AFFIRMATIVE®
computer products

YES*tation* User's Guide for Windows-Based Terminals Models 2x05 and 2x12 with CE.net 4.2

22xx

23xx and 27xx

YES*tation* Limited Warranty

General Terms and Conditions

Limited Product Warranty. Affirmative Computer Products warrants that the YES*tation* Hardware Product shall be free from defects in materials and workmanship that arise under proper and normal use and service for three years from the date of purchase. A warranty extension of two years is available at extra cost, if obtained at the time of the original YES*tation* purchase. In the event that the YES*tation* Hardware Product fails to comply with the warranty set forth above, Affirmative Computer Products will repair or replace the Product.

Software Warranty. Affirmative Computer Products warrants that, for a period of ninety (90) days from the date of purchase by the End User, its Software Products shall conform to its published specifications under normal usage. AFFIRMATIVE COMPUTER PRODUCTS DOES NOT WARRANT THAT THE OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE, OR THAT ALL SOFTWARE DEFECTS WILL BE CORRECTED. In the event that a Software Product fails to comply with the warranty set forth above, Affirmative Computer Products will replace the product. End User must, however, return all copies of the Software, along with proof of purchase, to Affirmative Computer Products within 90 days from the Software purchase date.

Warranty Limitations. End User's sole remedy under any Warranty provided by Affirmative Computer Products shall be limited to the replacement or repair of the Product or, at Affirmative Computer Products' sole discretion, a refund of the purchase price. AFFIRMATIVE COMPUTER PRODUCTS GRANTS NO WARRANTY, EXPRESS OR IMPLIED, OTHER THAN THE WARRANTIES STATED ABOVE. EXPRESSLY EXCLUDED ARE THE IMPLIED WARRANTIES OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL AFFIRMATIVE COMPUTER PRODUCTS BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INSTALLATION COSTS, LOST REVENUE OR PROFITS, OR ANY OTHER COSTS INCURRED AS A RESULT OF THE USE OF ANY AFFIRMATIVE COMPUTER PRODUCTS PRODUCT, WHETHER OR NOT USED IN ACCORDANCE WITH INSTRUCTIONS.

Warranty Procedure. Affirmative Computer Products will replace or repair any defective, undamaged units for which a Return Material Authorization number (RMA#) has been obtained from the Technical Support Department. (Contact 888-353-5250 or 480-946-1444 or support@affirmative.net)

Copyright and Trademarks

Copyright Notice

This manual, as well as the software described in it, is furnished under license. No part of this publication may be reproduced, transmitted, stored in a retrieval system, or translated into any human or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual, or otherwise, without the prior written permission of the copyright owner.

Note: Information in this document is subject to change without notice.

Trademarks Notice

- YES*tation*® is a registered trademark of Affirmative Computer Products®
- Microsoft® is a registered trademark of Microsoft® Corporation.
- Windows® is a registered trademark of Microsoft® Corporation.
- ICA® is a registered trademark of Citrix® Systems Inc.
- MetaFrame® is a trademark of Citrix® Systems Inc.
- Adobe®, the Adobe logo, Acrobat®, the Acrobat logo, and Acrobat Reader are trademarks or registered trademarks of Adobe Systems Incorporated.
- Micro Touch® is a trademark of Micro Touch® Inc.
- Ericom® and PowerTerm® are registered trademarks of Ericom® Software Ltd.
- Other company and brand, product and service names are trademarks or registered trademarks of their respective holders.

End User License Agreement (EULA)

EULA for Microsoft Windows CE Operating System for Windows-based Terminal Devices Version 1.5.

IMPORTANT! READ CAREFULLY

This End User License Agreement (EULA) is a legal agreement between you (either an individual or a single entity) and the manufacturer (MANUFACTURER) of the special-purpose computing device (SYSTEM) you acquired which includes certain Microsoft software product(s) installed on the SYSTEM and/or included in the SYSTEM package (SOFTWARE). The SOFTWARE includes computer software, the associated media, any printed materials, and any online or electronic documentation. By installing, copying, or otherwise using the SOFTWARE, you agree to be bound by the terms of this EULA. If you do not agree to the terms of this EULA, MANUFACTURER and Microsoft Licensing, Inc. (MS) are unwilling to license the SOFTWARE to you. In such event, you may not use or copy the SOFTWARE, and you should promptly contact MANUFACTURER for instructions on return of the unused product(s) for a refund.

SOFTWARE LICENSE

The SOFTWARE is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The SOFTWARE is licensed, not sold.

1. GRANT OF LICENSE

SOFTWARE includes software already installed on the SYSTEM (SYSTEM SOFTWARE) and, if included in the SYSTEM package, software contained on the CD-ROM disk and/or floppy disk(s) labeled "Desktop Software for Microsoft Windows CE" (DESKTOP SOFTWARE). This EULA grants you the following rights to the SOFTWARE:

- **System Software**.

  You may use the SYSTEM SOFTWARE only as installed in the SYSTEM.

- **Desktop Software.**

  DESKTOP SOFTWARE might not be included with your SYSTEM. If DESKTOP SOFTWARE is included with your SYSTEM, you may install and use the component(s) of the DESKTOP SOFTWARE in accordance with the terms of the end user license agreement provided with such component(s). In the absence of a separate end user license agreement for particular component(s) of the DESKTOP SOFTWARE, you may install and use only one (1) copy of such component(s) on a single computer with which you use the SYSTEM.

- **Use of Windows CE Operating System for Windows-Based Terminal Devices with Microsoft Windows NT Server, Terminal Server Edition.**

  If the SOFTWARE is Windows CE operating system for Windows-Based Terminal devices, the following special provisions apply. In order to use the SYSTEM in connection with Windows NT Server, Terminal Server Edition, you must possess (1) a Client Access License for Windows NT Server, Terminal Server Edition and (2) an end user license for Windows NT Workstation or an end user license agreement for Windows NT Workstation for Windows-Based Terminal Devices (please refer to the end user license agreement for Windows NT Server, Terminal Server Edition for additional information). MANUFACTURER may have included a Certificate of Authenticity for Windows NT Workstation for Windows-Based Terminal Devices with the SYSTEM. In that case, this EULA constitutes an end user license for the version of Windows NT Workstation for Windows-Based Terminal Devices indicated on such Certificate of Authenticity.

- **Back-up Copy.**

  If MANUFACTURER has not included a back-up copy of the SYSTEM SOFTWARE with the SYSTEM, you may make a single back-up copy of the SYSTEM SOFTWARE. You may use the back-up copy solely for archival purposes.

2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS.

- **Speech/Handwriting Recognition**

  If the SYSTEM SOFTWARE includes speech and/or handwriting recognition component(s), you should understand that speech and handwriting recognition are inherently statistical processes; that recognition errors are inherent in the processes; that it is your responsibility to provide for handling such errors and to monitor the recognition processes and correct any errors. Neither MANUFACTURER nor its suppliers shall be liable for any damages arising out of errors in the speech and handwriting recognition processes.

- **Limitations on Reverse Engineering, Recompilation and Disassembly**

  You may not reverse engineer, decompile, or disassemble the SYSTEM SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation.

- **Single SYSTEM**

  The SYSTEM SOFTWARE is licensed with the SYSTEM as a single integrated product. The SYSTEM SOFTWARE installed in Read Only Memory (ROM) of the SYSTEM may only be used as part of the SYSTEM.

- **Single EULA**

  The package for the SYSTEM SOFTWARE may contain multiple versions of this EULA, such as multiple translations and/or multiple media versions (e.g., in the user documentation and in the software). Even if you receive multiple versions of the EULA, you are licensed to use only one (1) copy of the SYSTEM SOFTWARE.

- **Rental**

  You may not rent or lease the SOFTWARE.

- **Software Transfer**

  You may permanently transfer all of your rights under this EULA only as part of a sale or transfer of the SYSTEM, provided you retain no copies, you transfer all of the SOFTWARE (including all component parts, the media, any upgrades or backup copies, this EULA and, if applicable, the Certificate(s) of Authenticity), and the recipient agrees to the terms of this EULA. If the SOFTWARE is an upgrade, any transfer must include all prior versions of the SOFTWARE.

- **Termination**

  Without prejudice to any other rights, MANUFACTURER or MS may terminate this EULA if you fail to comply with the terms and conditions of this EULA. In such event, you must destroy all copies of the SOFTWARE and all of its component parts.

3. UPGRADES.

If the SYSTEM SOFTWARE and this EULA are provided separate from the SYSTEM by MANUFACTURER and the SYSTEM SOFTWARE is on a ROM chip, CD ROM disk(s) or floppy disk(s), and labeled "For ROM Upgrade Purposes Only" ("ROM Upgrade"), you may install one copy of the ROM Upgrade onto the SYSTEM as a replacement copy for the SYSTEM SOFTWARE originally installed on the SYSTEM and use it in accordance with Section 1 of this EULA.

4. COPYRIGHT.

All title and copyrights in and to the SOFTWARE (including but not limited to any images, photographs, animations, video, audio, music, text and "applets," incorporated into the SOFTWARE), the accompanying printed materials, and any copies of the SOFTWARE, are owned by MS or its suppliers (including Microsoft Corporation). You may not copy the printed materials accompanying the SOFTWARE. All rights not specifically granted under this EULA are reserved by MS and its suppliers (including Microsoft Corporation).

5. PRODUCT SUPPORT.

Product support for the SOFTWARE is not provided by MS, its parent corporation, Microsoft Corporation, or their affiliates or subsidiaries. For product support, please refer to MANUFACTURER'S support number provided in the documentation for the SYSTEM. Should you have any questions concerning this EULA, or if you desire to contact MANUFACTURER for any other reason, please refer to the address provided in the documentation for the SYSTEM.

6. EXPORT RESTRICTIONS.

You agree that you will not export or re-export the SOFTWARE to any country, person, or entity subject to U.S. export restrictions. You specifically agree not to export or re-export the SOFTWARE: (i) to any country to which the U.S. has embargoed or restricted the export of goods or services, which as of March 1998 include, but are not necessarily limited to Cuba, Iran, Iraq, Libya, North Korea, Sudan and Syria, or to any national of any such country, wherever located, who intends to transmit or transport the products back to such country; (ii) to any person or entity who you know or have reason to know will utilize the SOFTWARE or portion thereof in the design, development or production of nuclear, chemical or biological weapons; or (iii) to any person or entity who has been prohibited from participating in U.S. export transactions by any federal agency of the U.S. government.

If the SOFTWARE is labeled "North America Only Version" above, on the Product Identification Card, or on the SOFTWARE packaging or other written materials, then the following applies: The

SOFTWARE is intended for distribution only in the United States, its territories and possessions (including Puerto Rico, Guam, and U.S. Virgin Islands) and Canada. Export of the SOFTWARE from the United States is regulated under "EI controls" of the Export Administration Regulations (EAR, 15 CFR 730-744) of the U.S. Commerce Department, Bureau of Export Administration (BXA). A license is required to export the SOFTWARE outside the United States or Canada. You agree that you will not directly or indirectly, export or re-export the SOFTWARE (or portions thereof) to any country, other than Canada, or to any person or entity subject to U.S. export restrictions without first obtaining a Commerce Department export license. You warrant and represent that neither the BXA nor any other U.S. federal agency has suspended, revoked, or denied your export privileges.

7. NOTE ON JAVA SUPPORT.

The SYSTEM SOFTWARE may contain support for programs written in Java. Java technology is not fault tolerant and is not designed, manufactured, or intended for use or resale as on-line control equipment in hazardous environments requiring fail-safe performance, such as in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, direct life support machines, or weapons systems, in which the failure of Java technology could lead directly to death, personal injury, or severe physical or environmental damage.

8. LIMITED WARRANTY.

- **Limited Warranty**

MANUFACTURER warrants that the SOFTWARE will perform substantially in accordance with the accompanying written materials for a period of ninety (90) days from the date of receipt. Any implied warranties on the SOFTWARE are limited to ninety (90) days. Some states/jurisdictions do not allow limitations on duration of an implied warranty, so the above limitation may not apply to you.

- **Customer Remedies**

MANUFACTURER'S and its suppliers' entire liability and your exclusive remedy shall be, at MANUFACTURER'S option, either (a) return of the price paid, or (b) repair or replacement of the SOFTWARE that does not meet the above Limited Warranty and which is returned to MANUFACTURER with a copy of your receipt. This Limited Warranty is void if failure of the SOFTWARE has resulted from accident, abuse, or misapplication. Any replacement SOFTWARE will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer.

- **No Other Warranties**

EXCEPT AS EXPRESSLY PROVIDED IN THE LIMITED WARRANTY SECTION ABOVE, THE SOFTWARE IS PROVIDED TO THE END USER "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF NON- INFRINGEMENT, MERCHANTABILITY, AND/OR FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK OF THE QUALITY AND PERFORMANCE OF THE SOFTWARE IS WITH YOU.

- **No Liability for Consequential Damages**

MANUFACTURER OR MANUFACTURER'S SUPPLIERS, INCLUDING MS AND ITS SUPPLIERS, SHALL NOT BE HELD TO ANY LIABILITY FOR ANY DAMAGES SUFFERED OR INCURRED BY THE END USER (INCLUDING, BUT NOT LIMITED TO, GENERAL, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES INCLUDING DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION AND

THE LIKE), ARISING FROM OR IN CONNECTION WITH THE DELIVERY, USE OR PERFORMANCE OF THE SOFTWARE.

If you acquired this EULA in the United States, this EULA is governed by the laws of the State of Washington.

If you acquired this EULA in Canada, this EULA is governed by the laws of the Province of Ontario, Canada. Each of the parties hereto irrevocably attorns to the jurisdiction of the courts of the Province of Ontario and further agrees to commence any litigation which may arise hereunder in the courts located in the Judicial District of York, Province of Ontario.

If this EULA was acquired outside the United States, then local law may apply.
Should you have any questions concerning this EULA, please contact the MANUFACTURER of your SYSTEM.

U.S. GOVERNMENT RESTRICTED RIGHTS

The SOFTWARE and documentation are provided with RESTRICTED RIGHTS. Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 or subparagraphs (c)(1) and (2) of the Commercial Computer Software XRestricted Rights at 48 CFR 52.227- 19, as applicable. MANUFACTURER is Microsoft Corporation/One Microsoft Way/Redmond, WA 98052-6399.

This Page Intentionally Left Blank.

Table of Contents

Installing Your Terminal

- Your terminal has no internal fan, and relies on natural airflow for cooling. When you mount it, *make sure to keep as many ventilation holes, as possible, unobstructed*.
- **DO NOT USE** any AC-DC adapter other than the one provided with the terminal or acquired from Affirmative Computer Products or its distributors

Firmware Requirements

This user guide is applicable for the following terminal firmware:
- **Model 2205**. 4.21EB Build 4043 and above; 4.22EB Build 4043 and above.
- **Model 2212**. 4.21TEB Build 4043 and above; 4.22TEB Build 4043 and above.
- **Model 2305**. 4.23EB Build 4043 and above.
- **Model 2312**. 4.23TEB Build 4043 and above.
- **Model 2705**. 4.23aEB Build 4043 and above.
- **Model 2712**. 4.23aTEB Build 4043 and above.
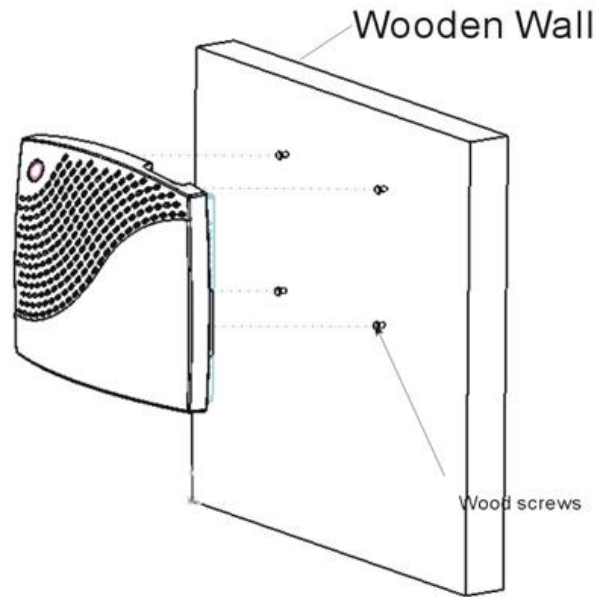
Mounting

22xx

Typically, a 22xx terminal placed horizontally on a flat surface, with the terminal resting upon four attached soft plastic feet. However, there are also several vertical mounting options using the four mounting holes on the bottom of the terminal. These holes are shown in the following figure.

22xx Mounting Holes

A self-adhesive template and four #3, ½-inch wood screws are included with every terminal. The following figure shows one mounting possibility on a wooden wall.

22xx Wall Mounting

Another possibility is shown here.

22xx Monitor Mounting

We have done some testing with the provided screws, and have the following suggestions:
- In soft wood, such as pine, no pilot holes are needed.
- In hard wood or plastic, such as the side of a monitor, drill pilot holes with a 3/64" drill bit.
- In dry wall, these screws do not hold well; if you must install on dry wall, we suggest:
    - Drill 3/64" pilot holes and put super glue in the holes before inserting the screws.
    Or
    - Use longer screws with coarser threads.

The four terminal mounting holes are spaced to match the mounting pins of a standard VESA mounting plate available from Affirmative Computer Products distributors. Such a plate can be attached to most of the current crop of LCD monitors, as shown in the following figure.

VESA Mounting Plate on a 17" LCD Monitor

The final result is shown below.

22xx Mounted on a 17" LCD Terminal

23xx and 27xx

These terminals can *only* be mounted vertically on a flat surface, using the provided stand, as shown in the picture on the front cover of this manual. Horizontal mounting will obstruct the airflow required to cool the terminal.

Cabling and Indicators

22xx

Please make all cable connections before turning on the power. The following figures show the 22xx rear and front connectors.
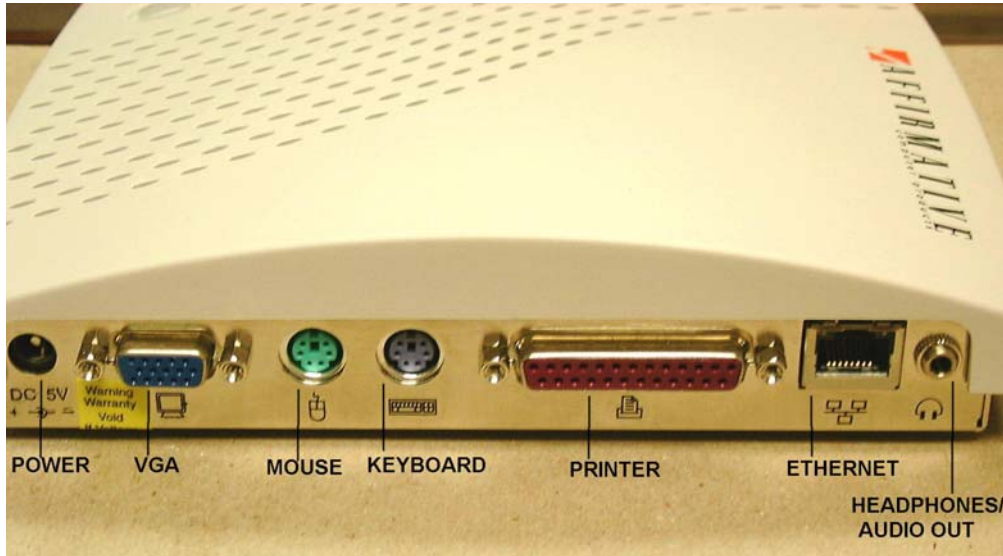
22xx Rear Connectors

22xx Front Connectors

There are three LED indicator lights:

- **Power**. The translucent **Power** button serves as the Power indicator. This indicator is faint amber when DC power is connected at the rear connector, and turns green when the terminal is powered up.
- **Network Connection**. This amber indicator at the upper right corner of the RJ-45 Ethernet connector is on when there is a good physical connection to the Local Area Network.
- **Network Activity**. This green indicator at the upper left corner of the RJ-45 Ethernet connector flashes to indicate LAN activity.

23xx and 27xx

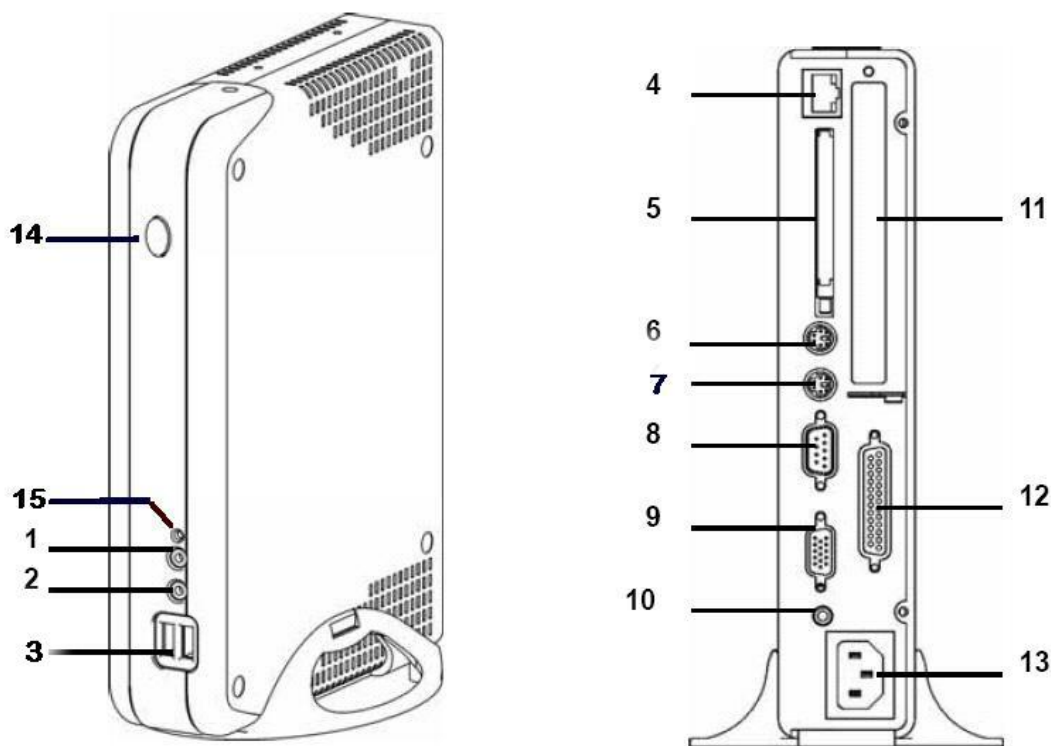Please make all cable connections before turning on the power. The following figure shows the rear and front connectors and the card slots on the rear panel of a 23xx terminal.

1. Audio Connector - Line Out	8. Serial Connector – Com1
2. Audio Connector – Mic In	9. Video Connector
3. USB Connectors – 2.0 (Front)	10. Audio Connector- Line out
4. RJ-45	11. PCI Slot
5. PCMCIA Slot – Wireless	12. Parallel Connector
6. PS/2 –Keyboard	13. Power Cord Connector
7. PS/2 -Mouse	14.Power Switch and Indicator
	15.Flash Memory Activity Indicator

Note: The 27xx has two additional USB connectors on the rear panel.

There are four LED indicator lights:

- **Power**. The translucent **Power** button serves as the Power indicator. This indicator is faint amber when AC power is connected at the rear connector, and turns green when the terminal is powered up.
- **Network Connection**. This amber indicator at the upper right corner of the RJ-45 Ethernet connector is on when there is a good physical connection to the Local Area Network.
- **Network Activity**. This green indicator at the upper left corner of the RJ-45 Ethernet connector flashes to indicate LAN activity.
- **Flash Memory Activity**. This green indicator flashes when there is read or write activity to the flash memory.

Power On and Boot Up

These terminals can be powered on in two ways:
- Locally by pushing on the **Power** switch on the top of the terminal.
- Remotely using eProManager remote central management software and the Wake on LAN capability of the terminals.

In either case, the process is:
1. Turn on the terminal after all rear panel connections have been made.
2. The translucent **Power** button will change from faint orange to light green.
3. You will see the message **Starting System. Please Wait …** on a black screen.
4. After several seconds, you will see the Affirmative Computer Products logo screen with the message **Loading** at the bottom.
5. After several seconds, you will see the message change to **Starting Windows CE**.
6. After several seconds:
   a) If the terminal has not yet been set up, the first dialog box of the Setup Wizard will appear. Refer to WBT Setup Wizard for setup instructions.
   b) If setup has already been done:
      i. If Multi-user Login is enabled, see below for additional steps.
      ii. If Multi-user Login is not enabled, the terminal will go directly to the Desktop, Terminal Connections Management, or Kiosk screen, as determined by the setting in **Control Panel>Desktop Style**.

Multi-user Login

These terminals can be configured for multiple users (see Configure Terminal Properties|Control Panel|Security|Enable Multiuser Control). When Multi-user Login is enabled, the procedure, at step 6.b.i above, depends upon whether or not **Single Connect Mode** is enabled in **Control Panel>Desktop Style**
- If *Single Connect Mode is not enabled and if Auto Login is not enabled*, you will see a login dialog box asking for User Name and Password.
   a) Enter a user name and password.
   b) If the entries are correct, you will see a Desktop, Connections Management, or Kiosk screen, depending upon Desktop Style
   c) If the entries are incorrect, you will be given another chance to make correct entries. There is no way to advance without making correct entries. **Note:** The only way to get out of the login dialog box is to enter correct information or to reboot the terminal.
- If *Single Connect Mode is not enabled, but Auto Login is enabled*, you have several seconds to open the login dialog box by pressing **Alt+F3**. If you do not press this key combination, you will automatically be logged in as the auto login user.
- If *Single Connect Mode is enabled*, an auto login user is enabled by default. You will see a **Connect** button along with an option to press **Alt+F3** to log in another user. If you click on **Connect**, the auto login user will automatically be connected to the Autostart sessions configured when you added that user in **Control Panel>Security>Add User**.

