

Funk Software, Inc. 222 Third Street Cambridge, MA 02142

617 497-6339 617 491-6503 (technical support)

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Introducing Proxy

Welcome to Proxy

Thank you for selecting Proxy.

Proxy is a network-based remote control program that lets you fully take over any PC on your network, right from a Windows or Windows 95 session. You can control multiple PCs simultaneously; the controlled PCs can be running DOS, Windows, or Windows 95.

Typical uses for Proxy include:

- network-based technical support and help desk
- accessing files and applications on a remote network over a remote node dial-in connection
- centralized software installation, updates, and system configuration
- software training
- monitoring of unattended PCs, such as job servers or data-collecting workstations

How Proxy Works

Proxy contains two major components:

- The Proxy "Master" is a Windows application that allows you to take over other PCs on your network.
- The Proxy "Host" is a program that you load on the PC that you'd like to take over.

The Master and Host communicate via the IPX or IP protocols.

Both the Proxy Master and Host operate in Windows and Windows 95 environments. A Proxy Host TSR supports DOS remote control over IPX.

Proxy: Chapter 1

The Proxy Master

With the Proxy Master program (PROXY.EXE), you can control any host machine on your network from Windows or Windows 95, using the IPX or IP protocol.

When you want to connect to a PC, Proxy will poll the network to locate all the workstations that have the Proxy Host loaded and are available to be taken over. You simply select the PC you want to take over from the list of workstation names that Proxy displays.

You can also set up Windows shortcuts that automatically run Proxy and connect to different machines. You'll then be able to take over any PC simply by clicking on its icon.

Once connected, the screen of the host PC will be displayed in your window, and you'll have complete mouse and keyboard control of the host PC. Proxy can render the screen of the other PC whether it is in text mode, graphics mode, or even if it is running Windows.

You can display each PC in a full-sized window, or you can trim the windows down to see a number of PCs at once. Even when the windows are reduced in size, you can scroll to see any section using the scroll bars, or you can let Proxy automatically scroll based on mouse and cursor position.

The Proxy Master has many other features that make it easy to connect to and operate other PCs. You'll be able to:

- Customize text mode display with a selection of fonts
- Copy any part of any screen (text or graphics) to the clipboard
- Reboot the host remotely, with automatic re-connect
- Poll the local network segment or across routers for available hosts
- Create "tasks" that automatically connect to a workstation and run a program on that station

Introducing Proxy

The Proxy Host

With the Proxy Host software loaded, your workstation is available to be controlled by Proxy Master stations across the network.

The Proxy Host software can be run from the following PC operating systems:

- Windows or Windows 95 Using a special Windows application, PHOSTWIN.EXE, using the IP or IPX protocol. After installation, PHOSTWIN will always run whenever Windows is started.
- DOS Using PHOST.EXE, a memory-resident program (TSR) that is loaded on the machine that you want to control using the IPX protocol. PHOST can be loaded into high memory on a 386 or above if you use DOS version 5.0 or higher, or a suitable memory manager.

The Host Control Panel permits you to set various options for controlling access to your host PC. You can:

- Lock out others at any time, or require specific permission to connect
- Set times during which outside access is permitted
- Require a password for access
- Elect that your host PC beep whenever a Proxy Master takes or relinquishes control
- Elect that your host PC beep while a Proxy Master has control
- Determine if a session is in progress, and which master station is currently connected
- Abort a session in progress

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System Requirements

The **Proxy Master** software runs as a Windows or Windows 95 application, and requires a 386 or higher PC with at least 4 MB of RAM.

The **Proxy Host** software runs as a Windows or Windows 95 application, and requires a 386 or higher PC with at least 4 MB of RAM.

The **DOS Proxy Host** software runs as a memory resident program, and requires DOS version 5.0 or higher; it uses approximately 9K of conventional memory when loaded with the DPMS memory manager.

Proxy can be run over any type of network including dial-up, ethernet, token ring, and FDDI, using either one of the following standard protocols:

• **IPX** — usually run on networks using Novell NetWare. It is not necessary for either the master or host workstation to be logged in to a server, nor is it necessary to run a network client.

For Windows 3.x you need the Novell 16-bit (VLM) or 32-bit Client IPX protocol support.

For Windows 95 you need to use the Microsoft Client for NetWare Networks, or Novell's Client-32 IPX protocol support.

IP — a general purpose protocol supported on a wide variety of networks and servers.

For Windows 3.x you need to use a Winsock 1.1-compliant IP stack.

When running Windows 95 you need to use a TDI-compliant 32-bit IP stack, such as Microsoft's TCP/IP.

Installing Proxy

Installation instructions for Proxy are provided in a separate booklet contained in your Proxy package. Follow the instructions in that booklet to install either the Proxy Master or Proxy Host software.

Introducing Proxy

Technical Support

If you have questions or problems as you install or use Proxy, please contact our Technical Support engineers using one of the following methods.

- This manual and the README files on your diskettes may contain the information you need to solve the problem you are having. Please re-read the relevant sections you may find a solution you overlooked.
- We can be reached by sending e-mail to our Internet address support@funk.com. Note that most on-line services such as CompuServe, America On Line, Microsoft Network, and Prodigy offer an Internet e-mail gateway.
- We can also be reached through our world wide web server on the Internet at http://www.funk.com.
- Our technical support staff is available to assist you Monday through Friday between 9:00 AM and 5:30 PM Eastern Standard Time at (617) 491-6503, or via fax at (617) 547-1031.
- If you're located outside North America, please refer to the enclosed sheet entitled Authorized International Partners for the name of the support provider in your country.

If you haven't already done so, please fill out and return the Registration Card to ensure that you will be notified of upgrades and of new networking products when they become available.

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The Proxy Basics

Starting Proxy

You start Proxy just as you would any Windows application—either double-click on its icon, or use the Windows 95 **Start Run** or Windows Program Manager **File Run** command. The name of the program to run is PROXY.EXE.

Each time you start Proxy you create a new Proxy window. You can have several Proxy windows active at once. Each Proxy window can be connected to a different host PC.

Using the Proxy Menu

When you first start up Proxy, you'll notice that, unlike most Windows applications, Proxy does not have a menu bar. Instead, all Proxy commands are contained in the Control Menu. This is to allow more space for showing the screen of the host PC.

To issue a Proxy command, simply click the Control Menu button in the upper left corner of the Proxy window, then select the appropriate command.



Figure 2-1: The Proxy Control Menu

Some of the commands on the Proxy menu are in gray, to indicate they are not available at the time. For example, you can only **Disconnect** if you are already connected.



Standard Control Menu Commands

Note that the Proxy commands completely replace the standard windowmanagement commands that are normally found in the Control Menu (**Restore**, **Minimize**, **Maximize**, etc.).

The standard Control Menu has not been eliminated. It is still available, but as a popup menu attached to the **Window** command.

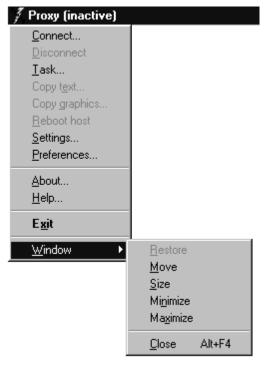


Figure 2-2: The standard Windows Control Menu

The Proxy Basics

Connecting to a Host PC via IPX

To connect to a PC using the **IPX** protocol:

- 1 Select **Connect** ... on the Proxy menu.
- 2 Click the **IPX** tab.
- 3 The IPX Connect dialog will appear, and Proxy will poll the network and display the names of all host PCs that it finds.
- 4 Use one of the following methods to connect to a host PC:
 - select a host PC from the list and click **Connect**
 - double-click a host PC on the list
 - type a station name in the Host workstation field and click **Connect**.

