domain) or a member server is rebooted, it copies the domain-wide `Default User` profile folder from the PDC to a subfolder named `Default User (Network)` in its local `Profiles` folder. This member computer now has two `Default User` profile folders: one named `Default User` and one named `Default User (Network)`.

note 📝 **The domain-wide** `Default User` **profile folder is** *not* **copied to the local** `Profiles` **folder on any domain controller in the domain. It is only copied to the local** `Profiles` **folder on non-domain controllers that are members of the domain.**

Figure 9-6 shows the `Profiles` folder and its subfolders on a Windows NT Workstation computer that is a member of the LAB domain. Notice the `Default User` and `Default User (Network)` folders.

FIGURE 9-6 Two `Default User` profile folders on a member computer

When a user logs on to a member computer that has two `Default User` profile folders by using a *local user account*, and that user does not have a profile folder on this local computer, Windows NT creates a new user profile for the user on the local computer by using the `Default User` profile folder.
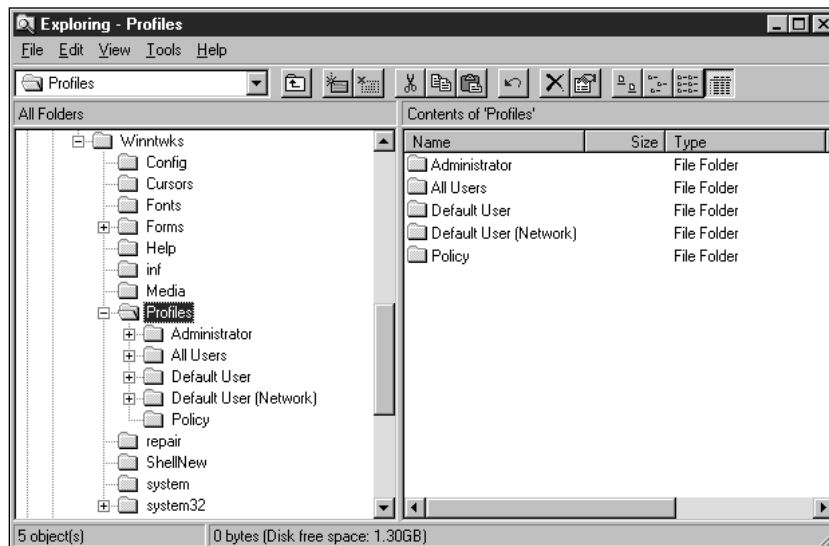
When a user logs on to a member computer that has two `Default User` profile folders by using a *user account from the domain*, and that user does not have a profile folder on this local computer, Windows NT creates a new user profile for the user on the local computer by using the `Default User (Network)` profile folder.

Customizing the All Users Profile Folder

The `All Users` profile folder is a subfolder of the `Profiles` folder on all Windows NT computers. The `All Users` profile folder contains only two subfolders: `Desktop` and `Start Menu`. Figure 9-7 shows the `All Users` profile folder and its subfolders in Windows NT Explorer.
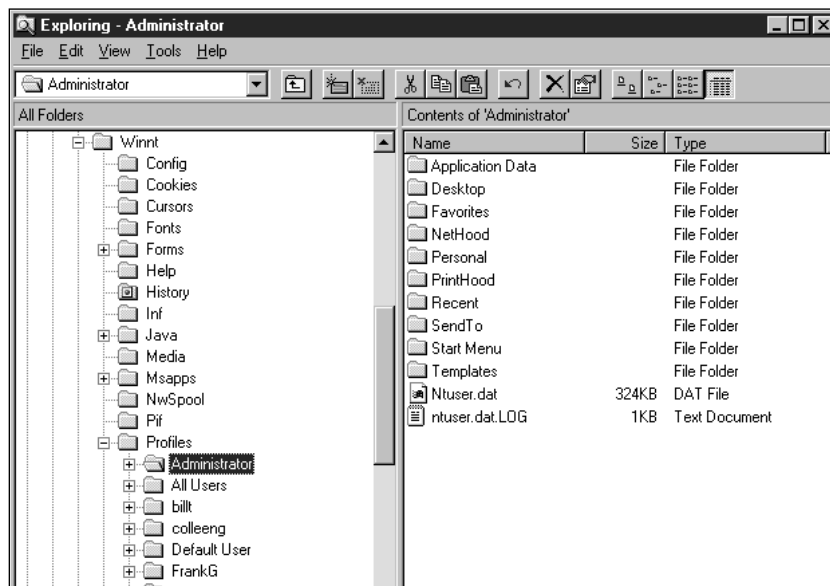
FIGURE 9-7   The `All Users` **profile folder**

The purpose of the `All Users` profile folder is to enable an administrator to create shortcuts and install applications that are made available to *all*—not just new—users of a particular Windows NT computer. Whenever a user logs on to a Windows NT computer, any shortcuts or applications placed in the `Desktop` and `Start Menu` subfolders of the local `All Users` profile folder appear on the user's desktop and/or `Start Menu`, as appropriate. Only members of the Administrators group on the local computer can customize the `All Users` profile folder.

Currently, there is no method to create a domain-wide `All Users` profile folder on a server. This means that an Administrator must customize the `All Users` profile folder on each individual Windows NT computer.

To customize the `All Users` profile folder, follow the same steps you would use to customize the `Default User` profile folder, except select the `All Users` profile folder in Windows NT Explorer instead of the `Default User` profile folder.

Roaming User Profiles

Roaming user profiles are user profiles that are stored on a server. Because these profiles are stored on a server instead of a local computer, they are available to users regardless of which Windows NT computer on the network they log on to.

The benefit of using roaming user profiles is that users retain their own customized desktop and work environment settings even though they may use several different Windows NT computers.

Roaming user profiles are implemented by first creating a shared folder on a server, and then assigning a server-based user profile path to a user account.

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TO IMPLEMENT ROAMING USER PROFILES, FOLLOW THESE STEPS:

1. Choose a server on your network on which to store roaming user profiles. (This is usually the PDC.)

2. Create a shared folder on the server. To do this, select Start ➣ Programs ➣ Windows NT Explorer.

3. In the All Folders section of the Exploring dialog box, highlight one of the drives on the server. (This drive must have enough free space to contain your roaming user profiles.) Select File ➣ New ➣ Folder.

4. Assign the new folder a name. (I recommend you use the name *Profiles*.) Right-click the newly created folder. Select Sharing from the menu that appears.

5. In the Profiles Properties dialog box, select the radio button next to Shared As. Accept the default share name of Profiles in the Share Name text box. Click OK.

6. Exit Windows NT Explorer.

7. Select Start ➣ Programs ➣ Administrative Tools (Common) ➣ User Manager (or User Manager for Domains).

8. In the User Manager dialog box, double-click the user account to which you want to assign a roaming profile.

9. In the User Properties dialog box for that user, click the Profile command button.

10. In the User Profile Path text box in the User Environment Profile dialog box, type in the path to the share that you created in Steps 4 and 5, and append the user name to the end of this path. (For example, on a server named PDCLAB you might use the path `\\pdclab\Profiles\BillT`. If you highlighted multiple users in Step 8, you could use the path `\\server_name\Profiles\%USERNAME%` to assign a unique profile path to each user account. Click OK.

11. In the User Properties dialog box, click OK.

12. Exit User Manager (or User Manager for Domains).

At this point, all you have done is assign a location for the user's roaming user profile. Now the user must log on and log off to create a roaming user profile folder on the server. (When the user logs off, the user's local user profile is saved to the server and becomes the user's roaming user profile.) The roaming user profile is then available to the user from any Windows NT computer to which the user logs on. From this point, every time the user logs off, the user's roaming user profile will be updated with any changes the user has made during the time the user was logged on.