Shutdown

These terminals should be shut down gracefully by:

- Going to **Start>Shutdown** in Desktop Shell (see Display Styles). You will see the following dialog box.
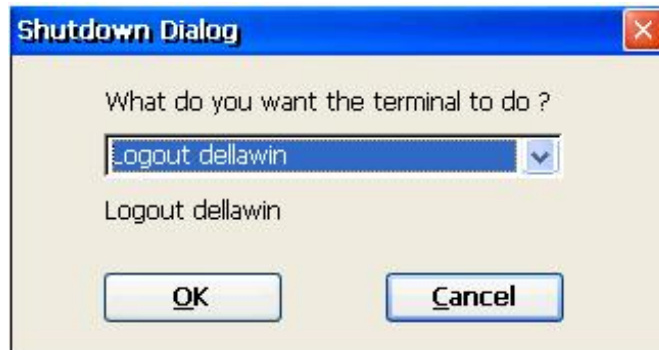
Shutdown Dialog Box

> In this case, the terminal is in multi-user mode, so a logout choice is shown. This allows another user to take over the terminal without rebooting. In addition to logout, the drop-down list offers the choices of **Restart** and **Shutdown**.

- Going to **Connection Manager>Connection>Shutdown** in WBT Shell. You will see the same dialog box as shown above.
- Executing **Shutdown** remotely from eProManager. In this case, the local user will receive a ten-second warning before shutdown occurs. A logout option is not offered.

In all of these cases, the terminal will save appropriate settings and make graceful connection disconnects before powering down by itself.

An exception to the graceful shutdown is Kiosk and Single Connect Mode display styles:

- **Kiosk**. The only available shutdown procedure is to power off by pressing the **Power** switch.
- **Single Connect**. If the user is not in the Power User group (see Configure Terminal Properties|Control Panel|Security|Enable Multiuser Control|Add User), the only available shutdown procedure is to power off by pressing the **Power** switch.

This Page Intentionally Left Blank.

WBT Setup Wizard

The WBT Setup Wizard is used for the terminal initial setup. The wizard runs when:
- A terminal is first booted up after being received from the factory.
- A terminal is reset to factory defaults and then rebooted.
- The terminal firmware is upgraded and the terminal is rebooted.

The WBT Setup Wizard sets the basic terminal network configuration, display, and printer parameters. Any parameters set in the WBT Setup Wizard can be changed later from Terminal Properties (WBT or Kiosk mode) or the Control Panel (Desktop mode). Please refer to Configure Terminal Properties.

If you are using an optional wireless LAN adapter, and no connection has yet been made to an access point, there will be a Wireless Information dialog box superimposed on the Setup Wizard or hidden beneath it. In this case, proceed in one of two ways:
- **If you are using DHCP IP addressing**,
    1. Complete the Setup Wizard
    2. Configure the wireless properties (see Display Styles|Desktop Shell|System Tray|Network Status|Wireless) for information on configuring wireless properties) in the dialog box.
    3. Disable the wired connection in **Start>Settings>Network Connections**.
- **If you are using static IP addressing**,
    1. Complete the Setup Wizard.
    2. Configure the wireless properties (see Display Styles|Desktop Shell|System Tray|Network Status|Wireless) for information on configuring wireless properties) in the dialog box.
    3. Set the static IP address information in **Start>Settings>Network Connections** and disable the wired connection. See Configure Terminal Properties|Network Connections for more information..

When proceeding through the WBT Setup Wizard process:
- Activate the **Next** or **Accept** buttons to display the next dialog box in the sequence.
- Activate the **Back** button to return to the previous dialog box.
- Activate the **X** button to quit and display the terminal's Desktop.

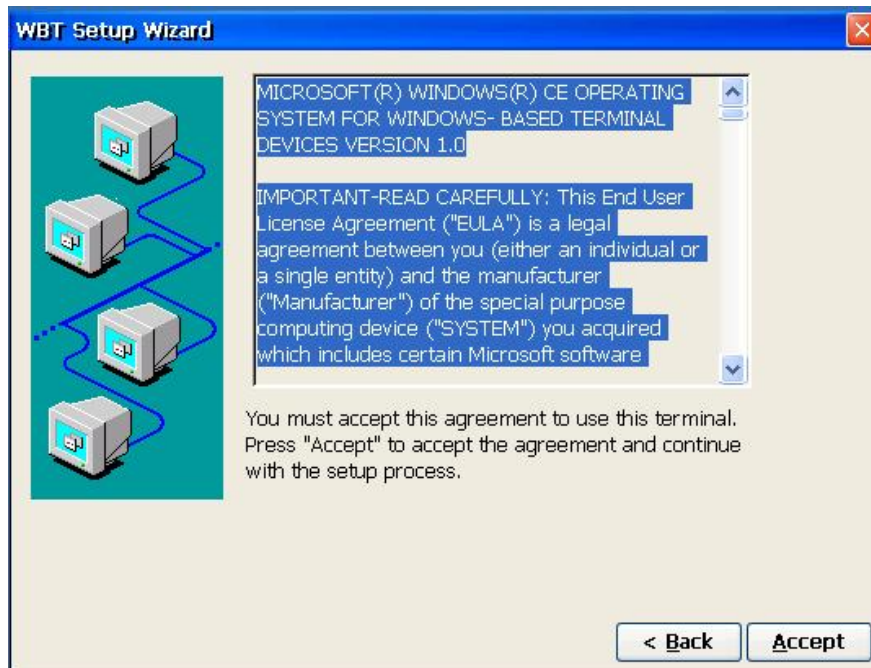The WBT Setup Wizard dialog boxes are discussed here in the order in which they will appear on your terminal.

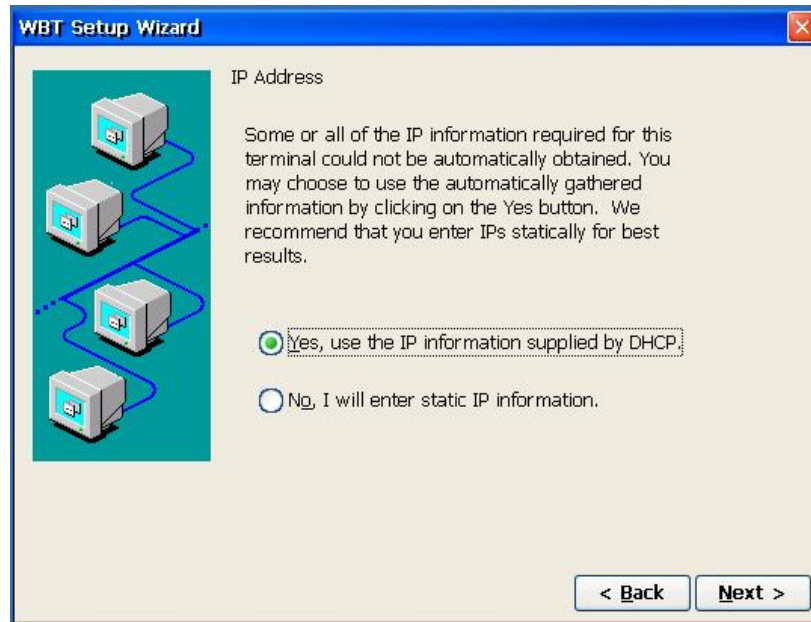1.
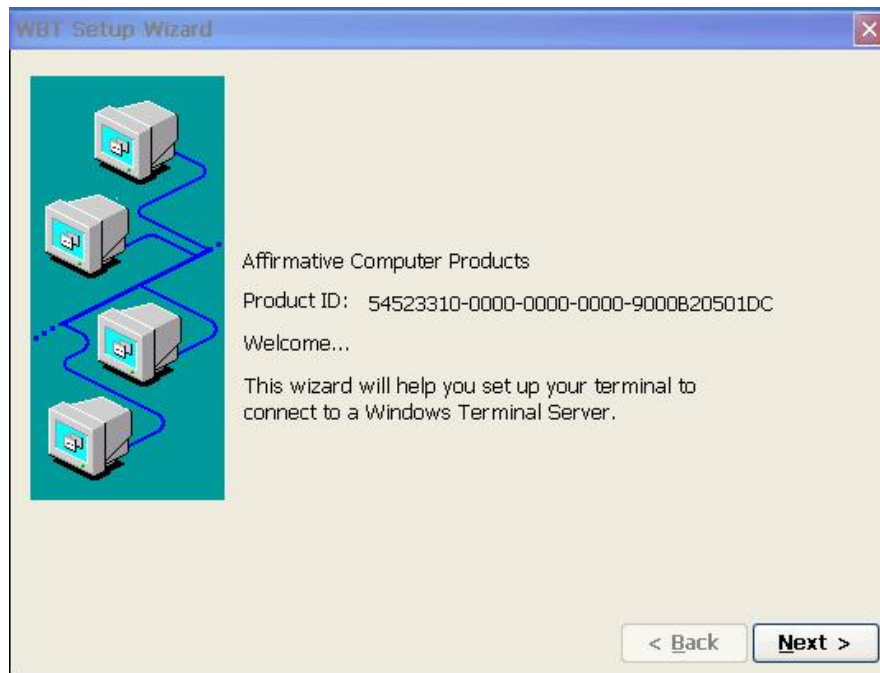
Welcome Screen

2.

EULA Dialog Box

Please read the license agreement carefully before you click on **Accept**.

3.

IP Address Dialog Box

- Select **Yes** to use the IP address information supplied by the DHCP server. Then the next screen will be the Name Servers dialog box.
- Select **No** to use static IP address information   Then the next screen will be the Specify an IP Address dialog box. **NOTE: If you are using a wireless LAN adapter to connect to your LAN, you *must* select Yes here.** Then, go to **Start>Settings>Network Connections** to set a static IP address after you have completed the Setup Wizard. See Configure Terminal Properties|Network Connections for information.

3a. If you selected **No** in the previous screen, you will see this dialog box.
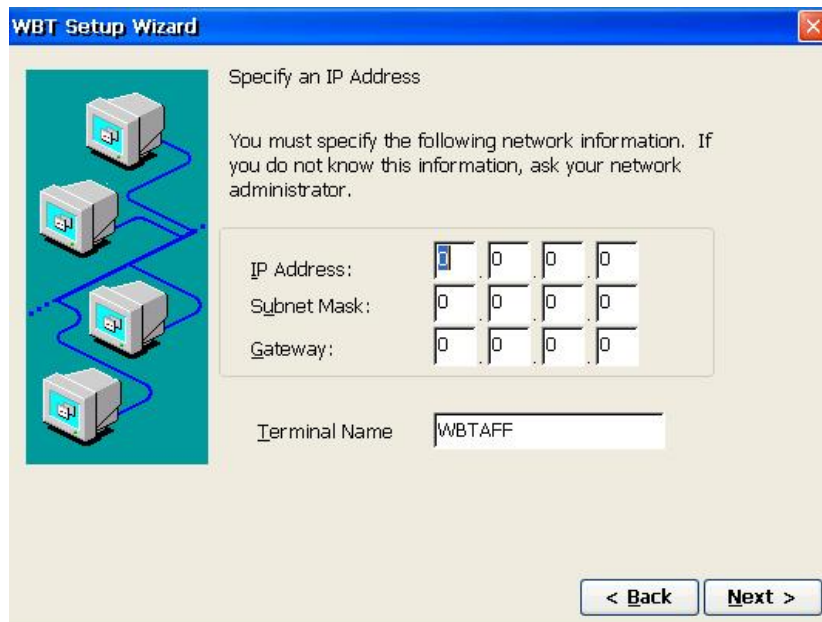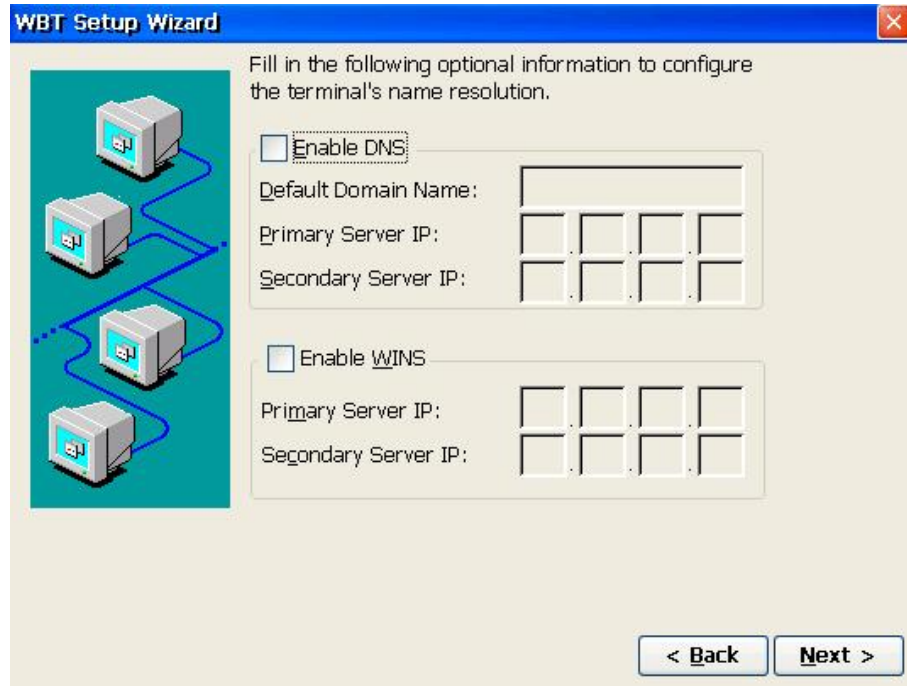

Specify an IP Address Dialog Box

- Ask your network administrator for the IP addresses to enter here.

- For identification purposes by network management software, we recommend that you enter a unique name in the **Terminal Name** field. If you do not see this dialog box, because you are not specifying an IP address, you can enter a terminal name later in **Control Panel>System**.

NOTE: If you are using a wireless LAN adapter to connect to your LAN, you should not see this dialog box. Return to screen #3 and select **Yes.**

4.

Name Servers Dialog Box

- If you specify an IP address, you will have to enter name server information here if you are going to browse the Web.
- If you use a DHCP server for IP addressing, you may still have to enter information here for Web browsing, depending upon how the DHCP server is configured.

NOTE: If you are using a wireless LAN adapter to connect to your LAN, your information here will have no effect. In that case, go to **Start>Network Settings** to configure your network after you have completed the Setup Wizard. See Configure Terminal Properties|Network Connections for information

5.
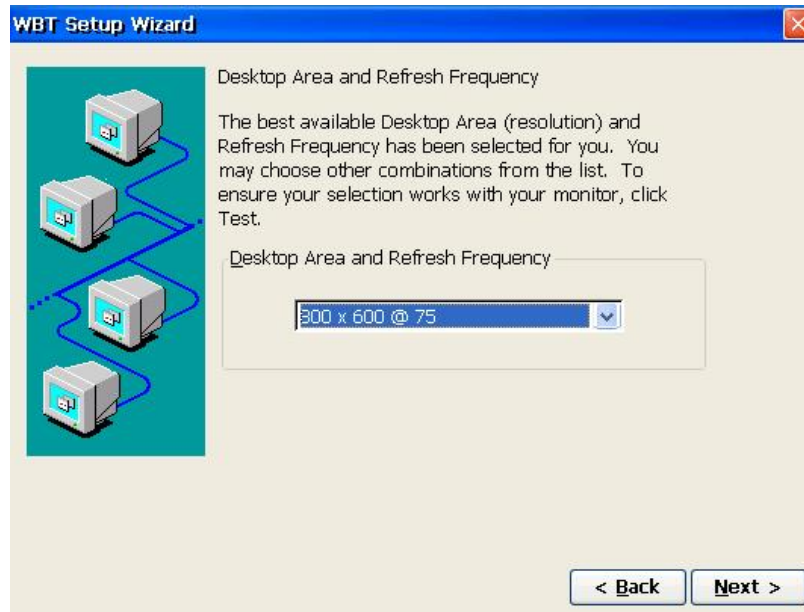
Desktop Area/Refresh Freq. Dialog Box

We recommend that you do not change the display parameters here. If you enter a setting that your monitor cannot support, you will be faced with an unusable screen when you reboot the terminal. Instead, complete your journey through the Wizard, and then go to **Control Panel>Display**. When you change display parameters there, you can test your new settings before locking them in.

6.
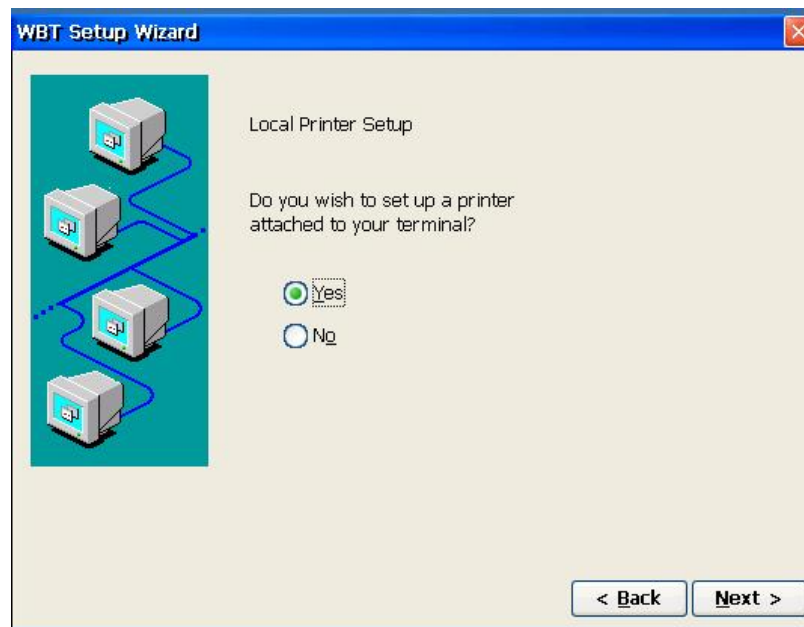
Local Printer Setup Dialog Box

If you select **Yes** here, you will be faced with several more dialog boxes used to configure printer properties. You should only answer **Yes** if you wish to use a local attached or a network printer for ICA or RDP connections. If you only want to use a printer for PowerTerm emulation connections, you answer **No** here, and printer setup is done within the emulation setup. The same printer can be used for both Windows applications and emulation, but two sets of parameters must be configured.

- If you select **No**, you will advance to the Finish dialog box.

6a.
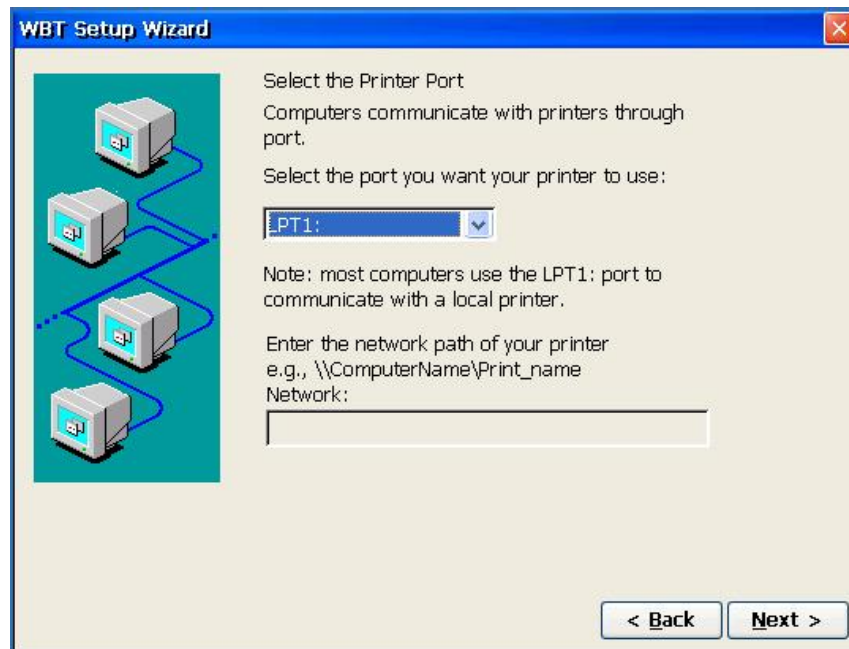
Select Printer Port Dialog Box

- You must select a printer port. You can have more than one local printer, but each one must be assigned to a different printer port. If you have a USB printer already connected to the terminal, you will see a **USB** option in the drop-down list, as well as the typical **LPT1** and **Network** options. **Note:** The default printer type for the LPT1 port is Extended Capabilities (ECP). If your printer requires a different type, the terminal BIOS setting must be changed. Contact Affirmative Computer Products Technical Support for information.
- If you select a network printer, enter the printer network path in the **Network** field. You can have multiple network printers.

6b.
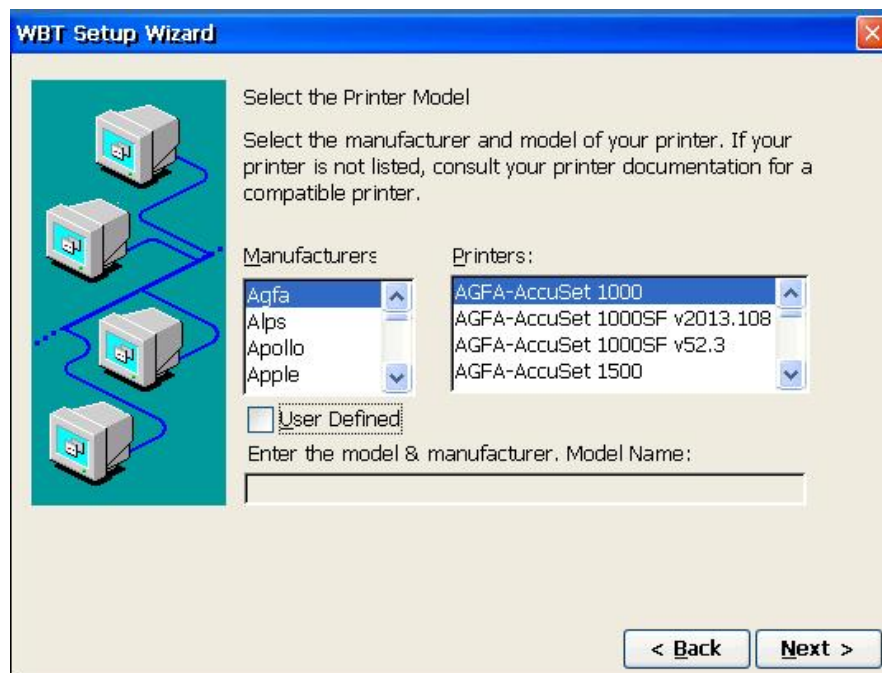
Select the Printer Model Dialog Box

- Select a printer manufacturer from the manufacturer drop-down list. After you select the manufacturer, the right-hand drop-down list will provide a list of models for that manufacturer.
- Select the printer model. If your model is not shown here, try to find a compatible printer in the list. It may be that your printer is compatible with a model from a different manufacturer. If that is the case, go back, change the manufacturer selection, and then choose the compatible model from that drop-down list. **Note:** There are no local Windows printer drivers in these terminals. You must have a driver in your Windows Terminal Server that corresponds to the selected model.
- Another option, if your printer is not found in the lists, is to check **User Defined**. In this case, you should then enter the model name, in the **Model Name** field, that corresponds to the printer driver on your Windows Terminal Server.

6c.
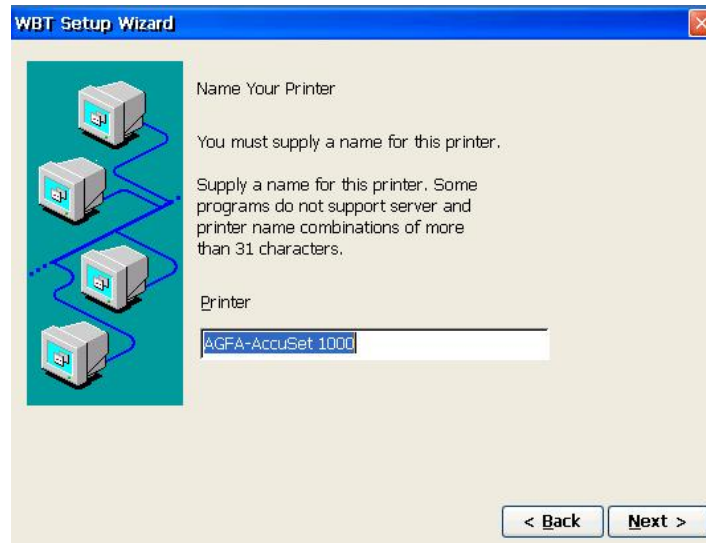
Name Your Printer Dialog Box

You must provide a "friendly" name for your printer. This name will identify your printer in the Printers settings dialog box on your server. The default name is the model name that you selected in the previous dialog box.

6d.
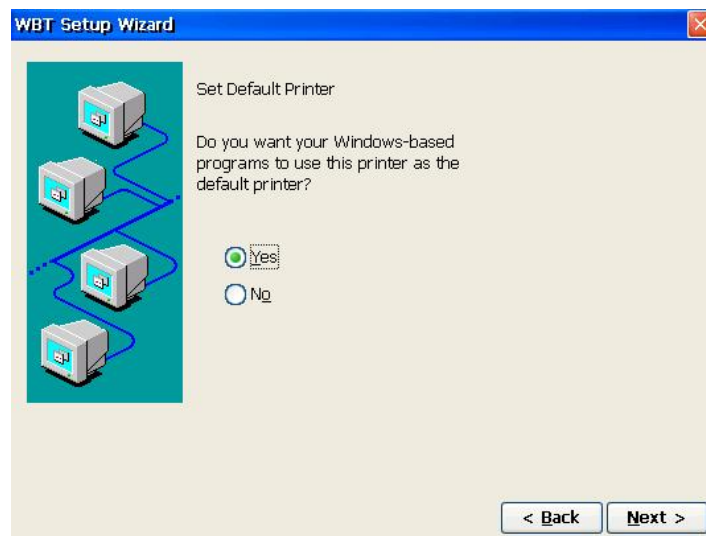
Set Default Printer Dialog Box

Select whether or not you want this local printer to be the default printer for your Windows (ICA and RDP connection) applications.