IPX	IP				
<u>H</u> ost workstation:		Network	_		Connect Cancel
Adrienne Bob Bob Win95 Dave's P60 Emma Fax Server Fax Server 2 Front Desk JQ Janet's PC Ken's Kool Breeze 486 Lovan Matt Rich	×	 Local, up to Local, up to Inter-networ 00000001 0000002 0000003 0000005 00000029 00000033 00000124 00000129 00000129 00000132 00000132 00000161 		•	Eoll >>

Figure 2-3: Connecting to a host PC using IPX

Proxy will connect to the selected PC. Its screen will appear in your Proxy window, and you'll be able to control it with your keyboard and mouse.

Proxy: Chapter 2

IPX Polling

"Polling" refers to Proxy's process of searching the network for host PCs. When using Proxy to search for IPX-based workstations, Proxy can poll in two ways:

• A **local poll** searches for host PCs on the local network segment and on neighboring segments. Each time you bring up the Connect dialog, Proxy automatically performs a local poll (if this feature is set in the Preferences dialog).

The "# of hops" setting lets you control how wide-ranging a search to perform; each hop represents the crossing from one network segment to another over a router. PCs on the local segment are 0 hops away, PCs on adjacent segments are 1 hop away, and so on.

• An **inter-network poll** searches for host PCs on the network segments you specify. You can select one or more network segments from a list of known segments; Proxy will search for host PCs on only those segments you select.

Proxy automatically performs a local poll when you bring up the Connect dialog. You can poll again at any time while the Connect dialog is displayed by clicking **Poll**. Proxy will poll the network based on the settings you've entered.

To perform a local poll:

- 1 Make sure **Local** is selected and **# of hops** is to your liking.
- 2 Click **Poll**.

To perform an inter-network poll:

- 1 Click Inter-network number(s).
- 2 Highlight one or more network segment(s) in the list.
- 3 Click **Poll**.

Specifying IPX Station Names

Each Proxy Host station has a "station name" that is assigned using the Host Control Panel. When Proxy polls for host PCs, it displays their station names in a list for you to select.

You can also type a station name directly into the **Host workstation** field, then click **Connect**. Proxy will attempt to locate that station name and establish a connection.

The Proxy Basics

If you enter the station name of a host PC on your local network segment (i.e., not across a bridge or a router), you don't have to worry about specifying a network number in order to make a connection.

However, to connect across a router to a host PC on a different network segment, you must precede the station name with the number of the network on which the PC may be found. The network number and the station name must be separated by a colon (:).

For example, to connect to a host PC on IPX network segment 00000028 named "George's P200," you'd specify:

28:George's P200

It is not necessary to supply the leading zeroes of the IPX network number.

If you're not sure of the network number of a Proxy Host, you can find out by running the Host Control Panel at the host PC; the network and node address will be shown.

Specifying IPX Addresses

You can also connect to a host workstation by specifying its IPX address. To indicate that you are specifying an IPX address rather than a station name, prefix it with the @ symbol; for example:

@1B3893A1Address of node on local segment

@28:1B3893A1 Address of node on network segment 28

Note that leading zeros for network number and node number are optional.

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Connecting to a Host PC via IP

To connect to a PC using the **IP** protocol:

- 1 Select **Connect** ... on the Proxy menu.
- 2 Click the **IP** tab.
- 3 The Connect dialog will appear, and Proxy will display a list of all known broadcast addresses that you have previously saved.
- 4 To show a list of host PCs shown in the **Broadcast Addresses** list, select one or more addresses from the list and click **Poll**.
- 5 To connect to a host PC shown on the **Available Hosts** list, select a host PC from the list and click **Connect**, or double-click a host PC on the list.

Connect		X
IPX IP]	
Host workstation:		Connect
198.186.160.50:Dave's		Cancel
Available hosts:	Broadcast addresses: <local network=""></local>	Poll >>
Dave's Jeff Kevin	198.186.160.66(30) Subnet 65	
ING YIII		
7 host(s)	Insert Edit Delete	Create Shortcut

Figure 2-4: Connecting to a host PC using IP

Proxy will connect to the selected PC. Its screen will appear in your Proxy window, and you'll be able to control it with your keyboard and mouse.

The Proxy Basics

IP Polling

"Polling" refers to Proxy's process of searching the network for host PCs. When Proxy searches for IP-based workstations it allows you to select one or more broadcast addresses in one of the following ways:

- <Local Network>— searches your local subnet based on a standard IP broadcast. This type of poll may only work on a local segment, and results may vary based on your particular IP stack implementation.
 <Local Network> is always available in the broadcast address list. Each time you bring up the Connect dialog, Proxy automatically performs a <Local Network> poll (if this feature is set in the Preferences dialog).
- **IP Broadcast address** searches for a host PC on a specific IP address in dot notation form a.b.c.d. For example, *198.186.160.55* would search for a host PC by sending a packet to the address 198.186.160.55 only.
- IP Scan address range searches for a host PC on a range of IP addresses in dot notation form a.b.c.d(e). For example, 198.186.160.5(99) would scan all addresses starting at 198.186.160.5 for 99 addresses.
- Symbolic DNS name searches for a host PC using a symbolic DNS name. For example, *machine.company.com*, would first do a DNS lookup on the name machine.company.com, then send a packet to its IP address.

Depending on how much of the network you choose to poll, your search for IPbased workstations could take anywhere from a couple of seconds to much longer. A status bar in the **Connect** dialog shows your polling progress; if need be, you can choose **Stop Poll** to stop your search.

Adding a Broadcast Address

To add an address to the Broadcast Address list:

- 1 Click **Insert** to bring up the **Add/Edit Broadcast Address** dialog box, then click the **Broadcast to address** button.
- 2 Enter a valid IP broadcast address or DNS name in the **Address** field.
- 3 Enter an optional description string in the **Description** field.
- 4 Click **OK**.

Your address will now appear in the Broadcast address list. If you entered a DNS name, the Address field will be set to its IP address, and if you have not entered a Description that field will contain the DNS name.

Add/Edit Broadcast Ad	dress	×
 Broadcast to address Scan address range 		OK Cancel
<u>A</u> ddress:		
Description:		

Figure 2-5: Adding an IP broadcast address

Adding a Scan Address Range

To add an address range to the Broadcast Address list:

- 1 Click **Insert** to bring up the **Add/Edit Broadcast Address** dialog box, then click the **Scan address range** button.
- 2 Enter a valid broadcast IP address in the **Address** field.
- 3 Enter the number of IP addresses to scan sequentially in the **Number of addresses** field.
- 4 Enter an optional description string in the **Description** field.
- 5 Click **OK**. Your address range will appear in the Broadcast address list with the number of addresses to scan displayed in parentheses.

Add/Edit Broadcast Ad	dress	×
 Broadcast to address Scan address range 		OK Cancel
<u>F</u> irst address: <u>N</u> umber of addresses: <u>D</u> escription:		

Figure 2-6: Adding an IP scan address range

The Proxy Basics

Editing a Broadcast or Scan Address

To edit an address in the Broadcast Address list:

- 1 Select an entry in the list.
- 2 Click **Edit**.
- 3 Switch between the **Broadcast to address** and **Scan address range**, if you wish.
- 4 Edit the **Address** and **Description** fields to your liking.
- 5 Click **OK**.

To delete an address in the Broadcast Address list:

- 1 Select a single entry in the list.
- 2 Click **Delete**.

Specifying IP Station Names

In addition to its IP address, each Proxy Host station has a "station name" that is assigned using the Host Control Panel. When Proxy polls for host PCs, it displays their station names in a list for you to select.

You can also type an IP address or DNS name directly into the **Host workstation** field, then click **Connect**. Proxy will attempt to establish a connection to that IP address (or the IP address of the translated DNS name).

To connect across a router to a host PC on a different network segment, you must provide the IP address or IP subnet mask on which the PC may be found. The IP address/mask and the station name must be separated by a colon (:).

For example, to connect to a host PC on IP subnet 198.186.160.255 named "George's P200," you'd specify:

198.186.160.255:George's P200

If you're not sure of the IP address of a Proxy Host, you can find out by running the Host Control Panel at the host PC; the IP address will be shown.