Both new and existing users can be assigned roaming user profiles. If you assign an existing user a roaming user profile, the next time the user logs on and then logs off, the user's local user profile will be copied, intact, at logoff to the server, and will become the user's roaming user profile.

You can also preconfigure a new or existing user's roaming user profile, so that the next time the user logs on, the properties of the preconfigured server-based roaming user profile are applied to the user. The advantage of using preconfigured roaming user profiles is that the administrator can provide users with all the shortcuts and program items users need to perform their day-to-day tasks.

To preconfigure a user's roaming user profile, assign a server-based profile path to a user account, and then copy an existing user profile (that you have customized with all of the shortcuts and applications you want the user to have) to the user's roaming user profile path.

Mandatory User Profiles

Mandatory user profiles are user profiles that, when assigned to a user, cannot be changed by the user. A user can make changes to desktop and work environment settings during a single logon session, but these changes are *not* saved to the mandatory user profile when the user logs off. Each time the user logs on, the user's desktop and work environment settings revert to those contained in the mandatory user profile.

In most cases, an administrator permits users to change and customize their own user profiles. There are instances, however, when you might want to use mandatory user profiles:

- When problem users require a significant amount of administrator time
- When an administrator has a large number of users to administer

Occasionally, a problem user modifies his or her profile so that needed shortcuts and applications are deleted, and the administrator must constantly fix the user's profile by reinstalling the necessary items. After repairing the user's profile, the administrator might choose to assign the user a mandatory user profile. To make an individual user's profile (either local or roaming) a mandatory user profile, rename the user's `Ntuser.dat` file in the user's profile folder as `Ntuser.man`. The mandatory profile becomes effective the next time the user logs on.

Sometimes an administrator needs to create a standardized desktop and work environment for a large number of users with similar job tasks. To accomplish this, the administrator can assign a single, customized mandatory profile to multiple user accounts.

TO ASSIGN A MANDATORY USER PROFILE TO MULTIPLE USER ACCOUNTS, FOLLOW THESE STEPS:

1. Log on as Administrator. Use User Manager (or User Manager for Domains) to create a new user account. (You will use this user account to create the customized mandatory profile.) Log off.

2. Log on as the new user you created in Step 1. Customize desktop and work environment settings as desired. Install shortcuts and applications in the new user's `Start Menu` and `Desktop` folders as desired. (These are subfolders of the user's `Profile` folder.) Log off.

3. Log on as Administrator.

4. Choose a server on your network on which to store the mandatory user profile. (This is usually the PDC.) In the next steps, you create and share a `Profiles` folder on the server. (If you have already created and shared a `Profiles` folder on your server, skip to Step 10 now.)

5. Select Start ➢ Programs ➢ Windows NT Explorer.

6. In the All Folders section of the Exploring dialog box, highlight one of the drives on the server. (This drive must have enough free space to contain the mandatory user profile.) Select File ➢ New ➢ Folder.

7. Assign the new folder a name. (I recommend you use the name *Profiles*.) Right-click the newly created folder. Select Sharing from the menu that appears.

8. In the Profiles Properties dialog box, select the radio button next to Shared As. Accept the default share name of Profiles in the Share Name text box. Click OK.

9. Exit Windows NT Explorer.

10. Select Start ➢ Programs ➢ Administrative Tools (Common) ➢ User Manager (or User Manager for Domains).

11. In the User Manager dialog box, highlight the first user to whom you want to assign the mandatory user profile. Then press and hold Ctrl while you click each additional user to whom you want to assign the mandatory user profile. When you have selected all the users that you want, select User ➢ Properties.

12. In the User Properties dialog box, click the Profile command button.

13. In the User Profile Path text box in the User Environment Profile dialog box, type in the path to the share you created in Steps 7 and 8, and add a subfolder name to the end of this path that describes the group of users the mandatory user profile is being assigned to (such as accountants or sales reps, and so on). An example of a path you might use on a server named PDCLAB when assigning a mandatory profile to several accountants is `\\pdclab\Profiles\accountants`. Click OK.

14. In the User Properties dialog box, click OK.

15. Exit User Manager (or User Manager for Domains).

16. Using the steps to copy a user profile listed in the "How a User Profile is Created" section earlier in this chapter, copy the customized user profile you created in Steps 1 and 2 to the folder specified by the path that you entered in the User Environment Profile dialog box in Step 13. Ensure that the Everyone group is permitted to use the new profile.

17. Using Windows NT Explorer, highlight the folder specified by the path you entered in Step 13. Within this folder, rename the `Ntuser.dat` file as `Ntuser.man`. The mandatory profile is assigned, and becomes effective for each assigned user at each user's next logon.

tip **If you have a need for the capabilities of mandatory user profiles, consider using a system policy instead. The Windows NT system policy provides the administrator with much more control over users' environment settings than mandatory user profiles. System policy is covered later in this chapter.**

Deleting User Profiles

You should consider deleting user profiles for user accounts that have been deleted. Deleting a user profile removes the entire user profile folder for the specified user, and also removes any Windows NT Registry entries related to that user profile. Simply deleting the user profile folder by using Windows NT Explorer does *not* completely delete all settings related to the user profile.

TO DELETE A USER PROFILE, FOLLOW THESE STEPS:

1. Select Start ➢ Settings ➢ Control Panel.

2. Double-click the System icon in Control Panel.

3. Click the User Profiles tab in the System Properties dialog box.

4. On the User Profiles tab, highlight the user profile you want to delete. Click the Delete command button.

5. In the Confirm Delete dialog box, click the Yes command button.

6. On the User Profiles tab, click OK.

7. Exit Control Panel.

exam
preparation
pointer
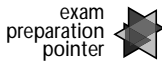
Profiles in Windows NT 4.0 have changed significantly from profiles in Windows NT 3.51. Additionally, NT 4.0 now has Windows 95-style system policy. All three exams have objectives covering user profiles. The Server and Enterprise exams also have objectives on system policy. You should become familiar with all of the nuances of user profiles and system policy, when each should be used, which settings take precedence when policies are combined with a user profile, and which settings take precedence when multiple policies apply.

Managing System Policy

The Windows NT *system policy* file is a collection of user, group, and computer policies. System policy restricts the user's ability to perform certain tasks on any Windows NT computer on the network to which the user logs on. System policy can also be used to enforce certain mandatory display settings, such as wallpaper and color scheme. You can also create a system policy file that applies to users of Windows 95 computers.

System policy, like a mandatory profile, enables an administrator to control the work environment of users on the network. System policy, however, gives the administrator far more configurable options than a mandatory profile. Administrators can use system policy to provide a consistent environment for a large number of users, or to enforce a specified work environment for problem users who demand a significant amount of administrator time.

In addition to enabling the administrator to limit the changes users can make to their work environments, system policy can be used as a security measure to limit access to parts of the network; to restrict the use of specific tools, such as the Registry Editor; and to remove the Run command option from the Start menu.

System policy is managed and configured by using the System Policy Editor. You can use System Policy Editor to create both Windows NT and Windows 95 system policy files. The administrator must create a system policy file — a system policy file is not installed by default.

After a system policy file is created, it should be saved in the `Netlogon` share on each domain controller. When a user logs on to the domain, Windows NT or Windows 95 retrieves the system policy file from the `Netlogon` share on the domain controller that authenticates the user's logon.

Because system policy is comprised of user, group, and computer policies, it can be applied to all users and computers; or it can be applied to individual users, groups, and computers.

User Policy

A *user policy* is a collection of settings that restrict a user's program and network options and/or enforce a specified configuration of the user's work environment. A user policy is created by an Administrator—it does not exist by default.

