COMPAQ

Compaq *Evo* T20 and Compaq T1010 NT Embedded Terminals

Quick Reference Guide

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This equipment has been tested and found to comply with the limits for either Class A or Class B digital devices (refer to “Terminal Requirements Compliance”) pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution

Changes or modifications not covered in this manual must be approved in writing by the manufacturer’s Regulatory Engineering department. Changes or modifications made without written approval may void the user’s authority to operate the equipment.

Terminal Requirements Compliance

The T1010 and Evo T20 terminals meet Class B requirements.

Canadian DOC Notices

Class A

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n’émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Réglement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

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This product conforms to the requirements of IEC950 and EN60950.

This product conforms to requirements of EN55022 for Class A equipment or EN55022 for Class B equipment (refer to “Terminal Requirements Compliance”).

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Compaq *Evo* T20™ and Compaq T1010 Terminals Quick Reference Guide

Introducing the *Evo* T20 and T1010 Terminals

Compaq *Evo* T20 and Compaq T1010 terminals use the Windows NT® Embedded operating system to display windows rather than the classic text-based display. These computers are designed to connect to Windows Terminal Server (WTS) and Windows 2000 servers via Remote Desktop Protocol (RDP) and Independent Computing Architecture (ICA). RDP is the Microsoft presentation service protocol for connecting to Windows terminal servers. ICA is the Citrix presentation service protocol for Windows NT servers. Both allow an application's user interface to execute on a NT Embedded-based terminal while the application's logic executes on the server.

About This Book

This publication is a supplement to the standard Windows NT Embedded documentation supplied by Microsoft Corporation, which is also available on the Microsoft web site at http://www.microsoft.com/windows/embedded/nt/. This document explains the differences, enhancements, and additional features provided by Compaq with the thin client. No attempt has been made in this publication to document the standard NT features found in this product.

Evo T20

The Compaq *Evo* T20 terminal is a small footprint, low profile, modular NT Embedded-based terminal. The connections for monitor, network and USB I/O devices are on the back panel of the terminal. Figure 1 shows the Evo T20 terminal.

The *Evo* T20 supports only USB serial communications. Keyboard and mouse connections are accomplished using the USB ports on the back of the terminal.

Figure 1 *Evo* T20 Thin Client

Evo T20 Features

The following list outlines the key features of the *Evo* T20 terminal.

- Windows 3.1, Windows 95, Windows 98, and Windows NT applications via Windows 2000 or Windows Terminal Server
- RDP and ICA application compliant
- 10/100 Base-T network communications
- Dual USB ports
- Extended color support up to 16 bits
- Support for monochrome or color monitor

The following items are provided with *Evo* T20 terminals.

- Power cord and power supply
- Keyboard and mouse
- Installation and user information

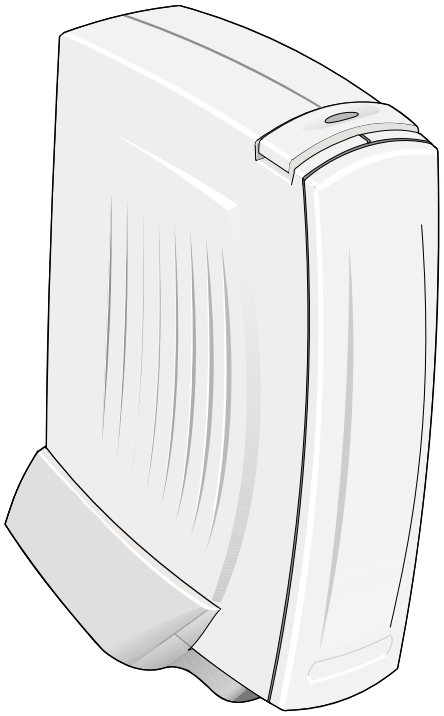
Use Figure 2 to connect power supply/power cord, monitor, keyboard, mouse, ethernet, and other external devices such as headphones to your terminal.

Figure 2 *Evo* T20 Back Panel

T1010 Terminal

The T1010 terminal is a modular-type NT Embedded-based terminal. The connections for its peripherals such as the monitor, keyboard, and mouse are on the back panel of the thin client. Figure 3 shows the T1010 terminal.

Figure 3 T1010 Terminal



T1010 Terminal Features

The following list outlines the key features of the T1010 terminal.