Proxy: Chapter 2

Wildcards in Station Names

Wildcards can be used for pattern matching when specifying a station name to connect to. Proxy will connect to the first available host PC it finds whose station name matches the name you specify.

Wildcards are useful when you want to make use of one of several idle host PCs, but you don't care exactly which PC you use. For example, you might set up a bank of several spare PCs, naming them SPARE–1, SPARE–2, SPARE–3, etc. These hosts might be shared by a number of users needing extra processing power. By specifying "SPARE–*" as the station to connect to, a Proxy user can grab the first spare PC available at that time.

The following special symbols are used for pattern matching:

- ? matches a single character
- matches the remainder of the station name

\ treats the next character literally, even if it is a special symbol

Examples:

Joe's ?86	matches Joe's 386, Joe's 486, Joe's 586, etc.
IBM*	matches IBM, IBM PC, IBM PS/2 Model 60, etc.
Star * PC	matches Star * PC

Passwords

The host PC to which you are connecting may require that you enter a password for access. If so, the Password dialog will appear; the connection will be established once you enter the correct password.

Request Permission

The host PC to which you are connecting may require that you explicitly request permission to connect. If so, a **Message from Proxy Host Station** dialog will display on your screen indicating that you must wait for permission to connect. Your connection will be established, or not, based on the response from the host PC.

The Proxy Basics

Creating a Shortcut

You may want to save a connection to a particular PC for easy single-click access in the future. This single-click access is called a shortcut, and can be accessed as an icon in your Windows program group, or as a Windows 95 shortcut.

To create a shortcut:

- 1 Select or enter an IPX or IP host name in the Host Workstation field.
- 2 Click Create Shortcut.
- 3 You will be asked if you want to create a shortcut.

Click Yes.

Ргоху	×
?	Create shortcut to connect to "Adrienne" in "Proxy" group ?
	Yes <u>N</u> o

Figure 2-7: Creating a shortcut to a Proxy host PC

You can now connect to the selected host using the Proxy icon in the Windows program group or using a Windows 95 shortcut.

NOTE: To change the program manager group in which to create shortcuts, use the Preferences dialog.

Shortcut Formats

When you create a shortcut, you are creating a special command line string to run Proxy. These strings are formatted to instruct PROXY.EXE on which station to connect to using the protocol, address and host station name in the command line.

You may optionally construct shortcuts manually. For more information on doing this, see the "Tips and Techniques" section.

Proxy: Chapter 2

Interacting with the Host PC

Once you're connected to the host PC, it's almost as if you were sitting right in front of it. You can control it with your keyboard and mouse, and you can watch its screen in the Proxy window in front of you.

The Proxy Display

The screen of the host PC will be shown in the Proxy window.

If the host PC's screen is larger than the Proxy window, scroll bars will appear that allow you to make any part of the screen visible.

To control the size of the Proxy window, you can:

- Size it with the mouse
- Click the **Maximize** button (in the upper right corner of the window) to make the Proxy window match the size of the host PC's screen.

NOTE: The size of the Proxy window is limited by the size of your own screen, and it sometimes may not be possible to make the Proxy window large enough to completely display the screen of the host PC without scroll bars.

How Proxy Maps the Screen of the Host PC to its Own Window

Proxy maps the host PC's screen to its own differently depending on whether the host PC is in text mode or in graphics mode.

- The host PC is in **text mode** while at the DOS command prompt or while running non-graphical DOS applications. In text mode, Proxy uses its own local font to display the text from the host PC's screen. You can select from among several font sizes from the Settings dialog.
- The host PC is in **graphics mode** while running graphical DOS applications such as a CAD program, or while running Windows. In graphics mode, Proxy renders the screen of the host PC pixel for pixel.

The Proxy Basics

Copying to the Clipboard

You can easily copy any part of the host PC's display to your local Windows clipboard. You can then paste it into a document you are creating with another Windows program.

Proxy has two commands for copying to the clipboard:

- Copy text
- Copy graphics

When the host PC is running a graphics-mode DOS program or Windows, your only option is the **Copy graphics** command.

However, if the host PC is running a text-mode DOS program, you can copy its screen in either text or graphics mode. Which you choose depends on how you'd like to use the data:

- If you use **Copy text**, you will be able to paste whatever you copied into a word processor as ordinary text. You will then be able to perform text editing and formatting on it within the word processor.
- If you use **Copy graphics**, the area you designate is copied as a bitmapped image, and you will be able to paste it into desktop publishing programs as a graphic, retaining the exact look that it had in the Proxy window.

To copy a part of the host PC's screen to the clipboard:

- 1 Select **Copy text** or **Copy graphics** from the Proxy menu. The mouse cursor will change shape to indicate "copy" mode.
- 2 Position the cursor at one of the corners of the rectangle that you'd like to copy, and press the left mouse button.
- 3 Drag the cursor, highlighting the entire rectangle you'd like to copy.
- 4 Release the mouse button. The rectangle you highlighted will be copied to the clipboard.

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Rebooting the Host PC

To reboot the host PC, select **Reboot host** from the Proxy menu, and confirm by selecting **Yes**.

Proxy will send a reboot command to the host PC, and the screen will go blank. Once the host PC has rebooted and Proxy is able to re-establish a connection, the host PC's screen will reappear.

In order to regain control of the host PC after a reboot, the host PC **must** have installed and loaded the Proxy host and be running Windows.

NOTE: PCs running the DOS version of Proxy Host require that their AUTOEXEC.BAT contain a command to load PHOST. Unless PHOST is loaded, Proxy will not be able to re-establish a connection.

Disconnecting

You can disconnect from the host PC you are controlling by selecting Disconnect from the Proxy menu. The host PC will be released from your control, and the Proxy screen will be blank.

You can also disconnect by simply closing the Proxy window. To close the window, either:

- Select **Exit** from the Proxy menu; or
- Double-click the Control Menu button.

The Proxy Basics

Proxy Settings and Preferences



The Settings Dialog

Proxy's Settings dialog lets you control Proxy's operation in a variety of ways. You can:

- Set the master to use View Only and/or Resize window
- Establish host PC settings to disable the host PC's keyboard and mouse and/or blank the host screen
- Control how mouse events are transmitted to the host PC
- Set Proxy's automatic scrolling behavior
- For DOS sessions, set the text font and refresh rates
- Specify which Windows control keys are transmitted to the host PC and which remain local to your Windows session

To bring up the Settings dialog, select **Settings** from the Control Menu. The Settings dialog shows the current status of each item, and allows you to modify any item you like.

Settings	x
Master Settings	Host Settings
⊡ <u>View Only</u>	Suppress keyboard and mouse
Resize window to fit Host	Bjank host screen
<u>M</u> ouse Transmission	Auto-scroll
left button clicks	Cursor Consor
right button clicks	DOS Sessions (Text Settings)
C no motion	
absolute motion	Font: Proxy 8 x 14
C relative motion	DOS text refresh rate
Local Keys	foreground: Fast
Alt+Tab Alt+Space	background: .2 second
Alt+Esc Ctrl+Esc	
	OK Cancel

Figure 3-1: The Settings dialog

Proxy: Chapter 3

While in the Settings dialog, you can:

- Modify any item
- Click **OK** to save the currently displayed settings as the default settings, to automatically take effect each time you open a new Proxy window
- Click **Cancel** to cancel your changes.

Master Settings

Master settings affect the mode in which the master operates relative to the host PC. The master setting modes are:

- View Only
- Resize window to fit Host

View Only Mode

If you'd like to see the host PC without controlling it, check the "View Only" box.

When this box is checked, the host PC will be displayed as usual, but keystrokes and mouse clicks on your PC will not be transmitted to the host. This ensures that you cannot disturb the host PC by accident.

Resize Window to Fit Host Mode

If you'd like to see the host PC using its actual dimensions, check the "Resize window to fit Host" box.

When this box is checked, the size of the Master window is automatically changed to the size of the Host display. This is useful when switching display modes on a host or going into and out of text mode. If the Master Window is not big enough to show the Host display, the Master window displays scroll bars, which you can use to see the entire Host display.