There are two types of user policies: an individual user policy and the Default User policy.

An *individual user policy* applies to a single, specific user. Normally, an individual user policy is created only when a user requires a unique policy that differs from any existing Default User or group policy.

The *Default User policy*, contrary to what its name implies, does not exist by default. Rather, it is created when a system policy file is initially created. When the Default User policy is initially created, it doesn't contain any settings that restrict users. The Administrator must configure any desired user restrictions in the Default User policy. The Default User policy applies to a user only if the user does not have an individual user policy.

There are a variety of settings that you can configure in a user policy. Figure 9-8 shows all of the configurable options for a Windows NT individual user policy. The same list of configurable options is available for the Default User policy. Notice the options available in the Desktop and Shell sections.

The actual process of configuring the check boxes in this list is covered in the "Creating a System Policy File" section later in this chapter.

When a user logs on, Windows NT (or Windows 95) permanently overwrites the existing settings in the HKEY_CURRENT_USER section of the Registry on the local computer with the settings contained in the user policy.
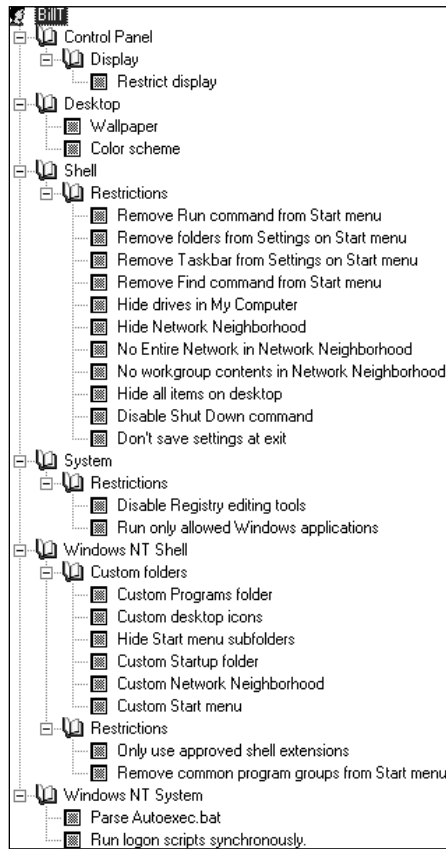
FIGURE 9-8 Configurable settings in a Windows NT individual user policy

Group Policy

A *group policy* is a policy that applies to a group of users. Group policies apply to all users that are members of a group (that has a group policy) and that do not have individual user policies. Group policies have the same configurable options as user policies. Like user policies, group policies don't exist by default — group policies must be created.

A group policy should be created when more than one user requires the same settings. It takes far less time to create one group policy than to create multiple individual user policies.

A user often belongs to multiple groups that have group policies. In this situation, the Administrator can configure group policy priorities. Figure 9-9 shows the Group Priority dialog box in System Policy Editor. Notice the Move Up and Move

Down command buttons that are used to arrange the group priority order. The group at the top of the Group Order list box has the highest priority.
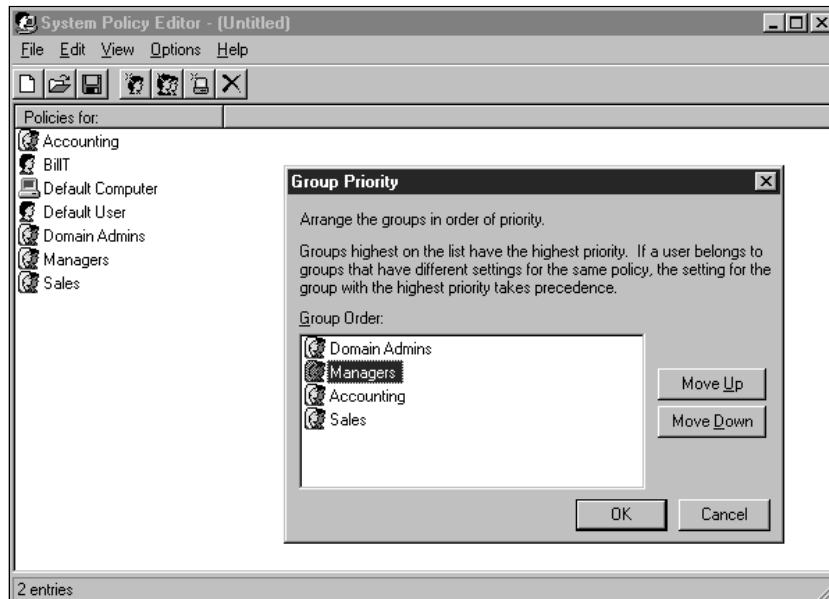

FIGURE 9-9   Configuring group priority

Assume that a user named JohnS, a Sales Manager with administrative duties, belongs to three of the groups listed in Figure 9-9: Domain Admins, Managers, and Sales. Also assume that JohnS does *not* have an individual user policy. When JohnS logs on to the domain, the group policy for the Sales group (which has the lowest group priority) is applied first, and then the group policy for the Managers group is applied, and finally the group policy for the Domain Admins group (which has the highest group priority) is applied to JohnS. As each group policy is applied, it overwrites the settings from previously applied group policies. The last group policy applied (the Domain Admins group policy, in this case) takes precedence over the lower priority group policies.

Computer Policy

A *computer policy* is a collection of settings that specifies a local computer's configuration. A computer policy enforces the specified configuration on all users of a

particular Windows NT (or Windows 95) computer. A computer policy is created by an Administrator — it does not exist by default.

There are two types of computer policies: an individual computer policy and the Default Computer policy.

An *individual computer policy* applies to a single, specific computer. Normally, an individual computer policy is created only when a computer requires a unique policy that differs from the Default Computer policy.

The *Default Computer policy*, like the Default User policy, is created when a system policy file is initially created. The Default Computer policy applies to a computer only if the computer does *not* have an individual computer policy.

There are a variety of settings that you can configure in a computer policy. Figure 9-10 shows the configurable options for a Windows NT individual computer policy. The same list of configurable options is available for the Default Computer policy. Notice the options available in the Windows NT System Logon and File system sections.

The actual process of configuring the check boxes in this list is covered in the "Creating a System Policy File" section in this chapter.

When a user logs on, Windows NT (or Windows 95) permanently overwrites the existing settings in the HKEY_LOCAL_MACHINE section of the Registry on the local computer with the settings contained in the computer policy.

How System Policy Is Applied

A Windows NT system policy is applied to a user or computer in a predefined, systematic manner. When a user logs on, the user's roaming or local profile is applied first, and then the system policy is applied. If settings in the system policy conflict with settings in the user profile, the system policy settings take precedence. System policy is applied in the following sequence:

- If a user has an individual user policy, it is applied.

- If a user does *not* have an individual user policy, and the user is a member of a group that has a group policy, then the group policy (or policies, if the user is a member of multiple groups that have group policies) is applied.

