Using Windows 95 Profiles With the IntranetWare Client for Windows 95

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The Novell IntranetWare Client for Windows 95, used in conjunction with Windows 95 profiles, provides control over the Windows 95 desktop as well as a method for users to "roam" from one PC to another while retaining their desktop and program settings. Windows 95 profiles also allow the network administrator to lock a user's desktop, preventing that user from altering his desktop settings.

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THE ROAMING USER

Many organizations require that certain users be able to login to the network from several different workstations connected to the network and have their desktop and program settings follow them. Windows 95 profiles can be used to meet this need.

The Windows 95 registry contains information about the workstation's hardware as well as software settings for applications and the desktop. The IntranetWare Client for Windows 95, when used with Windows 95 profiles, splits the information in the Windows 95 registry into two distinct sections: hardware information and software information. The hardware portion of the registry remains on the workstation's hard drive, while the software portion is copied to a directory on the network.

When a roaming user logs into a workstation that has the Windows 95 profiles enabled, the hardware drivers and settings are loaded and made available to that user, and the user's customized software and desktop settings are read from the network and established on the workstation. To the end user, the workstation has the same look and feel as his own workstation and he has access to all hardware devices installed on that PC.

While using Windows 95 profiles with the IntranetWare Client for Windows 95 may seem like the end-all solution for the roaming user, it does have one major problem: If the software that was installed for the roaming user on his personal workstation loaded any DLLs, executables, or other files to that workstation's hard drive, these components will not be available on the "roamed to" workstation. For example, let's say that user "Capulet" has Word installed on her PC. Capulet then logs onto Montague's PC, which does not have Word installed on it. Since Capulet is using Windows 95 profiles, the shortcut for Word (which points to the C:\ drive) is displayed in her start menu. If Capulet clicks on the Word shortcut when on Montague's PC, the program will not be found on Montague's hard drive. If all of the "roamed to" workstations contain the same software, then this problem will be negated.

IMPLEMENTING WINDOWS 95 PROFILES

Implementing Windows 95 profiles with the IntranetWare Client for Windows 95 is relatively simple to perform. The entire installation process consists of the following tasks:

◆ Install the IntranetWare Client for Windows 95 software.
◆ Establish a home directory (NetWare 4.x users).
◆ Enable the Windows 95 profiles.

Installing the IntranetWare Client for Windows 95 Software

The IntranetWare Client for Windows 95 software kit provides connectivity between the workstation and the NetWare

Removing Windows 95 Profiles

There are three parts to Windows 95 profiles in a NetWare environment:

1. the profile files that reside on the user's home directory

2. the Control Panel settings that enable profiles on the workstation

3. the profile files residing on the local hard drive of the PC

To completely remove profiles from your network, you would have to remove all three components from each user's home directory and workstation. If you need to give a user a new profile because he initially logged into the wrong PC, you only need to remove his profiles from his home directory.

Removing Home Directory Profile Files

To remove the Windows 95 profile files from a user's home directory, use the Windows Explorer program and navigate to the user's home directory. Delete the following files and directories:

✳ USER.DAT
✳ Application Data
✳ Cookies
✳ Desktop
✳ History
✳ NetHood
✳ Recent
✳ Start Menu

Modifying the Windows 95 Control Panel to Remove Profile Support

To remove profile support from a Windows 95 workstation, double-click on the Passwords icon from within the Control Panel. Click on the User Profiles tab, then select "All users of this PC use the same preferences and desktop settings."

Removing Profile Files From the Workstation

A copy of the Windows 95 profile files are stored on the workstation hard drive as well as in the user's home directory. To remove the Windows 95 profile files from a workstation's hard drive, use the Windows Explorer program and navigate to C:\WINDOWS\PROFILES\username. Delete the following files and directories:

✳ USER.DAT
✳ Application Data
✳ Cookies
✳ Desktop
✳ History
✳ NetHood
✳ Recent
✳ Start Menu

services on the network. You should install the latest version of the IntranetWare Client for Windows 95 software before attempting to implement Windows 95 profiles. The Windows 95 profiles will work on some of the older, Novell-written, Windows 95 client software kits, however, to help prevent potential problems, you should obtain and install the latest client kit.