- Windows 3.1, Windows 95, Windows 98, and Windows NT applications via Windows 2000 or Windows Terminal Server
- RDP and ICA application compliant
- 10/100 Base-T network communications
- Dual high-speed serial ports
- Parallel printer port
- USB port (See Note)
- Extended color support up to 16 bits

- Support for monochrome or color monitor
- Desktop housing

Note

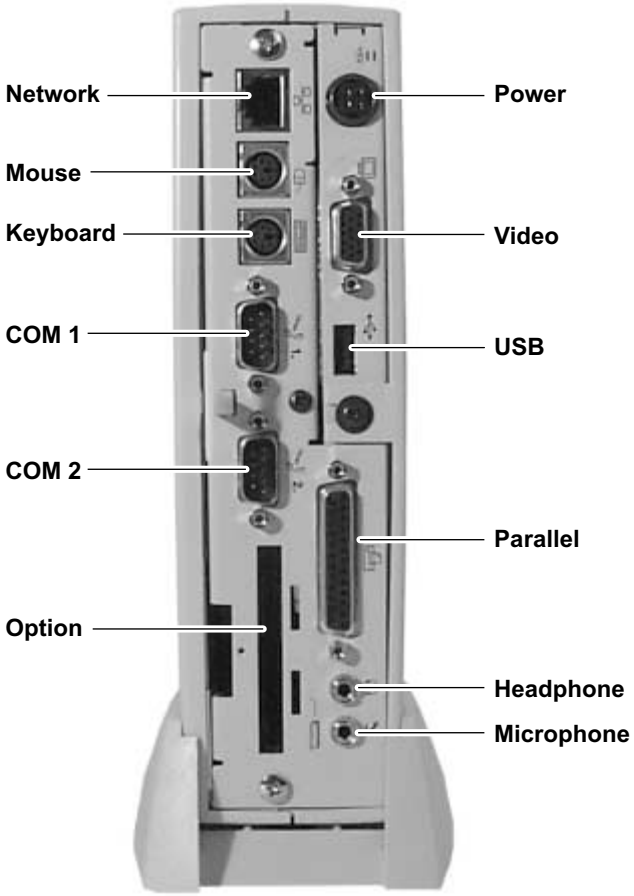
USB and Option card slot will be supported in future releases.

The following items are provided with T1010 thin clients.

- Power cord and power supply
- Keyboard and mouse
- Installation and user information

Use Figure 4 to connect power supply/power cord, monitor, keyboard, mouse, network (ethernet), and other external devices such as headphones to your terminal.

Figure 4 T1010 Back Panel



Extended Windows NT Embedded Features

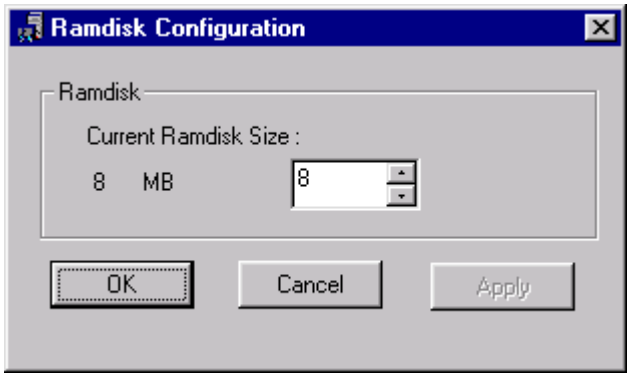
The NT Embedded based terminal's operating system has extended features not found in standard Windows NT. With the exception of Microsoft Client Connection Manager and Citrix Program Neighborhood, extended NT Embedded features are only available through Administrator logon accounts.

Extended Control Panel Features

- **Ramdisk**

  The Ramdisk is volatile memory space set aside for temporary user data storage. Use the **Ramdisk Configuration** dialog box to configure the Ramdisk size. See the following figure.