- If a user does *not* have an individual user policy, then the Default User policy is applied. (If a user that does not have an individual user policy has a group policy that conflicts with the Default User policy, then the settings in the Default User policy take precedence.)
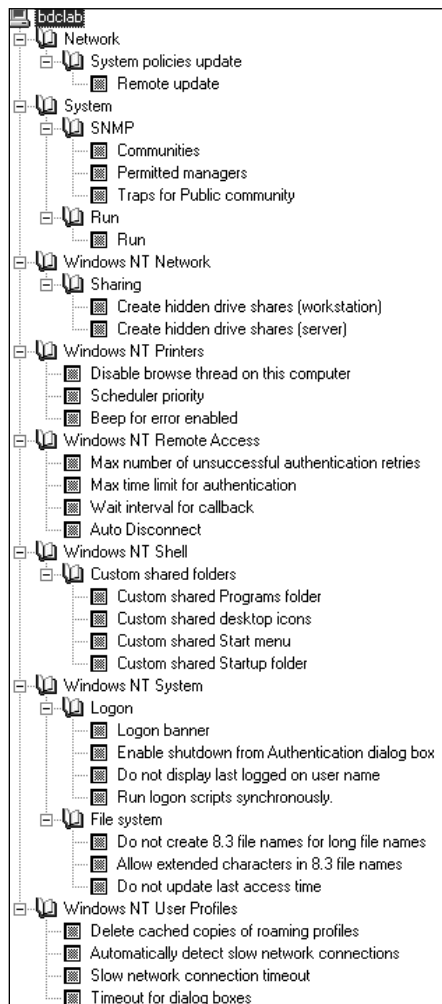
FIGURE 9-10 Configurable settings in a Windows NT individual computer policy

- If the computer the user logs on to has an individual computer policy, it is applied.

- If the computer the user logs on to does *not* have an individual computer policy, then the Default Computer policy is applied.

The end result is that a user has one of the following user/group policy combinations applied: an individual user policy only, a Default User policy only, or a combination of the Default User policy and a group policy (or policies, if the user is a member of multiple groups that have group policies). In addition, the

computer to which the user logs on has either an individual computer policy or the Default Computer policy applied.

Creating a System Policy File

A *system policy file* is created by using the System Policy Editor. After a system policy file is created, it is normally saved in the `Netlogon` share on each domain controller. Only an Administrator can create and save a system policy file to the `NetLogon` share on a domain controller.

caution ▽   **If you have configured directory replication on your domain, copy the system policy file to the** `<winntroot>\System32\Repl\Export\ Scripts\` **folder on the PDC,** *not* **to the** `<winntroot>\System32\ Repl\Import\Scripts\` **folder that is shared as** `Netlogon`. **If you copy it to the** `Import\Scripts` **folder and directory replication is configured, the Directory Replicator service will delete any files or folders in the** `Import\Scripts` **folder that do not exist in the** `Export\Scripts` **folder.**

The steps for creating a Windows NT system policy file and a Windows 95 system policy file are similar, but have a few important differences.

Windows NT system policy
The following section explains, in detail, how to create and configure a Windows NT system policy file.

<hr>

TO CREATE, CONFIGURE, AND SAVE A WINDOWS NT SYSTEM POLICY FILE, FOLLOW THESE STEPS:

1. Select Start ➤ Programs ➤ Administrative Tools (Common) ➤ System Policy Editor.

2. In the System Policy Editor dialog box, select Options ➤ Policy Template.

3. In the Policy Template Options dialog box, ensure that both the `COMMON.ADM` and `winnt.adm` files are listed. If one of these files is missing, click the Add command button. In the Open Template File dialog box, type **%SystemRoot%\inf***filename* (either `COMMON.ADM` or `winnt.adm`) in the File name text box. Click the Open command button. The Policy Template Options dialog box reappears. (If any files other than

COMMON.ADM and `winnt.adm` are listed in the Policy Template Options dialog box, highlight the extra file(s), and click the Remove command button.) Click OK.

4. In the System Policy Editor dialog box, select File≻New Policy.

5. Two icons are displayed in the System Policy Editor dialog box: Default Computer and Default User. Figure 9-11 shows the System Policy Editor dialog box.
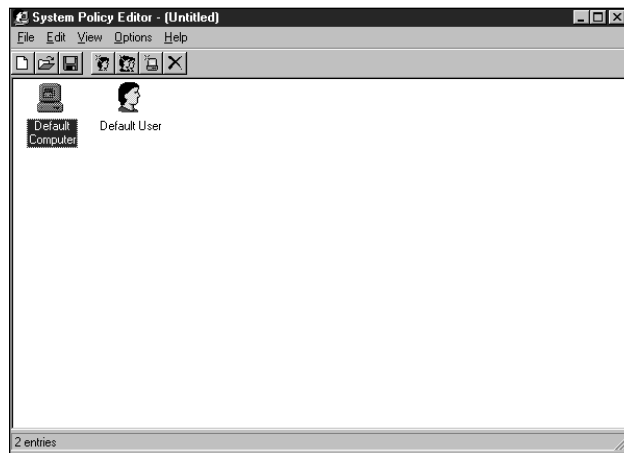
FIGURE 9-11   **Creating a Windows NT system policy file**

6. Customize the Default Computer and Default User policies as desired. To customize a policy, double-click the policy icon in the System Policy Editor dialog box. On the Policies tab, click the + sign next to the option that you want to configure. Then configure the check boxes that appear. Each check box has three possible configurations:

- Grayed out—causes the current setting for this option on the local computer to be retained.

- Checked—causes this option to be applied on the local computer.

- Cleared (white)—causes the *opposite* of this option to be applied on the local computer.

Figure 9-12 shows the Policies tab in the Default Computer Properties dialog box. Notice the three check boxes listed under Windows NT Printers. In Figure 9-12, the gray check box next to "Disable browse thread on this computer" causes the current setting for this option on the local computer to be retained. The check in the box next to "Scheduler priority" causes the priority listed in the Settings For Scheduler priority list box to be applied on the local computer. The clear (white) check box next to "Beep for error enabled" causes the "Beep for error" setting to be *disabled* on the local computer. After configuring all check boxes appropriately, click OK.
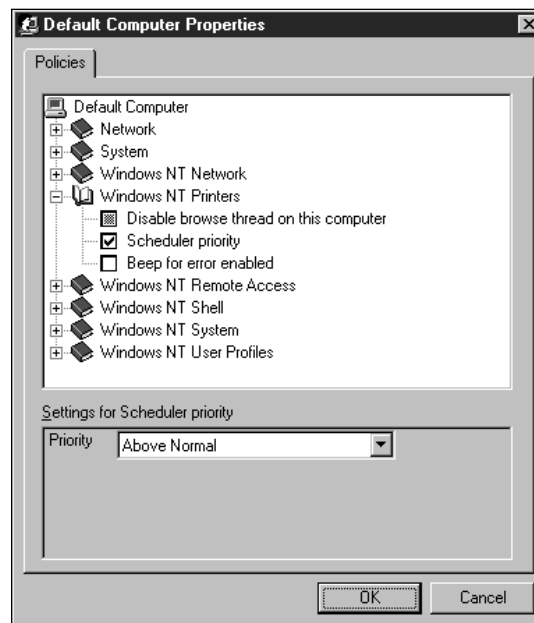
FIGURE 9-12 **Configuring check boxes for the Default Computer policy**

7. Create and customize individual user and group policies, and create individual computer policies as desired:

   o To create an individual user policy, select Edit ➢ Add User in the System Policy Editor dialog box. In the Add User dialog box, type the name of the user you want to create an individual user policy for. Click OK.

   o To create a group policy, select Edit ➢ Add Group in the System Policy Editor dialog box. In the Add Group dialog box, type the name of the group you want to create a group policy for. Click OK.

   o To create an individual computer policy, select Edit ➢ Add Computer in the System Policy Editor dialog box. In the Add Computer dialog box, type the

name of the computer you want to create an individual computer policy for. Click OK.

To customize your new policies, follow the directions in Step 6.

8. After you create and customize all of the user, group, and computer policies, save the system policy file. Select File ➢ Save As in the System Policy Editor dialog box. Save the file to the `Netlogon` share on all domain controllers as `Ntconfig.pol`. (However, if directory replication is configured on your domain, save the `Ntconfig.pol` file to the `<winntroot>\system32\repl\export\scripts` folder on the PDC instead.)