Proxy Settings and Preferences

Mouse Transmission

Remote mouse operation can be a little confusing at first. Keep in mind that your local mouse must do double-duty: it must allow you to operate your local Windows session, and it also must allow you to operate the host PC.

The way mouse transmission is handled differs depending on whether you are controlling a DOS or Windows session on the host PC.

Mouse Transmission to a Host Windows Session

When the host PC is running Windows, Proxy handles the mouse in a straightforward way:

- While the mouse is inside the Proxy window, the mouse is entirely "remote" and all movement and clicks are transmitted to the Host Windows session.
- While the mouse is anywhere else, the mouse is entirely local and any mouse operation affects only your local Windows session or Proxy itself.

Note that the "Mouse transmission" checkboxes in the Settings dialog do not apply while the host PC is running Windows: all mouse activity is transmitted as long as the mouse is positioned over the remote Windows session inside the Proxy window.

Mouse Transmission to a Host DOS Session

When you are controlling a mouse-driven DOS program on the host PC, you will see two mouse cursors on your screen. One of them is Proxy's local mouse, and is shaped like a diamond. The other is the mouse of the host PC, and its shape is controlled by the program that is running on the host PC.

Normally, when you move your local mouse without clicking a button, it has no effect on the Host mouse. This is necessary to allow you to use your local mouse to operate your local machine (both Proxy and Windows) without any undesirable side-effects on the host PC.

A set of checkboxes and radio buttons allows you to define how the local mouse controls the mouse on the host PC. Subject to these settings, you can operate the host PC using the local mouse when you:

• Click on a mouse button—Proxy will transmit both the mouse position and the click to the Host

Proxy: Chapter 3

- Drag the mouse with either button held down—Proxy will transmit the button clicks as well as all mouse motion while the button is depressed
- Move the mouse while holding down [Ctrl]—Proxy will transmit all mouse motion while the [Ctrl] key is held down

Controlling Click Transmission

The checkboxes "left button clicks" and "right button clicks" allow you to independently control whether left and right button clicks are transmitted to the host PC. If the box is checked, the clicks are transmitted. The original defaults are set to transmit left button clicks and suppress right button clicks.

The rationale for this is that in most programs that utilize the mouse, left button clicks are an essential part of the mouse interface, while right button clicks are either unused or perform operations that are available through other means. When the transmission of right button clicks is suppressed, the right button becomes available as an alternative to using the Control key to force transmission of mouse motion and to auto-scroll the display, without risking undesired side-effects on the host PC.

Controlling Transmission of Mouse Motion

The radio buttons "absolute motion" and "relative motion" allow you to control how mouse motion in Proxy is transmitted to the host PC. Either or neither of these checkboxes may be checked, but not both.

Proxy offers two different mouse motion transmission techniques to accommodate how DOS programs on the host PC might interpret mouse motion.

- If "absolute motion" is selected, Proxy will transmit mouse motion as absolute mouse position.
- If "relative motion" is selected, Proxy will transmit mouse motion as the difference between successive mouse positions.
- If neither is selected, Proxy will not transmit mouse motion at all.

"Absolute position" should work correctly with most programs, and it is in general the preferred option. If "absolute position" is working correctly, the mouse of the host PC should track the diamond-shaped Proxy mouse cursor very closely. If you find that the two mice do not track, try "relative position."

Proxy Settings and Preferences

Local Keys

As a general rule, Proxy transmits any keystrokes you type to the host PC. There are certain control keys, however, that have special meaning to Windows and you may want to reserve them for local use.

You can reserve the following keys as local keys:

key	meaning
[Alt-Tab]	switch between windows
[Alt-Esc]	switch between windows
[Alt-Space]	activate Control Menu
[Ctrl-Esc]	activate Start menu

You can control how Proxy handles each of these keys with a checkbox:

- If the box is not checked, Proxy will transmit the key to the host PC.
- If the box is checked, the key will operate your local Windows session.

You should set a key to local if you are accustomed to using it to control your Windows session, and you don't need that key to operate the host PC. If you don't have a mouse, you should, at a minimum, set **[Alt-Space]** to local in order to have access to the Proxy menu.

Note that a key's local setting only has meaning while you are connected to a host PC. Until a connection is made, all special keys are local and will operate your Windows session, regardless of the setting.

NOTE: Windows intercepts the [*PrintScreen*] keystroke before Proxy has a chance to process it. [*PrintScreen*] is always local to your Windows session.

Host Settings

Normally, the host PC is under dual control. You are controlling it remotely from the Proxy master, while the person sitting in front of the host PC can also control it directly using its keyboard and mouse. The controlled screen is visible by the Proxy master (from PROXY.EXE) and by the host PC (on the video display).

Control over the keyboard, mouse, and the ability to blank the video display on the host can be requested by the Proxy master.

NOTE: The Proxy Master control requests can be ignored by the host, if the host does not permit the specific function.

Proxy: Chapter 3

Suppressing the Host Keyboard and Mouse

Normally, keystrokes and mouse movements are handled on a first-come, firstserved basis whether received from the Proxy master or host.

The Proxy master can gain exclusive control of the host PC from Proxy by selecting "Suppress host keyboard/mouse." When this checkbox is selected, the host PC's own keyboard and mouse will stop operating, and the host PC will only be operable from your Proxy window. The host PC will regain control when you de-select the checkbox, or when you disconnect.

This feature is extremely useful when you are using an unattended PC and you want to prevent the "what's going on here?" syndrome. This syndrome is characterized by passers-by who notice a PC operating "all by itself" and feel an uncontrollable urge to poke at its keyboard!

Blanking the Host Screen

Normally, the host PC screen is visible both from the Proxy master and from the host PC. Any operations performed by the Proxy master are visible to anyone who can view the host PC screen.

To temporarily "blank" the screen during remote control you can select "Blank host screen." When this checkbox is selected, the host PC's own screen will appear as a blank screen, and the keyboard and mouse will be suppressed. The host PC screen will once again be visible and the keyboard and mouse active again when you de-select the checkbox, or when you disconnect.

This feature is useful as a security precaution when you are using an unattended PC and you want to prevent passers-by from seeing the operations performed.

Auto-scroll

Auto-scrolling comes into play when your Proxy window is too small to enclose the entire screen of the host PC. Auto-scrolling is often more convenient than using the scroll bars to view various parts of the screen.

If "cursor auto-scroll" is checked, the window will scroll to include the text cursor whenever it moves out of view. This affects text mode only.

If "mouse auto-scroll" is checked, the window will scroll to include the mouse whenever you move the mouse out of view while pressing a mouse button or the **[Ctrl]** key.

Proxy Settings and Preferences

DOS Sessions (Text Settings)

DOS Sessions settings control the text settings for full-screen DOS sessions. DOS boxes displayed as a window in Windows and Windows 95 are not affected. The DOS session settings are used to control the Text Font displayed, and the Text refresh rate.

Text Font

The Text Font is the typeface and type size that Proxy uses to display the host PC's screen when it is in text mode.

By varying the Text Font, you can increase or decrease the size of the host PC's screen as displayed in the Proxy window. With a smaller Text Font, you'll be able to see more of the host PC in a smaller window. With a larger Text Font, you'll improve readability at the expense of requiring a larger window.

To select a Text Font:

- 1 Click the Text Font control to get a drop-down list of fonts.
- 2 Click one of the fonts in the list.

The fonts in the list are shown previewed as they will actually appear. The names of the fonts are composed of a typeface name and a size. Thus, the font "Proxy 8 x 14" is typeface "Proxy," whose character dimensions are 8 horizontal pixels by 14 vertical pixels.

NOTE: The text fonts called "Proxy" are fonts that came with your Proxy package. Fonts with other typeface names are other Windows fonts that are also suitable for text display.

DOS Text Refresh Rate

The "refresh rate" settings allow you to control how frequently the host PC sends screen updates to Proxy. You can select from a list of refresh rates ranging from "Fast" (the maximum) to "10 seconds."