6e.
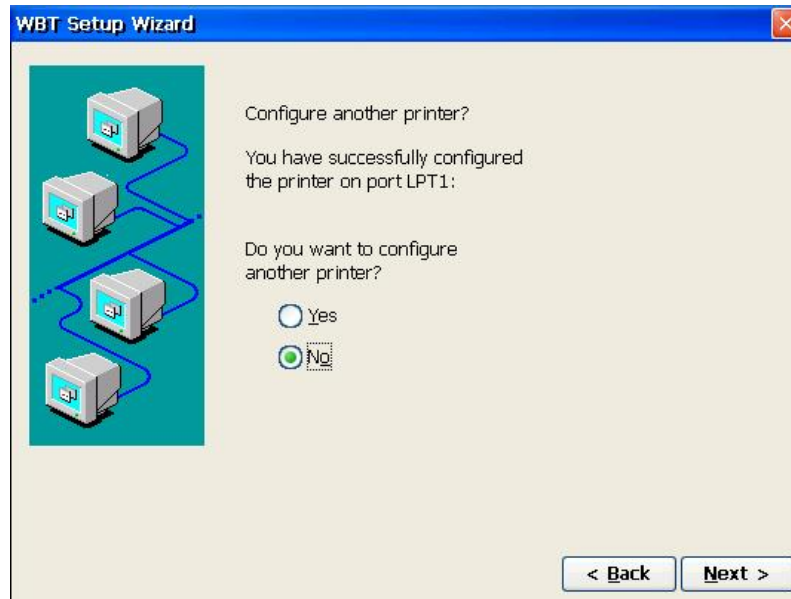
Configure Another Printer Dialog Box

You are given the opportunity to begin the configuration of another printer. If you select **Yes**, you will repeat the dialog boxes 6a-6e for that printer. If you select **No**, you will go on to the Finish dialog box.

7.

Finish Dialog Box

- Click on **Finish** to apply your selections. Depending upon the selections you have made, the terminal will either reboot or go to the Desktop screen.
- Click on **Back** to return to the previous dialog box.
- Click on **X** to forget the whole thing and reboot the terminal. If you do this, you will lose any changes that you made from the default settings

Display Styles

You can choose one of four display styles (see Configure Terminal Properties|Control Panel|Desktop Styles) to be used during configuration and terminal operation.

NOTE: In the remainder of this document, a reference to the **Ctrl** key actually means the **LeftCtrl** key, a reference to the **Alt** key actually means the **LeftAlt** key, and a reference to a click actually means a mouse left click.

Desktop Shell

The Desktop Shell style is the default, presenting the Desktop screen with a Task Bar, Start button, and System Tray, very similar to a standard Windows desktop. A full set of configuration options is accessible from **Start>/Settings**. Sessions are launched from the Start menu or from Connection Manager, although they can be configured to Autostart at bootup.
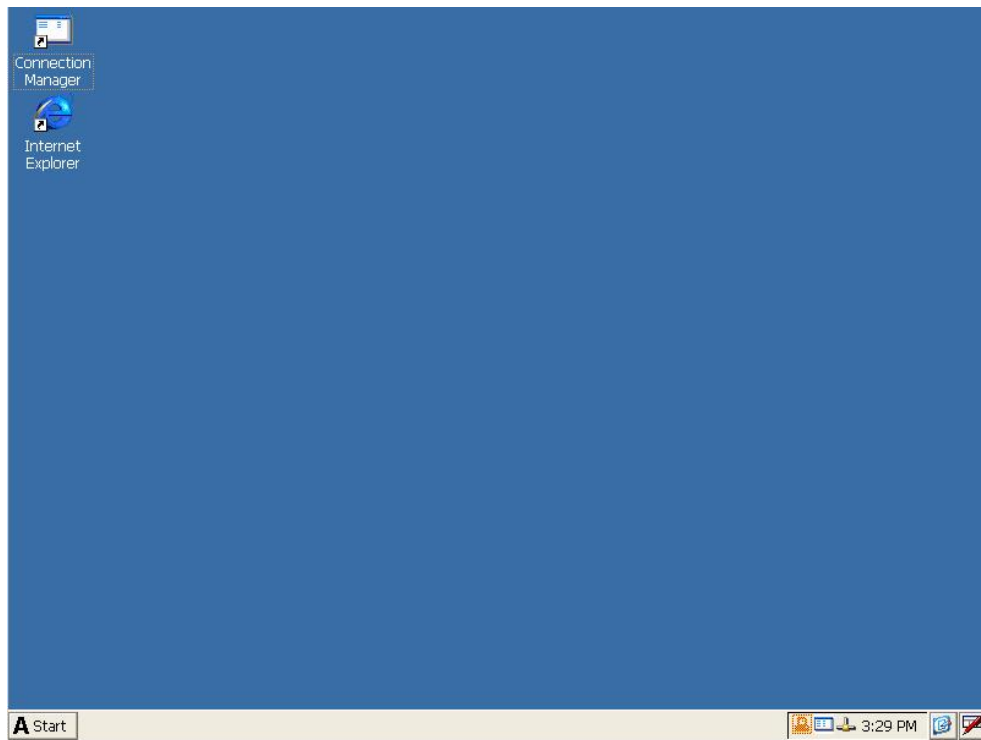
Startup Screen in Desktop Style

Task Bar

Right-click anywhere on the Task Bar to see the following menu.
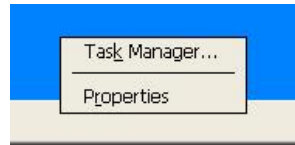
Task Bar Right-Click Menu

Task Manager

Select **Task Manager** to open the Task Manager dialog box.
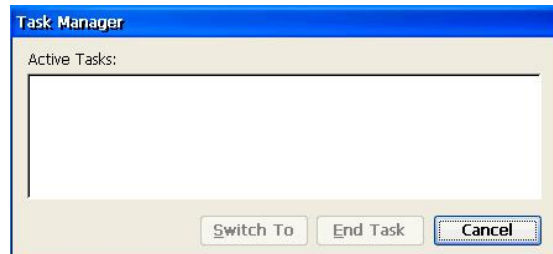
Task Manager Dialog Box

In this box, you will see a list of all active tasks (sessions, utilities, etc.) You can maximize or end a task from this box. However, it is usually easier to do this simply by clicking on the appropriate placeholder on the Task Bar.

Task Bar Properties

Select **Properties** to see the Taskbar and Start Menu Properties dialog box.

Taskbar and Start Menu Properties Dialog Box

Make your choices here. If you check both **Auto hide** and **Always on top**, **Auto hide** will override.
Note: The Advanced properties are not supported.

System Tray

The System Tray is located at the right end of the Task Bar, and holds icons for a number of utilities.
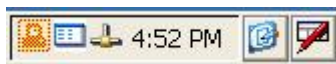
Desktop System Tray

These icons provide quick utility access via mouse clicks.

18

Screen Keyboards

Screen Keyboards Icon

Two virtual screen keyboard layouts are available, useful primarily when the terminal is connected to a touchscreen monitor. A single click on this icon opens the Virtual Keyboards menu.

Screen Keyboards Menu

Select either of the two keyboards shown here.

Keyboard

Large KB

These images show the keyboard layouts, but the Large KB is actually much bigger than shown here.

Show Desktop

Show Desktop Icon

A single click on this icon will minimize the current session or utility and display the Desktop.

Date/Time
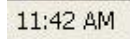
Date/Time Icon

Obviously, this icon shows the current time as stored in the terminal. A double-click on the icon will open the Date/Time Properties dialog box.
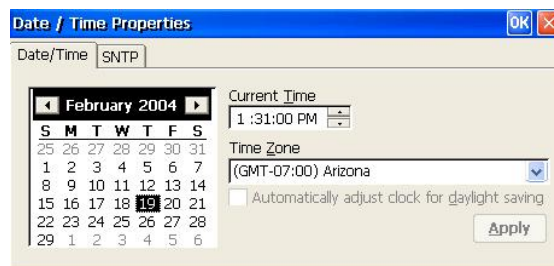
Date/Time Properties Dialog Box

This dialog box is identical to the box opened from the **Date/Time** icon in Control Panel. See Configure Terminal Properties|Control Panel|Date/Time for an explanation of this box.

19

Network Status

The system tray icons and resulting information status boxes are different for wired and wireless network connections.

Wired

Wired Network Status Icon

A double-click on this icon opens the Wired Network Status box.
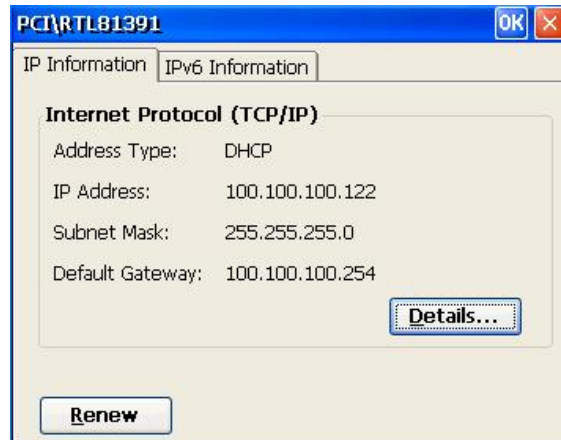
Network Status Box

This information is especially useful when troubleshooting network problems.

- **Renew**. Click on this button to renew your DHCP IP address lease. Typically, a lease is renewed automatically, and this manual renewal is not necessary.
- **Details**. Click here to see more DHCP details and the physical (MAC) address of the network adaptor.
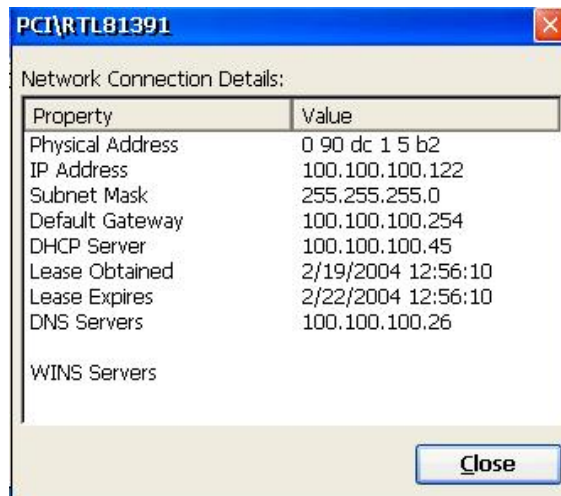
Connection Details Box

Wireless

Wireless Network Status Icon

A double-click on this icon opens the Wireless Network Status box.
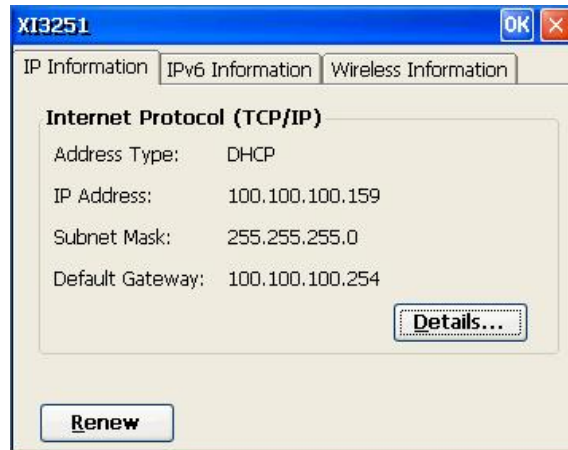
Wireless Network Status Box

The first two tabs show the same type of information as that shown in the Wired Network Status box above. Click on **Wireless Information** to configure your connection to a network wireless access point.
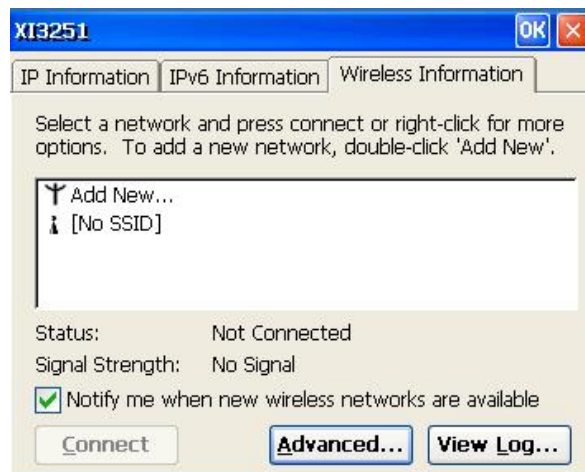
Wireless Information Dialog Box

If your access point does not broadcast its SSID, you will have to add it by double-clicking on **Add New**. You will see the following dialog box.

Wireless Network Properties Dialog Box

Insert the appropriate information and **OK** out. You will then see the new SSID shown in the Wireless Information Dialog Box, and a wireless connection will be made.

Connection Manager

Connection Manager Icon

Double-click on this icon to open the Connection Manager.

ThinPrint Client

ThinPrint Client Icon

You will see this icon only if the ThinPrint Client is enabled in **Control Panel>ThinPrint**.

ThinPrint Client Configuration Box

This box is identical to the box opened from the **ThinPrint** icon in Control Panel. See Configure Terminal Properties|Control Panel|ThinPrint for an explanation of this box.

Caps Lock

Caps Lock Icon

You will see this icon whenever Caps Lock is enabled on your keyboard.

Terminal Properties

Terminal properties are accessed from the Start menu.
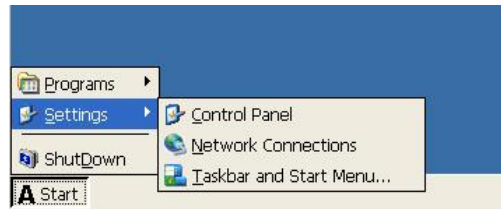
Terminal Settings Menu

- **Control Panel**. This selection provides the bulk of the terminal properties, and is covered in detail in Configure Terminal Properties|Control Panel. The same set of terminal properties is accessible in either the WBT or Desktop Control Panel, although the screens look slightly different.
- **Network Connections**. Standard network connection properties are set in Control Panel, but some esoteric possibilities are configured here. These settings are *only* accessible from the Desktop Shell. See Configure Terminal Properties|Network Connections for details.
- **Taskbar and Start Menu**. This same menu is also accessible by right-clicking on the Task Bar and selecting Properties.

Taskbar and Start Menu Properties Dialog Box

Make your choices here. If you check both **Auto hide** and **Always on top**, **Auto hide** will override.
Note: The Advanced properties are not supported.

Connection Manager

Connection Manager is identical in both the Desktop and WBT styles, except for access to Control Panel and Shutdown control. To open Connection Manager in Desktop style, use one of the following methods:
- Select it from the Start menu.
- Double-click on the Connection Manager icon in the upper left corner of the Desktop.
- Double-click on the Connection Manager icon in the System Tray.
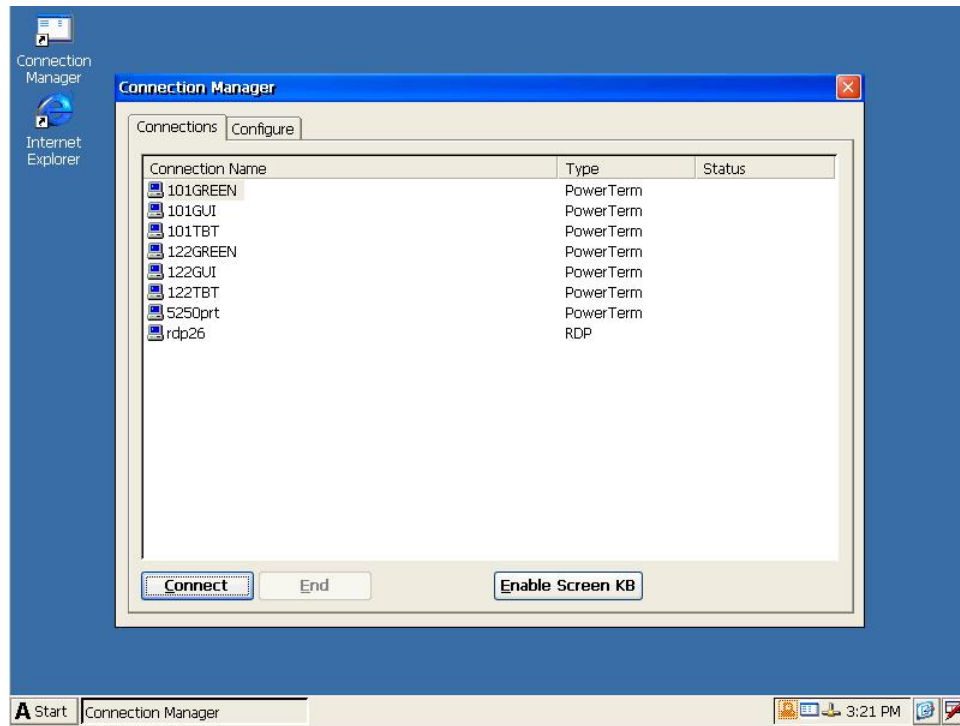
Connection Manager Screen in Desktop Style

Navigation

- To open the Start menu, click on the **Start** button in the Taskbar.
- To open Control Panel, select it from **Start>Settings**.
- To open Connection Manager:
  - o Select it from the Start menu.
  - o Double-click on the Connection Manager icon in the upper left corner of the Desktop.
  - o Double-click on the Connection Manager icon in the System Tray.
- To activate non-Autostart connections:
  - o In **Connection Manager>Connect**, highlight the connection name and click on **Connect**.
  - o In **Connection Manager>Connect**, double-click on the connection name.
  - o Select from **Start>Programs>Connections**.
  - o For an Internet connection, double-click on the **Internet Explorer** icon in the upper left corner of the Desktop.
- To close a PowerTerm connection:
  - o Go to the Sign On screen, open the **File** menu, and activate **Exit**.
  - o Go to the Sign On screen and click on **X** in the upper right corner.
- To move among all active connections.
  - o Press **Ctrl+Alt+UpArrow/DownArrow**.
  - o Press **RightAlt+Up/DownArrow.**
  - o Return to Connections Manager and select another connection.
  - o Click on the placeholder in the Task Bar.
- To move among active PowerTerm connections:
  - o Press **RightAlt+PgUp/PgDn**..
  - o Open the **Sessions** menu and click on the desired session name.
- To power down or reboot, select **Shutdown** from the Start menu.

WBT (Windows Based Terminal) Shell

The Windows Based Terminal display style presents the kind of screens that you normally see in Affirmative Computer Products YES*tations* that use older versions of Windows CE or CE.net operating systems. Connections are activated from Terminal Connection Manager, although they can be configured to Autostart at bootup.

Terminal Properties

Terminal properties are set in Control Panel. The same set of terminal properties is accessible in either the WBT or Desktop Control Panel, although the screens look slightly different. Control Panel is accessed by pressing **F2** while in the Connection Manager screen. See Configure Terminal Properties for more information.

Connection Manager

Connection Manager functions are identical in both the Desktop and WBT styles, except for Shutdown and access to Control Panel.
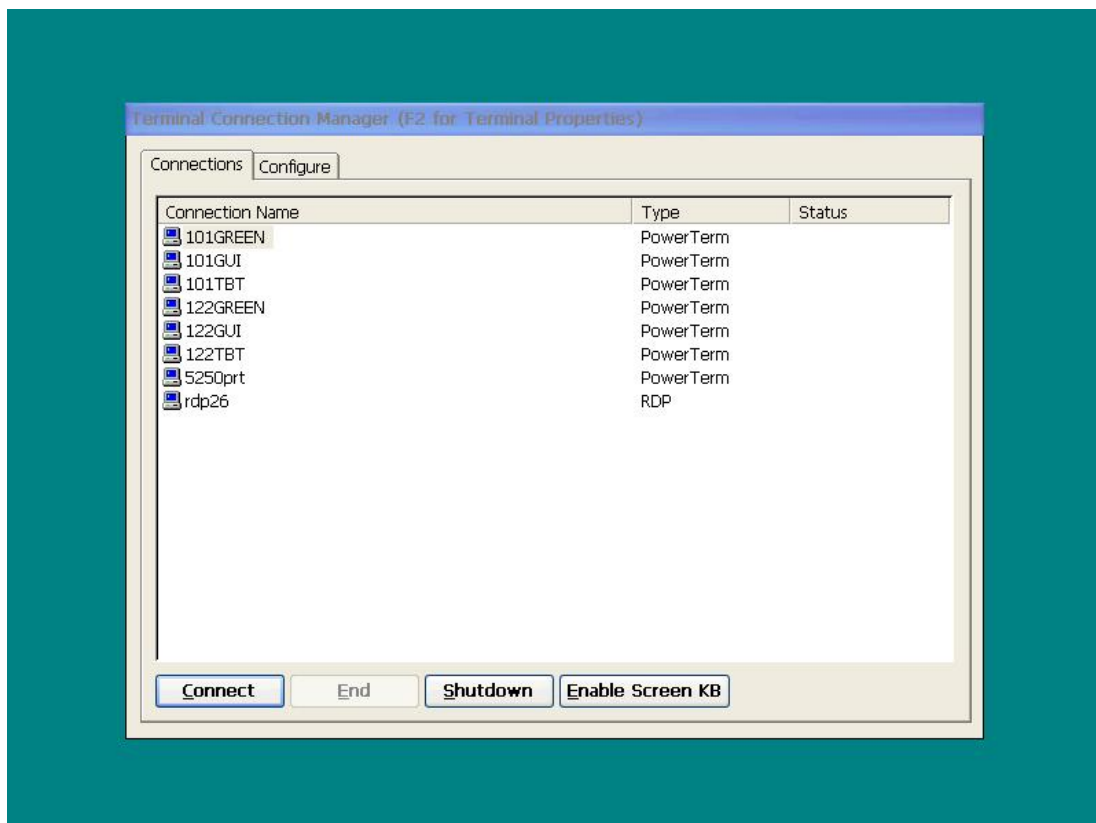
Connection Manager Screen in WBT Style

To open Connection Manager in WBT style, use one of the following methods:
- This is the default screen at bootup, unless you have Autostart sessions.
- Press **Ctrl**+**Alt**+**End** at any time.

Navigation

- To access Control Panel, press **F2** while in Connection Manager.
- To open Connection Manager:
  - This is the default screen at bootup, unless you have Autostart sessions.
  - Press **Ctrl+Alt+End** at any time
- To activate non-Autostart connections:
  - In **Connection Manager>Connect**, highlight the connection name and click on **Connect**.
  - In **Connection Manager>Connect**, double-click on the connection name
- To activate more than one connection:
  - Press **Ctl+Alt+End** to be returned to Connection Manager from an active connection. You can now select another connection for activation. All connections can be activated at the same time.
  - Set any or all connections to activate automatically at boot-up.
- To move among all active connections:
  - Press **Ctrl+Alt+UpArrow/DownArrow** for all keyboards.
  - Press **RightAlt+Up/DownArrow** for all keyboards.
  - Return to Connection Manager and select another connection.
- To move among active PowerTerm connections, open the **Sessions** menu and click on the desired session name.
- To close a display session:
  - Go to the Sign On screen, open the **File** menu, and activate **Exit**.
  - Click on **X** in the upper right-hand corner.
- To power down, select **Shutdown** from **Connection Manager>Connections**.

Kiosk Style

In Kiosk style, only one session, a browser session, is allowed. This session auto-starts at bootup, and goes to the configured home page. This is a somewhat limited Internet session, since Favorites cannot be saved, and there are none of the usual menu or icon selections. It is primarily intended for intranet access.

Terminal Properties

Terminal properties are set in Control Panel. The same set of terminal properties is accessible here as in the WBT or Desktop Control Panel. Control Panel is accessed by pressing **Ctrl+Alt+End** while in the Internet session.

Connection Manager

Connection Manager is not applicable or accessible in Kiosk style.

Navigation

- To access Control Panel, press **Ctrl+Alt+End** or **Ctrl+Alt+UpArrow** while in the Internet session.
- To move to a previously viewed Web site, right-click and select **Back** or **Forward** from the resulting menu
- To power off, press the **Power** switch.

Single User Connect

This style is a special case of WBT Shell style. In this style, an auto login user is enabled by default. At bootup, you will see a **Connect** button along with an option to press **Alt+F3** to log in another user. If you click on **Connect**, the auto login user, selected in **Control Panel>Desktop Style> Single User Connect>Single Option**, will automatically be connected to all of the Autostart sessions as configured when you added that user in **Control Panel>Security>Add User**. If you log in as another user, you will advance to Connection Manager in WBT Shell style.

Terminal Properties

Terminal properties can only be accessed from the auto login session if the user is in the Power User group (see Configure Terminal Properties|Control Panel|Security|Enable Multiuser Control|Add User). WBT Shell rules apply.

Connection Manager

Connection Manager can only be accessed from the auto login session if the user is in the Power User group (see Configure Terminal Properties|Control Panel|Security|Enable Multiuser Control|Add User). WBT Shell rules apply.

Navigation

For a user who is not in the Power User group (see Configure Terminal Properties|Control Panel|Security|Enable Multiuser Control|Add User), the only navigation option from an auto login session is to power off by pressing the **Power** switch. For a Power User, normal WBT Shell rules apply.

This Page Intentionally Left Blank.

Configure Terminal Properties

All of your terminal properties (not to be confused with connection properties) are accessible from **Start>Settings** in Desktop style. You will see the following menu.
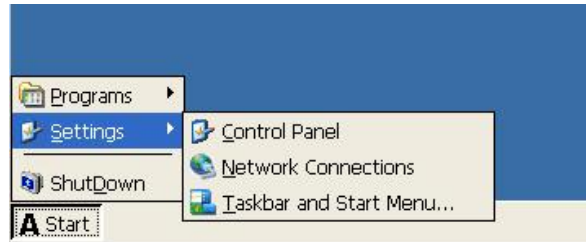
Settings Menu

Control Panel is also accessible in the WBT and Kiosk modes, but **Network Connections** can only be accessed here. **Taskbar and Start Menu** is only accessible, and pertinent, in Desktop style.

Network Connections

If you are using a wired connection to your LAN, you can configure that connection from here or from **Control Panel>Network**. If you are using a wireless connection, you will have to open this screen.
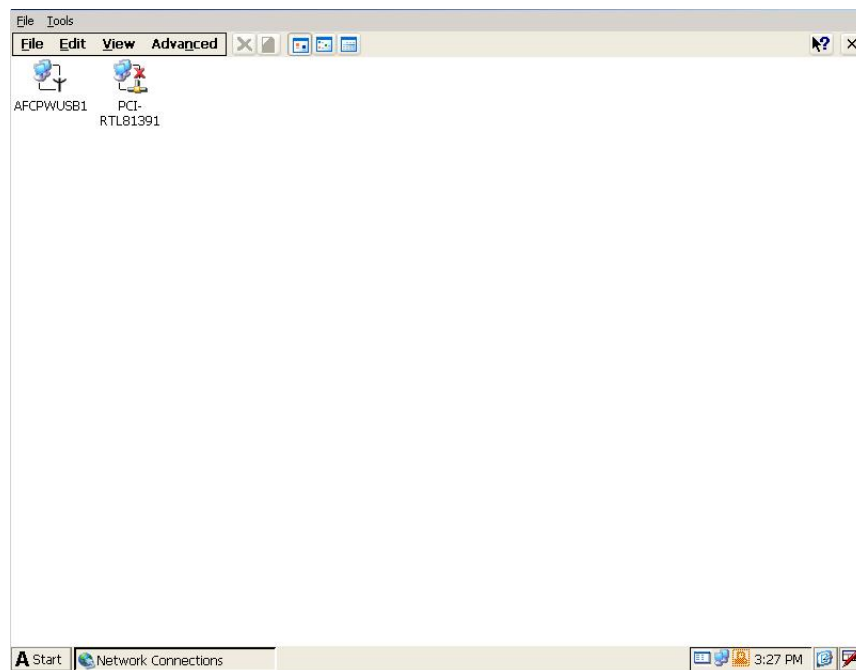
Network Connections Screen

Connections are added automatically to this screen as the terminal discovers network adapters. Consequently, there will always be a **PCI…** connection and icon since this is the internal network adapter for a wired

29

connection. If you attach a wireless adapter, you will see second connection and icon. Multiple adapters can be connected to network(s) at the same time, but a wired connection will generally take precedence in terminal operation and there may be some strange results. **SO**, the rule of connection is ***ONLY ONE CONNECTION SHOULD BE ENABLED AT A TIME***. This is true even if you do not have a wired connection and are only using wireless.