Figure 5 Ramdisk Configuration Dialog Box



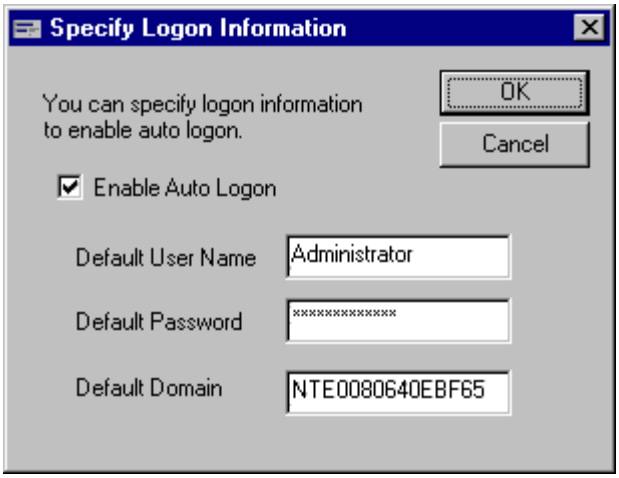
- **Time Sync**

  Synchronize the terminal's time to the server's time.
- **Winlog**

  Use the **Specify Logon Information** dialog box to enter logon information:
  - **Enable Autologon**
  - **Default User Name**
  - **Default Password**
  - **Default Domain**.

  See the following figure.

Figure 6 Specify Logon Information Dialog Box



Extended Program Features

- **Terminal Services Client**

  Client Connection Manager

  Use this feature to create shortcuts to terminal servers.

  See Microsoft Windows/Windows NT documentation for a detailed explanation and instructions on how to use the Client Connection Manager. It is available on the web at http://www.microsoft.com/windows/embedded/nt/.

  Terminal Services Client

  Use this feature to connect to available servers.

  See Microsoft Windows/Windows NT documentation for a detailed explanation and instructions on how to use the Terminal Services Client. It is also available on the web at http://www.microsoft.com/windows/embedded/nt/.

- **Image Upgrade**

  Upgrade individual terminals using the **Image Upgrade** dialog box. For information about this dialog box see the Application Notes.

- **WinVNC**

  The WinVNC application is available only to administrators and allows them to remotely log on and control a terminal. This is a freeware product and the documentation may be found on the web at http://www.uk.research.att.com/vnc.

Using Your Sysytem

Logging On

The Auto Logon feature is enabled as a factory default. Use the Specify Logon Information dialog box to:

- change the **Default User Name**
- change the **Default Password**
- enable or disable **Auto Logon**

The **Specify Logon Information** dialog may be accessed with the following special key sequence: **Tab**, **Home**, **End**, ←, →.

After completing this key sequence, the next dialog box to display will be the **Specify Logon Information** dialog box. Make one of the following choices:

- As an Administrator, enter **Administrator** in both the **User Name** and **Password** fields
- As a User, enter **User** in both the **User Name** and **Password** fields

The default for the **Logon Information** dialog box is **User**.

Note

The passwords are case sensitive. The administrator's password is uppercase A followed by all lowercase characters. The user's password is uppercase U followed by all lowercase characters.

Passwords can be changed using **Ctrl**+**Alt**+**Del** | **Change Password**. For security purposes it is recommended that the administrator default password be changed.

Time Synchronization

The Dimension 4 time sync application automatically launches each time the terminal is started. It searches pre-configured time servers in sequence until it connects and sets the time on the terminal. The application then automatically exits. If the application cannot connect with a time server within approximately 15 seconds it will time-out and close. The time on the terminal will not be accurate.

Joining A Domain

Note

If you are joining a domain you must have a unique system ID (SID). All terminals are shipped from the factory with identical SIDs. Therefore, before joining a domain with your unit, change the SID.

Contact your System Administrator to have this done.

Note

System Administrators: If you do not already have the appropriate utility to change the SID, contact your software supplier.