The faster the refresh rate, the faster changes on the host PC will be reflected in the Proxy window, and the "snappier" your session will feel. But with a faster refresh rate, the host PC will be spending more CPU time scanning its screen and transmitting changes, and Proxy will be spending more CPU time displaying those changes.

Proxy: Chapter 3

There are two refresh rate settings:

- The "foreground" refresh rate applies whenever the Proxy window is active
- The "background" refresh rate applies whenever the Proxy window is not active

The refresh rate of the foreground is the more important of the two, since it determines the speed of response of the window that you are actually operating. If you set a slower background rate, the window will update more slowly whenever you switch out of it, but will resume speed as soon as you re-activate it.

In general, if both the Proxy Master PC and the host PCs are fast (386 or higher), you can usually leave both refresh rates set to "Fast" without much worry.

You should consider slower refresh rates if:

- You are running a computationally-intensive graphics mode program on the host PC and you notice that it slows down when connected
- You are running multiple Proxy windows, all of which are simultaneously updating the display
- Your network is heavily loaded with communications traffic

Proxy Settings and Preferences

The Preferences Dialog

Proxy's Preferences dialog lets you control Proxy's behavior in a variety of ways. You can:

- Specify if polling is done when you enter the IPX or IP Connect dialogs
- Set the name of the Program Manager group where Shortcuts will be created
- Specify connection identification for the host PC

To bring up the Preferences dialog, select **Preferences** from the Control Menu. The Preferences dialog shows the current status of each item, and allows you to modify any item you like.

Preferences
IPX Connections
Poll local network after opening Connect dialog
- IP Connections
Poll local network after opening Connect dialog
Program Manager Group for Shortcuts
Group name: Proxy
Connection Identification for Host
System:
© Custom:
OK Cancel

Figure 3-2: The Preferences dialog

While in the Preferences dialog, you can:

- Modify any item
- Click **OK** to save the currently displayed settings as the default settings, to automatically take effect each time you open a new Proxy window
- Click **Cancel** to cancel your changes.

Proxy: Chapter 3

IPX Connections Polling

When you enter the IPX Connections dialog, you have the option of polling for any Proxy hosts which may be available.

You can set this polling behavior by setting "Poll local network after opening Connect dialog" in the *IPX Connections* box. When this checkbox is selected, the network will be polled for all Proxy hosts according to the settings in the Connect dialog. If you do not select this checkbox, then you will need to poll manually by clicking **Poll** in the Connections dialog.

IP Connections Polling

When you enter the IP Connections dialog, you have the option of polling for any Proxy hosts which may be available.

You can set this polling behavior by setting "Poll local network after opening Connect dialog" in the *IP Connections* box. When this checkbox is selected, the local network will be polled for all Proxy hosts. If you do not select this checkbox, then you will need to poll manually by clicking **Poll** in the Connections dialog.

Shortcuts Group Name

When you create a Shortcut for a connection, Proxy will create an entry in a particular program manager group, usually the same one into which you installed Proxy.

You can change the name of this group by setting "Group name" in the *Program Manager Group for Shortcuts* box. To change the name, click on the pull-down menu and a list of all available program manager groups will be displayed; you can click on the one you want to use.

Connection Identification for Host

When the Proxy Master connects to a Proxy Host, the Proxy Master displays its name on the Proxy Host's control panel. The System and Custom radio buttons let you determine the displayed name, as follows:

System — Proxy attempts to get and display the name of the Proxy Master workstation and show it in this field. This name will appear on any Proxy Host's Control Panel to which this master is connected.

Custom — This button and text box let you override the name in the System field with any name you choose.

Proxy Settings and Preferences

Proxy Tasks



Task Capabilities

Proxy's Task feature lets you describe the parameters of a session and save them by name.

When you create a task, you specify the following:

- The name of the host PC to connect to
- Optionally, a new set of settings to put into effect
- Optionally, a DOS, Windows, or Windows 95 program to automatically start up when connected

Suppose, for example, there is a spare PC on your network which you take over in order to run an Excel report macro. You could then set up a task called "Excel Report," which would automatically connect to the correct host PC, set the desired settings, and run Excel with the appropriate command line.

The Task Dialog

Using the Task dialog, you can create, edit, and run tasks. To bring up the Task dialog, select **Task** from the Control Menu.

Tasks	×
Select <u>T</u> ask:	
Excel Report PC Internet Gateway Server	<u>R</u> un
Report Server #1 Report Server #2	<u>S</u> ettings
Web Server	<u>A</u> dd
	Re <u>m</u> ove
	<u>C</u> reate Shortcut
	Done

Figure 4-1: The Task dialog

The Task dialog will list all the tasks that you've already defined. Initially, this list will be empty.

Push-button commands in the Task dialog allow you to:

- Run a task
- Add a new task
- Remove a task
- Edit a task's settings
- Create a shortcut to a task

Adding a Task

To create a new task:

- 1 Click **Add**.
- 2 When prompted, type the name of the new task you'd like to create, and click **OK**.
- 3 The Task Description dialog will appear. Edit the task description to your liking, then click **OK**.

The new task will be added to the list.

Editing a Task

To edit an existing task:

- 1 Highlight a task on the list, and click **Settings**.
- 2 The Task Description dialog will appear. Edit the task description to your liking, then click **OK**.

Removing a Task

To remove a task, highlight the task and click **Remove**. The task you selected will disappear from the list.

Proxy Tasks

Running a Task

To run a task, highlight a task on the list and click **Run**, or double-click a task on the list.

Creating a Shortcut to a Task

To create a shortcut to a task, highlight a task on the list and click **Create Shortcut**.

NOTE: To change the program manager group in which to create shortcuts, use the Preferences dialog.

The Task Description Dialog

The Task Description dialog allows you to set all the parameters of a task. It appears when you click **Add** or **Settings** from the Task dialog.

Excel Report PC			×
Connection	Excel Report PC		OK I
	PX	<u>P</u> oll	Cancel
Password:			
- <u>S</u> ettings			
Use task-spec	ific settings	<u>E</u> dit	
Execute on Conn	ect		
Automatically r	un:		
Command line:	excel report1.xlm		
Start in directory:	c:\lotusapp\excel		
Run:	Normal window		
Close window	on exit		

Figure 4-2: The Task Description dialog

Proxy: Chapter 4

Setting the Host PC

The "Connect to" box contains the name of the host PC you'd like to connect to when you run the task; the "Protocol" chooses whether to use IPX or IP.

To enter the name of the host PC, either:

- Type the name directly into the box and select the Protocol, or
- Click **Poll** to get a list of host PCs.

When you click **Poll**, Proxy will show the Host Workstations dialog with a choice of IPX or IP to poll the network for available host PCs. Select a protocol and a host PC. Once selected, the host name will be placed in the "Connect to" box, and the protocol used will be placed in the "Protocol" list.

Passwords

If the host PC requires a password, you can enter it into the "Password" box to automate the connection process. If the host PC does not require a password, you can leave this box blank.

If the host PC requires a password and you don't supply it in the "Password" box, you will be prompted for the password when you run the task.

Defining Special Settings

The "Use task-specific settings" checkbox determines whether Proxy changes the settings when you run the task:

- If it is not checked, Proxy will not alter the current settings when you run the task.
- If it is checked, Proxy will switch to specially defined settings when you run the task.

To define special settings for the task:

- 1 Check "Use task-specific settings."
- 2 Click **Edit**. The Settings dialog will appear.
- 3 Edit the settings to your liking, then click **OK**.

Proxy Tasks

Executing a Program Automatically when you Connect

You can set up a task to automatically run a specific program as soon as it connects to the host PC. This is useful if you have spare PCs on your network that you use as an extension of you own desktop for running particular programs.

To set a task to automatically run a program on the host PC:

- 1 Check "Automatically run:"
- 2 In the "Command line:" box, type the command line you'd like to execute on the host PC.
- 3 In the "Start in directory:" box, type the drive/directory you'd like to make current on the host PC when the program is run.
- 4 In the "Run:" box, select **Normal Window**, **Minimize**, or **Maximize** for the mode in which you want the Windows program to run on the host.
- 4 Check or uncheck the "Close window on exit" box. If this box is checked, the connection will automatically shut down and the Proxy window will close as soon as you exit from the program.