The IntranetWare Client for Windows 95 software can be downloaded from the Novell web site at www.novell.com. As of this writing, the most current version of the IntranetWare Client for Windows 95 is Version 2.2. Go to the Client Download section of the Novell web site to determine which files must be downloaded to obtain the most current version of the client software.

Tip: *The IntranetWare Client for Windows 95 software can (and should) be used on all Windows 95 workstations connected to either NetWare 3.x and/or NetWare 4.x networks. Many of the features of the IntranetWare Client for Windows 95 can be exploited on NetWare Version 3 and Version 4 systems.*

Establishing a Home Directory

As stated previously, the IntranetWare Client for Windows 95 software will split the Windows 95 registry into two sections, hardware and software. The hardware portion of the registry is kept on the local hard drive while the software portion is saved on the network. The file that contains the software settings is USER.DAT. For NetWare Version 3 users, the USER.DAT file is stored in the user's mail directory (SYS:\MAIL\userid-number). For NetWare Version 4 users, the USER.DAT file is stored in the user's home directory.

Establishing a user's home directory is done using the NetWare Administrator program. To set the user's home directory, view the Details of the user, then click on "Environment." Enter the volume and path to the user's home directory in the Home Directory settings, as shown in Figure 1. You should also map a network drive to the user's home directory. A container login script can be used to perform the drive mapping, as shown in Figure 2.

Enabling the Windows 95 Profiles

1. To enable profiles on a Windows 95 workstation, first log on to the network from the target PC. Make sure IntranetWare Client is selected as the Primary Network Logon, as shown in Figure 3.

2. Double-click on the Passwords icon from within the Control Panel. Click on the User Profiles tab, and then select the "Users can customize their preferences" option as shown in Figure 4.

3. After clicking on OK, you will be prompted to re-boot the workstation. When the computer reboots and you log into a NetWare server, you will be prompted with the following message: "You have not logged on at this computer before. Would you like this computer to retain your individual settings for use when you log on here in the future?"

4. Reply "Yes" to this prompt. You should now restart the workstation. After the workstation has been restarted, the USER.DAT file will be created on the user's home directory. This user can now use his own customized desktop settings from any other Windows 95 workstation that has the IntranetWare Client for Windows 95 software installed and the User Profiles option set as shown in Figure 4.

Note: *After replying "Yes" to the above message, the desktop settings from the PC being logged into will be saved in the user's home directory. When a new user first logs into a workstation, make sure that the first workstation he logs into contains the settings they need. If you happen to log the user into a PC that does not contain the settings needed for that user, you will need to remove the profile files from the user's home directory. See the sidebar on removing Windows 95 profiles for more information.*

Also note that several other files and directories are created in the user's home directory, as shown in Figure 5. Notice that the Start Menu folder is copied to the user's home directory. It is interesting to note that the network administrator can manipulate each user's Start Menu folder

when Windows 95 profiles are enabled by simply adding or removing items from the folders in the user's home directory. For example, the following steps could be used to add a folder containing a link to a web document to a (profile-enabled) user's desktop:

1. From the Windows Explorer program, browse to the user's home directory.

2. Open the Desktop Folder.

3. Create the new folder within the Desktop folder, as shown in Figure 6.

4. Add the desired shortcut(s) into the newly created folder.

Note: *When performing the above procedure, the user should be logged out of the network. If the user is not logged out, your modifications will be overwritten when the user does log out.*
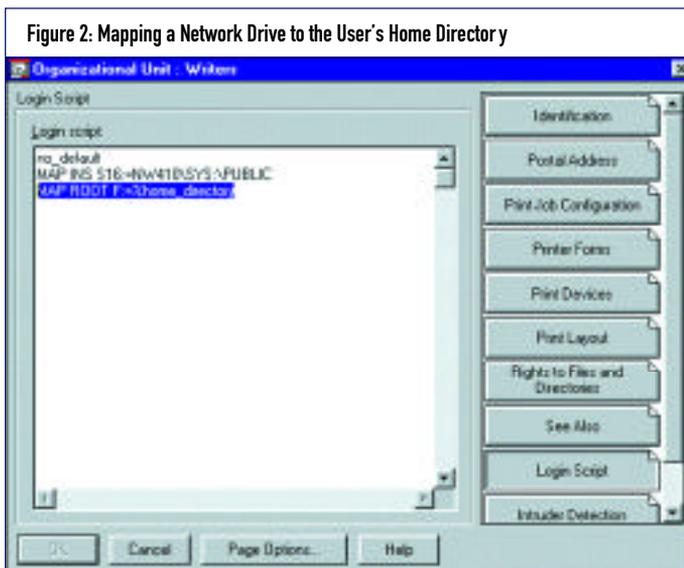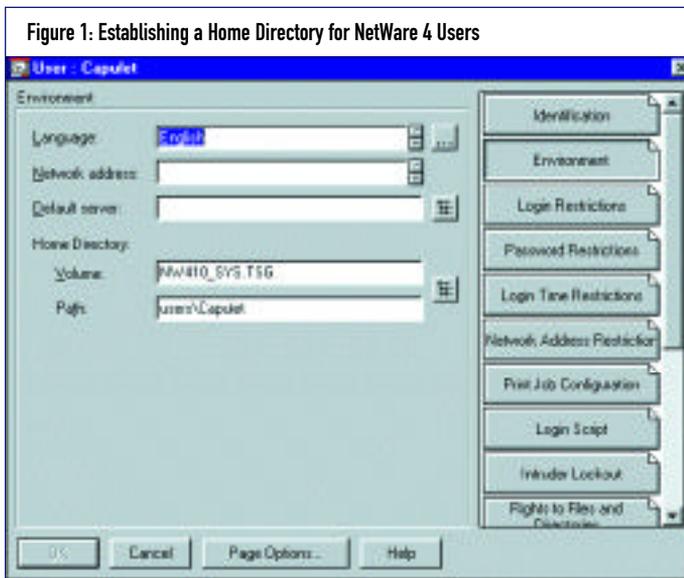
The same files and directories that were created in the user's home directory are also created in the following directory on the local PC's hard drive:
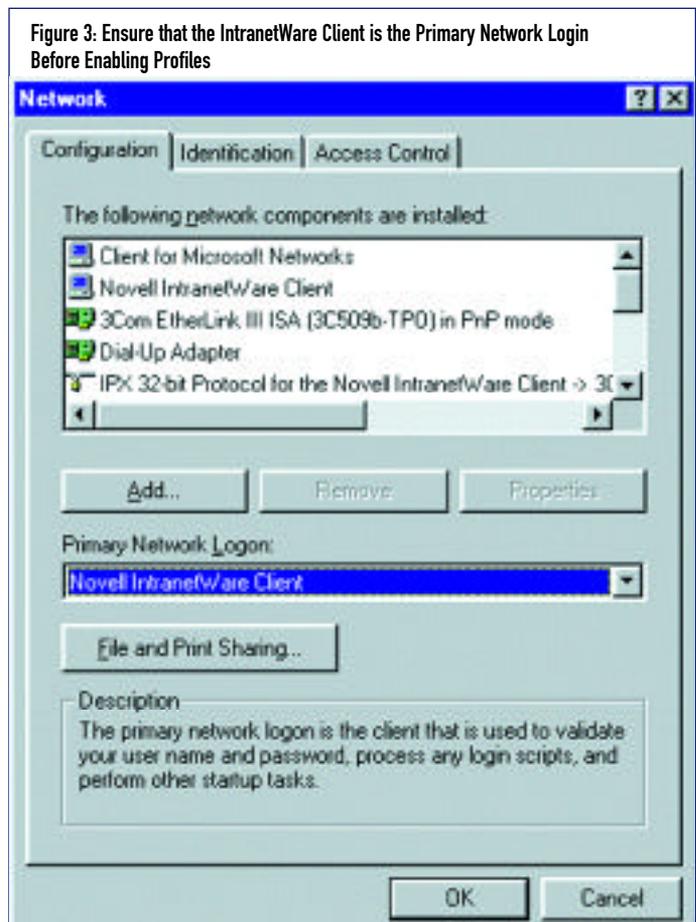
```
C:\WINDOWS\PROFILES\username
```

We can now see how these profiles are used to allow users to roam from one PC to another while retaining their own desktop settings:

1. When the user logs into a PC with profiles enabled the profile files from his home directory are copied to the C:\WIN-DOWS\PROFILES\username directory. (Except the first time the user logs in, at which time the Desktop settings from the PC are copied to his home directory.)

