NT Server Manager

BY GUY C. YOST

Rather than using a large single utility (such as Novell's NWADMIN) to manage all aspects of the network, Microsoft NT domain-based networks are broken down into several function-specific utilities. In the "Administrative Tools" program group you will find between 14 and 20 "fill-in-the-blank" Manager utilities, depending on the number of services and options enabled on the server. Optional TCP/IP management-related utilities such as DNS Manager, WINS Manager, and DHCP Manager will appear if the server is configured for those services. However, several core management utilities will be available on all NT Servers — one of which is the Server Manager.

The past two issues discussed domain strategies; this month's and next month's columns will address NT's Server Manager utility that provides a variety of services, most of which (intuitively) deal with managing servers in domains. Here's a rundown of what the utility can do:

◆ manage user connections to NT Server and Workstation resources
◆ add Workstations, Servers, and BDCs (Backup Domain Controllers) to the domain
◆ promote a BDC to PDC (Primary Domain Controller)
◆ synchronize the Domain User account database between PDC and BDCs

Some of the utility's functions are very intuitive, so I'll focus on the not-so obvious functions and present some security tips.

Figure 1 shows the main screen of Server Manager. Note that on the top menu bar the name of the domain that you're working with will be displayed — in this cas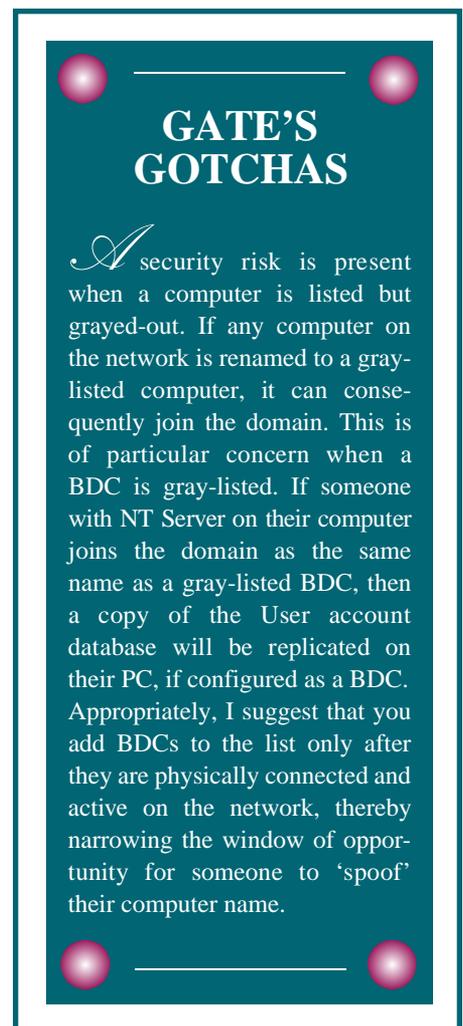e, "Redstone." You can work with other domains by choosing "Computer" from the main menu bar. Next, select "Domain," which brings up the standard browser displaying all known Domain names on the network. You'll need to authenticate to the other domains as "administrator" or as another account that has appropriate domain management rights; however, you may only work with one domain at a time.
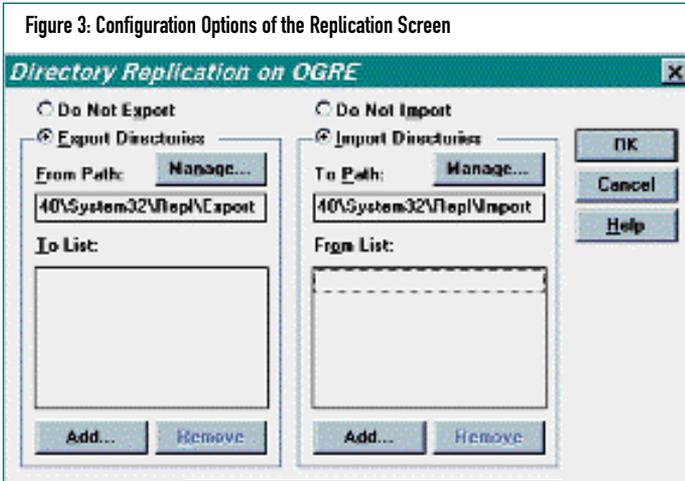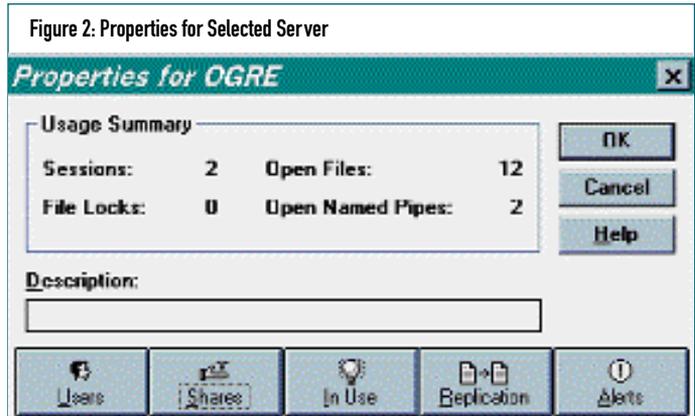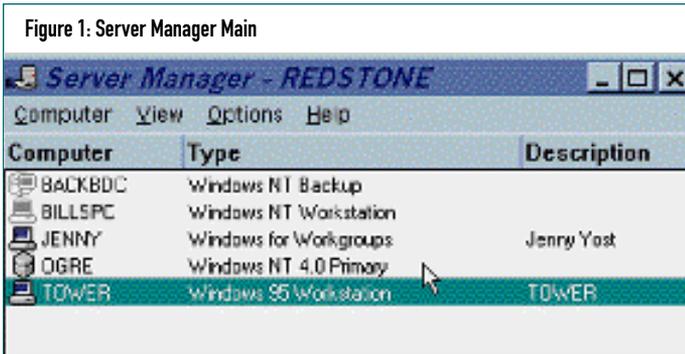
Notice how some of the entry icons are gray, whereas others are shown in color. Those in color are the machines that are currently active (or seen) on the network. To help troubleshoot network connections, administrators can check the main screen to determine if Server Manager acknowledges the network presence of one or more computers. Those entries that are gray are registered but not presently seen on the network. When a grayed-listed machine is turned on, the icon turns solid, provided the connection is functioning properly. To add an NT Workstation or Server to the domain, simply choose "Computer," then "Add to Domain." The name you provide is the same name that is defined as the "Computer Name" under the Network icon in the Control Panel. Not all computers need to be explicitly added to the domain — only computers that need to participate in NT's full C-2 security need to be added. Specifically, add BDCs and the PDC manually, and perhaps select NT workstations as well. Windows 95 and 3.x workstations are not added explicitly to the list, but will be seen in Figure 1 if they are active clients in the domain.

