CHAPTER 3

Accessing Remote File Servers

What is Remote Node Access

CiscoRemote provides full support for remote node access to your company's LAN resources as well as full access to Internet services. What this means is that you can access your company's network resources, such as file servers, printers, database servers, etc. from a remote location as though you are still in your office and connected to the local network. Once you have made the connection to your LAN with PPP/SLIP Connect, you work exactly like you do in the office, using the same commands and applications. The only difference is that operations may be slower since you are working over a phone line instead of a direct LAN link.

CiscoRemote provides support for remote node access to Novell Netware and Microsoft Windows Networking (including Windows for Workgroups and LAN Manager). In addition, the included Powerburst remote node accelerator application can provide a performance improvement in many remote access environments when installed on both your PC and on the LAN to which you are connecting.

If you have access to the Internet you can use any of the Internet applications along with your Netware and Microsoft Windows Network support! You could, for instance, use Netscape Navigator to down-load a file from the Internet directly onto a hard drive on your LAN server at work. You don't have to do anything special to do this — the fact that you are working from a remote location is transparent to your PC and your applications.

Requirements for Remote Access

Before you can make a remote connection into a network, whether it is to your company's LAN or the Internet, you need to have access to a dial-in service point or remote access server. In most cases this will be a Cisco remote access server provided by your company. When you dial into this server the CiscoRemote Connect application will authenticate your right to access the network. Once this is done you can use the facilities of that LAN as though you were physically present. You can now "MAP" or "Mount" drives, printers, and other network resources.

If your company's LAN provides access to the Internet through a TCP/IP gateway, the Netscape Navigator, Eudora Light E-Mail, CiscoRemote News Reader, and other Internet applications can be used. If an Internet connection is not offered by your company, you can open an account with a local or national Internet service provider. The service provider must provide either PPP or SLIP services in order to use CiscoRemote.

Novell Netware Remote Node Access

During the installation process you will have the opportunity to install Novell Netware remote node access support on your PC. If your company's LAN uses Novell Netware, and you need to connect to the Netware resources, you should select this option. Once installed you will be able to use the MAP command to access your LAN resources from remote locations.

If you do select to install the Netware remote node access support, and you already have Netware installed for direct LAN access, your direct LAN connection will be disabled to enable the remote connection. You will be asked for confirmation before any change is made to your system configuration. If you confirm this choice, then the PPP/SLIP Connect access is installed as the Novell Netware connection.

Before you can use remote Netware, you must make the PPP/SLIP connection as described in the Establishing a Connection section of the "Installing CiscoRemote" chapter. The CiscoRemote PPP/SLIP Connect application must be manually started for Novell Netware support. Once you have made that connection, you Login as usual and all of your normal default resources will be mapped to your local PC. You can also activate the Powerburst application to help speed up the access to the remote Netware resources. When you are ready to disconnect from the remote network you *must* follow the reverse procedure. You first deactivate the Powerburst application, if active; Logout from the Novell LAN (this is important since the Novell VLM will hang indefinitely if you disconnect *before* you Logout!); and finally disconnect from the remote service.

Microsoft Windows Networking Remote Node Access

Microsoft Windows networking permits a PC running Windows 3.1 or Windows for Workgroups to access files and printers on LAN Manager, Windows for Workgroups, Windows 95, or Windows NT networks. During the installation of CiscoRemote you may select either LAN Manager if you are running Windows 3.1 or Windows Network if you are running Windows for Workgroups. If your company's LAN uses LAN Manager or Windows for Workgroups then you should select this option. Since many enterprise LANs now support Netware with Windows for Workgroups you might want to install both the Netware and Microsoft Windows Networking support on your PC if your corporate LAN supports both environments.

Once installed you will be able to dial-in to your company's LAN and have full access to your normal networking resources as though you were directly attached to the LAN. Windows for Workgroups supports "ghosted" network drives. Enabling this setting allows you to define LAN resources that appear to be constantly available but are connected to only when they are accessed by an application.

To enable the "ghosted" support select the Network Icon from the Control Panel. In the Network dialog box select the **Startup** button and mark the "Ghosting Connections" check box. In the future, when you use the File Manager to attach network drives, you can set them to "reconnect at startup." Until you dial-in and connect to your company's network these drives will not be available. Once connected to the network, accessing the drives, or the data on them, will result in that drive becoming active and available.

Once you have made the remote connection with Microsoft Windows networking enabled, you can activate the Powerburst application to provide higher performance over the remote link for many applications. You should deactivate Powerburst before you disconnect from the remote Microsoft Windows Network. You do not need to Logout from the LAN before disconnecting.