2. If the user makes changes to his desktop settings, these settings are stored in the profile files residing in the C:\WINDOWS\PRO-FILES\username directory.

3. When the user logs off of the workstation, the files are copied from the C:\WINDOWS\PROFILES\username directory to the user's home directory.

PROFILE USAGE SCENARIOS

The use of Windows 95 profiles can be a bit confusing, and can produce unexpected results if you do not think through the implications of the timing of events. To help reduce this confusion, let's take a look at a few sample Windows 95 profiles scenarios:


Figure 1: Establishing a Home Directory for NetWare 4 Users

Figure 2: Mapping a Network Drive to the User's Home Directory

Figure 3: Ensure that the IntranetWare Client is the Primary Network Login Before Enabling Profiles

Scenario 1: A User Replies "No" to the Profile Prompt

◆ User Capulet logs into her PC with profiles already enabled (as shown in Figure 4).

◆ Capulet adds a folder to the desktop.

◆ User Montague (who does not have any profiles in his home directory) logs into Capulet's PC and replies "No" to the "You have not logged on at this computer before" message.

◆ User Montague will get the original Capulet settings. Montague will not see the folder that Capulet added to the desktop. (The desktop settings for the folder that Capulet added reside in Capulet's profile in her home directory).

◆ No profile files will be created in Montague's home directory.

Scenario 2: A User Replies "Yes" to the Profile Prompt

◆ User Capulet logs into her PC with profiles already enabled (as shown in Figure 4).

◆ Capulet adds a folder to the desktop.

◆ User Montague (who does not have any profiles in his home directory) logs into Capulet's PC and replies "Yes" to the "You have not logged on at this computer before" message.

Figure 4: Enabling Windows 95 Profiles
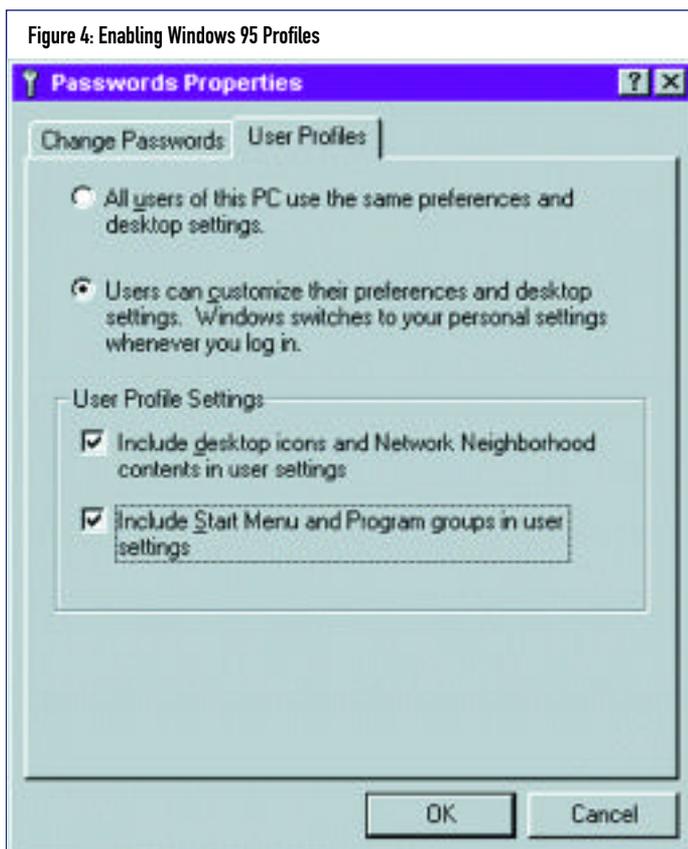
◆ User Montague will get Capulet's original settings. Montague will not see the folder that Capulet added to the desktop.

◆ A profile will be created in Montague's home directory that will contain Capulet's original desktop settings.

Scenario 3: Two Users Login With the Same Login Name

◆ User A logs into a profile-enabled PC using the user name Capulet.