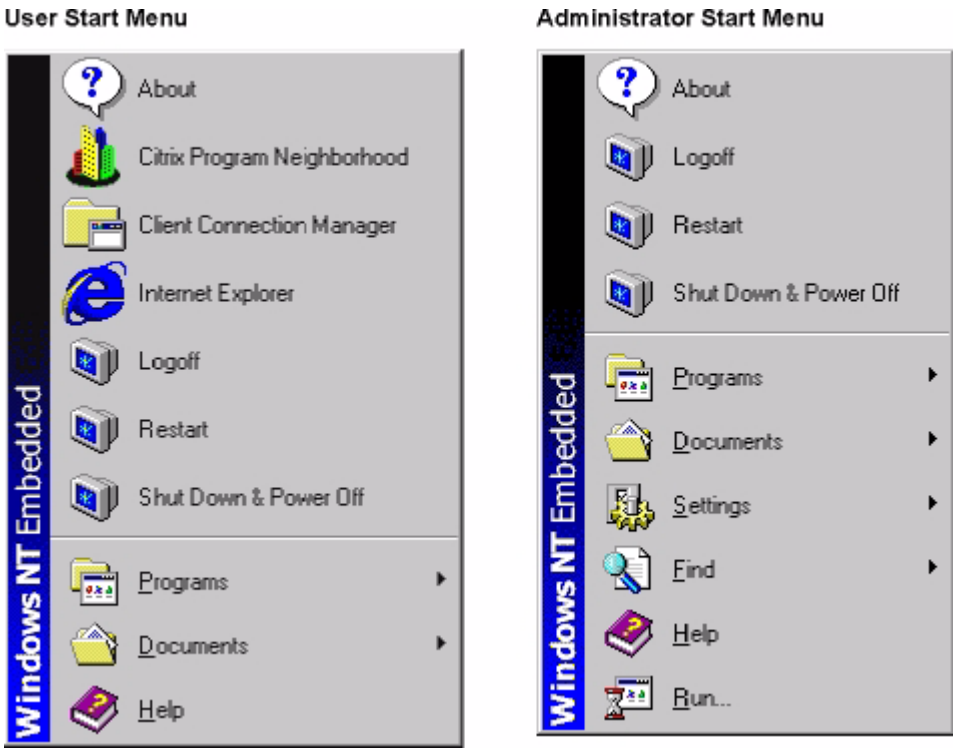
Shutting Down

Shutting down the NT Embedded based T1010 Terminal varies slightly from standard Microsoft Windows and Windows NT based equipment. To shut down, Restart, or Logoff, simply click the **Start** button in the Task Bar and select the appropriate action from the **Start** pop-up menu. (See the following figure).

Note

You may also logoff by using the Ctrl + Alt + Del key combination.

Figure 7 User and Administrator Start Menus



The Windows NT Embedded Desktop

When you log on as an administrator, a dialog box displays over the desktop for a short period of time. This dialog box shows the current time as its title. When this occurs, the terminal is synchronizing its local time with the server's local time. You can invoke and use this dialog box again using **Start** | **Settings | Control Panel** | **Time Sync**.

Users Desktop

When you first turn on your terminal and log on as a user, the desktop in Figure 8 will display. The **Start** menu for the user contains the following top-level items:

- **About**
- **Citrix Program Neighborhood**
- **Client Connection Manager**
- **Internet Explorer**
- **Logoff**
- **Restart**
- **Shut Down & Power Off**
- **Programs**
- **Documents**
- **Help**