9. Exit System Policy Editor.

Windows 95 system policy

To create, configure, and save a Windows 95 system policy file, follow the steps in the previous section on "Windows NT system policy," with the following exceptions:

o In Step 3, substitute the `windows.adm` file for all references to the `winnt.adm` file. In other words, ensure that the `COMMON.ADM` and `windows.adm` file are the only files listed in the Policy Template Options dialog box.

o In Step 8, substitute the `Config.pol` file for all references to the `Ntconfig.pol` file. In other words, save the customized system policy file to the `Netlogon` share on the PDC as `Config.pol`.

Windows 95 system policy can also be configured for load balancing. By default, Windows 95 computers take system policy only from the `Netlogon` share on the PDC. This can place a significant load on the PDC if your network has a large number of Windows 95 computers. To enable Windows 95 computers to take system policy from the domain controller that authenticates the user, configure load balancing for all computer policies (both individual computer policies and the Default Computer policy) in the Windows 95 system policy file.

Figure 9-13 shows load balancing configured for the Windows 95 Default Computer policy. Notice that the check box next to Remote update is checked, and that the check box next to Load balancing (in the Settings For Remote update section) is selected.
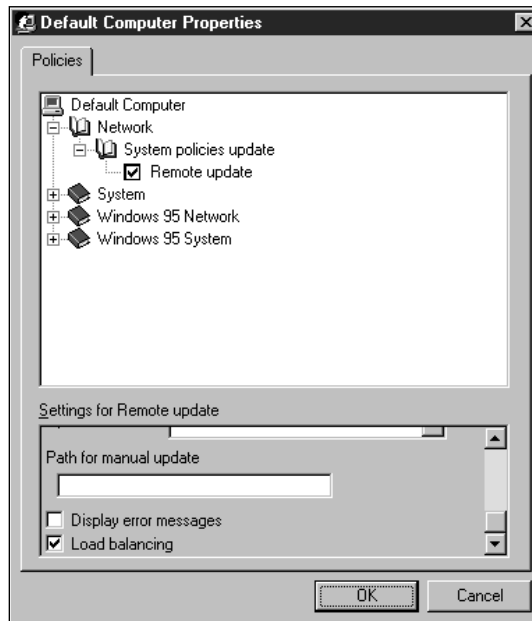
FIGURE 9-13 Configuring load balancing for Windows 95 system policy

Logon Scripts

A *logon script* is a batch file or executable file that runs during the user's logon process. An administrator can configure logon scripts to connect network drives and printers, or to run a program during logon. Many Windows NT networks don't use logon scripts at all. However, some Microsoft BackOffice products, such as Systems Management Server, use logon scripts extensively.

You can create a logon script by using any text editor, such as Notepad. All MS-DOS 5.0 (and earlier) batch commands can be used in logon scripts. Logon scripts should be saved in the `Netlogon` share on all domain controllers. (Remember, if directory replication is configured on your domain, save the logon script to the `<winntroot>\system32\repl\export\scripts` folder on the PDC instead of the `Netlogon` share on all domain controllers.)

Administrators can assign a unique logon script to each user, or one logon script to multiple users.

TO ASSIGN A LOGON SCRIPT TO A USER, FOLLOW THESE STEPS:

1. Select Start ≻ Programs ≻ Administrative Tools (Common) ≻ User Manager (or User Manager for Domains).
2. In the User Manager dialog box, highlight the user(s) you want to assign the logon script to. Select User ≻ Properties.
3. In the User Properties dialog box, click the Profile command button.
4. In the User Environment Profile dialog box, type the name of the logon script file (*not* the full path) in the Logon Script Name text box. Click OK.
5. In the User Properties dialog box, click OK.
6. Exit User Manager (or User Manager for Domains).

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concept link

For more information on logon scripts, see Logon Scripts and associated topics in the Windows NT Books Online program. Windows NT Books Online is a series of help files that ship with Windows NT Server. To access Books Online on a Windows NT Server computer, select Start ≻ Programs ≻ Books Online.

Key Point Summary

Chapter 9 explored the various types of *user profiles*, and explained the steps involved in creating, customizing, and deleting user profiles. This chapter also covered *Windows NT system policy*, and how system policy is applied and created.

- A *user profile* is a collection of settings and options that specify a user's desktop and all other user-definable settings for a user's work environment. In an environment where user profiles are implemented, when a user logs on, the same desktop is displayed as when the user last logged off, even when more than one user uses the same computer.
  - The contents of a user profile include user-specific settings for: Windows NT Explorer, Notepad, Paint, Calculator, and other built-in NT applications; various display settings; applications written to run on Windows NT; network

drive and printer connections; and the Start menu. A user profile is normally stored in a subfolder of the `<winntroot>\Profiles` folder. Each user's profile is stored in a separate folder named after the user's account name.

○ Each user profile folder contains various subfolders and files. Subfolders include: `Application Data`, `Desktop`, `Favorites`, `NetHood`, `Personal`, `PrintHood`, `Recent`, `SendTo`, `Start Menu`, and `Templates`. Files contained in a user profile folder include `Ntuser.dat` and `Ntuser.dat.LOG`.

○ A user profile is created in one of two ways: an Administrator can create a user profile for a new user by using the System application in Control Panel to copy an existing user profile; or if no user profile exists when a user logs on, Windows NT creates a new user profile for the user. *Remember, user profiles are copied by using the System application in Control Panel. You can't use Windows NT Explorer to copy user profiles.*

○ Administrators can customize the `Default User` profile folder so that new users, at first logon, have the appropriate desktop and work environment settings. You can customize the *local* `Default User` profile folder on a Windows NT computer to affect only new users that log on to that computer; or, you can create a *domain-wide* `Default User` profile folder on the `Netlogon` share on the PDC to affect all new domain users when they log on to a member computer.

○ Administrators can customize the `All User` profile folder so that specific shortcuts and applications are made available to *all* users of a particular Windows NT computer. Currently, there is no method available to create a domain-wide `All Users` profile folder on a server.

○ *Roaming user profiles* are user profiles that are stored on a server, and are available to users regardless to which Windows NT computer on the network they log on. Roaming profiles, which can be assigned to new or existing users, make it possible for users to retain their own customized desktop and work environment settings even though they may use different Windows NT computers. Roaming user profiles are implemented by first creating a shared folder on a server, and then assigning a server-based user profile path to a user account. At this point in the process, a location is assigned for the user's roaming user profile, but the roaming user profile is not actually created until the next time the user logs on and logs off. When

the user logs off, the user's local profile is saved to the server and becomes the user's roaming profile. From this point on, every time the user logs off, the user's roaming user profile is updated with any changes the user has made during the logon session.

- *Mandatory user profiles*, when assigned to a user, cannot be changed by the user. Although normally administrators permit users to change and customize their own user profiles, administrators may decide to use mandatory user profiles when problem users require a significant amount of administrator time, or when there are a large number of users with similar job tasks to administer. To make an individual user's profile (either local or roaming) a mandatory user profile, rename the user's `Ntuser.dat` file in the user's profile folder as `Ntuser.man`. The mandatory profile becomes effective the next time the user logs on.

- You should consider deleting user profiles for user accounts that have been deleted. Use the System application in Control Panel to delete user profiles, because Windows NT Explorer does not completely delete all settings related to a user profile.

- The *Windows NT system policy file* is an Administrator-created collection of user, group, and computer policies that restrict the user's ability to perform certain tasks on any Windows NT computer to which the user logs on. System policy can also be used to enforce certain mandatory display settings. You can also create a system policy file that applies to users of Windows 95 computers. System policy is created and configured by using System Policy Editor. After a system policy file is created, it should normally be saved in the `Netlogon` share on each domain controller.