NOTE: If you are taking over a PC running DOS (using PHOST.EXE TSR), then the host PC must be at the DOS command prompt in order for automatic program execution to work. If the host PC is already running a program, you will get an error message when you try to run the task.



Starting the Proxy Host

The Proxy Host software, once installed and loaded, makes your workstation a Proxy Host that is available to Proxy Master stations across the network.

The Proxy Host software can be run from the following PC operating systems:

- Windows or Windows 95 Using a special Windows application, PHOSTWIN.EXE, your PC will be available to Proxy Master stations using the IP or IPX protocol.
- DOS Using a DOS TSR, PHOST.EXE, your PC will be available to Proxy Master stations using the IPX protocol.

You can run PHOST.EXE (in DOS) and PHOSTWIN.EXE (in Windows) at the same time to make your PC available to Proxy Master stations from IPX, whether your PC is in DOS or Windows.

In order to use the Proxy Host, you must use one of the following stacks:

- **IPX**: For Windows 3.x, you need to use Novell 16-bit (VLM) or 32-bit Client IPX protocol support. For Windows 95, you need to use the Microsoft Client for NetWare Networks, or Novell's Client-32 IPX protocol support.
- **IP:** For Windows 3.x, you need to use a Winsock-1.1 compliant IP stack. For Windows 95, you need to use a TDI-compliant 32-bit IP stack, such as Microsoft's TCP/IP.

NOTE: When using IPX it is not necessary to be logged in to a server, or even to run the NetWare client; all that is required is for IPX to be loaded.

The Host Control Panel

The Host Control Panel lets you view and alter the Proxy Host's status and settings. You can:

- See which Proxy Master, if any, is connected to the host PC
- Abort the connection with the Proxy Master
- Set the conditions under which a Proxy Master may establish a connection
- Ask for beeps to notify you of a Proxy Master connection

Running the Control Panel

To run the Control Panel from Windows double-click the *Proxy Host Control Panel* icon, or use the Program Manager's **File Run** or Windows 95 **Start Run** command to run the program PHOSTWIN.EXE from the Proxy directory.

🔮 Proxy Hos	t - No Connection	
Options <u>H</u> elp		
Protocols	ist operation	
IPX	00000002:008029EB62F5	
IP	198.186.160.39	
Connected to	: <none></none>	

Figure 5-1: The Host Control Panel

Enabling and Disabling Host Operation

The **Enable Host operation** checkbox on the Control Panel menu allows you to control whether or not a Proxy Master can take over your PC.

If you want to disable Proxy Host operation, uncheck **Enable Host operation** and Proxy Master machines will be unable to connect to your PC.

If you want to enable Proxy Host operation, check **Enable Host operation** and Proxy Master machines will be able to connect to your PC based on time restrictions, permissions, and/or password security you may have set.

NOTE: In order to completely remove the Proxy Host from your system, you need to double-click the Uninstall Proxy Host icon.

Status Information

The Control Panel indicates the current status of your PC:

- "Protocols" indicates the IPX address, in the form "network:node" and the IP address, in the form "a.b.c.d" of the host PC
- "Connected to" indicates the network address and user name of the Proxy Master that is currently connected, or "<none>" if there is no current connection.

Aborting the Current Connection

If a Proxy Master is in control of your PC, you can abort the connection by selecting **Options**, then **Abort session**.

The Settings Dialog

To view or modify settings, select **Options**, then **Settings** from the main menu. The Settings dialog will appear with four tab dialogs: General, Access, Security, and Protocols.

roxy Host Settir	ngs		2
General	Access	Security	Protocols
	George's P200		8
	ppearance s no connection: nection is active:	Hidden Icon	Y
		ОК	Cancel

Figure 5-2: The General Settings Tab Dialog

While in the Settings dialog, you can:

- Switch to the **General**, **Access**, **Security** or **Protocols** tab dialogs by clicking on that tab
- Modify any item within a tab dialog
- Click **OK** to save the currently displayed settings as the default settings, to automatically take effect each time you open a new Proxy window
- Click **Cancel** to cancel your changes
- Proxy: Chapter 5

General Setting

The **General** tab dialog allows you to change the most commonly updated values for the Proxy Host. The station name, password, notification (beeping) values, and the appearance of the Control Panel itself.

The Station Name

The Station Name identifies your PC to Proxy Masters which may want to connect to it.

You'll probably want to assign a station name that makes it easy to identify the PC. Combining the name of the person who uses the PC with the PC's brand or type is usually a good practice; for example, "George's P200" or "Gracie's Model 60."

The Password

If you'd like to restrict access to your PC to only certain Proxy Master users, you can assign a password. Whenever a Proxy Master tries to connect to your PC, that password will have to be supplied before the connection is accepted.

The password can be any sequence of up to 16 characters. The password is never displayed on screen; as you edit it, asterisks appear in place of the characters you type. You can change the password at any time.

If you don't want to require a password for access, you should leave this field completely blank.

Beeping

You can set Proxy Host to alert you whenever a Proxy Master makes or breaks a connection with your PC, and to periodically beep while a session is in progress.

If you check "Beep on connect/disconnect," you will hear a quick series of three tones rising in pitch whenever a Proxy Master connects to your PC, and another series of tones falling in pitch when it disconnects.

If you check "Beep while connected," you will hear a short tone periodically while a Proxy Master is connected to your PC. You can set the interval between beeps to any number of seconds between 1 and 999.

Proxy Host Appearance

The Proxy Host Control Panel program (PHOSTWIN.EXE) can be set to appear (or not) as an icon on your desktop. This is useful if you want to know when a Proxy Master has connected to you.

If you select the "When there is no connection:" **Hidden** option, then the Control Panel will not normally appear on your desktop. If you select the **Icon** option, then the Control Panel icon will appear as soon as Windows starts.

If you select the "When a connection is active:" **Hidden** option, then the Control Panel will not appear on your desktop even if a connection is made. If you select the **Icon** option, then the Control Panel icon will appear as soon as a Proxy Master connects to your PC.

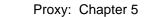
NOTE: You can bring up the Control Panel at any time by running PHOSTWIN.EXE.

Access Setting

The **Access** tab dialog allows you to change the conditions for a successful connection. You can set access restrictions, and select the connection permission required before a station can be taken over.

Proxy Host Settin	ngs		×
General	Access	Security	Protocols
Access Rest	rictions		
Permit co	nnection		
C Lock out	connection		
C Lock out	or Permit connectio	on based on time zo	ine:
		Time Zone S	Settings
Connection F	Permission		
No permis	sion required		
C Permissio	n must be granted t	oy host;	
host's use	er must respond with	nin: 30 seconds	7
C Permissio	n requested from he	ost;	
connectio	on continues after:	30 seconds	
		ОК	Cancel

Figure 5-3: The Access Settings Tab Dialog



Access Restrictions

A set of three radio buttons control whether a Proxy Master will be permitted to establish a connection with the host PC. You can select any one of these options:

- **Permit connection**—while this button is checked, Proxy Masters are welcome to connect to this host PC.
- **Lock out connection**—while this button is checked, Proxy Masters are unconditionally denied permission to connect to this host PC.
- **Lock out or Permit connection based on time zone**—while this button is checked, Proxy Masters are allowed to connect based on the day of the week and the time of day, as specified in the time zone map.

If you've chosen the last of the three options —"Lock out or Permit based on time zone"— then the time zone map will determine when a Proxy Master will be permitted to connect to the host PC.

Click on **Time Zone Settings** to bring up the Time Zone map.