Now let's go through the menus on this screen.

File

If you have more than one connection on the screen, you must select one by highlighting before opening the File menu.

Network Connections File Menu

- **Disable/Enable**. Click on this option to disable or enable the selected network connection. If you are using a wireless adapter, you should disable the wired connection seen in this window.
- **New/Desktop Shortcut/Delete**. These options are permanently grayed out since connections are added automatically when the firmware discovers the network adapter(s).
- **Rename**. A connection is automatically named with the type of network adapter associated with that connection. You can rename if you wish.
- **Close**. This option closes the Network Connections window.

Properties

Click here or on the icon to open the Settings dialog box for the selected connection.

Network Connection Settings Dialog Box

These settings are also set up in the WBT Setup Wizard and are available in **Control Panel>Network**.
- **Wired Connection**. If you are using the wired network adapter, you can make your settings in the Wizard or the Control Panel, or you can change them here.
- **Wireless Connection**. If you are using a wireless adapter, ***and*** are using a static IP address, you ***must*** make your static settings here.

Edit

This menu is not used.

View

Network Connections View Menu

This menu, or one of the icons, controls the manner in which information is displayed in this window, much like a View menu in Windows Explorer.

Advanced

Network Connections Advanced Menu

If you click on **Advanced Settings**, your only choice here, you will see the Advanced Adapter Settings dialog box.

Advanced Adapter Settings Dialog Box

You should never have to use or access this box, because you should *never* have more than one adapter enabled at a time.

Control Panel

Almost all terminal properties are configured in Control Panel. Invoke this window:

- From **Start>Settings>Control Panel** in the Desktop display mode (see Display Styles|Desktop Shell).
- By pressing the **F2** key in the Terminal Connection Manager window in WBT Shell display mode.
- By pressing **Ctrl**+**Alt**+**End** in Kiosk display mode.

If a password has been enabled for this terminal (see Control Panel|Security), you will see the Setup Password dialog box when you invoke Control Panel. Type in your password and activate **OK**.

When you get into Control Panel, you will see twenty-four icons, each representing a sub-set of terminal properties. These icons are the same for all display styles, but their order in Control Panel will vary.
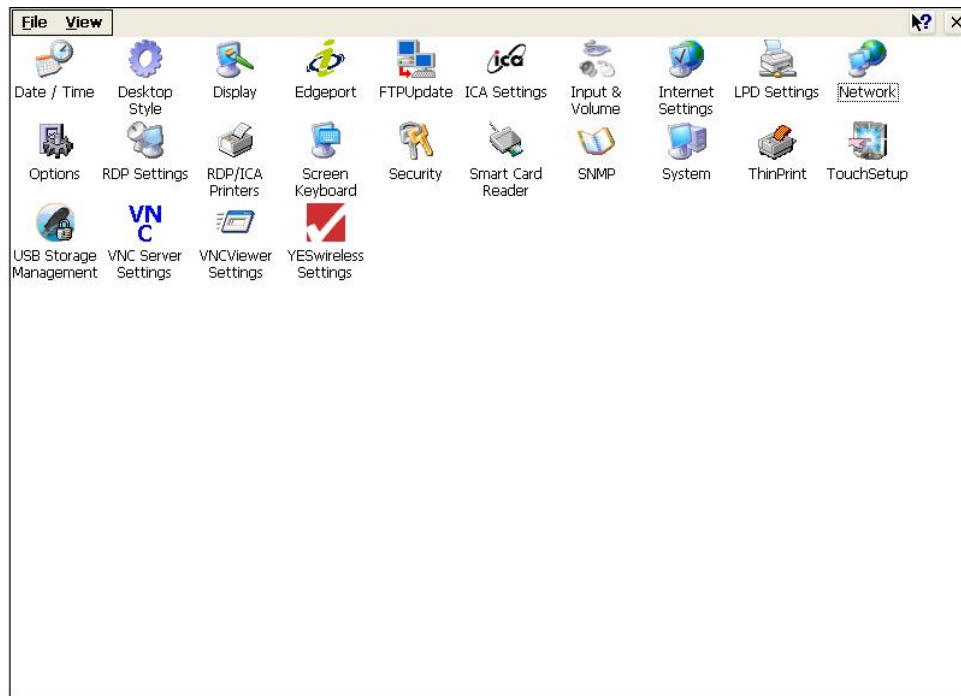
Control Panel in Desktop Style

These icons and property sub-sets will be discussed here in alphabetical order, as they appear in Desktop style. Double-click on an icon to open the associated property dialog box.

Date/Time

In Desktop Shell style, the time is displayed in the System Tray, and in browser sessions. This dialog box can also be invoked by double-clicking on the time in the Desktop System Tray.

Date/Time

Date/Time Dialog Box

- **Calendar/Current Time**. These settings can be useful in browser sessions when date stamping a site printout, and the time is also displayed in the System Tray in Desktop style.
- **Time Zone**. Time Zone has two uses:
  - It allows the user, when logging on to a MetaFrame XP server in a different time zone, to have the ICA sessions reflect the time zone of the local terminal. For example, a user in London (Greenwich Mean Time) logs onto a MetaFrame 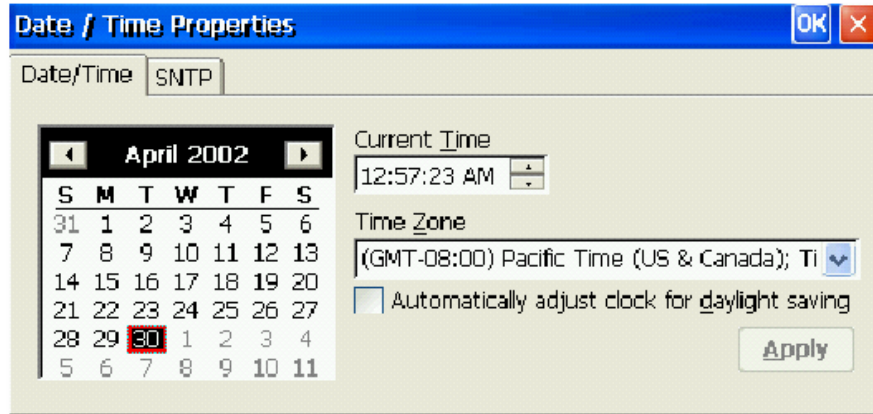XP server in New York City (Eastern time zone), and launches Microsoft Outlook as a published application; Microsoft Outlook stamps emails sent during this ICA session with the user's GMT time zone information.
  - When SNTP synchronization is used (see below), Time Zone provides the correct offset from the timeserver base time.

SNTP

SNTP Dialog Box

This dialog box allows the terminal to sync the local **Current Time**, shown in the Date/Time dialog box, with a timeserver on the Web. Obviously, it only works if you have a Web connection (but you do not need a browser session).

- **Auto Sync…**. Check this box to sync the time whenever the terminal is rebooted.
- **Time Server**. Select a timeserver from the drop-down list. The default **time.nist.gov** is often inactive, so you may want to choose another server.
- **Add**. Click here to open a dialog box that allows you to add the name of another timeserver of your choice.
- **Synchronize**. Click here to synchronize immediately without waiting for a reboot.

Desktop Style

Desktop Style Dialog Box

Choose a desktop style here. See Display Styles for descriptions of the style choices. The terminal will reboot if you change the style here.

Single Connect Mode

If you select this style, the dialog box will change.

Desktop Style Dialog Box in Single Connect Mode

Click on the **Single Option** tab to see the following dialog box
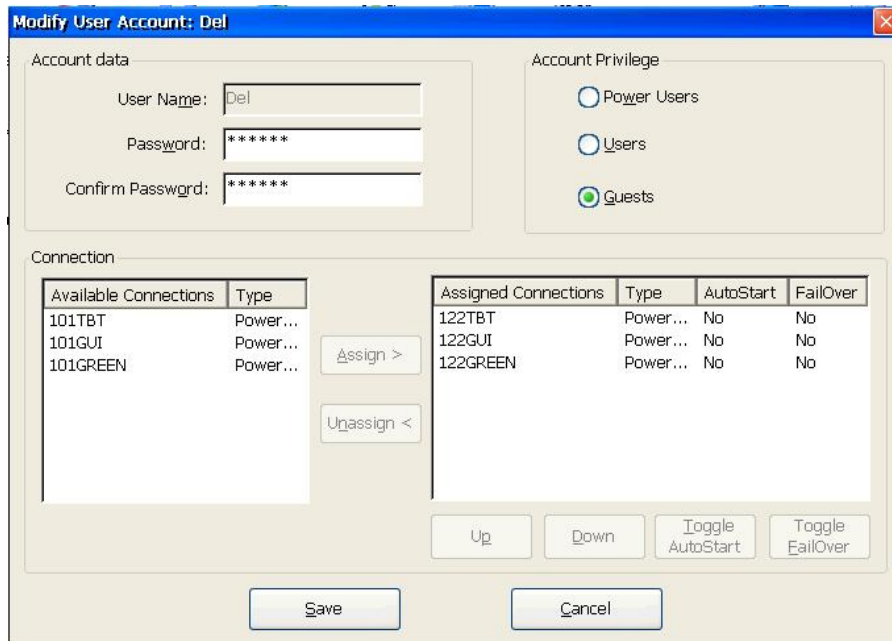
Single Option Dialog Box

In the **Auto Login User** drop-down list, you will see all of the users configured in the **Security** applet. Select the appropriate one for auto login. Any change you make here will automatically be seen in the Enable Auto Login list of the **Security** applet, and vice versa.

Click on **Modify User** to configure parameters for the selected user. You will see the following dialog box.

Modify User Account Dialog Box

This is the same dialog box as that available in the **Security** applet when Multiuser Control is enabled and a user is modified. See Security|Enable Multiuser Control|Modify User for an explanation of this box.

Display

Display Dialog Box

Display

- **Desktop Area and Refresh Frequency**. Use the scroll list to select the terminal display resolution. The terminal will support resolutions and frequencies from 600x480x60 up to1280x1024x60 if the monitor will support them. A change here will result in a terminal reboot when you exit the dialog box. **NOTE: Be sure**

to test your new setting if you are going up in frequency or resolution. If you do not test, you could be faced with an unreadable screen after boot-up.

- o **Test Resolution**. Use this button to preview the resolution and frequency selected on the scroll list. Testing is recommended before locking in this setting; if the monitor will not support your selection, you will be faced with an unreadable screen after boot-up. See Troubleshooting Your Terminal if this situation occurs.

- **Enable Power Saving**. Check here to enable the screen saver. By default this function is activated.
  - o **Screen Saver**. Click on this radio button to use a screen saver. Then choose, from the drop-down list, either a floating logo screen saver or a blank screen. Use the **Test** button to preview your choice for three seconds.
  - o **Wait**. Adjust the amount of idle time before either the Screen Saver or Turn Off Monitor is activated.
  - o **Password Protect**. Check this box if you wish to require a password to escape screen saver. Then specify your password after clicking on **Modify Password**.
- **Display Driver Colors**. This is the terminal hardware video color setting. By default, **High Colors (16 bit)** is activated. Higher color resolutions are only useful if you are using ICA connections and if your Citrix server supports them. If you encounter any display problem in your RDP or ICA connection applications, try a lower setting. **Note:** If the setting is **256 Colors**, the **RDP Colors** in **Control Panel>RDP Settings** will automatically revert to **256 Colors**, and the **Thousands** and **Millions** options will be absent in **Control Panel>ICA Settings>Preferences**.

Background
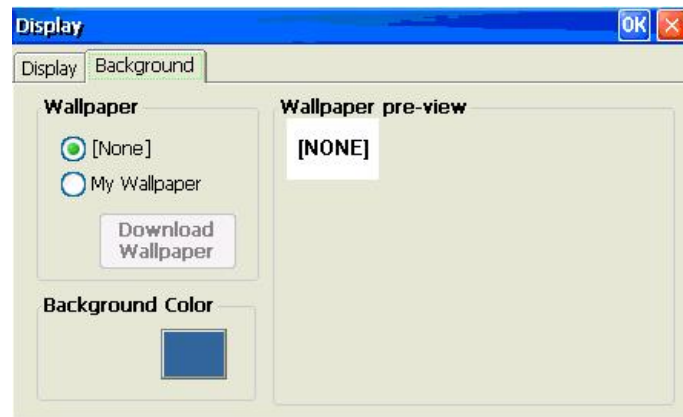
Display Background Dialog Box

- **Wallpaper**. By default, there is no wallpaper in your terminal. But you can select **My Wallpaper** and then click on **Download Wallpaper** to install a wallpaper file on your terminal. If you do this, you will be faced with an FTPUpdate dialog box which allows you to download a .bmp file from the FTP server. See Firmware Upgrade Utilities for more information on downloads. **Note:** Only one wallpaper image can be installed at a time.
- **Background Color**. Click on this button to see a color palette and make your selection.

36

Edgeport

Edgeport Status Box

Serial devices can be used with your terminal through an Edgeport USB-to-COM adapter. This status box will show you the Edgeport status: **Device ready** or **Device not installed**.

FTP Update
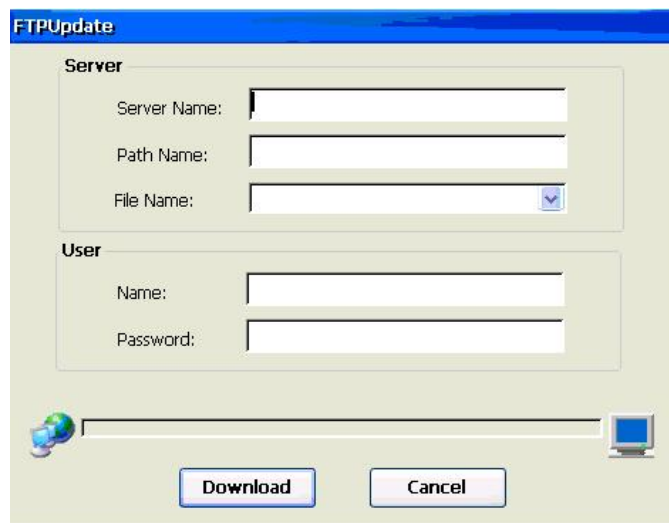
FTPUpdate Dialog Box

Use the FTPUpdate dialog box if you wish to update your terminal's firmware or download a wallpaper file from an FTP server. For more information, please refer to Firmware Upgrade Utilities.

ICA Settings

ICA Settings

Click on this icon to see the Global ICA Client Settings window with four settings sheets that can be invoked by activating their individual tabs. These settings will be used for all Citrix ICA connections that are added to the terminal.

Hotkeys
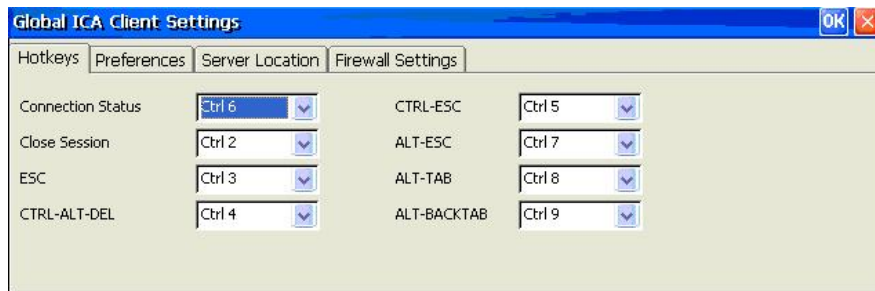
Hotkeys Settings Sheet

Many hot-key combinations used in Windows applications cannot be used directly in client sessions because they are intercepted by the local operating system. Therefore, Citrix provides a way to substitute, or map, more obscure key combinations for some of the standard Windows hot-key combinations. For example, in the above screen, the combination **Ctrl+8** is substituted in all ICA client sessions for the standard hot key combination **Alt+Tab**. If you are in an ICA session, pressing **Ctrl+8** will have the same result in the active Windows application as pressing **Alt+Tab** on a PC.

The following table lists the default ICA Windows CE Client hotkeys.

Function or PC Equivalent	Default Hotkey	Description
Status Dialog	CTRL+6	Displays ICA Client session status.
Close Session	CTRL+2	Disconnects the ICA Windows CE Client from the Citrix server and closes the client window on the terminal. Using this hotkey leaves the ICA session running in a disconnected state on the Citrix server. If you do not want to leave your session running in a disconnected state, log off instead.
ESC	CTRL+3	Provides the functionality of an ESC key on your terminal.
CTRL-ALT-DEL	CTRL+4	Displays the Windows NT Security dialog box on a MetaFrame for Windows server.
CTRL-ESC	CTRL+5	On MetaFrame for Windows servers, the Windows Start menu is displayed. On *WINFRAME* servers, this hotkey displays the Task List.
ALT-ESC	CTRL+7	This hotkey cycles the focus through the minimized icons and open windows of applications running in your ICA session
ALT-TAB	CTRL+8	This hotkey cycles through all applications in the ICA session. A pop-up box appears and displays the programs as you cycle through them. The selected application receives keyboard and mouse focus.

| Function or PC Equivalent	Default Hotkey	Description
ALT-BACKTAB	CTRL+9	Like the ALT+TAB hotkey, this key sequence cycles through applications that have been opened in the ICA session, but in the opposite direction. The chosen application receives keyboard and mouse focus.

But you may want to change this mapping. If so, execute the following procedure:
1. Click on the drop-down arrow for the hot-key combination that you want to change.
2. Select a new combination from the drop-down list. **Note:** There are no safeguards to prevent you from choosing the same hotkey combination for multiple functions. Expect erratic performance if you do so.
3. Repeat for other hot keys as desired.
4. **OK** out of the window, or select another tab to change other settings. If you **OK** out, you will be asked if you want to reboot to make the changes effective.

Preferences
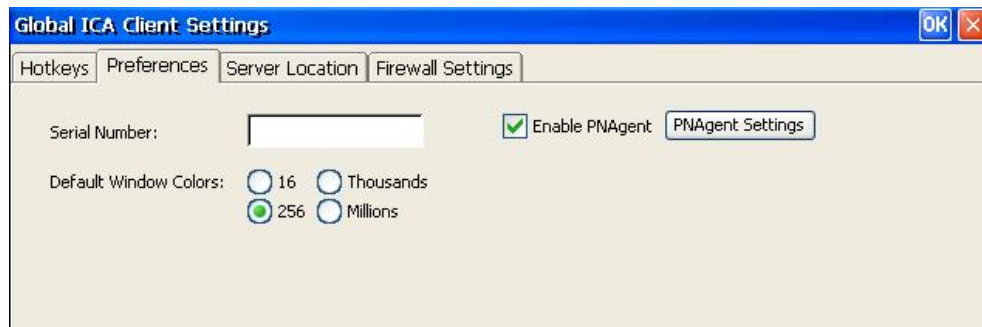
Preferences Settings Sheet

- **Serial Numbe**r. This is the serial number of your ICA Client software. This number is only necessary when you are using the ICA Windows CE Client with a product such as WI*N*FRAME Host/Terminal, which requires each ICA Client to have a Citrix PC Client Pack serial number. If a serial number is required, you must enter it exactly as it appears on the Serial Number card. The serial number is not used when connecting to MetaFrame servers.
- **Default Window Colors**. We recommend that you select 16 or 256 colors since lower color depth may provide better performance. If the specified option exceeds the capabilities of the terminal hardware, the maximum color depth supported by the terminal is used instead. **Note:** The options to select Thousands or Millions of colors are not available if your device is not capable of high-color display or if you have a lower depth selected in **Control Panel>Display**.
- **Enable PNAgent**. Check this box if you wish to connect to an Nfuse-enabled Citrix server and obtain a list of available published applications. In this mode, you do not have to manually configure each ICA connection, but a list of published applications will be 'pushed' (made available) to your session. If you select this option, you must then click on the **PNAgent Settings** button to specify the URL or IP address of your Nfuse server.
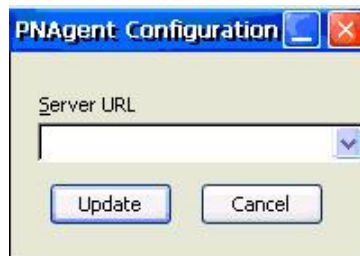
Nfuse Server Address Box

Server Location

The information entered in this sheet is used to help locate available Citrix servers and published applications.
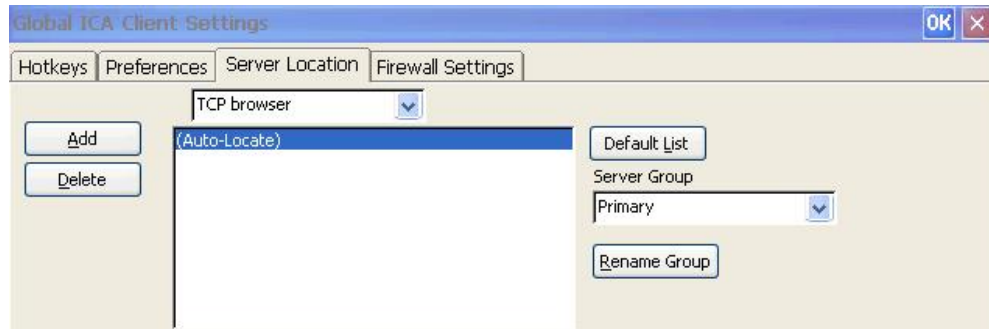
Server Location Settings Sheet

Server location (also called server browsing) provides a method for a user at a network-connected Citrix ICA Client to view a list of all MetaFrame servers on the network that have ICA connections configured for that network protocol, or a list of all published applications. You can specify a separate server location for each network protocol. **Tip:** Set a specific server address for the Citrix server that functions as the master ICA Browser when your network configuration uses routers or gateways, or to eliminate broadcasts on your network.

The way in which server location works depends on which network protocol has been configured:
- **TCP+HTTP Browser** and **SSL+HTTPS Browser**. The default server address is ica.*domainname*, where *domainname* is a TCP/IP domain name. The ICA Client uses the HTTP or HTTPS protocol respectively to contact the MetaFrame servers. **Note:** If you are going to use SSL security for your ICA connections, you must choose **SSL+HTTPS Browser** protocol.
- **TCP Browser**. The default setting for server location is auto-locate. The ICA Client attempts to contact all of the servers on the subnet by broadcasting on the UDP protocol. Alternatively, you can set specific addresses for MetaFrame servers.

Business recovery provides consistent connections to published applications in the event of a master ICA browser server disruption. You can define up to three groups of MetaFrame servers to which you want to connect: a primary and two backups. Each group can contain from one to five servers. When you specify a server group for your client, the client attempts to contact all the servers within that group and the first server to respond passes its master browser address to the client.

To configure server location and business recovery:
1. Select the required network protocol from the drop-down list.
2. Click **Add** to display the **Add Server Address** dialog box.
3. Enter the name or IP address of a MetaFrame server. **Note:** For the TCP/IP+HTTP and SSL+HTTPS protocols, if you do not enter an IP address, you must have a MetaFrame server on your network mapped to the default name of ica.*domainname*, where *domainname* is a TCP/IP domain name. TCP/IP+HTTP and SSL+HTTPS server locations do not support the **(Auto-Locate)** function.
4. To define other server groups, select the required group from the **Server Group** and repeat steps 2 and 3.
5. Click **OK**.

Firewall Settings

If the network has a SOCKS proxy server to limit access to your Citrix servers, you must enter the proxy server information here to handle connections between clients and the server. You can configure a default SOCKS proxy for all connections here, or you can configure a SOCKS proxy for a specific client connection under the specific connection properties (see Creating a New Connection|Citrix ICA Client|Network Connection).
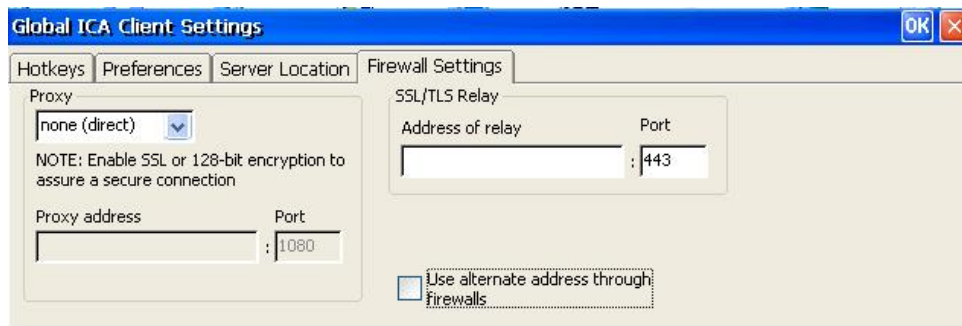
Firewall Settings Sheet

Configuring a Default SOCKS Proxy Server

In the Proxy drop-down list, select **SOCKS**.
1. In the Proxy Address box, enter the SOCKS proxy server's IP address or DNS name.
2. In the Port box, enter the proxy server's port number (if different than 1080).
3. Click OK to save your changes.
Note: If you configure a default SOCKS proxy, you must specify at least one server in the Server Location tab for server and published application browsing to work.

Configuring a Secure Proxy Server

If you want to connect to a MetaFrame server beyond a firewall, and your network is using a Secure proxy server, you must configure the ICA Client to connect to MetaFrame servers through the Secure proxy server. You can configure a default Secure proxy for all connections here or a Secure proxy for a specific client connection (see Creating a New Connectio|Citrix ICA Client|Network Connection).