  - A *user policy* restricts a user's program and network options and/or enforces a specified configuration of the user's work environment. There are two types of user policies: *an individual user policy and the Default User policy*. There are a variety of settings that can be configured in a user policy. When a user logs on, the existing settings in the HKEY_CURRENT_ USER section of the Registry on the local computer are permanently overwritten with the settings contained in the user policy.

  - *Group policies* apply to all users that are members of a group (that has a group policy) and that do *not* have individual user policies. If a user belongs to multiple groups that have group policies, an Administrator can

configure group policy priorities. When multiple group policies are applied, the group policy of the group that has the *lowest* priority is assigned first. As each next-highest priority group policy is applied, it overwrites settings from previously applied group policies. The last group policy applied takes precedence over the lower priority group policies.

- There are two types of computer policies: *individual computer policies and the Default Computer policy*. An individual computer policy applies to a single, specific computer. The Default Computer policy applies to a computer only if the computer does *not* have an individual computer policy. When a user logs on, the existing settings in the HKEY_LOCAL_MACHINE section of the Registry on the local computer are overwritten by the settings contained in the computer policy.

- When a user logs on, the user's profile is first applied, and then the system policy is applied. If settings in the system policy conflict with settings in the user profile, the system policy settings take precedence. *System policy is applied in the following sequence*:

  - If a user has an individual user policy, it is applied.

  - If a user does *not* have an individual user policy, and the user is a member of a group that has a group policy, then the group policy (or policies, if the user is a member of multiple groups that have group policies) is applied.

  - If a user does *not* have an individual user policy, then the Default User policy is applied. (If a user that does not have an individual user policy has a group policy that conflicts with the Default User policy, then the Default User policy takes precedence.)

  - If the computer the user logs on to has an individual computer policy, it is applied.

  - If the computer the user logs on to does *not* have an individual computer policy, then the Default Computer policy is applied.

- A *logon script* is a batch file or executable file that runs during the user's logon process. Logon scripts can be created with any text editor, such as Notepad. Logon scripts are normally saved in the `Netlogon` share on all domain controllers. Administrators can assign a unique logon script to each user, or one logon script to multiple users. Many Windows NT networks don't use logon scripts at all.

Applying What You've Learned

Now it's time to regroup, review, and apply what you've learned in this chapter.

The questions in the Instant Assessment section that follows bring to mind key facts and concepts.

The hands-on lab exercises will reinforce what you've learned, and give you a chance to practice some of the tasks tested by the Microsoft Certified Professional exams.

Instant Assessment

1. What is a user profile?
2. Where is a user profile normally stored?
3. What are the subfolders and files contained in a user profile folder?
4. What Windows NT application should you use to copy a user profile?
5. What Windows NT program *can't* you use to copy user profiles?
6. You want all new users, at first logon to a domain member computer, to have the appropriate desktop and work environment settings. What should you do to accomplish this?
7. What is a roaming user profile?
8. What is a logon script?
9. What is a mandatory user profile?
10. Name two situations where the use of mandatory user profiles might be considered.
11. Which file in a user's profile folder must be renamed in order to make the user profile into a mandatory user profile? What must the file be renamed as?
12. What Windows NT application should you use to delete a user profile?
13. What is the Windows NT system policy file?
14. What Windows NT tool is used to create and configure system policy?
15. Where is a system policy file normally saved after it is created?
16. What are the two types of user policies?
17. When multiple group policies are applied, which group policy takes precedence?

18. A user named SusanH has an individual user policy. She is also a member of a group that has a group policy. Which policy is applied to SusanH when she logs on?

19. What are the two types of computer policies?

20. When a user logs on to a Windows NT computer that does *not* have an individual computer policy, what kind of computer policy is applied?

T/F

21. Roaming user profiles can only be assigned to new users.   _____

concept link   **For answers to the Instant Assessment questions see Appendix D.**

Hands-on Lab Exercises

The following hands-on lab exercises provide you with practical opportunities to apply the knowledge you've gained in this chapter about managing user profiles and Windows NT system policy.

Lab 9.13   *Implementing user profiles*

The purpose of this lab is to give you hands-on experience in creating and copying user profiles, and experience in configuring roaming and mandatory user profiles.

MCSE

This lab consists of five parts:

Workstation
Server
Enterprise

Part 1: Creating and sharing a profile's folder
Part 2: Configuring a user profile
Part 3: Copying a user profile
Part 4: Configuring server-based profiles
Part 5: Testing profiles

Begin this lab by booting your computer to Windows NT Server. Log on as Administrator.

Follow the steps below carefully.

Part 1: Creating and sharing a profile's folder

In this section, you create a shared folder on the PDC that contains users' profiles.

1. Select Start ➢ Programs ➢ Windows NT Explorer.

2. In the All Folders section of the Exploring dialog box, highlight the NTFS volume on your computer — this is most likely drive D:. Select File ➢ New ➢ Folder.

3. In the Contents of the NTFS Volume section, type the new folder name: **Profiles**.

4. Right-click the newly created `Profiles` folder. Select Sharing from the menu that appears.

5. In the Profiles Properties dialog box, select the radio button next to Shared As. Accept the default Share Name of Profiles. Click OK.

6. Notice that a hand appears under the `Profiles` folder in the Exploring dialog box, indicating that it is a shared folder. Exit Windows NT Explorer. Continue to Part 2.

Part 2: Configuring a user profile

In this section, you configure a profile that will be used by all sales representatives.

1. Select Start ➢ Programs ➢ Administrative Tools (Common) ➢ User Manager for Domains.

2. In the User Manager dialog box, double-click Sales_User in the Username list box. (You will use this user account to create the profile that you will copy to the user account of each sales representative.)

3. In the User Properties dialog box, clear the check boxes next to User Must Change Password at Next Logon and Account Disabled. Select the check box next to Password Never Expires. Click OK.

4. Exit User Manager for Domains.

5. Select Start ➢ Shut Down.

6. In the Shut Down Windows dialog box, select the radio button next to "Close all programs and log on as a different user." Click the Yes command button.

7. Press Ctrl + Alt + Delete to log on.

8. In the Logon Information dialog box, type in a user name of **Sales_User** and a password of **newuser**. Click OK.

9. If the Welcome to Windows NT dialog box appears, click the Close command button.

10. Right-click the desktop. Select Properties from the menu that appears.

11. In the Display Properties dialog box, click the Appearance tab.

12. In the Scheme drop-down list box, select the Red, White, and Blue (VGA) scheme. Click the Background tab.

13. In the Pattern drop-down list box, select the Scottie pattern. Click OK.

14. Right-click the desktop. Select New ≻ Shortcut from the menus that appear.

15. In the Create Shortcut dialog box, type **calc.exe** in the Command line text box. Click the Next command button.

16. In the "Select a name for the shortcut" text box, type **Calculator**. Click the Finish command button.

17. Right-click the desktop. Select New ≻ Shortcut from the menus that appear.

18. In the Create Shortcut dialog box, type **notepad.exe** in the Command line text box. Click the Next command button.

19. In the "Select a name for the shortcut" text box, type **Notepad**. Click the Finish command button.

20. Right-click the desktop. Select Arrange Icons ≻ Auto Arrange from the menus that appear. Notice that the new shortcuts are neatly arranged on your desktop.

21. Select Start ≻ Shut Down.

22. In the Shut Down Windows dialog box, select the radio button next to "Close all programs and log on as a different user." Click the Yes command button.

23. Press Ctrl + Alt + Delete to log on.

24. In the Logon Information dialog box, type in a user name of **Administrator** and a password of **password**. Click OK. Continue to Part 3.

Part 3: Copying a user profile

In this section, you copy the user profile you created in Part 2 to a profile folder for each sales representative. You also configure one of the sales representative's user profiles as a mandatory user profile.