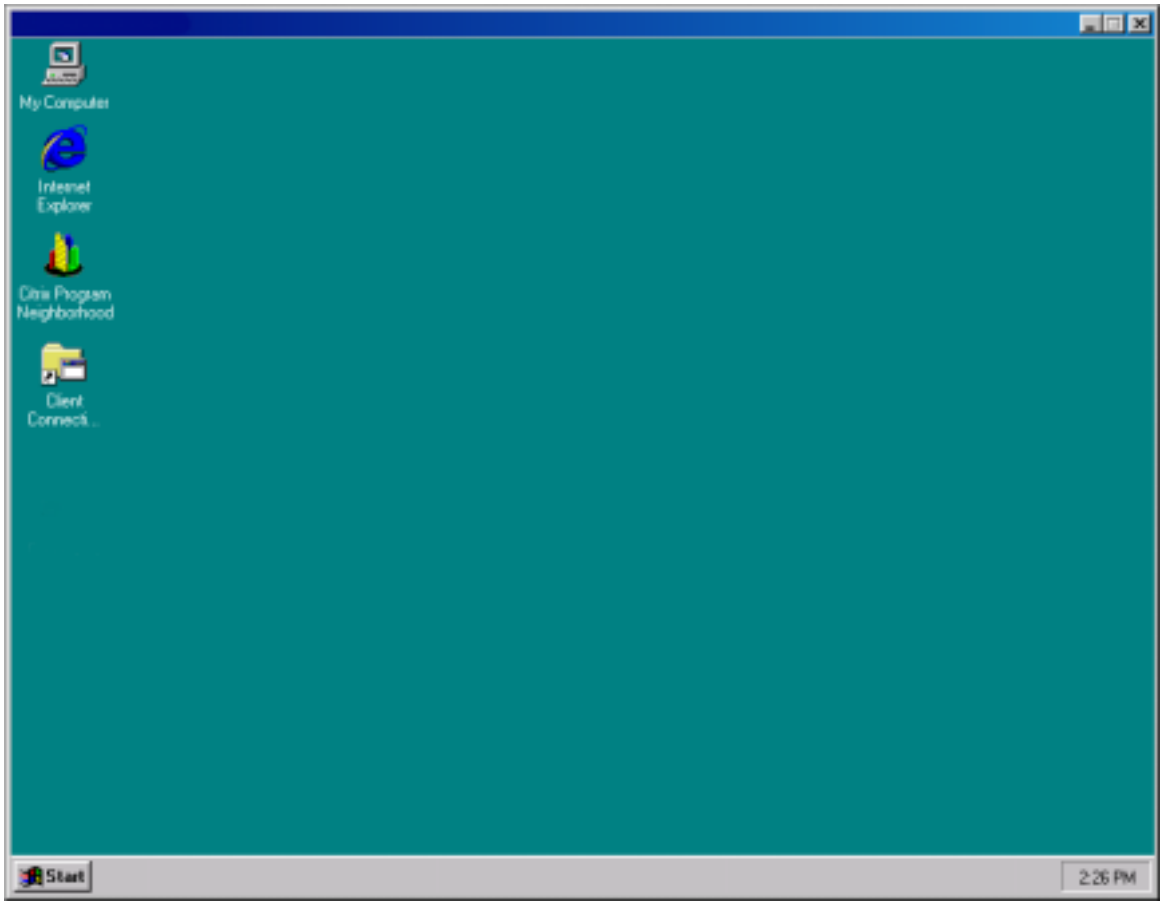
Note

For information about the functionality of the menu items, refer to Microsoft or third-party documentation, as appropriate.

Note

If you have a custom firmware image in your Compaq terminal, it may have more or fewer top-level items and Start menu options.

Figure 8 Users Desktop



Administrators Desktop

When you first turn on your terminal and log on as administrator, the desktop in Figure 9 will display. The **Start** menu for the administrator contains the following top- and secondary-level items:

- **About**
- **Logoff**
- **Restart**
- **Shut Down & Power Off**
- **Programs**, including **Citrix Program Neighborhood, Internet Explorer, winvnc, Startup**, **Terminal Services Client**, **Command Prompt**, **Image Upgrade**, and **Windows Explorer**
- **Documents**
- **Settings**, including **Control Panel**, **Printers** and **Taskbar**
- **Find**
- **Help**
- **Run**