◆ User B logs into a profile-enabled PC using the user name Capulet.

◆ Both user A and User B make changes to the desktop settings.

◆ User A logs out.

◆ User A's changes are saved in the Capulet home directory.

◆ User B logs out.

◆ User B's changes are saved in the Capulet home directory, overwriting user A's settings.

Scenario 4: Cloning Users

It is common practice for network administrators to clone PCs and users. This is especially helpful when a large number of users with similar network access requirements must be added to the network. You can clone the user profiles giving the users common desktop settings:

1. Create the user accounts using NWADMIN. You can user the User Template function to create several identical accounts.

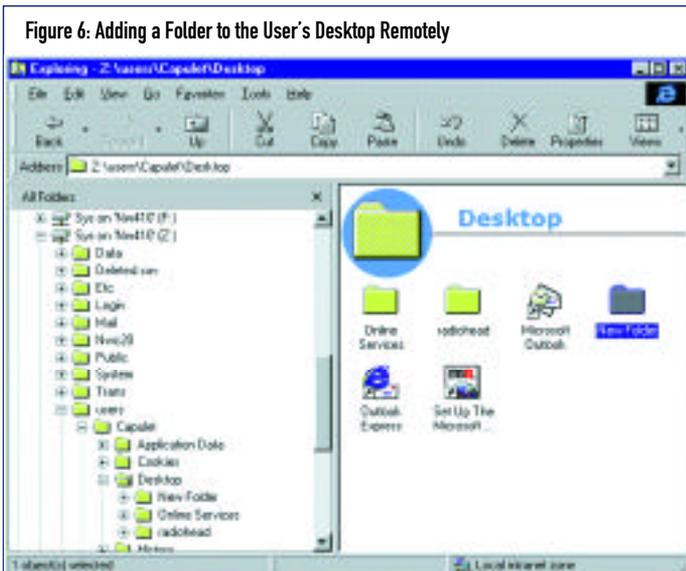**2.** Make sure to create a home directory for each user.

Figure 5: Files and Directories Created in the User's Home Directory

Figure 6: Adding a Folder to the User's Desktop Remotely

3. From a Windows 95, customize the desktop as you want it to be for the users. Then enable profiles as shown in Figure 4.

4. Log in to the PC using one of the newly created user accounts and reply "Yes" to the "You have not logged on at this computer before" message.

5. Log out of the PC.

6. Copy the files and directories shown in Figure 5 from the home directory of the user just logged in to all of the other user's home directories.

Using Windows 95 Profiles to Lock the Desktop

You can also create mandatory user profiles. With mandatory user profiles, the user cannot change the desktop settings. This is useful in environments where end users tend to damage their workstations by experimenting with the desktop settings. To enable mandatory user profiles:

1. Establish a regular user profile as described previously.

2. Rename the file USER.DAT in the user's home directory to USER.MAN.

After USER.DAT has been renamed to USER.MAN, the user can still modify the desktop settings and add new objects to the desktop. However, when the user logs out, then back in, the changes will regressed and he will see the settings initially established.

Note: *This desktop locking mechanism can be easily compromised by the user. The user can simply rename USER.MAN to USER.DAT in his home directory to circumvent the lock.*

CONCLUSION

Many organizations require that multiple users use the same PC. For example, companies that have three shifts of workers commonly require that one PC be shared by the users on all three shifts. Users who fall into this category will appreciate the use of Windows 95 profiles. These profiles allow each user to keep his personal color schemes and desk-top settings.

Users that are required to roam from one PC to another will also appreciate Windows 95 profiles. These users will learn a consistent desktop as they login from one PC to another.

LAN administrators of organizations that field frequent user distress calls related to the modification of Windows 95 desktop settings will also appreciate Windows 95 profiles. The mandatory profile option will help to eliminate these types of calls.

Windows 95 profiles can also be used in Windows NT networks that do not have NetWare file servers or that utilize Windows NT servers as their primary network login. The implementation process for pure Microsoft networks is a bit different than illustrated in this article. If you would like to learn how to implement Windows 95 policies in a Microsoft network, please email me at johnj@fast.net or the editor at editor@naspa.net. **ts**

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