To configure a default Secure proxy server:
1. Select **Secure (HTTPS)** from the Proxy drop-down list.
2. In the Proxy Address box, enter the Secure proxy server's IP address or DNS name.
3. In the Port box enter the Secure proxy server's port number.
4. To enable SSL/TLS Relay, enter the **Address of relay** and the **Port number** in the appropriate boxes.
5. Click **OK** to save your changes.
Note: If you configure a default Secure proxy, you must specify at least one server in the Server Location tab for server and published application browsing to work.

Connecting to a Server across a Firewall

Network firewalls can allow or block packets based on the destination address and port. You can configure the ICA Client here to connect to a MetaFrame server through a firewall. If the firewall uses address remapping, you must configure the ICA Client to use the alternate address returned by the master ICA Browser. This is necessary whether or not you are using a SOCKS/Secure proxy server.

To use alternate address translation for all connection entries:
1. Check **Use alternate address through firewalls**.
2. Click **OK** to save your changes.
Note: If you set alternate address translation here, it cannot be disabled for specific Client connections.

Input and Volume

Configure your keyboard, mouse, and audio settings here.

Keyboard, Volume
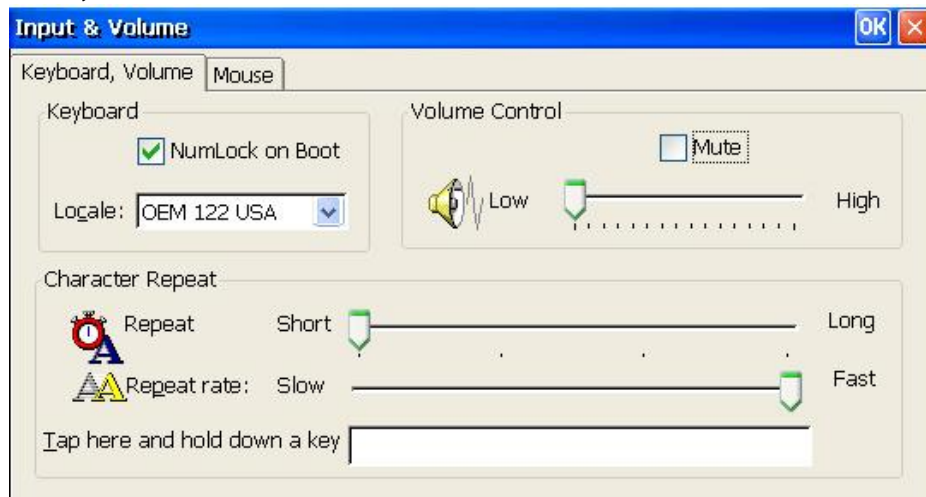
Keyboard, Volume Settings Sheet

- **Keyboard**
  - **NumLock on Boot**. Check to force Numeric Pad NumLock when the terminal starts up.
  - **Locale**. Use the scroll list to select a language and number of keys for the keyboard. Default is **OEM 122 USA**, which is the setting required if the Affirmative Computer Products 122-key keyboard is used with the terminal. If "122" is not shown, the number of keys is assumed to be 101.
- **Character Repeat**
  - **Repeat Delay**. Use this slider control to define how long a character key must be held down before that character will start to repeat on the screen.
  - **Repeat Rate**. Use this slider control to define how often a character will repeat when that character key is held down.

  You can test your repeat settings in the test box.
- **Volume Control**.
  - Use the slider control to adjust the volume of the audio.
  - Use the "Mute" check box to disable the audio of the terminal.

Mouse

Wheel mice**,** both PS/2 and USB**,** work well in ICA and RDP sessions and in native applications (viewers, browsers). The third button of a three-button mouse works in ICA and RDP sessions, but not in native applications.
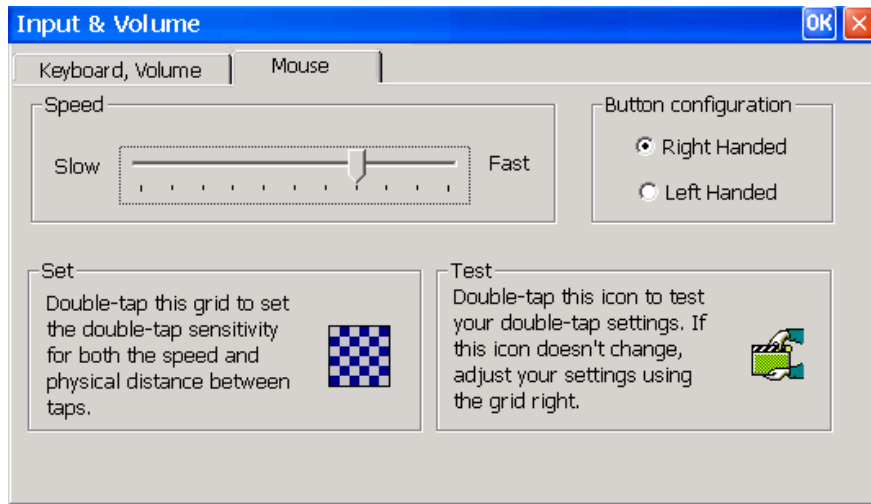
Mouse Settings Sheet

- **Speed**. Use the slider control to set the speed of the cursor movement on screen vs. the movement of the mouse.
- **Button Configuration**. Use the radio buttons to select "Right Handed" or "Left Handed" for your clicking convenience.
- **Set**. Place the cursor on the grid and then double-click to set speed and distance sensitivity.
- **Test**. Test your double-click sensitivities here.

Internet Settings

This icon opens an Internet Settings sheet with four tabs.

General Internet Settings Sheet

The settings in these sheets are a sub-set of standard Windows Internet Explorer 6.0 settings, and will not be detailed here.

43

LPD Settings

LPD Settings

The Berkeley versions of the UNIX™ operating system provide printer spooling with a collection of programs: lpr (assign to queue), lpq (display the queue), lprm (remove from queue), and lpc (control the queue). These programs interact with an autonomous process on network print servers called the line printer daemon (LPD).

Each YES*tation* terminal includes an LPD module that allows an LPR device on the network to assign print jobs to a local printer attached to the terminal.

Double-click on the **LPD Settings** icon to see the following box.
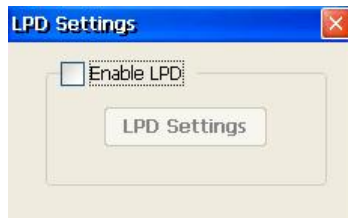
LPD Settings Box

Check **Enable LPD**. You will be unable to use the **LPD Settings** button until you reboot. After you reboot, click on this button to see the dialog box.
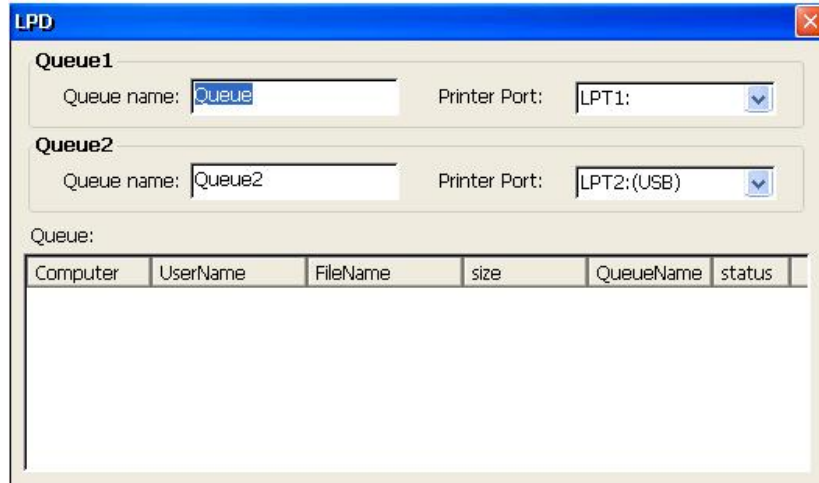
LPD Dialog Box

You can define two LPD printers.

- **Queue name**. Define a queue name here. This will be the queue name used by LPR devices to assign print jobs.
- **Printer Port**. Select a port from the drop-down list. You may have two printers on different ports.
- **Queue**. This box shows the status and source of all the print jobs currently in the LPD queues.

Network

The Network utility lets you control the terminal IP address, name server addresses, and global ICA client settings, as well as providing the useful ping function.
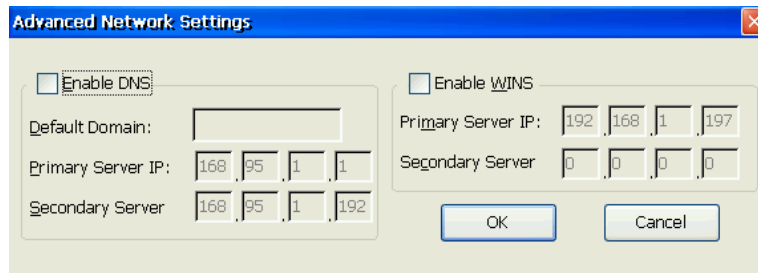
Note: With a wireless adapter, many of the items in this dialog box are invalid. In that case, only **Client IP Address**, **Ping IP Address**, and **Global ICA Client Settings** can be used from this utility.

Network Dialog Box

- **Obtain an IP address from a DHCP Server**. Select this radio button to enable DHCP addressing for a wired connection.
- **Specify an IP address**. Select this radio button to enable a specific IP address setting for a wired connection.
  - o **IP Address**. Enter a static IP address in this field.
  - o **Subnet Mask**. Enter the subnet mask of the local network.
  - o **Gateway**. Enter the IP address of a gateway if any server is not on the local sub-net.
- **Network Speed**. Specify a wired LAN speed from the drop-down list, or leave at **Auto Detect**.
- **Keep Current IP Address…**. If you are getting the IP address from a DHCP server, a check here will allow the terminal to use the last known IP address if the terminal cannot connect to the DHCP server.
- **TCP KeepAlive Time**. It may be advantageous to know if communication to a connection server has been lost. If you enter a non-zero value in this field, the terminal will attempt to establish communications with the server if no communications has been received within the set Keep Alive number of minutes. The terminal will make twenty attempts at five-second intervals. If there is no success, you will get an error message notifying you that the connection has been lost. Enter **0** here to disable Keep Alive.

45

Advanced Network

Activate this button to configure name server settings if you are using a static IP address for the terminal.
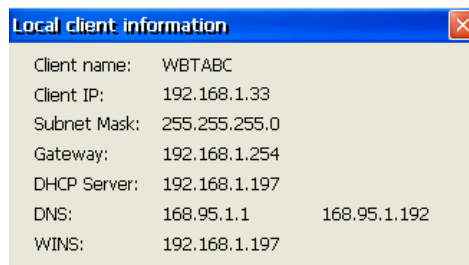
Advanced Network Settings Dialog Box

- **Enable DNS.** Activate this check box to enable the following three fields for the DNS setting.
- **Enable WINS**. Activate this check box to enable the following three fields for the WINS setting

Client IP Address

Click on this button to see the Local Client Information box.

Local Client Information Box

You will see all the network information for this terminal, either obtained from a DHCP server or manually specified. The **Client Name** is the same as the terminal name.

Ping IP Address

Activate this button to display the Ping dialog box. You can ping the name or IP address of a host or any other device connected on the network. You can even ping a web site through a gateway.

Ping Dialog Box

46

- **IP, Name or Web Site**. Enter the network name or the IP address of the device to be pinged.
- **Count**. Enter the desired number of ping attempts.
- **Timeout**. Enter the desired wait time, in milliseconds, before a ping attempt is recorded as failed.
- **Ping**. After entering the parameters above, activate this button to execute pings. The results will be shown in the list box.

Options
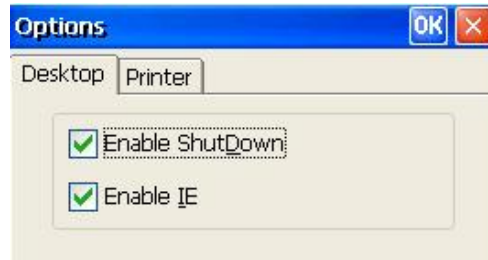
Desktop Options Dialog Box

This utility provides several miscellaneous options.

- **Enable ShutDown**. Uncheck this box to remove **ShutDown** from the Start menu.
- **Enable IE**. Uncheck this box to remove the Internet Explorer icon from the Desktop and to remove this selection from **Connection Manager>Configure>Add**.
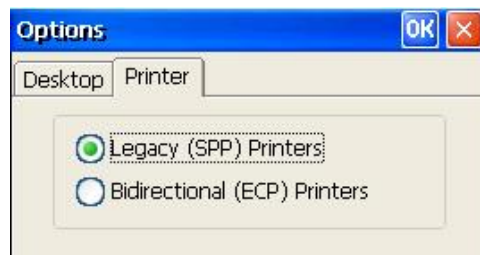
Printer Options Dialog Box

These two selections are intended for printers connected to the LPT1 parallel port. Some printers, especially older ones, cannot support full bi-directional capability on this port. If you are using such a printer, select **Legacy (SPP) Printers**. Otherwise, make the **Bidirectional…** choice for generally faster operation.

RDP Settings

This utility is used to configure local resources and display properties for all RDP connections. Many of these settings are only valid when connected to a Windows 2003 server.

Local Resources

RDP Local Resources Properties Sheet

- **Remote computer sound**. **Note:** This feature works only with a Windows 2003 server.
    - o **Bring to this computer.** Map the audio (sound) from the server to the terminal.
    - o **Do not play.** Do not play computer sound on terminal or server.
    - o **Leave at remote computer.** Does not map the audio (sound) from the server to the terminal.
- **Local devices**
    - o **Disk drivers.** Enable local USB port mapping for USB disk drives such as USB FDD, HDD, Flash Disk, and CDROM. **Note:** This feature works only with a Windows 2003 server.
    - o **Printers.** Enable local parallel port mapping. It supports both parallel printers from LPT1 and USB printers from USB port.
    - o **Serials ports.** Enable local serial ports mapping. **Note:** This feature works only with a Windows 2003 server.
- **Display the connection bar**. If this box is checked, a Connection bar will be shown at the top of every RDP session screen.
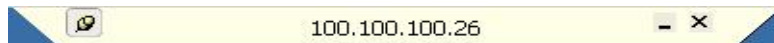
RDP Connection Bar Example

This bar is useful in several ways:
- o **Server IP Address**. The bar shows the IP address of the Terminal Server for this session.
- o **Minimize**. Clicking on the Minimize icon will conveniently take you back to the Desktop (Desktop shell) or Connection Manager (WBT shell).
- o **Disconnect**. Clicking on the **X** will evoke the Disconnect dialog, allowing you to disconnect without closing your programs.

Experience
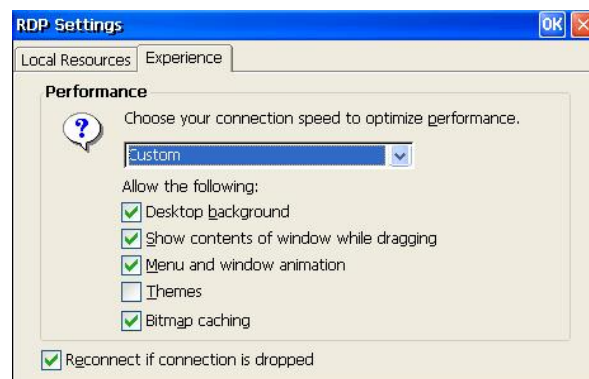
RDP Experience Properties Sheet

This properties sheet is only useful if you are connecting to a Windows 2003 server. If so, you can optimize performance and desktop appearance by selecting connection speed and enabling/disabling desktop parameters. Default parameters vary depending upon the chosen connection speed.

RDP/ICA Printers

Open this utility to add, delete, or edit the properties of, a printer for use in RDP and ICA connections. Printer parameters for emulator connections are configured in the emulator. The same printer can be used for both Windows applications and emulation, but two sets of parameters must be configured.
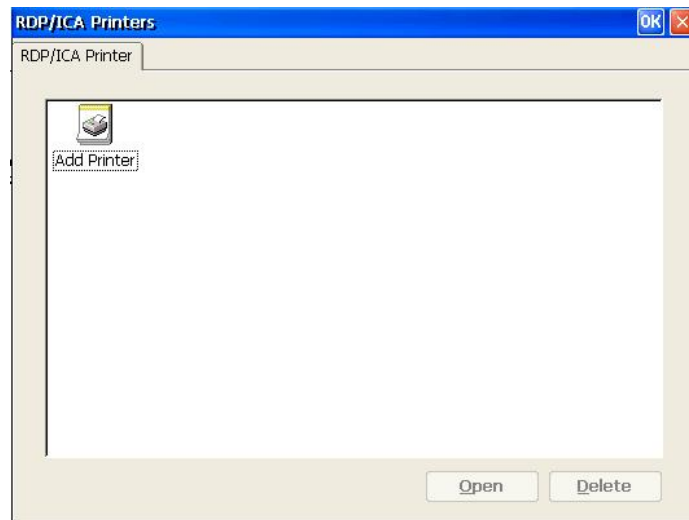
RDP/ICA Printer Dialog Box

If you already have configured printers on this terminal, double-click on a printer icon, or highlight an icon and click on **Properties**, to see the printer properties.

To add a printer, double-click on the **Add Printer** icon, or highlight this icon and click on **Open**, to start the WBT Printer Wizard:
1.
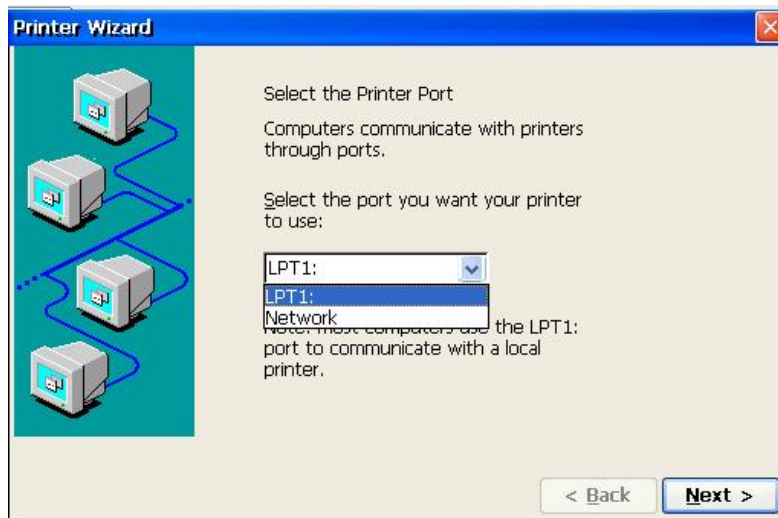
Printer Wizard Dialog Box #1

- You must select a printer port. You can have more than one local printer, but each one must be assigned to a different printer port. If you have a USB printer already connected to the terminal, you will see a **USB** option in the drop-down list, as well as the typical **LPT1**, **COM1/2** (2613P only), and **Network** options. **Note:** The default printer type for the LPT1 port is Extended Capabilities (ECP). If your printer requires a different type, the terminal BIOS setting must be changed. Contact Affirmative Computer Products Technical Support for information on changing the BIOS.
- You can have multiple network printers. Specify the network path in dialog box #2a.
- If you select a COM port, you can configure the properties later in Connection Manager by creating a bogus Dial-Up connection (see Creating a New Connection|Dial-Up Client|Configure).

2.
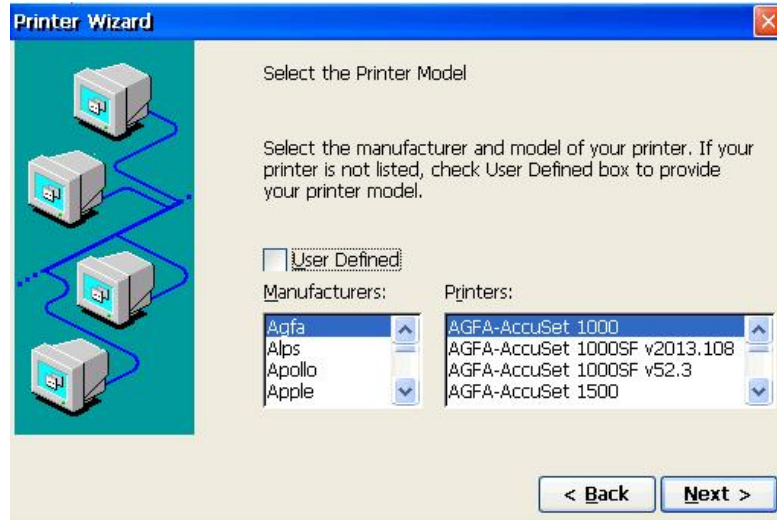
Printer Wizard Dialog Box #2

- Select a printer manufacturer from the manufacturer drop-down list. After you select the manufacturer, the right-hand drop-down list will provide a list of models for that manufacturer.
- Select the printer model. If your model is not shown here, try to find a compatible printer in the list. It may be that your printer is compatible with a model from a different manufacturer. If that is the case, go back, change the manufacturer selection, and then choose the compatible model from that drop-down list. **Note:** There are no local Windows printer drivers in these terminals. You must have a driver in your Windows Terminal Server that corresponds to the selected model.
- Another option, if your printer is not found in the lists, is to check **User Defined**. In this case, you will then see dialog box #2a.

2a.
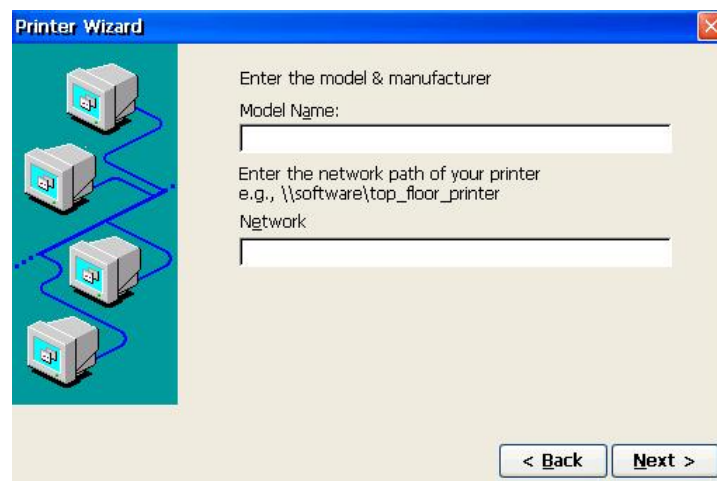
Printer Wizard Dialog Box #2a

- **Model Name**. If you chose **User Defined** in the previous dialog box, #2, you will see this dialog box #2a. Enter the model name, in the **Model Name** field, that corresponds to the printer driver on your Windows Terminal Server.
- **Network**. If you chose **Network** in dialog box #1, you will also see this dialog box #2a. Enter the network path to your networked printer here.

3.
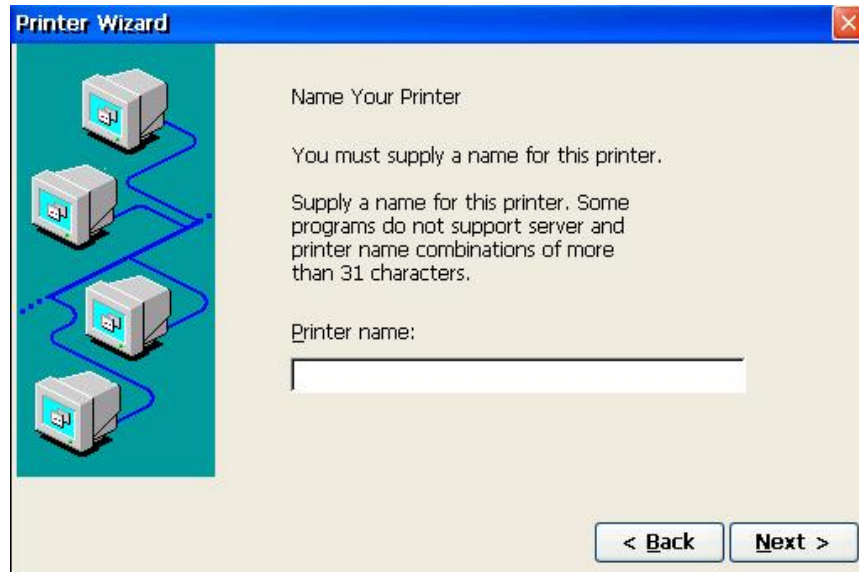
Printer Wizard Dialog Box #3

You must provide a "friendly" name for your printer. This name will identify your printer in the Printers settings screen on your server. The default name is the model name that you selected in the previous dialog boxes.

4.
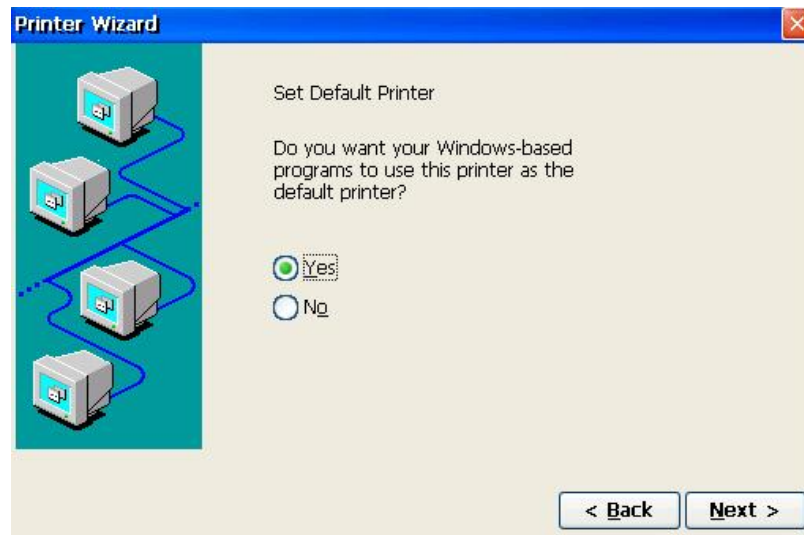
Printer Wizard Dialog Box #4

If this is your only printer, you will not see this dialog box, since the first added printer is automatically set as the default printer. If you already have added another printer, you will see this box and you can select whether or not you want this local printer to be the default printer for your Windows (ICA and RDP connection) applications.