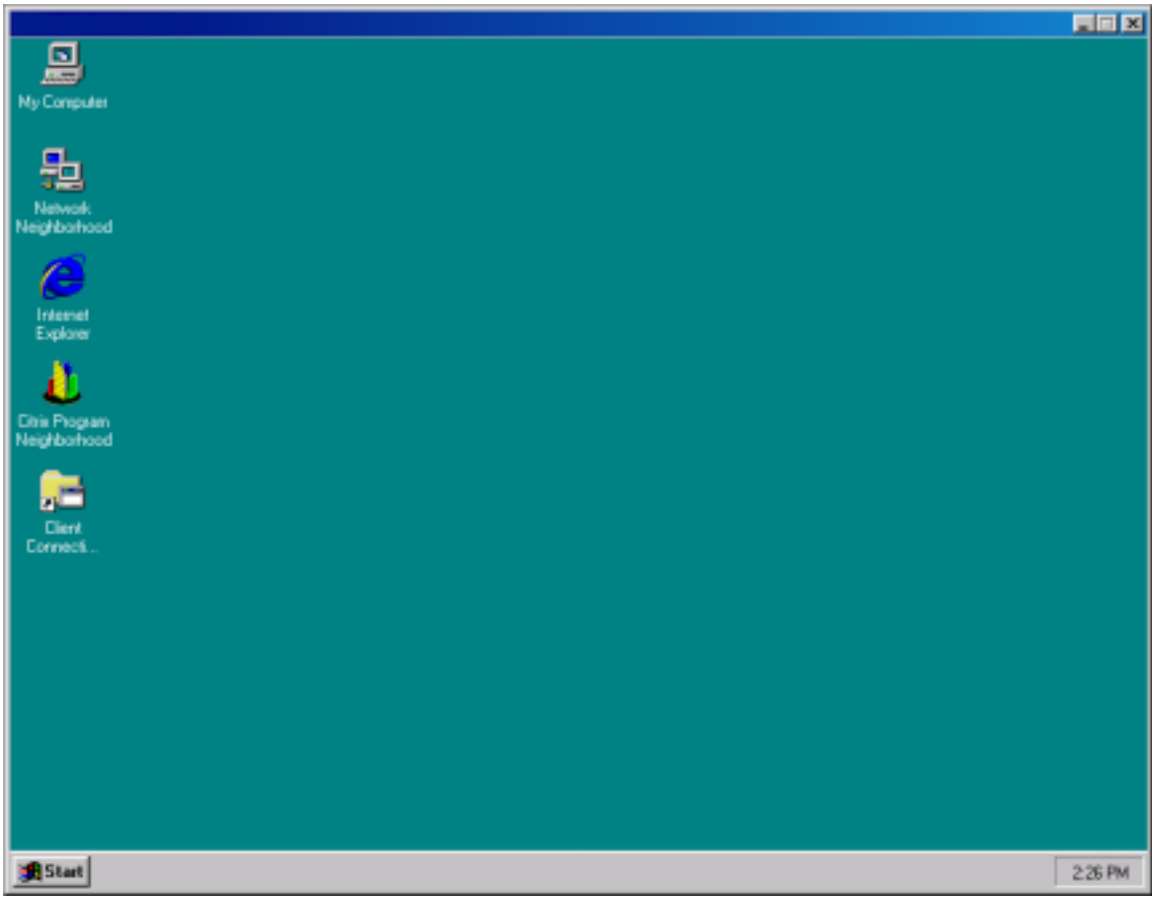
Note

For information pertaining to the functionality of the menu items, refer to Microsoft or third-party documentation, as appropriate.

Note

If you have a custom firmware image in your Compaq terminal, it may have more or fewer top-level items and Start menu options

Figure 9 Administrators Desktop



About Dialog Box

Click **About** in the **Start** menu to display the **About** dialog box for general information about the Compaq terminal.

Application Notes

Drive Z:

Drive Z: is onboard volatile memory (**Ms-ramdrive**) on the logic board of the terminal. Because drive Z: is volatile memory, we recommend that you do not save data that you want to keep on this drive.

Drive C: and Flash

Drive C: is onboard non-volatile Flash (memory) on the logic board of the terminal. It is recommended that you do not write to drive C:. Writing to C: reduces the size of the Flash. If the Flash size is reduced to 3 megabytes, the terminal becomes unstable. If Flash size is reduced to 2 megabytes, the terminal's image is irreparably damaged.

Items that are written to Flash during normal operations are:

- Favorites
- Created connections
- Delete/edit connections
- History

Saving Files

Save files that you want to keep on a server rather than on your terminal.

Upgrading Firmware

There are three methods for upgrading the firmware:

1. For remote upgrades use Rapport™ Administrative Software.
2. For single local upgrades, use **Image Upgrade**. Use this method to upgrade one terminal at a time. Invoke the function using **Start** | **Programs** | **Image Upgrade**. The **Image Upgrade** dialog box shown in Figure 10 displays.

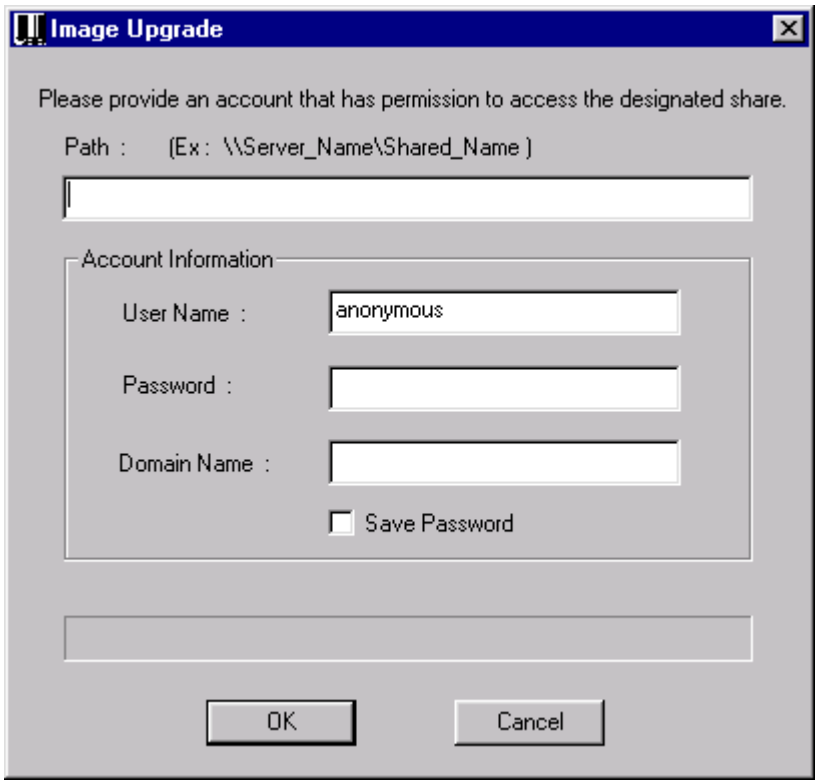
a. Type the **Shared Drive Path** to the directory where the upgrade can be found. (See Figure 10.)