To bring up the Properties menu for any participating NT machine in the Redstone domain, double click on the entry, and a screen similar to Figure 2 will appear. On the bottom of this screen the buttons labeled "Users," "Shares," and "In Use" control (disconnect) and monitor connections to network resources. These functions are very intuitive and needn't be explained further.

The Replication screen, however, is worthy of discussion. Figure 3 shows the configuration options of this feature, which is intended to automate small- to medium-sized data transfers between servers (under 4MB). Note, however, the Replication screen shouldn't be used for large file transfers or

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GATE'S GOTCHAS

A security risk is present when a computer is listed but grayed-out. If any computer on the network is renamed to a gray-listed computer, it can consequently join the domain. This is of particular concern when a BDC is gray-listed. If someone with NT Server on their computer joins the domain as the same name as a gray-listed BDC, then a copy of the User account database will be replicated on their PC, if configured as a BDC. Appropriately, I suggest that you add BDCs to the list only after they are physically connected and active on the network, thereby narrowing the window of opportunity for someone to 'spoof' their computer name.

Figure 1: Server Manager Main

Figure 2: Properties for Selected Server

Figure 3: Configuration Options of the Replication Screen

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to synchronize large data sets. (For large file synchronization and server-to-server fault tolerance, use products such as Octopus from Octopus Technologies or Vinca.) The types of files replicated using this feature are usually login scripts (batch files), user profiles and policies, all of which contribute to controlling and managing the client's network environment. You can specify directories for the server to export to other servers and/or specify directories to which data will be imported from other servers. The logic used is indeed replication, not synchronization. For example, if a file is copied from a server's export directory to another server's import directory and then changes are made to the import server's copy, those changes will not automatically be propagated back to the export server. The logic is "source to destination" where copies are distributed from the export source to the import destination when changes are made to the source files. NT doesn't check for changes being made to the destination copy. By default, the affected directories are:

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C:\WINNT\system32\repl\import
C:\WINNT\system32\repl\export
```

Note at the bottom of Figure 3, the logon script path is specified as "scripts," a subdirectory of the \WINNT\system32\repl\import directory. The strategy is to store all your master scripts, profiles, and polices on one main "source" server, and import those directories to other (perhaps several) import servers. More specifically, a PDC usually holds the master files and propagates copies of scripts out to BDCs, which help with authenticating users into the domain. To specify an export, click on "Export Directories," and then specify the path in the "From Path" field. To work with specific and numerous directories, click on the "Manage" button. Adding directories is intuitive.

Next, as shown in Figure 3, click the left "Add" button to display eligible recipient computers and pick those computer names (BDCs) that will be active targets. (You will need to go to this screen on the target servers and activate the "Import Directories" option on the right of the screen.) **Note:** Only subdirectories and their contents are affected. Files in the Export directory are ignored.

Once configured, the NOS will automatically send copies of the export directories specified. This saves the administrator the headaches and batch file maintenance that would otherwise be required to maintain consistency throughout your network.

Next month, I'll present the rest of NT's Server Manager utility and show you how to leverage its features and functions. As always, thanks for reading. *ts*

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