5.
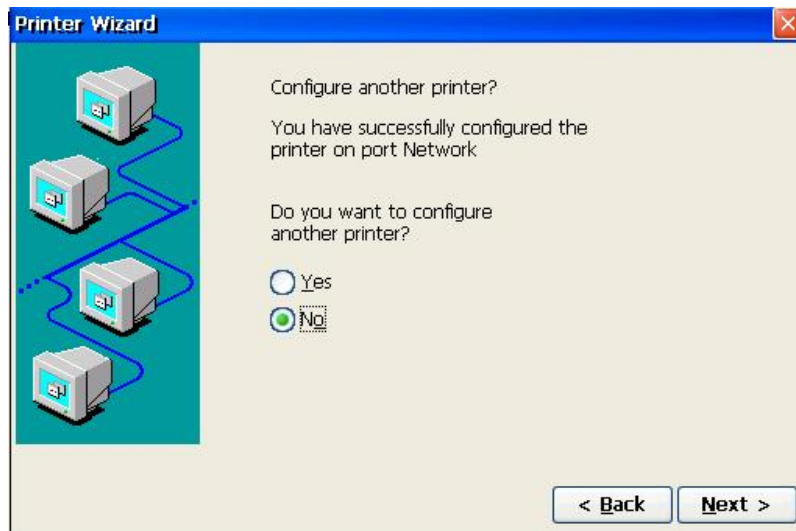
Printer Wizard Dialog Box #5

You are given the opportunity to begin the configuration of another printer. If you select **Yes**, you will repeat the above dialog boxes for that printer. If you select **No**, you will go on to the Finish dialog box.

6.
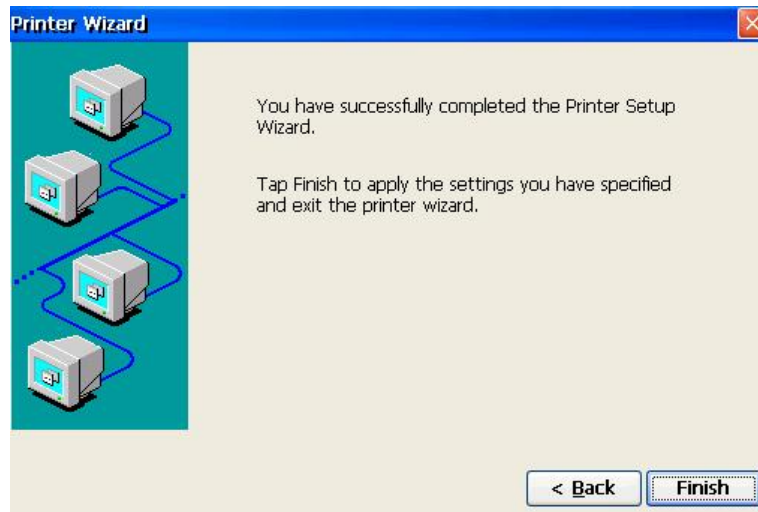
Final Printer Wizard Dialog Box

- Click on **Finish** to apply your selections.
- Click on **Back** to return to the previous dialog box.
- Click on **X** to forget the whole thing and go back to the Control Panel screen.

Screen Keyboard

Screen
Keyboard

This feature is intended for use only with touch screens, but you can play with it using a mouse cursor if you want to.
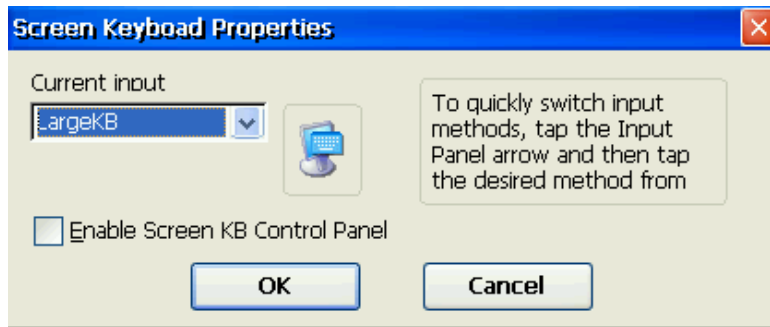
Screen Keyboard Settings Sheet

- **Current input**. Choose one of two sizes of keyboard from the drop-down list. See Desktop Styles|Desktop Shell|System Tray|Screen Keyboards for descriptions of the screen keyboard layouts. If you are using Desktop Shell, you can easily switch between these two sizes from the System Tray **Screen Keyboard** icon.
- **Enable Screen…**. Check this box to cause an Enable/Disable button to be shown in the lower right corner of the screen after the terminal is booted up. Then you can click on the button to enable or disable the screen keyboard. This is useful when you bypass the Connection Manager, which also has an Enable/Disable button, because of an Autostart session. This check box only takes effect on boot up.

Security

Several levels of security can be configured in this utility.

Security Dialog Box

53
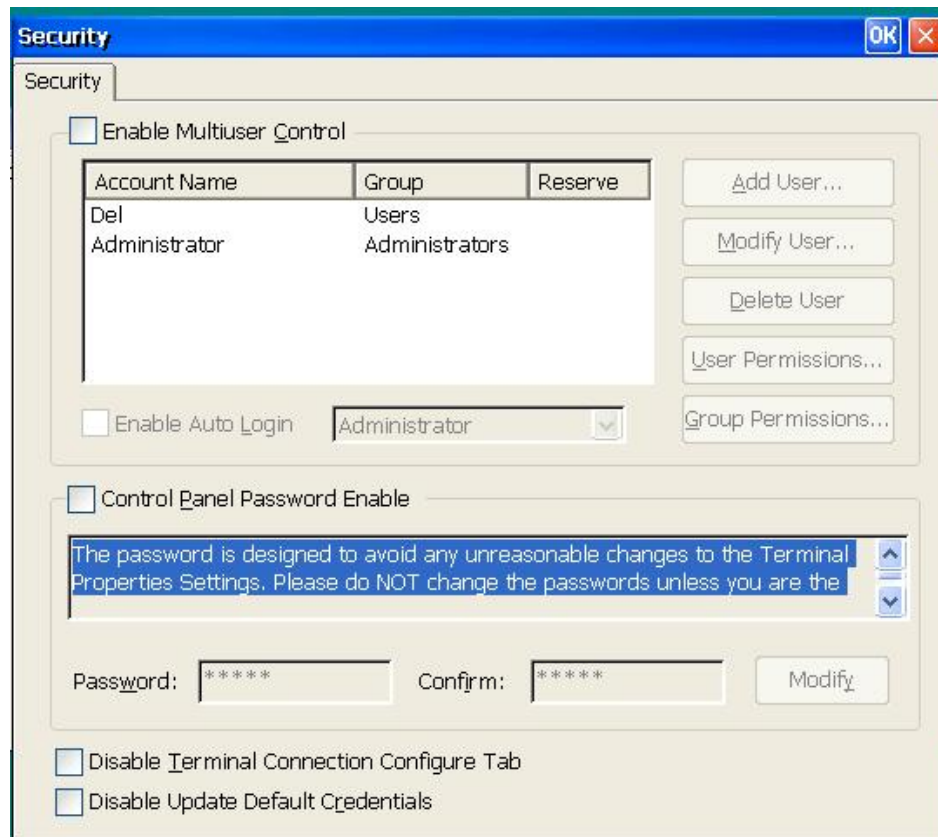
- **Control Panel Password Enable**. Check this box to enable Control Panel password security. Then enter and confirm a password in the boxes. The factory default password is **"guest"**. With password security, a user must have the proper password to open any of the Control Panel utilities.
  NOTE: *The password is designed to avoid any unreasonable change to the terminal settings. Please do NOT change the password unless you are the administrator. If you forget the password, it will be difficult to recover. There are two methods of recovery if you forget the password.*
    - Contact your distributor or Affirmative Computer Products get a super password.
    - Use Remote Management software to change the password settings.
- **Disable Terminal Connection Configure Tab**. Check this box to hide the Configure tab of the terminal Connection Manager. This can be done even if a password is not enabled. If you do this, the user will be unable to add, delete, or edit any connections.
- **Disable Update Default Credentials**. Windows CE.net 4.2 includes the Credential Manager service to allow users the option to save authentication information. When a Web site or another computer on the network requests authentication, an Update Default Credentials or Save Password check box appears in the dialog box. If the user selects the check box, the Credential Manager keeps track of the user's name, password, and related information for the authentication service in use. The next time that service is used, the Credential Manager automatically supplies the stored credential. If it is not accepted, the user is prompted for the correct access information. If access is granted, the Credential Manager overwrites the previous credential with the new one. So only one credential can be saved at a time.

  Check the **Disable Update…** box to disable the Credential Manager service. This will require the user to enter authentication information whenever an authentication request is presented.
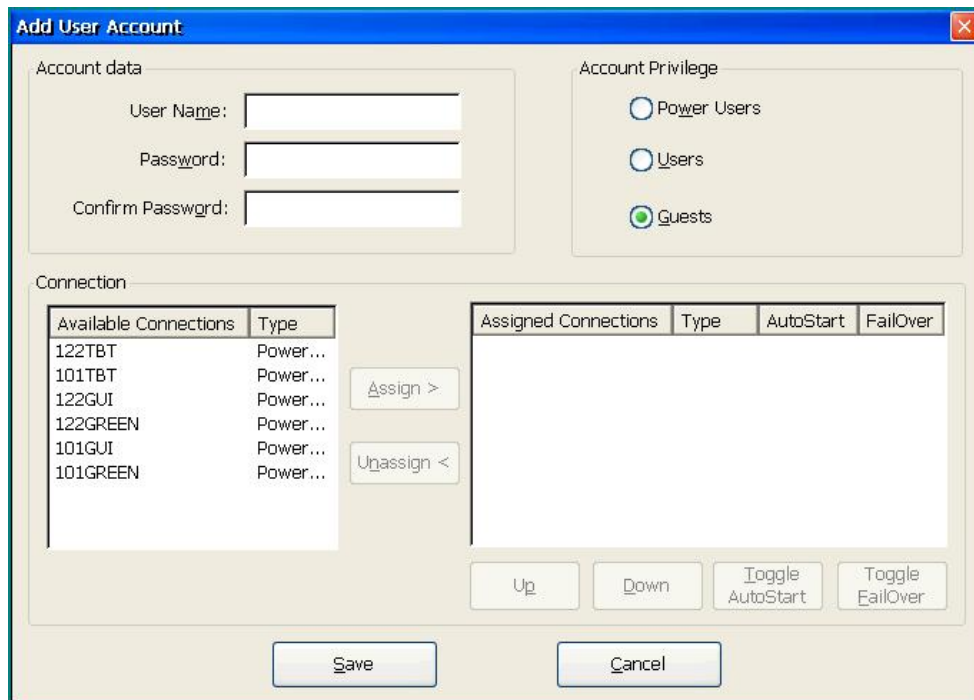
Enable Multiuser Control

Check this box to allow multiple users on this terminal. By default there is only one user, called Administrator, and that user has all rights. But you can set up multiple users, assigning each one specific Control Panel and connection rights. These users can be set up even before multi-user control is enabled. If you establish and enable multiple users, a logon name and password will be required whenever the terminal is rebooted, unless Auto Login is enabled.

All users will have the same set of terminal properties. The difference between users is in the connections they can activate and the terminal properties that they are allowed to configure. But a terminal property configured by any user is then applicable to all users.

Add User

Click on this button to add a user. You will see the Add User Account dialog box.

Add User Account Dialog Box

- **Account Data**. Enter the user name and password here. You can leave the password blank if you wish.
- **Account Privilege**. There are three privilege groups. Each group has a set of defined Control Panel privileges, which are explained in Group Permission. Choose one of these groups here for this user. The **Power Users** group gets full administrative privileges.
- **Connection**. The left pane shows a list of all the connections that have been defined in Connection Manager. To assign one of those connections to this user, highlight the connection name and click on the **Assign** button. The assigned connection name will then appear in the right pane. You can assign multiple connections, and you can assign the same connection to multiple users. Delete a connection privilege by highlighting a connection name in the right pane and clicking on the **Unassign** button. When this user signs on, only the assigned connections will appear in Connection Manager, and the Configure tab will not be seen. A Power User automatically is assigned all connections.
- **Toggle Autostart**. You can select any or all of the assigned connections to Autostart at bootup. Highlight the desired connection and click on **Toggle AutoStart**. Repeat the procedure to turn off Autostart.
- **Toggle Failover**. You can select one or more non-Autostart sessions to serve as fallback sessions in case an Autostart session fails to start.
- **Up/Down**. Order only has significance for Autostart and Failover sessions. Move a highlighted session up or down in the right-hand pane to establish the order of Autostart and Failover.
- **Save/Cancel**. When you are finished with the user settings, click on **Save** to establish the user, or **Cancel** to forget it.

Modify User

Highlight a user name and click on this button to modify the settings for that user.

Modify User Account Dialog Box

You can modify any or all of the user settings here, except for **User Name**. If you want to change the name, you will have to delete this user account and add a new one with the desired name. See Add User for an explanation of the parameters.

Group Permission

Click on this button to establish the permissions for each group.

User Group Permission Dialog Box

56

The Power User group does not appear here, because this group has all permissions. But the User and Guest groups can be individually configured. Each group has a set of default permissions; the User defaults are shown here. By checking or unchecking the boxes, you can customize group permissions for Control Panel access. A Control Panel password, if enabled, still applies even to access these limited sets of permissions.

User Permission

Highlight a user name and click on this button to establish permissions for that user.
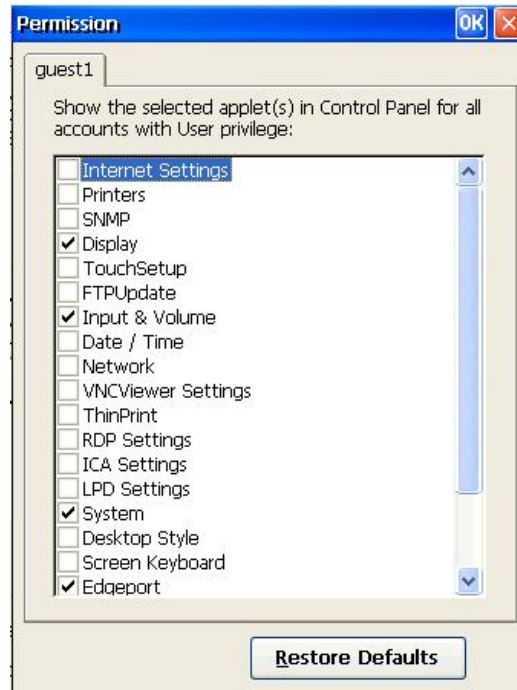
Individual User Permission Dialog Box

By default, an individual user will be assigned the permissions set under Group Permissions for that group. But these default permissions can be overridden by checking and unchecking permission boxes here. A Control Panel password, if enabled, still applies even to access these limited sets of permissions.

Enable Auto Login

Check this box to allow one user to automatically be logged in at bootup. Then choose one of the users from the dropdown list. Other users can still log in at bootup by using the hotkey combination **Alt+F3** to open the login dialog box. Any choice that you make here is automatically seen in the Single Connect Mode desktop style, and vice versa.

Smart Card Reader

You can attach a smart card reader to a USB port and configure it here.

SNMP

Simple Network Management Protocol (SNMP) is the Internet standard protocol for network management and is part of the TCP/IP protocol suite. SNMP uses a distributed architecture that consists of managers and agents. The SNMP agent is an application that monitors network traffic and responds to queries from SNMP manager applications. The agent also notifies the manager when significant events occur by sending a trap. The SNMP manager is an application that generates queries to SNMP-agent applications and receives traps from SNMP-agent applications.

SNMP Description Sheet

This sheet only provides descriptive information to an SNMP manager.
- **System Name**. This is the Network Name shown in System.
- **UUID**. This is the Product Identification shown in System.
- **Description**. This gives the version and build of the Windows CE operating system, with the information provided automatically by the operating system. **Note:** Version 4.x denotes the CE.net operating system.
- **Location/Contact**. You can enter information here to aid the SNMP manager.

System

System Information Sheet

This sheet is informational except for **Terminal Name** and **Reset…**.

- **Product ID**. This is a unique product identification code. The last 12 characters are a permutation of the terminal MAC address.
- **DRAM Size**. This shows the amount of DRAM in the terminal. DRAM is used for working storage. The standard amount is 64MB, but an upgrade to 128MB is available. More RAM allows you to have more sessions open at the same time.
- **ROM Size**. This shows the amount of non-volatile flash memory in the terminal. The title is a misnomer, since the terminal uses flash memory rather than Read-Only-Memory. Flash memory is used to store all of the operating system and program software. The standard amount is 32MB, and this number would increase only if subsequent firmware builds require more flash memory.
- **MAC Address**. This is a unique hardware identifier. Every device on every LAN in the world is supposed to have a unique identifier.
- **OEM Software Version**. This is the version of the firmware installed in this terminal. If you contact Affirmative Computer Products Tech Support about a problem, please have this version, including the build number, available.
- **Microsoft Windows CE**. This is the version of the Windows CE operating system that is installed in the terminal. All the terminals discussed in this document should read **CE.NET 4.2** here. The operating system can only be upgraded as part of a general firmware upgrade; it cannot be upgraded by itself.
- **Terminal Name**. We recommend that you enter a unique name here for easy identification when using network management and administration software. The first character of this name must be an alpha character, and the name should have no more than fifteen characters
- **Reset the terminal to factory-default property settings**. Activate this check box to reset the terminal to its factory default settings. When you do this, you will get a dialog box asking you to confirm your intentions.

ThinPrint
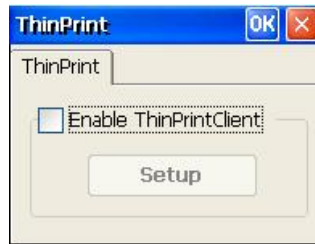
ThinPrint Enable Box

ThinPrint enables direct printing from the terminal to network printers and local printers. With the ThinPrint Client, a print job can be delivered over the Citrix ICA protocol to the device and from there direct to the selected printer. To learn more about ThinPrint advantages, go to http://www.thinprint.com/ on the Web.

To configure ThinPrint:
1. Check **Enable ThinPrintClient**.
2. You will be told that you have to restart the terminal. Click on **Yes**.
3. After the terminal has rebooted, enter Control Panel again and double-click on the ThinPrint icon.
4. You will see the ThinPrint dialog box again, but now you can click on **Enable**. Do so.
5. You will see the ThinPrint Client Configuration dialog box appear. **Note:** You can also open this dialog box from the ThinPrint icon in the System Tray.

ThinPrint Client Configuration Dialog Box

6. For information on using this window, go to http://www.thinprint.com/download/information/manuals/englisch/dot_print_client_winCE_e_01.pdf on the Web.

NOTE: Do not enable ThinPrint if you want to do standard local printing through a Citrix server.

TouchSetup

TouchSetup

TouchSetup Dialog Box

Both USB-attached and COM-port-attached ELO Touch screens are supported. Most ELO Touch configuration is done from on-screen menus under control of the built-in controllers. Very little can be done here in the terminal Control Panel. But you can configure a COM port after clicking on **Setup**, and you can click on **Calibrate** to initiate the calibration procedure.

USB Storage Management

USB Storage Management

USB Storage Management Dialog Box

Click on **Enable** to allow local USB storage devices to be seen internally. Local storage may be useful to store email, email attachments, web pages, or downloaded files.

File Management

There is a limited amount of file management available in your terminal, with several methods to transfer and store files:

- USB-attached storage.
- Shared network storage.
- Web download
- Email attachment.

Regardless of the transfer/storage method, there is no way to save new files internally in the terminal flash memory in the event of a Shutdown. To save files, you must move them, before Shutdown, to external USB or network storage.

To access the **My Computer** file structure, you must be using Desktop Shell. From the Desktop, do the following:
1. Right-click anywhere on the Desktop.
2. In the resulting menu, click on **New Folder**. You will see a **New Folder** icon on the Desktop.
3. Double-click on this icon. You will see the following screen, looking suspiciously like the right pane of a Windows Explorer screen.
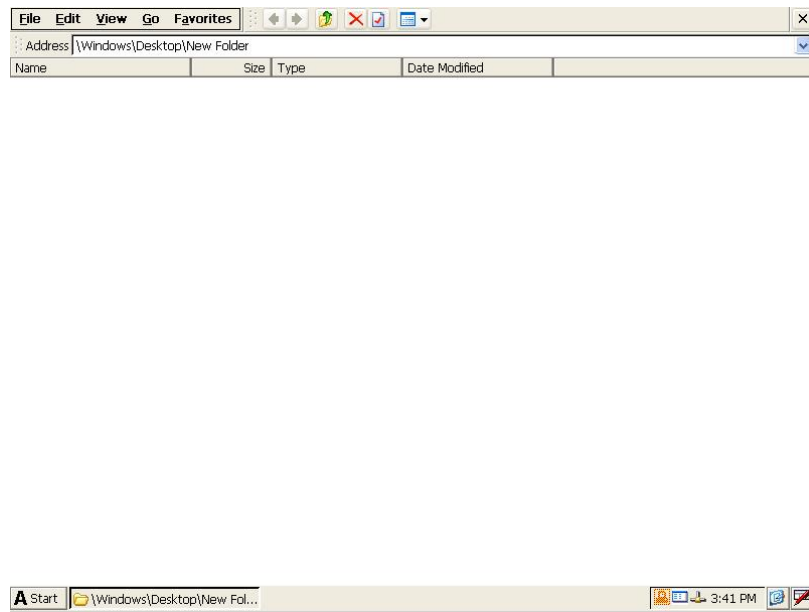
New Folder Screen

4. In the **Address** field, change the path from **\Windows\Desktop\New Folder** to simply ****.
5. Press the PC **Enter** key. You will see the **My Computer** file structure screen.
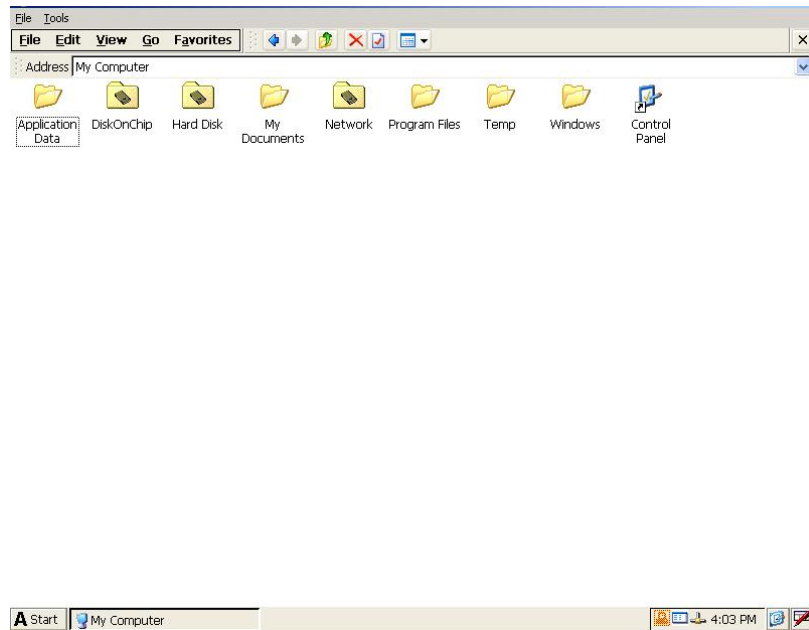
My Computer File Structure Screen

6. From the menu and the tool bar at the top of the screen, you can do a sub-set of the functions of the Windows Explorer found in a PC.

There is no drag and drop capability between storage folders in the **My Computer** root. If you want to move files among folders, or from external storage to an internal folder, or vice versa, use **Cut**, **Copy**, and **Paste** from the **Edit** menu.

USB-Attached Storage

If USB storage is enabled in the USB Storage Management dialog box, any type of attached USB storage will appear in **My Computer** as the **Hard Disk** folder. Whenever you are given a storage browse option, this folder will be available. You can, of course, create subfolders if you wish.

Shared Network Storage

From the **My Computer** screen, you are able to view shared content on Windows PC (Windows 95 and above) storage partitions connected to the same network subnet as your terminal. Please make sure that the appropriate partitions and folders on the PCs have Sharing enabled. To access this shared storage:
1. In the address field of **My Computer**, enter the name of the target PC: \\<target_PC_name>.
2. You may be prompted for username and password if the sharing is password-protected.
3. After any authentication is processed successfully, the shared folders should be displayed.
4. You can now transfer files to and from the shared folders.
Note: This procedure does not work in the reverse direction. You cannot see or manipulate the terminal file structure from a network-attached PC.
Note: This shared storage is not visible from a storage browse option of an application, since this shared storage is not mapped in the terminal.

Web Download

File downloads from the Web are done in the familiar Web download manner:
1. You are asked if you want to save or open.
2. Choose **Save**.
3. The **My Computer** file structure will appear. Browse to the folder where the new file should be stored. If you have external USB storage, you can save directly to that external storage.
4. Tap **Go** or the PC **Enter** key.
5. The file will be downloaded to the designated folder.

Email Attachment

When you configure Inbox, attached files in incoming email are stored in the **My Computer\Program Files\Inbox\Mail Attachments** folder by default. Your only other option here is, if you have external USB storage, to send the attachments to that external storage as follows:
1. Click on the **Inbox** icon on the Desktop.
2. Open the **Services** menu.
3. Click on **Options**. The Options window will open in the Services tab.
4. Click on the **Storage** tab.
5. Select the **External Storage Card** radio button.
6. Select **Hard Disk** from the drop-down list
7. Click **OK**.
8. Enter a folder name for attachments in the resulting dialog box.
9. **OK** out of Inbox.

VNC Server Settings

VNC (Virtual Network Computing) is, in essence, a remote display system which allows a device with an installed VNC client to view a computing 'desktop' environment from anywhere on the Internet. It is platform-independent; a desktop running on a Linux machine may be displayed on a PC, or on your YES*tation*. VNC requires a server software module in the machine that is being viewed. If you enable the VNC Server here, the terminal can be viewed and controlled by any machine that is running the VNC client software. Of course, you need a TCP/IP connection to allow this to happen. You can learn much more about VNC from the Web site http://www.realvnc.com.

When you double-click on the icon, you will see this dialog box.
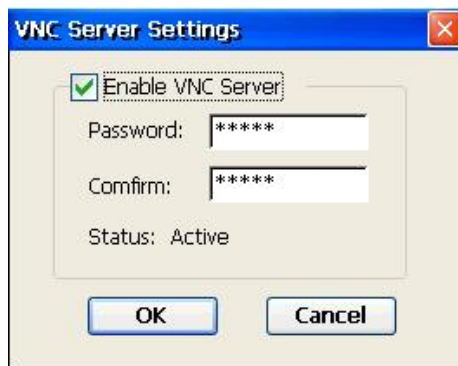
VNC Server Settings Dialog Box

By default, VNC Server is enabled, with the password **guest**. Make changes here if you wish.