Time Zone S	ettings	×
Lock out/Per	mit connection based on time zone:	ОК
	1 AM 111 PM 11 212345678901212345678901	
Sunday Monday	2 <mark></mark>	
Tuesday Wednesday		Permit (+)
Thursday Friday		Lock (-)
Saturday		
	Sunday, 12:00 AM - 12:30 AM PERMITTED	

Figure 5-4: The Time Zone Settings Dialog

The time zone map is divided into half-hour time slots for each day of the week. Each half-hour time slot is marked with either:

- A dot (\cdot) , indicating connection is permitted, or
- A blank, indicating connection is locked out

To edit the time zone map in the Settings dialog:

• Use the mouse to highlight a rectangle, then click **Permit** or **Lock**; or

The Proxy Host

Tab to the time zone map, then use the arrow keys to navigate and press
 [+] or [-] to set any entry to PERMITTED or LOCKED.

When you've modified the settings to your liking, click **OK**.

Connection Permission

A set of three radio buttons controls whether a Proxy Master will be given permission to establish a connection to the host PC. You can select any one of these options:

- No permission required while this button is checked, Proxy Masters are welcome to connect, according to password and time zone settings you've specified.
- **Permission must be granted by host**—while this button is checked, Proxy Masters must be explicitly granted permission by the host within a specified period of time; if the host is unattended, or no permission is granted, then the connection is rejected.
- **Permission requested from host**—while this button is checked, Proxy Masters will request permission from the host within a specified period of time; if the host is unattended, or permission is not explicitly denied, then the connection is allowed.

If you've chosen one of the last two options, then a permission message box will be shown on the host PC when a Proxy Master attempts to make a connection.

Ргоху Н	ost: Request Permissi	ion for Conn	ection 🛛 🕅
<u>34</u>	The user at the compute 00020000:008029EF7F1 would like to connect to	EA	ı.
Time re	maining before automatic	rejection:	175 seconds
	Accept Connection	Reject cor	nection

Figure 5-5: Permission Message Box

This message box will request the host to grant permission to allow the Master to take control and display the Proxy Master user name (or network address). The host PC user can then answer **Accept Connection** or **Reject Connection** to the permission question.

Security Setting

The **Security** tab dialog allows you to change the security features for a host connection. You can grant the master permission to change local suppression of the keyboard/mouse or screen blanking, and set local security features such as reboot on disconnect, keyboard disabling, and screen blanking.

Proxy Host Set	tings		×
(()	
General	Access	Security	Protocols
Permit scre Local Security ■ Reboot on	oression of keyboard en blanking on conn / Settings disconnect or termin yboard and mouse o	ect ation	
		OK	Cancel

Figure 5-6: The Security Settings Tab Dialog

Permit Master Requests

A set of two checkboxes controls whether a Proxy Master will be permitted to suppress the keyboard and mouse, and whether screen blanking on connect will be allowed.

If you check "Permit suppression of keyboard/mouse," you will allow a Proxy Master to optionally suppress your ability to use the keyboard and mouse during a connection. If you uncheck this field, then you will always be able to control the keyboard and mouse during a connection, even if the Proxy Master has requested keyboard/mouse to be disabled.

If you check "Permit screen blanking on connect," you will allow a Proxy Master to optionally blank the screen (set it to black) during a connection. If you uncheck this field, then you will always be able to see the screen during a connection, even if the Proxy Master has requested screen blanking.

Local Security Settings

A set of three checkboxes give the Proxy Host local control to enforce security on incoming Proxy Master connections. You can select any one of these options:

- **Reboot on disconnect or termination**—while this is checked, the Proxy Host PC will automatically reboot whenever a Proxy Master disconnects or the connection is terminated. This is useful to establish a standard startup process on the PC, and to protect against accidental takeover of a previous session.
- **Disable keyboard and mouse on startup**—while this is checked, the Proxy Host PC cannot be changed by someone who has physical access to the keyboard and mouse. This is useful to guard against tampering with a configuration once the Proxy Host is started.
- **Blank screen on startup**—while this is checked, the Proxy Host PC screen will be blanked (all video will become black) as soon as the Proxy Host is running. This guarantees that any activity by a Proxy Master cannot be viewed by a passerby.

If you have chosen one of the last two options, the "Confirm Security Settings" message box will be displayed on the Host PC at Windows startup. To take control of the Host PC before screen blanking and/or keyboard and mouse disabling, answer **Disable Security Settings** within 30 seconds.

NOTE: Choosing one of the last two options and also selecting connection permissions is incompatible, since the Host cannot acknowledge a message box. If you attempt to do this, then **No Permission Required** will be forced as the new setting.

Protocols Setting

The Protocol tab	dialog allows	you to set	which p	protocols	you wish to	o allow	the
host to use.							

Proxy Host S	Settir	ngs		×
Genera	I	Access	Security	Protocols
- Enable	/Diab	ble Network <u>P</u> rotoc	olo	
		000002:0020C501		
IP		8.186.160.48		
			OK	Cancel

Figure 5-7: The Protocols Settings Dialog

A set of two checkboxes controls whether a Proxy Master will be permitted to connect via IPX or IP protocol.

Each protocol that is currently available will have its address displayed. If a protocol is currently unavailable then *<not enabled>* will be shown in place of the network address.

If you check "IPX," you will allow a Proxy Master to see your host PC using the IPX protocol, and connect to you via IPX.

If you check "IP," you will allow a Proxy Master to see your host PC using the IP protocol, and connect to you via IP.

Password for Settings Access

To prevent a Proxy Master from using the Settings dialog to change your Host settings, select **Options**, then **Password for Settings Access** from the Host Control Panel menu. This option works as follows:

- A password can only be set by a local user when the machine is not taken over
- If a password is set, it only needs to be entered while the machine is taken over

DOS Proxy Host Support

Loading PHOST.EXE allows your PC to be available to Proxy Master stations using the IPX protocol while it is running DOS. PHOST.EXE is a TSR program, which means that once it is loaded, you can continue to use your PC for other applications.

To load PHOST, switch to the directory in which it is installed, or make sure that directory is on the path, and type:

PHOST 🚽

You can also load PHOST by specifying a complete path; for example:

C:\PROXY\PHOST ↓

If you'd like PHOST to be loaded automatically at boot time, simply add the PHOST command to your AUTOEXEC.BAT file.

Loading PHOST High

PHOST can be loaded high on 386 or higher PCs running DOS version 5 or later. When loaded high, PHOST occupies memory between 640K and 1M, leaving more space for typical DOS applications that reside below 640K.

To load PHOST high, type:

LOADHIGH PHOST ,J

PHOST can also be loaded high using memory managers such as QEMM 386 or 386MAX. Refer to your memory manager's documentation for details on loading TSRs high.

Proxy: Chapter 5

PHOST Command Line Switches

PHOST will recognize switches on its command line as follows:

PHOST /U	unload PHOST
PHOST /C	run the Host Control Panel
PHOST /B	forces a reboot when disconnected
PHOST /D	disables the keyboard and mouse on the host
PHOST /S	blanks the screen on the host

Running the DOS Control Panel

To run the Control Panel from DOS, run PHOST with the /C switch:

PHOST /C 🗸

Note: Some Proxy Host Settings are only applicable in Windows and are not available from the DOS Host Control Panel.

Operating the Control Panel is easy. These are the basic operations:

- To issue a command, press the appropriate function key.
- To move to any setting use the up/down arrows or click the setting with the mouse. The setting you select will be highlighted and may be edited.