Microsoft Windows networking depends upon the Network Basic Input/Output System (NetBIOS) for its communications between devices. CiscoRemote provides a very complete NetBIOS over TCP/IP implementation as a standard component of the product. The NetBIOS interface is also available for any other NetBIOS application, such as Lotus® Notes, to use.

The NBUTIL utility is included to allow you to create mappings from NetBIOS Names to TCP/IP addresses. Use this utility to create a list of mappings to make access to other NetBIOS based resources faster and, in some cases, make access possible where it might not have been before. A full description of the NBUTIL command and how to use it is given in "CiscoRemote NBUTIL."

Internet Access

Most of the individual applications included with CiscoRemote are designed for Internet resource access. These can used in addition to the remote node access to your company LAN. In order to use these applications the TCP/IP protocols must be installed on your computer. You can install the TCP/IP protocols with or without support for remote node access installed.

Any application which uses the standard Windows Sockets interface (Winsock) can be run with the CiscoRemote TCP/IP protocol stack. Your company LAN or a service provider must offer a gateway into the Internet before any of these applications can access Internet resources. Check with your Network Administrator to find out if Internet service is provided. However, these applications can be run on any TCP/IP network without a gateway.

Powerburst Application

The Powerburst application is a remote node accelerator that more than doubles the performance file system based applications over remote note connections to LAN file and print servers. It eliminates redundant data transfers from normal remote access using a number of advanced techniques, including caching data at your PC, and updating cached data differentially through a dedicated PC on the remote LAN running Powerburst's differential refresh software.

Once you have installed and activated Powerburst, this performance improvement happens automatically. You can do everything you did before, only faster!

Setting the Agent Name (First Time Only)

Before using Powerburst for the first time, you must specify the name of the Powerburst agent. Once the agent name is specified, Powerburst will retain it for future connections. Ask your Network Administrator for the name of the agent that you will be using.

To set the agent name, from the AirSoft Powerburst group in the Program Manager, double click on the Control Panel icon. Click on the Advanced Options button and fill in the Agent name field. Click on **OK** to close the dialog box and set the name.

Starting Up Powerburst

Use the following procedure to activate the Powerburst application.

- **Step 1** Click the Connect icon and connect to the remote site.
- Step 2 Log in to your remote network as you normally do.

This process establishes your drive mappings. Make sure no other applications are running and no network files are open—including the File Manager.

Step 3 Click the Activate Powerburst icon.

You can optimize 15 drives simultaneously. If you have more than 15 drive mappings, only the first 15 are optimized.

Using the Powerburst Control Panel

The Powerburst Control Panel allows you to work with the advanced features of Powerburst Click the Powerburst Control Panel icon to display this screen. You can use this Control Panel to:

activate the Powerburst application

Clicking this button is the same as using the Activate Powerburst icon in the Windows Program Manager.

deactivate the Powerburst application

Clicking this button is the same as using the Deactivate Powerburst icon in the Windows Program Manager.

- clear the data from cache storage
- set advanced configuration options
- display help information about the Powerburst application.

You can use the activate and deactivate buttons, but you would not modify the configuration options or clear the cache without the assistance of your Network Administrator. Normally, you do not need to clear the cache as the Powerburst application automatically clears it after an abnormal termination, or if the cache overflows.

You can also click the Help button to find out more about the Powerburst application.

Ending the Powerburst Application

When you are ready to end your remote node work session, use the following procedure to deactivate the Powerburst application.

- Step 1 Close all applications and network files (including the File Manager).
- Step 2 Double-click the Deactivate Powerburst icon.
- Step 3 Log out from the network or disconnect from any remote drives and/or devices.
- **Step 4** Disconnect from the remote LAN using PPP/SLIP Connect. This will free up your phone line.

Warning If you fail to disconnect from any remote drives or devices, your computer may lock up. You must then power off (or reset) to restart. This may cause the loss of data. Do not deactivate the Powerburst application while any network applications or files are open. If you do, your system could become unstable.

Timbuktu Pro Application

The Timbuktu Pro remote control application can be used to communicate to, transfer data between, and control other Timbuktu Pro equipped personal computers on the network. With Timbuktu Pro installed on your network's computers you can perform the following functions:

- Send FlashNotes and files to other users with the Send service
- Copy files to and from other computers with the Exchange service
- Use your keyboard and mouse to take control of another computer with the Control service
- Observe the activity on another computer's desktop with the Observe service
- Save your most frequently used network addresses in Timbuktu Pro's Personal address book

Timbuktu Pro allows you to access any other Timbuktu Pro equipped computer through your network or a dial-in connection, or over the Internet. Timbuktu Pro operates in both directions -- connecting to other computers and being accessed by other computers -- at the same time. For example, a remote Timbuktu Pro user can be sending files to you while you are controlling or exchanging files with a third computer. Finally, Timbuktu Pro fills your security needs by allowing multiple levels of user access that you define.