VNC Viewer Settings

VNC Viewer Settings Dialog Box

The VNC Viewer is used to view and control a remote desktop on a computer that has an installed and enabled VNC Server. Use this utility here only if you want a viewer connection to Autostart at every bootup. For one-time viewing, use **Start>Programs>VNC Viewer** or **Add** a VNC Viewer connection from **Connection Manager>Configure.**

If you check **Auto start…**, the two entry fields will be opened.

- **VNC server**. Enter the network name or the IP address of the device that you wish to view, along with the display number on the device (display 0 always works for me). For example, if the device name is snoopy, the entry will be **snoopy:0**. An IP address entry might be **100.100.10.10:0**.
- **Password**. VNC servers typically are password protected. Enter the correct password here.

When you boot up, the viewer will attempt to make a connection to the server identified in **VNC server**. If the server software is enabled at that device, and the password is correct, you will see a rendition of the server desktop. In the viewer session, you have some additional options from the session menus.

VNC Viewer Session Menu Bar

Connection

VNC Viewer Connection Menu

New

You can launch a new session here, but it will not be a repetitive Autostart session. Click on **New** to open the Connection Details dialog box.
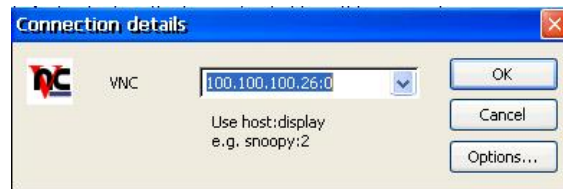
Connection Details Dialog Box

Enter the network name or the IP address of the device that you wish to view, along with the display number on the device (display 0 always works for me). For example, if the device name is snoopy, the entry will be **snoopy:0**. An IP address entry might be **100.100.10.10:0**. When you click on **OK**, the session will be initiated with the server. See Creating a New Connection|VNC Viewer for more information on one-time VNC sessions.

Options

Click on **Option** in the Connection menu to set some options for this session.
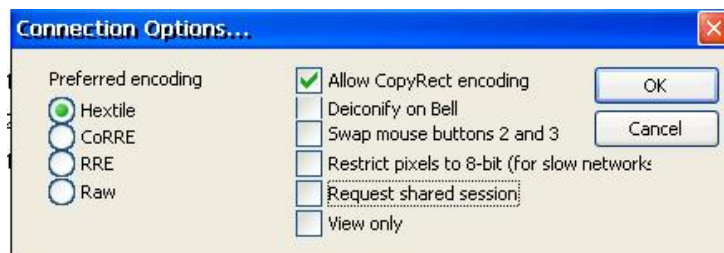
Connection Options Dialog Box

Any option changes that you make here are only good for the life of this session. When you reboot the terminal, the options will revert to the defaults shown here.

Info

VNC Connection Information Box

This information-only box provides some details about your session.

Keys

VNC Viewer Keys Menu

Computer hot key combinations are typically trapped locally in the terminal, rather than being passed on to the VNC server. This menu allows you to select and transmit one of several hot key combinations to the server.

YESwireless Settings

This utility is not used.

AFFIRMATIVE®
computer products

Connection Manager

It is tempting to use the terms "connection" and "session" interchangeably, but we do try to maintain a distinction in this document.

- **Connection**. A connection defines the parameters used to establish and control communication between a server and a YES*tation* client.
- **Session**. When a connection is activated and successful communication is established between the server and the client, the server/client communication becomes a session.

Despite these precise definitions, it is necessary to confess that the Connection Manager "Add" list includes some items that do not meet the above definition for Connection. These items are the Microsoft viewers and the Cisco utilities—more accurately called "Programs" since they do not invoke or configure connections to servers.

Connection Manager is used in both the Desktop and WBT shells to create, delete, configure, and activate connections. In WBT Shell, this is the only way to access connections; in Desktop Shell, activation and some connection manipulation can also be done from **Start>Programs**. Connection Manager is very similar, but not identical, in the Desktop and WBT Shells. The significant differences are shown in the following table.

Table 1. Connection Manager Differences between Desktop and WBT Shells

ITEM	DESKTOP	WBT
"New Connection" List	- No Email client (Inbox located in **Start>Programs**) - Does not include Microsoft Viewers	- Email client titled "PMail" - Includes Microsoft Viewers
Access to Control Panel	**Start>Settings>Control Panel**	Press **F2**
Graceful Shutdown	**Start>Shutdown**	Click on **Shutdown** button

To open Connection Manager in Desktop Shell, use one of the following methods:
- Select it from the Start menu.
- Double-click on the Connection Manager icon in the upper left corner of the Desktop.
- Double-click on the Connection Manager icon in the System Tray

To open Connection Manager in WBT Shell, use one of the following methods:
- This is the default screen at bootup, unless you have Autostart sessions.
- Press **Ctrl**+**Alt**+**End** at any time.

In the Connection Manager window, you can select either the Connections or the Configure tab to manage or activate your terminal's network connections and viewers.

Configure

The Configure tab allows five basic functions.
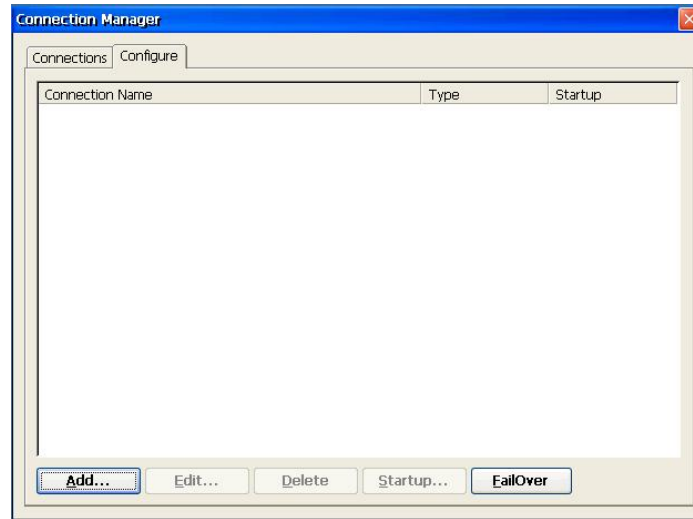
Desktop Connection Manager Configure Tab

Add

Activate the **Add** button to create a new connection. A New Connection dialog box is displayed.
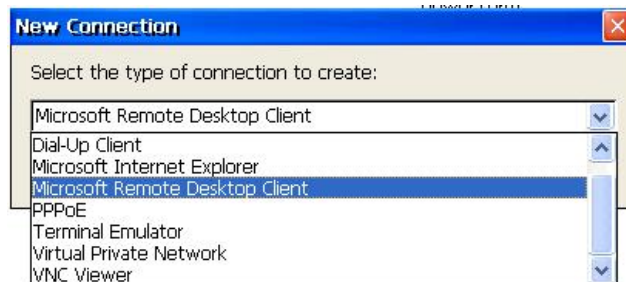
New Connection Dialog Box

Click on the drop-down arrow to see the list of possible connections. See Creating a New Connection for information on adding specific connections. As connections are added, they will be displayed alphabetically. If you are using Desktop Shell, they will also be displayed under **Start>Programs>Connections**.

Edit

Activate the **Edit** button to edit the properties of a highlighted connection. A properties or edit window for that connection will pop up. Please refer to Editing an Existing Connection for more information about editing a connection. You can also bring up the window by double-clicking on the highlighted connection.

Delete

Activate the **Delete** button to delete the highlighted connection. When you activate this button, a Confirm Connection Delete dialog box is displayed.
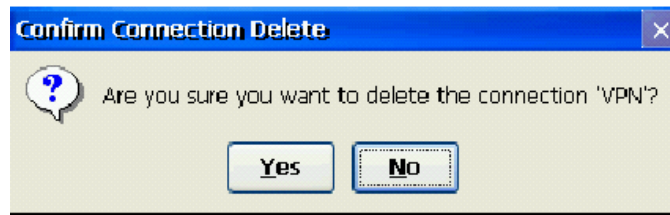
Confirm Connection Delete Dialog Box

Activate the **Yes** button to complete the deletion. Activate **No** to cancel the deletion.

Startup

Activate the **Startup** button to specify the Autostart connection option when the terminal boots up. The Connection Startup dialog box displays after the Startup button is pressed. Using the dialog box, your terminal can be set to automatically connect to a server when the terminal is turned on. Any or all connections can be configured for automatic startup.

Connection Startup Dialog Box

- **Make the selected…**. Enable this function to use the selected connection as the default connection. This connection will be highlighted in Connection Manager when the terminal is powered up.
- **Automatically start…**. Enable this function to automatically activate the selected connection when the terminal starts up.
- **Create shortcut…**. Check this box to place a shortcut on the Desktop. If you are using WBT Shell, a check here will have no effect unless you subsequently switch to Desktop Shell; then you will see the shortcut.
- **Default Connection…**. You can adjust the delay time before the Autostart connections attempt to connect. This is especially useful if the terminal is using a wireless LAN adapter, since wireless typically takes several seconds to establish a network connection.

Failover

FailOver allows you to establish backup connections if any connection that is configured for Autostart fails to establish communication with its server.

Click on **FailOver** to display the FailOver dialog box.
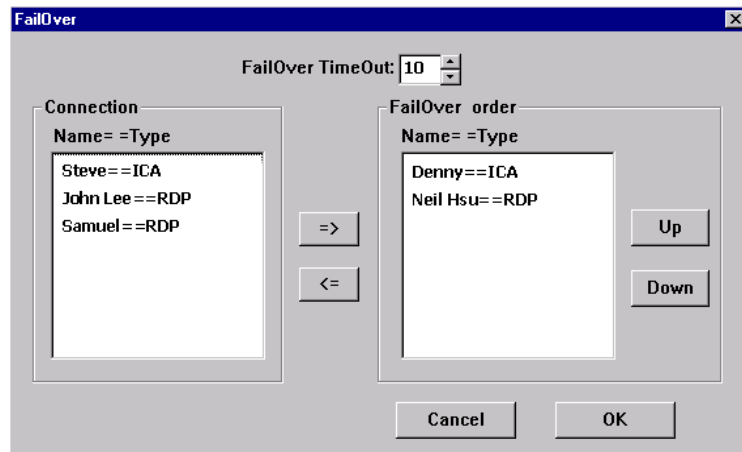
FailOver Dialog Box

A list of all connections eligible for use as backup connections is shown in the left-hand box; browser connections cannot be used for backup, although they can initiate fail-over backup if they are set for Autostart but fail to start. A list of all connections selected for use as backup connections is shown in the right-hand box. FailOver operates as follows:

1. FailOver operation is activated if any Autostart connection fails to connect to its server when the terminal is powered on.
2. FailOver pings the first (top) connection from the FailOver list. If the ping is successful, then the backup connection is made.
3. If ping is not successful, then FailOver pings next connection from the FailOver list, and so on.
4. If no connection is made, FailOver stops and displays an error message.

For example, in the dialog box shown in this section: If an Autostart connection fails for some reason, the terminal will automatically search and connect to the Denny (an ICA server) server. If the connection to the Denny server fails also, the terminal will automatically search and connect to the Neil Hsu (a RDP server) server. If that connection fails, the terminal will display an error message. **Note:** FailOver does not match the type of backup connection with the failed Autostart connection. In this example, the failed Autostart could have been an emulation connection to an IBM server, but the first failover backup is an ICA connection.

The dialog box functions as follows:
*   **Connection**. This box lists all of the terminal connections that are eligible for backup duty.
*   **Failover order**. This box lists all of the terminal connections that are being used for backup duty. The priority of use is top to bottom.
*   **FailOver TimeOut**. You can set the connection timeout (in seconds) before a connection is considered as having "failed".
*   =>. Add the selected connection to the FailOver list.
*   <=. Remove the selected connection from the FailOver list.
*   **Up**. Increase the FailOver Priority of the selected connection.
*   **Down**. Decrease the FailOver priority of the selected connection.

Note: A connection can be manually activated from the Connections tab and used even if it is in the FailOver list, but not called upon for backup.

Connections
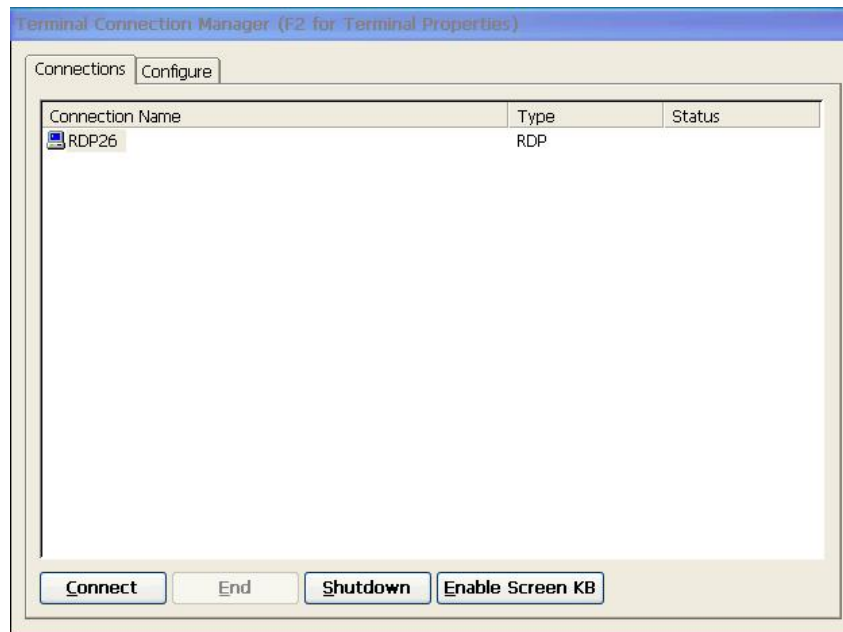
WBT Connection Manager Connections Tab

The Connections tab is used to make or end network connections with the server(s). As you add new connections, they are listed in alphabetical order.

- **Connect**. Highlight the connection and activate the **Connect** button to make a network connection. You can also make a connection by double-clicking on it.
- **End**. Highlight the connection and activate the **End** button to end a connection shown as **Active** in the status field. A dialog box will pop up asking for confirmation. You can also end a connection from the session screen itself, without going to Connections, and that is the recommended way to end a connection.
- **Shutdown** (WBT Shell only). It is recommended that you shut down your terminal using this button. You will see a box asking you to confirm your decision.
- **Enable Screen KB**. Click on this button to display an on-screen keyboard. This is typically useful only if you are using a touch screen. The size and style of the keyboard is determined by the settings in Control Panel|Screen Keyboard. After you enable the on-screen keyboard, the button will change to **Disable Screen KB**, for obvious reasons.

Multiple Sessions

Starting Multiple Sessions

There are several ways to start multiple sessions:

- You can configure any or all connections to activate automatically at terminal boot-up, as described in Configure|Startup.
- Invoke Connection Manager from an active connection, highlight another connection, and activate **Connect** or double-click to start a new session.
- In Desktop Shell, click on another connection from **Start>Programs>Connections.**

Moving among Sessions

You do not have to return to Terminal Connection Manager to go to another active session. Alternate methods are:

- Press **Ctrl+Alt+UpArrow** to proceed to the next session.
- Press **RightAlt+UpArrow** to proceed to the next session.
- Press **Ctrl+Alt+DownArrow** to proceed to the previous session.
- Press **RightAlt+DownArrow** to proceed to the previous session.
- In emulator sessions, use one of the above or select a session from the **Sessions** menu..
- Click on a session placeholder in the Desktop Task Bar.

.

Creating a New Connection

All connections except Inbox are created in the **Configure** tab of Connection Manager. Click on **Add** to see the New Connection dialog box. Then click on the drop-down arrow to see the list of possible connections. **Note:** Some of the items that may be seen in the drop-down list are not "connections" in the strict sense defined in the section on Connection Manager. These items are the Microsoft viewers and the Cisco utilities—more accurately called "programs" since they do not invoke or configure connections to servers. These "program" items are discussed in Opening a Program.

New Connection Dialog Box

Each network client connection can be to a unique server, if desired. The total number of concurrent active connections is limited by the amount of RAM and the type of emulator in your YES*tation*. With the standard 64MB RAM, there is seldom any practical limitation unless you are running multiple browser sessions or multiple file viewers. A 128MB RAM option is available to overcome any limitation that you might encounter.

The connection types will be covered here in alphabetical order. Highlight the desired connection type and then click **OK** to open the associated dialog box.

After your setup and configuration are complete, you can secure parameters from any user changes--if you do not intend to open any "programs"-- as follows:
1. Open Control Panel.
2. Double-click on the **Security** icon.
3. Check the box for **Disable Terminal Connection Configure Tab**.
4. Check the box for **Password Enable**.
5. Choose and confirm a password.
6. **OK** out of Terminal Properties

Citrix ICA Client

You can configure and run two types of ICA connections: Citrix server connections and published applications. *Citrix server connections* allow you to connect to the Windows desktop of a specific Citrix server; you can run any applications that have been mad available on the desktop by your system administrator, in any order. *Published applications* are specific applications set up by an administrator for remote users. When connected, you are presented with the application itself.

This manual describes the simplest way to create either a network or a dial-up connection entry. When you follow these steps, you set the essential items you need to connect to a Citrix server from the YES*tation*. See Editing an Existing Connection for more information about changing the other properties for a connection entry. For the ultimate in detailed information about ICA operation and features, please refer to the Windows Based Terminal Administrator's Guide for Citrix ICA Client at http://www.affirmative.net/pub/icaceUG.pdf.

When you click on **OK** after selecting Citrix ICA Client, a Setup Wizard with a series of dialog boxes will be invoked. Some of them will allow you to override some of the global ICA properties that you set in Configure Terminal Properties|Control Panel|ICA Settings. In each dialog box, click on **Next** to advance to the next box, or click on **Done** to bypass the remaining boxes.

Specify Connection Type Dialog Box

- Click **Network Connection** to make an Ethernet network connection. Make sure your WBT is connected to the network through the Ethernet connector or wireless LAN adapter. Click **Next** to continue.
- Click **Dial-In Connection** to make a dial-in connection. Make sure your modem is installed and properly configured. Click **Next** to continue.

Network Connection

If you chose **Network Connection**, you will see the following dialog box.
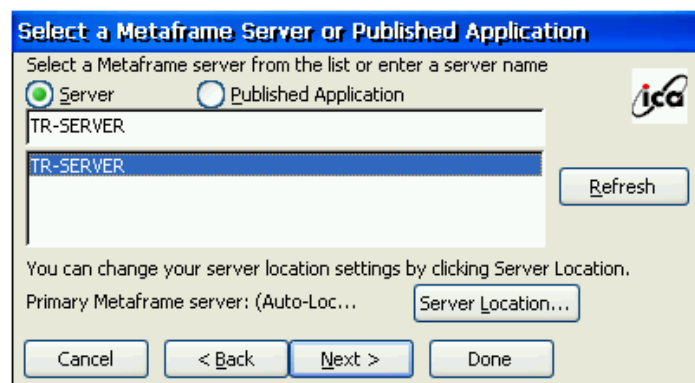
Select a MetaFrame Server or Published Application Dialog Box

1. Select **Server** or **Published Application**.
2. If your server or published application is on the local sub-net, click on **Refresh**.
3. The terminal will search the local sub-net for all Citrix servers or published applications, and will present a list in the lower box. You will get an error message if none is found.
4. Double-click on the desired item in the list. It will appear in the upper box.

5. If your server or application is not found for some reason, you can type in the IP address or application name in the upper box or you may want to choose an alternate server location.

    - If your WBT is not on the same network as the Citrix server you want to connect to (for example, if you are on the other side of a router, across the Internet, or using RAS to connect to a remote network containing Citrix servers), the Server and Published Application lists will not contain that server. In this case, click **Server Location** and go to the Server Location dialog box to choose, add, or delete a Server Location. Alternate locations may already have been set up in Configure Terminal Properties|Control Panel|ICA Settings|Server Location. If not, follow the instructions in that section to add more servers.

6.
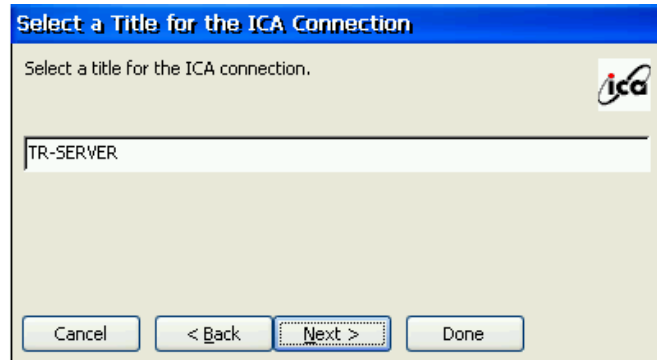
Select a Title Dialog Box

By default, the Citrix server or published application name appears in the edit field. You can accept this name or enter another. The name you choose will be the name of the entry in the Connection Manager Connection Name list and will appear in the title bar of the ICA session window.

7. **Note:** This dialog box does not appear when configuring a published application connection.
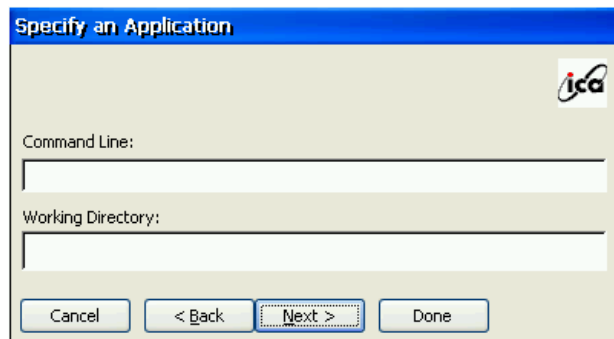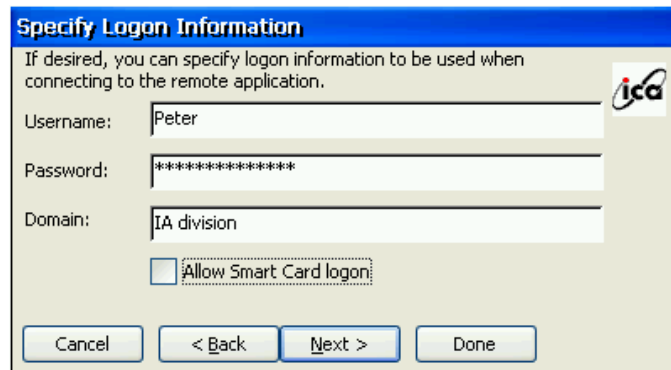
Specify an Application Dialog Box

If you want this connection to open in a specific application on the server after the logon to the Citrix server is successful, enter the path and executable file name of an application in the **Command Line** field. Leave this field blank to run a Windows desktop from the Citrix server. **Working Directory** lets you associate a directory with the application specified in Command Line.

- For example, if the application **Notepad.exe** is in the **C:\WTSRV** directory on the Citrix server, type **C:\WTSRV\Notepad.exe** in the **Command Line** field. If you use Notepad to work on documents in the **C:\My Documents** directory, type **C:\My Documents** in the **Working Directory** field. When you log on to the Citrix server, Notepad begins. In Notepad, if you click the File menu, the directory **C:\My Documents** is displayed.

8.
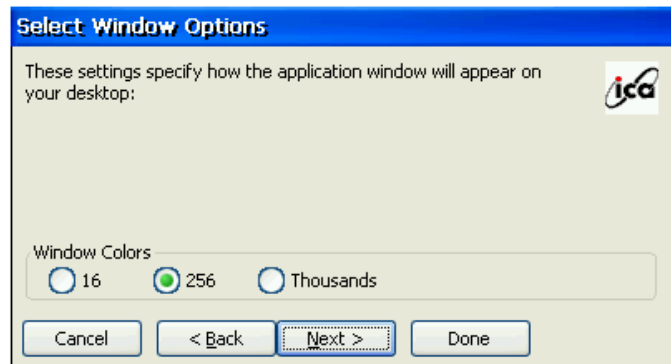
Specify Logon Information Dialog Box.

Type a valid user name, domain, and password. If you leave these fields blank, you are prompted for your user name, domain, and password whenever the ICA connection connects to the Citrix server. Smart Card logon is not supported.

9.

Select Window Options Dialog Box

We recommend that you select 16 or 256 colors.

10.

Compression, Encryption and Sound Dialog Box

- **Compress Data Stream**. Check this box to reduce the amount of data transferred between the ICA session and the Citrix server hosting the connection. (If your connection is bandwidth-limited, enabling compression may increase performance. If your WBT is on a high-speed LAN, you may not need compression.)
- **Use Disk Cache**. Check this box to store commonly used bitmaps (images) locally on your client so that they do not have to be transferred over the ICA connection every time they are needed.
- **Enable Sound**. Check this box to enable sound support. Remote applications will be able to play sounds on your client. From the **Sound Quality** pull-down list, select a sound presentation quality level. **High**

provides the greatest audio quality but should only be used when bandwidth consumption is not a concern. **Medium** results in less bandwidth consumption than when using **High**. Compression of sound data provides greater bandwidth efficiency but reduces sound quality somewhat. This value is recommended for most LAN-based connections. **Low** offers the most efficient use of bandwidth but also decreases sound quality severely. This value is recommended for low-bandwidth connections, including most modem connections.

- **Speed Screen**. Latency reduction improves responsiveness over high-latency connections by providing feedback to the user in response to typed data or mouse clicks. Speed Screen will only work if the server-side Speed Screen feature is available and has been enabled on the Citrix server to which you are connecting. In this field, select the setting you need:
  - o For slower connections (for example, if you are connecting over a WAN or a dial-in connection), set mode to **On** to decrease the delay between user input and screen display.
  - o For faster connections (for example, if you are connecting over a LAN), set mode to **Off**.
  - o If you are not certain of the connection speed, set the mode to **Auto** to turn Speed Screen latency reduction on or off automatically depending on the latency of the connection.
- **Encryption Level**. Encryption increases the security of your ICA connection. By default, **Basic** encryption is enabled on all connections. If the Citrix server you are connecting to supports advanced encryption (e.g., Secure ICA services), you can use it to improve security. Select the level of encryption you want to use. Select **RC5 128-bit Login Only** to use encryption only during authentication. The Citrix server must be configured to allow the selected encryption level or greater. For example, if the Citrix server is configured to allow RC5 128-bit connections, the ICA client can connect with RC5 56 or 128-bit encryption.
  Note: To use advanced encryption, you need to install Secure ICA on your Citrix server. The Citrix server must also be configured to allow the selected encryption level or greater.

11.