b. Type the **User Name**.

c. Type the **Password**.

d. Type the **Domain Name** for which the user name and password you entered in steps b and c are valid.

Figure 10 Image Upgrade Dialog Box



3. For local multiple upgrades, use the **AT** command. Use this method to automatically upgrade several terminals in your local network. Invoke the command line using **Start** | **Programs** | **Command Prompt**. The command line displays. Enter the **AT** command and command parameters that are appropriate. The complete syntax follows:

```
AT [\\computer name] [ [id] [/DELETE] | /DELETE [/YES]]
```

AT [\\computer name] time [/INTERACTIVE]

[/EVERY:date[,...] | /NEXT:date[,...]] “command”

Where:

\\computer name is the remote terminal.

id is an identification number assigned to a scheduled command.

/DELETE cancels a scheduled command.

/YES is used with the cancel all jobs command when no further confirmation is required.

time /INTERACTIVE allows the job to interact with the desktop of the user who is logged on at the time.

/EVERY:date[,...] runs the command on the specified day(s).

/NEXT:date[,...] runs the command on the next occurrence of the day.

“command” is a Windows NT command to run a batch program.

Example:

at 12:00 /every:m,t,w,th,f,sa,su upgrade.exe

Note

Time should be in 24-hour format (i.e., 0300, 2300). Use these parameters in a batch program to automatically upgrade terminals.

Mapping Network Drives

You can map network drives if you log on as an **Administrator**. You can not map network drives if you log on as a **User**. The mappings are retained if the terminal is rebooted.

Domain Participation

Write roaming profiles to Z:. The profiles need to be limited in size and will not be retained if the terminal is rebooted.

Setting Keyboard Languages

Keyboard languages may be set only by an administrator. Setting the language comprises two actions with several steps.

The first action is getting the region for the desired language to appear in the **Keyboard Properties** dialog box (and for it to be retained after you close the box).

1. Click on **Start** | **Settings** | **Control Panel**.
2. Double-click on the **Regional Settings** icon.
3. Click on the **Regional Settings** tab.
4. Select the region appropriate to the keyboard language.
5. Click on the **Input Locales** tab.
6. Select the appropriate language from the list.
7. Click on the **Set as Default** button.
8. Click **Apply**.
9. Click **OK**.

The second action applies to changing to a language other than the one you just selected in the steps above.

The following steps apply to regions that now appear in the Keyboard Properties box:

1. Click **Start** | **Settings** | **Control Panel**.
2. In the **Control Panel** window, double-click **Keyboard**. The **Keyboard Properties** dialog box appears.
3. Click the **Input Locales** tab. The Language appears in the list. Use the procedure outlined above to add regions to this list.
4. Select the desired language from the list.
5. Click **Set as Default.**
6. Click **Apply**.
7. Click **OK**.

Note

The terminal must be shut down and restarted for the changes to take effect.

Remote Administrator Support

Microsoft Windows NT Embedded on windows-based terminals now supports Remote Administrator software functions.

Remote Administrator software allows a system administrator to observe terminal use (shadowing), accomplish software updates remotely, and perform other administrative and maintenance activities without physically touching the client terminal.

Shadowing

Shadowing must be enabled from the client terminal. It is used primarily for troubleshooting purposes, allowing the system administrator to observe user actions and the results of those actions. It is also possible for the shadower to take control of the terminal.

Enabling Shadowing

Shadowing is enabled by starting the WinVNC client. WinVNC is only available when logged in as a terminal administrator.

Shadowing may also be enabled remotely on the terminal using the Remote Administrator Software.