				Proxy H	lost Co	ntrol	Panel			
Stati	on name:		George	e's P200)			>	F10	ОК
Passw	ord:		< ****		>				BO	CANODI
[v] D	eep on co	moot	diagon	ant					F3	CANCEL
	eep on co eep while					mde				
	ermit suj					Jinus			F9	ABORT SESSIO
	ermit sc								15	
					IECT					
() L	ermit con ock out o ock out/l	mecti connec	on tion			time z	one:		F1	HELP
() L	ermit con ock out o ock out/l 1	nnecti connec Permit A M	on tion connect 1	ion bas	ed on P	1	1	1	F1	HELP
() L () L	ermit com ock out o ock out/l	nnecti connec Permit A M	on tion connect 1	ion bas	ed on P	1	1	-	F1	HELP
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() L	ermit con ock out o ock out/l 1	nnecti connec Permit A M	on tion connect 1	ion bas	ed on P	1	1	-	F1	HELP
() L () L SUN MON TUE WED	ermit con ock out o ock out/l 1	nnecti connec Permit A M	on tion connect 1	ion bas	ed on P	1	1	-	F1	HELP

Figure 5-8: The Host Control Panel (DOS)

- To edit a text setting, just start typing to overwrite the current entry, or use the arrow keys, **[Backspace]**, and **[Del]** to edit the current entry. To erase an entry entirely, press **[Esc]**.
- To toggle a [] checkbox, press either **[Space]** or **[Enter]**, or click the checkbox with the mouse.
- To select from among several () radio buttons, highlight the radio button you'd like to select and press either **[Space]** or **[Enter]**; or click the radio button with the mouse.
- To edit the time zone map, position the cursor with the arrow keys, then use:

[*] or [+] to set PERMITTED
[Space] or [-] to set LOCKED
[Enter] to toggle between PERMITTED and LOCKED

To mark a rectangular range for editing, press **[F5]** to set block mode, or hold down **[Shift]** while marking the block with the cursor keys.

You can also toggle any item by clicking it with the mouse; you can toggle a range by clicking and dragging the mouse.

When you've performed whatever operations you like, press **[F10]** to exit to DOS.

Unloading PHOST

PHOST may be unloaded by running it with the /U switch. From the DOS prompt, type:

PHOST /U 🚽

PHOST will remove itself from memory and make the memory it had taken up available to DOS.

TSRs can normally be unloaded in the reverse order in which they were loaded. If other TSRs have been loaded after PHOST, PHOST may not be able to unload when you ask it to, and will return an error message instead. It may still be possible to unload PHOST by first unloading the TSRs you loaded after PHOST, in reverse order.

Proxy: Chapter 5

Tips and Techniques



Controlling Many Host PCs

In theory, a Proxy Master can control up to 254 host PCs at one time.

In practice, you'll run out of memory before you'll be able get close to that many Proxy windows running at once.

If you have the memory and the processing power, you should be able to simultaneously display and control 5, 10, or more host PCs at once from a single Windows session.

Proxy's ability to keep up with multiple host PCs depends largely on how much display activity there is. If each host PC's display is quiet until you switch to it to perform operations, then Proxy should have no trouble keeping up.

If, on the other hand, the various host PCs are independently active with constantly changing displays, you might want to adjust the background refresh rate in the Settings dialog to allow Proxy to respond less quickly to display changes on host PCs that are not in the active window.

Setting Up Banks of Host PCs

One of the typical uses for Proxy is to provide a computing resource that can be made available to the entire network. For example, you might set up one or more high-powered PCs as Proxy Hosts that various people might take over in order to do CAD or database queries. Or, you might have several modem-equipped host PCs that can provide shared communications service to anyone on the network.

If you have more than one PC performing the same type of function, you can set them up as a bank of interchangeable PCs, with similar names. Since users don't care which of the several PCs they connect to, they can use wildcards in the station name; the connection will be made to the first available PC.

Suppose, for example, you have three PCs you'd like to make available as CAD servers. You might assign them the station names "CAD-1," "CAD-2," and "CAD-3." You could then set up a Proxy icon that connects to any one of the available CAD machines with the following command line:

PROXY CAD-*

The Proxy Command Line

Proxy can be given instructions right on the command line that you use to run it. This allows you to create separate Proxy icons in Program Manager that operate Proxy in different ways.

(In fact, when you use the **Create Shortcut** function in Proxy, you are specifying and saving Proxy command lines.)

You can set up:

- Shortcuts that automatically open Proxy windows and connect to particular host PCs, either by station name, IPX address, or IP address
- Shortcuts that automatically open Proxy windows and run particular tasks

You can also customize the title bar of your Proxy window using a command line switch.

Connecting by IPX Address

To connect to a particular station by IPX address, use the /P switch with the name of the protocol, then specify the station's IPX address, preceded by the @ symbol:

PROXY /PIPX @node

or

PROXY /PIPX @network:node

For example:

PROXY /PIPX @20:1B31DAE9

Connecting by Name with IPX

To connect by name to a particular IPX station, use the /P switch with the name of the protocol followed by the name of the station you would like to connect to, optionally preceded by the network segment:

PROXY /PIPX stationname

or

PROXY /PIPX network:stationname

Tips and Techniques

If the station you want to connect to is on a different network segment, you must prefix its network number and a colon (:) to the station name. For example, to connect to station "Dell P200" on network number 2:

PROXY /PIPX 2:Dell P200

Note that the stationname may include wildcards.

Connecting by IP Address

To connect to a particular IP-based station by IP address, use the /P switch with the name of the protocol, followed by the station's IP address or DNS name.

PROXY /PIP address

PROXY /PIP DNS-name

For example, to connect to the station at IP address 198.186.160.138, use the following command line:

PROXY /PIP 198.186.160.138

If the station you want to connect to has a DNS address, you can use it. For example, to connect to station jackson.company.com, use the following command:

PROXY /PIP jackson.company.com

Running a Task

To start up a task, specify the /T or /t switch, followed by the name of the task:

PROXY /Ttask

For example, to run a task called "report," use a command line like the following:

PROXY /Treport

Customizing the Window Title

The title bar of a Proxy window normally has the caption "Proxy," along with the name of the host PC to which you are connected and, if the connection was made through a task, the name of the task.

If you'd like to replace the standard caption with one of your own choosing, use the /W or /w switch. This switch must precede the workstation name, IPX address, or task name.

For example, to connect to station "Dell P200" in a Proxy window entitled "Analysis," use the following command line:

PROXY /WAnalysis Dell P200

Proxy will consider the first space that follows the /W switch to be a separator, and will expect a workstation name, IPX address, or task name to follow. If you'd like to include spaces in your custom window title, you must enclose the text in quotes.

Thus, to entitle the window in the example above "Stock Market Analysis," use the following command line:

PROXY /W"Stock Market Analysis" Dell P200

Display Mode Support

Proxy is able to reproduce the display of the host PC while it is in a wide variety of display modes, both in DOS and Windows.

Proxy's ability to render colors accurately depends on the capabilities of the Windows display driver. The most accurate color reproduction will occur when the Proxy Master's color capability matches or exceeds that of the host PC. For example, a Proxy Master running in a Windows session with a 16-color display driver will be able to render a host PC running Windows with a 16-color display driver perfectly; however, if the host PC's display driver is 256-color, the Proxy Master will have to approximate some colors as best it can.

For accuracy in color rendering, it is better to use a 256-color than a 16-color Windows display driver on the Master machine. The 16-color display driver, however, will give significantly better performance, while still providing a range of colors that is adequate for most purposes.

The display resolution of the Master machine is less critical, since Proxy can display host PC screens of any size by resorting to scroll bars. However, you'll find it convenient to use a high-resolution display driver for the Master machine, such as 800 x 600 or 1024 x 768, so that you'll be able to render most host PC displays in their entirety without scroll bars.

Tips and Techniques

Host Display Modes—Windows

Proxy can display a host PC running Windows provided the Windows display driver of the host is either monochrome, 16-color, 256-color, 15/16-bit or 24/32-bit color. Note that host PCs running Windows in monochrome mode may display in full-color in the Proxy window.

Host Display Modes—DOS

While the host PC is in DOS, Proxy can render its display when it is in any of the following modes:

mode	description
0/1	40 x 25 16-color text
2/3	80 x 25 16-color text
4/5	320 x 200 4-color graphics
6	640 x 200 monochrome graphics
7	80 x 25 monochrome text
D	320 x 200 16-color graphics
E	640 x 200 16-color graphics
10	640 x 350 16-color graphics
11	640 x 480 monochrome graphics
12	640 x 480 16-color graphics
10	

13 320 x 200 256-color graphics

If the host PC enters a display mode which Proxy cannot render, the Proxy window will be blank until the host PC enters a display mode that Proxy can handle.

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