Starting Timbuktu Pro

Use the following procedure to activate the Timbuktu Pro application.

- Step 1 Log in to your remote network as you normally do.
- **Step 2** Double-click the **Timbuktu Pro** icon in the CiscoRemote program group. The application opens and the main Timbuktu Pro window is displayed.

Note If you want your computer to remain available for access by other Timbuktu Pro users, you must keep your application open. Timbuktu Pro's main window can be minimized to an icon, reducing your desktop clutter.

Setting Up Timbuktu Pro User Access

Step 1 Select User Access Privileges from the Setup menu.

- **Step 2** Select the network protocol(s) (NetWare and/or TCP/IP) you wish to use with Timbuktu Pro.
- Step 3 Click OK to close the User Access Privileges dialog box.

Defining Users

A guest can access your PC without typing a password. A registered user must enter a user name and password to connect to your computer. To define registered users perform the following steps:

- Step 1 Select Define Users from the Setup menu.
- **Step 2** Select the **<Guest>** and click the privileges you wish to grant.

These privileges will become available to all Timbuktu Pro users.

- **Step 3** Add a new registered user by clicking **New User**, entering a name and password (repeating the password in the Confirm field), and assigning privileges to that user.
- **Step 4** Repeat step 3 for each registered user you'd like to add.
- **Step 5** Click **OK** to store the changes you've made and close the dialog box.

Getting Help

To display Timbuktu Pro's on-line help, press F1 or select Contents from the Help menu.

Selecting an Address

To choose a network protocol, click its connection tab (TCP/IP or NetWare).

If you've chosen NetWare:

- Click Search to generate a list of all the available Novell/IPX addresses.
- To find addresses that begin with a specific combination of characters, enter the characters in the field below the Search button and click **Search**.

If you've chosen TCP/IP, enter the IP name or IP address in the IP Address field and press Enter.

Selecting an Address from an Address Book

- Step 1 Click one of the address book tabs (Personal or Shared).
- **Step 2** Click an address book entry. The name and address of the chosen computer is displayed.

Adding an Address to the Personal Address Book

- Step 1 Select an address from one of the network connection tabs (TCP/IP or NetWare).
- **Step 2** Click the **Add** button in the lower right-hand corner of the tab. An address confirmation dialog box appears.
- Step 3 Click OK. The address is immediately added to the Personal address book.

Using Send

The Send command lets you send FlashNotes and files to remote computers.

- Step 1 Select the connection tab you desire: Personal, Shared, TCP/IP, or NetWare.
- **Step 2** Select an address from the tab.
- **Step 3** Click the **Send** button. A FlashNote window appears. The address you selected will be displayed to the right of the To... button.
- Step 4 Click the Files... button to display the file selection window.

Use the **Add to List** button to attach files to the FlashNote. When you have finished selecting files, click the **OK** button. The names of the file(s) you selected will appear to the right of the **Files**... button.

- Step 5 Type your FlashNote message in the message window.
- Step 6 Click the Send button in the FlashNote window to send the FlashNote.

Using Exchange

Exchange lets you copy files to or from any folder on a remote computer.

- **Step 1** Select an address from a connection tab.
- Step 2 Click the Exchange button.

The Exchange window appears. The list of files on your PC is on top. The list of files on the remote computer is on the bottom.

Step 3 Drag the file(s) you wish to copy from the source (on one computer) to the intended destination (on the other computer).

Using Control or Observe

Control lets you watch and control a remote computer. Observe allows you to watch -- but not control -- the remote desktop.

- **Step 1** Select an address from a connection tab.
- Step 2 Click the Control or Observe button. A Control or Observe window appears.

To stop controlling or observing, close the window.

Admitting Temporary Guests

- **Step 1** Select **Admit Temporary Guest**... from the Connections menu.
- **Step 2** Have the remote user connect to your computer. The name of the service being requested and the guest's computer name will appear in the Admit Temporary Guests identification field.
- Step 3 Click OK to allow access to the temporary guest.

Exiting Timbuktu Pro

To close the Timbuktu Pro application, select the **Exit** command from the File menu in Timbuktu Pro's main window. If there are active connections, Timbuktu Pro will alert you before terminating them.

Timbuktu Pro Application

Note Once Timbuktu Pro has been shut down, other Timbuktu Pro users will not be able to connect to your PC.

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