1. Select Start ≻ Settings ≻ Control Panel.

2. In the Control Panel dialog box, double-click the System icon.

3. In the System Properties dialog box, click the User Profiles tab.

4. Scroll down the Profiles stored on this computer list box. Select the LAB\Sales_User profile. Click the Copy To command button.

5. In the Copy profile to text box, type **\\pdclab\profiles\BillT**. (Don't type the period at the end.) Click the Change command button.

6. In the Choose User dialog box, click the Show Users command button. Scroll down the Names list box and select BillT. Click the Add command button. Click OK.

7. In the Copy To dialog box, click OK.

8. The System Properties dialog box reappears, with LAB\Sales_User highlighted. Click the Copy To command button.

9. In the Copy profile to text box, type **\\pdclab\profiles\MikeC**. (Don't type the period at the end.) Click the Change command button.

10. In the Choose User dialog box, click the Show Users command button. Scroll down the Names list box and select MikeC. Click the Add command button. Click OK.

11. In the Copy To dialog box, click OK.

12. The System Properties dialog box reappears, with LAB\Sales_User highlighted. Click the Copy To command button.

13. In the Copy profile to text box, type **\\pdclab\profiles\ColleenG**. (Don't type the period at the end.) Click the Change command button.

14. In the Choose User dialog box, click the Show Users command button. Scroll down the Names list box and select ColleenG. Click the Add command button. Click OK.

15. In the Copy To dialog box, click OK.

16. In the System Properties dialog box, click OK.

17. Exit Control Panel.

18. Select Start ➢ Programs ➢ Windows NT Explorer.

19. In the All Folders section of the Exploring dialog box, click the + sign next to the NTFS volume (probably drive D:). Click the + sign next to the `Profiles` folder. Highlight the `BillT` folder. In the Contents of BillT section of the dialog box, highlight the `Ntuser.dat` file. Select File ➢ Rename. Rename the `Ntuser.dat` file as **Ntuser.man**. Press Enter. (Renaming BillT's `Ntuser.dat` file as `Ntuser.man` causes BillT's profile to be a mandatory user profile.)

20. Exit Windows NT Explorer. Continue to Part 4.

Part 4: Configuring server-based profiles

In this section, you configure the user accounts of the sales representatives to use the server-based profiles you created for them in Parts 2 and 3. Additionally, you configure the user accounts of the accounting staff to use roaming user profiles.

1. Select Start ➢ Programs ➢ Administrative Tools (Common) ➢ User Manager for Domains.

2. In the User Manager dialog box, highlight BillT, and then press and hold Ctrl while you click ColleenG and MikeC in the Username list box. Select User ➢ Properties.

3. In the User Properties dialog box, click the Profile command button.

4. In the User Environment Profile dialog box, type **\\pdclab\profiles\ %USERNAME%** in the User Profile Path text box. Click OK. (This step assigns a copied profile to each selected user account.)

5. In the User Properties dialog box, click OK.

6. In the User Manager dialog box, double-click Sales_User in the Username list box.

7. In the User Properties dialog box, select the check box next to Account Disabled. (Remember that in Part 2 you deselected this check box so that you could use the account to create a profile. Now you want to disable the account again so that no one can use it to log on.) Click OK.

8. In the User Manager dialog box, highlight MikeCo, and then press and hold Ctrl while you click NancyY. Select User ≻ Properties.

9. In the User Properties dialog box, click the Profile command button.

10. In the User Environment Profile dialog box, type **\\pdclab\profiles\ %USERNAME%** in the User Profile Path text box. Click OK. (This step assigns a roaming user profile to MikeCo and NancyY.)

11. In the User Properties dialog box, click the Hours command button.

12. In the Logon Hours dialog box, highlight the entire chart, so that all hours are selected. Click the Allow command button. (You are changing the hours now in case you're doing this lab during nonbusiness hours. This change permits you to log on as MikeCo or NancyY anytime.) Click OK.

13. In the User Properties dialog box, click OK.

14. In the User Manager dialog box, select Policies ≻ User Rights.

15. In the User Rights Policy dialog box, select "Shut down the system" from the Right drop-down list box. Click the Add command button.

16. In the Names list box (in the Add Users and Groups dialog box), double-click the Everyone group. Click OK.

17. In the User Rights Policy dialog box, click OK.

18. Exit User Manager for Domains. Continue to Part 5.

Part 5: Testing profiles

In this section, you try out the sales representatives' profiles, including the mandatory user profile. Additionally, you try out the roaming user profiles for one of the accounting staff.

1. Select Start ≻ Shut Down.

2. In the Shut Down Windows dialog box, select the radio button next to "Close all programs and log on as a different user." Click the Yes command button.

3. Press Ctrl + Alt + Delete to log on.

4. In the Logon Information dialog box, type in a user name of **ColleenG** and a password of **newuser**. Click OK.

5. A message appears indicating that you are required to change your password at first logon. Click OK.

6. In the Change Password dialog box, type in a new password of **password**, and confirm the new password by retyping it. Click OK.

7. A message is displayed, indicating that your password has been changed. Click OK.

8. If a Welcome to Windows NT screen appears, deselect the check box next to Show this Welcome Screen next time you start Windows NT, and then click the Close command button.

9. Notice that the background pattern (Scottie dogs) and color scheme (Red, white, and blue) that you configured for the Sales_User profile and copied to ColleenG's profile appear on the desktop. Right-click the desktop. Select Properties from the menu that appears.

10. In the Display Properties dialog box, select (None) from the Pattern drop-down list box. Select a Wallpaper of lanmannt. Click the Appearance tab.

11. In the Scheme drop-down list box, select Rose. Click OK.

12. Select Start ➢ Shut Down.

13. In the Shut Down Windows dialog box, select the radio button next to "Close all programs and log on as a different user." Click the Yes command button.

14. Press Ctrl + Alt + Delete to log on.

15. In the Logon Information dialog box, type in a user name of **ColleenG** and a password of **password**. Click OK.

16. Notice that the changes you made to ColleenG's desktop (the rose scheme and the lanmannt wallpaper) appear on the desktop. These settings have been successfully saved to ColleenG's user profile, because her profile is not a mandatory user profile.

17. Select Start ➢ Shut Down.

18. In the Shut Down Windows dialog box, select the radio button next to "Close all programs and log on as a different user." Click the Yes command button.

19. Press Ctrl + Alt + Delete to log on.

20. In the Logon Information dialog box, type in a user name of **BillT** and a password of **newuser**. Click OK.

21. A message appears indicating that you are required to change your password at first logon. Click OK.

22. In the Change Password dialog box, type in a new password of **password**, and confirm the new password by retyping it. Click OK.

23. A message is displayed, indicating that your password has been changed. Click OK.

24. If a Welcome to Windows NT screen appears, deselect the check box next to Show this Welcome Screen next time you start Windows NT. Click the Close command button.

25. Notice that the background pattern (Scottie dogs) and color scheme (Red, white, and blue) that you configured for the Sales_User profile and copied to BillT's profile appear on the desktop. Right-click the desktop. Select Properties from the menu that appears.

26. In the Display Properties dialog box, select Critters from the Pattern drop-down list box. Click the Appearance tab.

27. In the Scheme drop-down list box, select Pumpkin (large). Click OK.

28. Select Start ➢ Shut Down.

29. In the Shut Down Windows dialog box, select the radio button next to "Close all programs and log on as a different user." Click the Yes command button.

30. Press Ctrl + Alt + Delete to log on.

31. In the Logon Information dialog box, type in a user name of **BillT** and a password of **password**. Click OK.

32. If a Welcome to Windows NT screen appears, deselect the check box next to "Show this Welcome Screen next time you start Windows NT." Click the Close command button.

33. Notice that the desktop changes that you made for BillT's desktop in Steps 26 and 27 were *not* saved to BillT's profile. (This is because in an earlier part of this lab you configured BillT to have a mandatory user profile.) Select Start ➢ Shut Down.

34. In the Shut Down Windows dialog box, select the radio button next to "Close all programs and log on as a different user." Click the Yes command button.

35. Press Ctrl + Alt + Delete to log on.

36. In the Logon Information dialog box, type in a user name of **NancyY** and a password of **newuser**. Click OK.

37. A Logon Message is displayed, indicating that you are required to change your password at first logon. Click OK.

38. In the Change Password dialog box, type in a new password of **password**, and confirm the new password by retyping it. Click OK.

39. A message indicating that your password has been changed appears. Click OK.

40. If a Welcome to Windows NT screen appears, click the Close command button.

41. Right-click the desktop. Select New ➢ Shortcut from the menus that appear.

42. In the Create Shortcut dialog box, type **calc.exe** in the Command line text box. Click the Next command button.

43. In the Select a name for the shortcut text box, type **Calculator**. Click the Finish command button.

44. Right-click the desktop. Select Arrange Icons ➢ Auto Arrange.

45. Select Start ➢ Shut Down.

46. In the Shut Down Windows dialog box, select the radio button next to "Close all programs and log on as a different user." Click the Yes command button.

47. Press Ctrl + Alt + Delete to log on.

48. In the Logon Information dialog box, type in a user name of **Administrator** and a password of **password**. Click OK.

49. Select Start ➢ Programs ➢ Windows NT Explorer.

50. In the All Folders section of the Exploring dialog box, click the + sign next to the NTFS volume (probably drive D:). Click the `Profiles` folder. Notice that a profile folder has been created for NancyY. (It is displayed in the Contents Of Profiles section.) Also notice that there is not a folder for MikeCo, because he has not logged on since you assigned him a roaming profile. Exit Windows NT Explorer.

Lab 9.14 *Configuring a system policy*

The purpose of this lab is to give you hands-on experience in creating and configuring a Windows 95 system policy; and experience in creating, configuring, and testing a Windows NT system policy.

Server Enterprise

This lab consists of three parts:

> Part 1: Creating a system policy and configuring load balancing for all Windows 95 computers
>
> Part 2: Creating a system policy for all Windows NT computers
>
> Part 3: Testing the Windows NT system policy

Begin this lab by booting your computer to Windows NT Server. Log on as Administrator.

Follow these steps carefully.

Part 1: Creating a system policy and configuring load balancing for all Windows 95 computers

1. Select Start ➢ Programs ➢ Administrative Tools (Common) ➢ System Policy Editor.

2. In the System Policy Editor dialog box, select Options ➢ Policy Template.

3. In the Policy Template Options dialog box, click the Add command button.

4. In the Open Template File dialog box, type **\winntsrv\inf\windows.adm** in the File name text box. Click the Open command button.

5. The Policy Template Options dialog box reappears. Highlight the `C:\WINNTSRV\INF\Winnt.adm` file. Click the Remove command button. Click OK.

6. In the System Policy Editor dialog box, select File ➢ New Policy.

7. Double-click Default Computer.

8. On the Policies tab, click the + sign next to Network. Then click the + sign next to System policies update. Select the check box next to Remote update. In the Settings For Remote Update section, select Automatic (use default path) in the Update Mode drop-down list box. Scroll to the bottom of the section, and select the check box next to "Load balancing."

9. On the Policies tab, click the + sign next to Windows 95 Network. Then click the + sign next to Microsoft Client for Windows networks. Select the check box next to Log on to Windows NT. In the Settings for Log on to Windows NT section, select the check boxes next to Display domain logon confirmation and Disable caching of domain password. Type **LAB** in the Domain name text box.

10. On the Policies tab, click the + sign next to Windows 95 System. Then click the + sign next to Profiles. Select the check box next to "Enable user profiles." Click OK.

11. In the System Policy Editor dialog box, double-click Default User.

12. On the Policies tab, click the + sign next to Shell. Then click the + sign next to Restrictions. Then select the check boxes next to "Remove Run command from Start menu" and "Don't save settings at exit."

13. On the Policies tab, click the + sign next to System. Then click the + sign next to Restrictions. Next, select the check box next to Disable Registry editing tools. Click OK.

14. In the System Policy Editor dialog box, select File ➢ Save As. In the File name text box, type **\\pdclab\repl$\scripts\config**. (Don't type the period at the end.) Click the Save command button.

15. In the System Policy Editor dialog box, select File ➢ Close. Continue to Part 2.

Part 2: Creating a system policy for all Windows NT computers

1. In the System Policy Editor dialog box, select Options➢Policy Template.

2. In the Policy Template Options dialog box, click the Add command button.

3. In the Open Template File dialog box, double-click the `Winnt.adm` file.

4. In the Policy Template Options dialog box, highlight `C:\WINNTSRV\INF\`
`windows.adm`. Click the Remove command button. Click OK.

5. In the System Policy Editor dialog box, select File➢New Policy.

6. Double-click Default Computer.

7. On the Policies tab, click the + sign next to Windows NT System. Click the
+ sign next to Logon. Then select the check box next to Logon banner.

8. On the Policies tab, click the + sign next to Windows NT User Profiles. Then
select the check box next to "Delete cached copies of roaming profiles."

9. On the Policies tab, click the + sign next to Windows NT Network. Then
click the + sign next to Sharing. Then select the check box next to "Create
hidden drive shares (server)." Then select the same check box again, so it
turns white (not gray), *without* a check in it. Click OK.

10. In the System Policy Editor dialog box, double-click Default User.

11. On the Policies tab, click the + sign next to Windows NT System. Then
select the check box next to Parse `Autoexec.bat`. Click OK.

12. In the System Policy Editor dialog box, select File➢Save As.

13. In the Save As dialog box, type **\\pdclab\repl$\scripts\ntconfig** in the
File name text box. Click the Save command button.

14. Exit System Policy Editor.

15. Select Start➢Programs➢Windows NT Explorer.

16. In the All Folders section of the Exploring dialog box, click the + sign next
to the `Winntsrv` folder. Then click the + sign next to the `System 32`
folder. Next, click the + sign next to the `Repl` folder, and then click the
+ sign next to the `Export` folder. Highlight the `Scripts` folder. Notice
in the Contents of Scripts section that both the policy files you created
(`config.POL` and `ntconfig.POL`) are listed. Click the + sign next to the
`Import` folder. Highlight the `Scripts` folder under `Import`. Wait until
the `ntconfig.POL` file appears (is replicated) to the Contents of Scripts
section.

17. Exit Windows NT Explorer. Continue to Part 3.

Part 3: Testing the Windows NT system policy

1. Select Start ≻ Shut Down.

2. In the Shut Down Windows dialog box, select the radio button next to "Close all programs and log on as a different user." Click the Yes command button.

3. Press Ctrl + Alt + Delete to log on.

4. In the Logon Information dialog box, type in a user name of **Administrator** and a password of **password**. Click OK. (Logging on has implemented the Default Computer and Default User policies. These policies will take effect the next time you log on.)

5. Select Start ≻ Shut Down.

6. In the Shut Down Windows dialog box, select the radio button next to "Close all programs and log on as a different user." Click the Yes command button.

7. Press Ctrl + Alt + Delete to log on.

8. Notice that a logon banner (Important Notice) is displayed. (Remember, you configured a logon banner in Part 2 of this lab.) Click OK.

9. In the Logon Information dialog box, type in a user name of **Administrator** and a password of **password**. Click OK. This step completes Lab 9.14.