Firewall Settings Dialog Box

See Configure Terminal Properties|Control Panel|ICA Settings|Firewall Settings for an explanation of these settings.

Dial-In Connection

Some Citrix servers are configured to allow direct dial-in without going through a RAS dial-up connection. If this is your situation, you can use this Dial-In Connection option. Do **NOT** use this option if you want this connection to connect to a Citrix server through a RAS dial-up connection. In that case, create an ICA connection as a network connection with the server IP address of the remote Citrix server. Then create a RAS dial-up connection (see Creating a New Connection|Dial-Up Client) and, in step 3 of that setup, choose the network connection that you just created to automatically start after the RAS connection has been made.

Note: The ICA Windows CE Client does not support modem callback for Dial-In connections.

If you have a 22xx terminal, you must have an Edgeport USB-to-Serial converter between your serial modem and a terminal USB port.

When you choose **Dial-in Connection** in the **Specify Connection Type** dialog box, and click on **Next**, the Dial-In Devices dialog box displays.
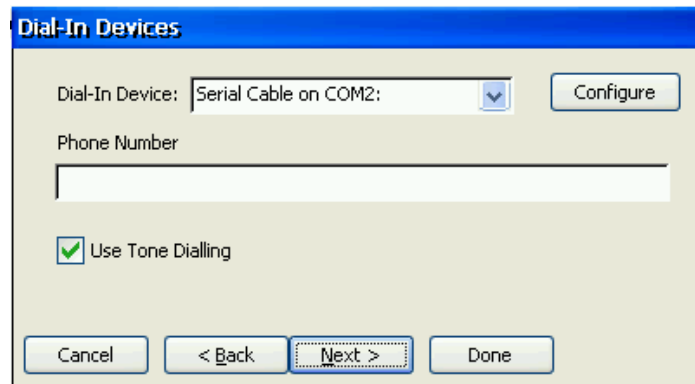
Dial-In Devices Dialog Box

- **Phone Number**. Enter the complete phone number, including area code and country code, if applicable, of the Citrix server.
- **Use Tone Dialing**. Check this box if your modem uses tone dialing, as is typical these days.

Dial-In Device

Select your device from the drop-down list. Then click on **Configure** to set the device properties.
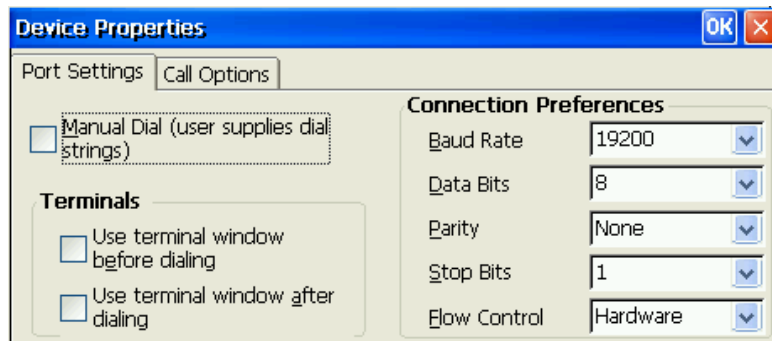
Port Settings Dialog Box

- **Manual Dial**. Check this box to use manual dialing instead of the number entered in Telephone Number.
- **Terminals**. Per your application requirement, you can check one or both of these boxes. The default setting disables both check boxes and executes an automatic log-on to the server.
- **Connection Preferences.** Select the serial connection preferences from the drop-down lists**.** These preferences will be identical for all COM connections in this terminal; you cannot have different preferences for COM1 and COM2.

Call Options Dialog Box

- **Call Setup**. Check the appropriate boxes and set the time to wait for connection or dial tone before canceling a call.
- **Extra Settings**. A common problem is that some "Hayes-compatible" modems, including some from a very popular vendor, are not really 100% Hayes compatible. When that occurs, it can usually be fixed by entering a modem initiation string here. Talk to your modem vendor for the details of this initiation string.

The remaining steps of Dial-In Connection setup are the same as Network Connection setup. Please refer to steps 6 through 11 of Network Connection setup.

Dial-Up Client

The Dial-up networking feature is implemented with Remote Access Service (RAS) and the Point-to-Point Protocol (PPP). Dial-up Networking allows the terminal to access network resources from a remote server. The terminal can connect to a remote access server using direct serial as well as dial-up.

If you have a 22xx terminal, you must have an Edgeport USB-to-Serial converter between your serial modem and a terminal USB port. If you do not have this converter, you will get an error message when you try to add a dial-up connection.

You will use the Remote Connection Wizard to create a new Dial-Up connection. Click **Next** to display the next dialog box in the sequence. Click **Back** to return to the previous dialog box. When you are finished, a new connection will be added to the Connection Name list in the Terminal Connection Manager.

There are three major steps for the Dial-Up Remote Connection Wizard process.
1.

Remote Connection Wizard Dialog Box #1

The name entered here is the name that will be listed in the Connection Manager.

2.
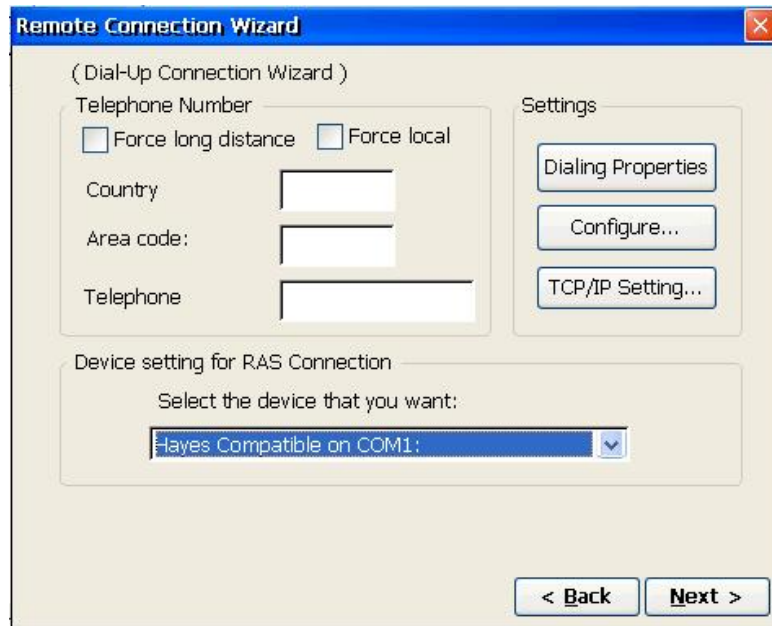
Remote Connection Wizard Dialog Box #2

- **Telephone Number**.
  - o **Force local/long distance**. Leave these boxes unchecked
  - o **Country/Area Code**. Ignore these fields.
  - o **Telephone**. Put the complete number, including area code, here. If you are making an international call, enter the international prefix (011) and the country code also.
- **Device Setting for RAS Connection**: Select a device from the drop-down list.

Dialing Properties

Click on this button to display the Dialing Properties dialog box.
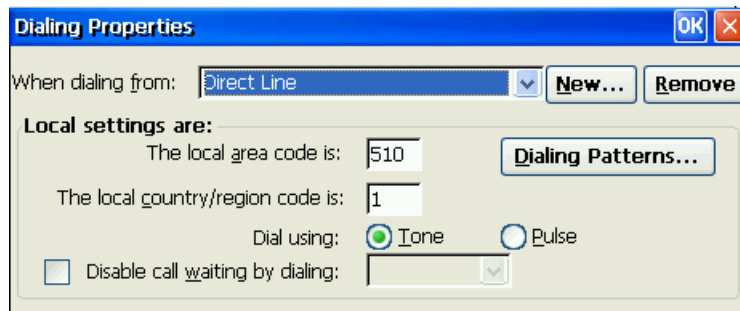
Dialing Properties Dialog Box

- **When Dialing From**. Ignore this parameter.
- **The Local Area/Country Code is**. Ignore these fields.
- **Dial Using**. Select the appropriate radio button.
- **Disable Call Waiting By**. Check this box, if applicable, and enter the appropriate disable sequence.

Dialing Patterns

Activate this button to open the Dialing Patterns dialog box.
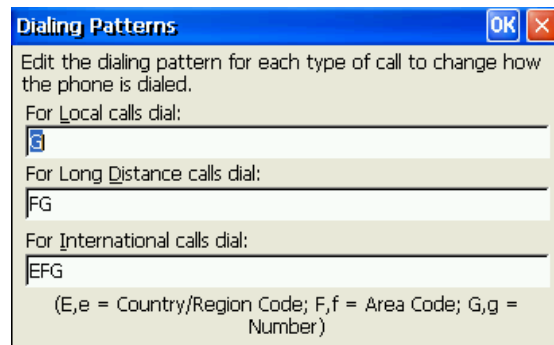
Dialing Patterns Dialog Box

All calls are treated as local calls. Ignore the Long Distance and International fields, and delete everything except G from the Local field unless you have to dial a numeral to get an outside line. In that case, add the numeral to the Local field (i.e. 9,G).

Configure

This button is used to configure the device that you selected in **Device Setting for RAS Connection**. When this button is pressed, the Device Properties dialog box displays with two tabs.
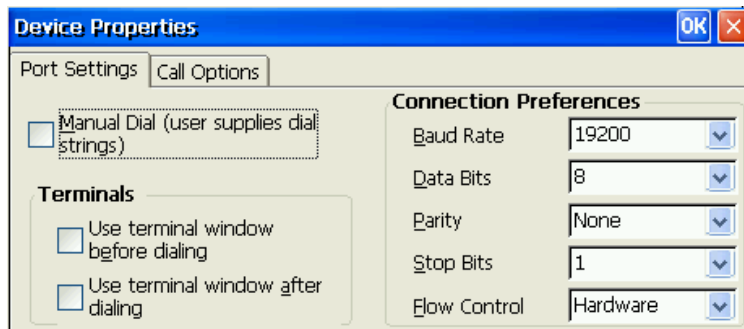
Port Settings Dialog Box

- **Manual Dial**. Check this box to use manual dialing instead of the number entered in Telephone Number.
- **Terminals**. Per your application requirement, you can check one or both of these boxes. The default setting disables both check boxes and executes an automatic log-on to the server.
- **Connection Preferences**. Select the serial connection preferences from the drop-down lists**.** These preferences will be identical for all COM ports in this terminal; you cannot have different preferences for COM1 and COM2.
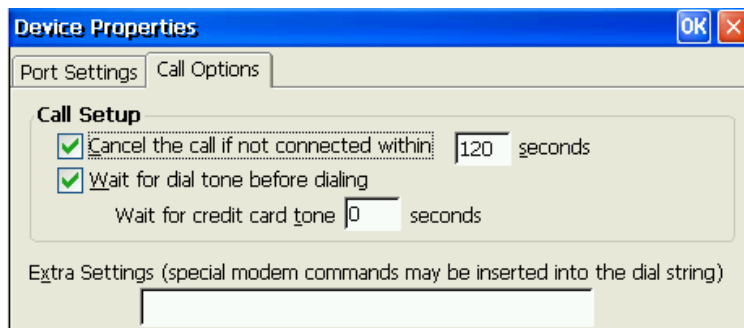
Call Options Dialog Box

- **Call Setup**. Check the appropriate boxes and set the time to wait for connection or dial tone before canceling a call.
- **Extra Settings**. A common problem is that some "Hayes-compatible" modems, including some from a very popular vendor, are not really 100% Hayes compatible. When that occurs, it can usually be fixed by entering a modem initiation string here. Talk to your modem vendor for the details of this initiation string.

TCP/IP Setting

Click on this button to see the TCP/IP Settings dialog box.
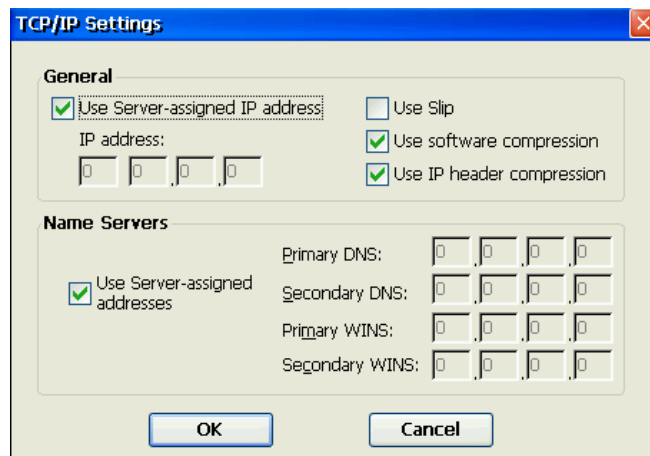
TCP/IP Settings Dialog Box

The default settings you see here are commonly used to access a RAS server, and seldom need changing. Your network administrator will give you any changes that are necessary.

3.
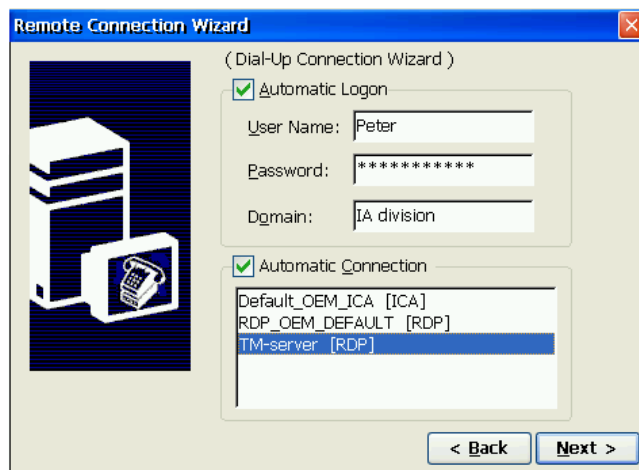
Remote Connection Wizard Dialog Box #3

- **Automatic Logon**. Click on this box and enter the appropriate parameters here for an automatic RAS logon.
- **Automatic Connection**. Click on this box to automatically open an ICA, RDP, or emulation session after the RAS connection is made. A list of all eligible sessions is shown in the list box. Highlight the desired session. **Note: Any session considered for automatic connection in this box MUST have been configured for network connection, not dial-in connection. Also, the session should NOT be set to Autostart in Connection Manager.**

4.
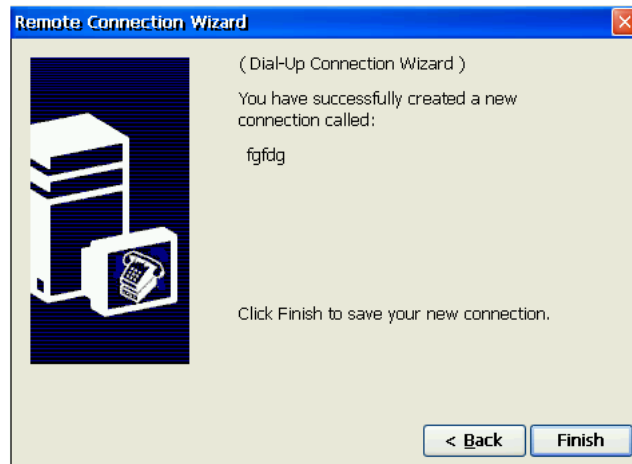
Remote Connection Wizard Dialog Box #4

Check "Finish" to complete the Dial-Up connection setup.

Inbox (Desktop Shell)

Inbox is the email client in Desktop Shell and is the connection exception; it is configured and opened from **Start>Programs** instead of from Connection Manager/

Inbox is almost identical to the Inbox email program found in Pocket PC devices. You can send and receive e-mail by connecting to POP3 or IMAP4 servers. Inbox contains an e-mail service for each method you use. For example, if you receive e-mail through a connection to a POP3 server and through a connection to an IMAP4 server, Inbox will contain two services: POP3 Mail and IMAP4 Mail. Each e-mail service has its own folder hierarchy with four default folders: Inbox, Outbox, Deleted (local), and Sent. The messages you receive and send through the mail service are stored in these folders. You can also create additional folders within each hierarchy. You can set up multiple services of either protocol, but you can only connect to one service at a time.

Note: Inbox only allows email connections through the LAN. Modem connections are not allowed.

Connect to a Mail Server

To connect to your POP3 or IMAP4 mail server, you need to set up a mail service.
1. Get the following information from your ISP or network administrator: POP3 or IMAP4 server name, SMTP host name, user name, password, and domain name.
2. Open Inbox from **Start>Programs**, and select **Options** from the **Services** menu. You will see the Options Services dialog box
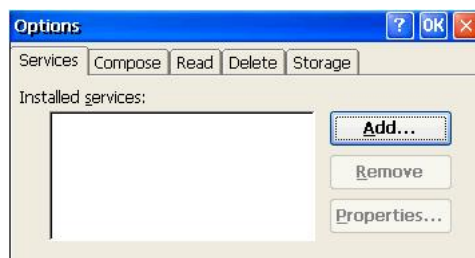
Inbox Options Services Dialog Box

3. Select **Add** to see the Service Name dialog box.

Service Name Dialog Box

4. From the **Service type** list, select **POP3 Mail** or **IMAP4 Mail**.
5. Enter a unique name for the service. This name cannot be changed later; if you later want to change the name, you will have to delete the service and add a new one with the desired name.
6. Select **OK**. You will see the first of three Setup wizard dialog boxes.
7. Follow the steps in the Setup wizard discussed below.
8. Repeat Steps 2-7 for each mail server or each mailbox within each mail server.
9. After you finish the wizard for each service, that service name will appear in the **Installed services** list of the Option Services Dialog Box and in the left-hand pane of the main Inbox window.

Notes:
*   Other mail protocols, such as the protocol used by AOL, are not supported. In addition, services that use special authentication, such as MSN, are not supported.
*   If you have multiple mailboxes within a mail server, set up and name a different service for each mailbox.

Service Definition (wizard dialog box #1)

The Mail Service Definition dialog box appears after you add a service. If you are adjusting the settings of an existing service, select **Services** > **Options**, select the service you are using, and then **Properties**.
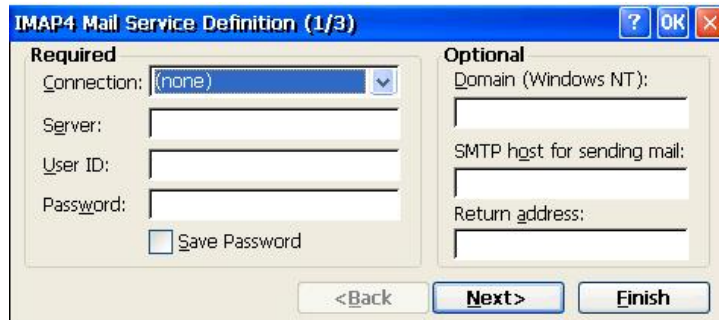
IMAP Mail Service Definition Dialog Box

*   **Connection**. Select **Network Connection**.
*   **POP3 Host** (POP3 only). Enter the name of the mail server you use to receive and send messages.
*   **Server** (IMAP4 only). Enter the name of the mail server you use to receive and send messages.
*   **User ID**. Enter the user name or mailbox ID assigned to you.
*   **Password**. Enter the password you use to access this mail account. If you do not want to be prompted to enter the password each time you connect, check **Save Password**.
*   **Domain (Windows NT)**. Enter your Windows NT domain name. This name is required only when connecting to networks, such as a corporate network, that use Windows NT domain security. This is not required for most ISP accounts. If you have trouble connecting, try clearing this box.

- **SMTP Host**. If your mail service uses a separate server for SMTP, enter the name in the box. If you are setting up a POP3 Mail service with an ISP, the ISP must use an SMTP mail gateway.
- **Return Address**. By default, the return address is set to *username@POP3host* or *username@Servername*, depending on the type of service you are using. If this is not your e-mail address, enter the correct address in the box.

Set General Preferences (wizard dialog box #2)

If you are adjusting the settings of an existing service, select **Services** > **Options**, select the service you are using, select **Properties**, and then select **Next**.
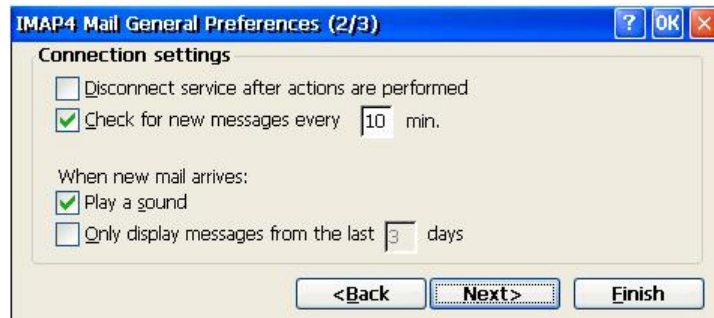
IMAP Mail General Preferences Dialog Box

- **Disconnect service…**. Select to automatically disconnect from the server upon completion of all pending actions. This option minimizes connect time.
- **Check for new messages every**. Select the time interval (in minutes) at which you want the device to check for new mail. If this option is turned off, you must check for new mail manually by selecting **Services** > **Send/Receive Mail**.
- **Display a message box …** (POP3 only). Select to be informed that new mail has arrived.
- **Play a sound** (IMAP4 only). Select to be informed that new mail has arrived.
- **Send using MIME format** (POP3 only). Select to send messages with extended characters.
- **Only display messages…**. Select how many day's messages you want downloaded.

Set Inbox Preferences (wizard dialog box #3)

If you are adjusting the settings of an existing service, select **Services** > **Options**, select the service you are using, select **Properties**, and then select **Next** twice.

IMAP Mail Inbox Preferences Dialog Box

- **Get message headers only**. Select to save storage space and time by downloading only headers. You can download a full copy of the message later by selecting the message and then **Services** > **Get Full Copy**.
  - o **Include <number> lines**. You can download a specified number of lines of the actual message, along with the header, if you wish.

- **Get full copy of messages**. Select to receive a full copy of all messages. In addition to the message body, any options you select in **When getting full copy** will be downloaded.
- **Only synchronize…** (IMAP4 only). Select to speed download time by preventing the complete download of the folder list every time you connect.
- **Get meeting requests** (POP3 only). Select to download and store copies of meeting requests when getting full copies of messages. This setting applies whether you have chosen to download full copies of messages by default, or if you selectively download full copies of messages by opening the message and selecting **Services** > **Get Full Copy**. Limitations apply.
- **Get file attachments** (POP3 only). Select to download and save message attachments when getting full copies of messages. This option may use significant RAM and slow download time. This setting applies whether you have chosen to download full copies of messages by default, or if you selectively download full copies of messages by opening the message and selecting **Services** > **Get Full Copy**.
- **Get file attachments and…** (IMAP4 only). Select to download and store meeting requests and message attachments when getting full copies of messages. This setting applies whether you have chosen to download full copies of messages by default, or if you selectively download full copies of messages by opening the message and selecting **Services** > **Get Full Copy**. Limitations apply.
  - o **Only if smaller than**. Select to restrict the size of the attachments you download. Set to 10K if you want to receive meeting requests only.

Other Service Options

In addition to the Services options, used to add and define services, there are four other options dialog boxes—Compose, Read, Delete, and Storage--available from **Services>Options**. The parameters in these boxes define the treatment of messages and message attachments. These parameters are global; the same parameters are used for all services.

Work with Folders

Inbox contains folders from mail services you have set up. You can set up services to connect directly to a remote mail server. When you set up a service, it appears in the Inbox list view in the left-hand pane. Each service contains four default folders: Inbox, Deleted (local), Outbox, and Sent; you will not see IMAP service folders until you connect to the server. The Deleted (local) folder contains messages that have been deleted on the device. If you are using IMAP4, you may see a Deleted Items folder. This folder is for messages deleted on the server. The behavior of the Deleted (local) and Sent folders depends on the Inbox options you have chosen.

You can also create your own folders. The behavior of the folders you create depends on whether you are using POP3 or IMAP4:

- If you are using POP3 and you drag or delete messages from the Inbox, the link is broken between the messages and their copies on the mail server. The next time you connect, the mail server will see that the messages are missing from your Inbox and delete them from the server. This prevents you from having duplicate copies of a message.
- If you are using IMAP4, the folders you create and the messages you move are mirrored on the server. For example, if you move two messages from the Inbox folder to a folder called Family, the server will create a copy of the Family folder and copy the messages into that folder. Therefore, messages are available to you anytime you connect to your mail server, whether it is from your terminal or from some other device. This synchronization of folders occurs when you create a new folder, move messages into a folder, exit the Inbox program, or select **Services** > **Synchronize Folders**. If you want to view the messages in a folder while disconnected from your mail server, select the folder and then **Services** > **Offline Folder**.

Create a Folder

You can create a folder in a service, or you can create a subfolder under a service folder. The process is:
1. Highlight the service or folder under which you wish to create the new folder.
2. Select **File** > **Folder** > **New Folder**.
3. Type a name for the folder in the resulting New Folder name box.
4. Click on **OK**, and you will see the new folder in the list view in the left-hand pane.

Rename a Folder

You can rename folders that you have created for POP3 services. The process is:
1. Highlight the folder you want to rename.
2. Select **File** > **Folder** > **Rename Folder**.
3. Type the new name for the folder.
4. Press **Enter** or click on another file.

Delete a Folder

You can delete folders that you have created. The process is:
1. Highlight the folder you want to delete.
2. Select **File** > **Delete**.
3. Click on **Yes** when asked to verify your deletion.

Designate a Folder as Offline

Only IMAP4 folders can be designated as offline. All IMAP4 default folders, such as Inbox, are automatically designated as offline. Messages in offline folders can be viewed when you are disconnected from your mail server. If a folder is not designated as offline, you will be able to read and respond to messages in that folder only when connected to the server.

To designate a folder as offline, select the folder, and then select **Services** > **Offline Folder**.

Synchronize Folders while Connected

When you synchronize folders, the contents of your device folders and mail server folders are compared and updated. New mail messages are downloaded, and messages in your device Outbox folder are sent. The synchronization behavior depends on how you connect to your mail server.

When you connect to a POP3 server, the Inbox and Outbox folders on your device are synchronized with the corresponding folders on the mail server. To synchronize after the initial connection, select **Services** > **Send/Receive Mail**.

When you connect to an IMAP4 server, Inbox, Outbox, and all folders marked as offline are synchronized. To synchronize all folders after the initial connection, select **Services** >**Synchronize Folders**. To synchronize just the selected folder and the Outbox folder, select **Services** > **Send/Receive Mail.**

Download Messages

When you download messages, you need to create two connections: a Web connection and a mail server connection. The Web connection connects you to your ISP or network. The mail server connection downloads messages from your mail server to Inbox on your device. When you select **Services** > **Connect** in Inbox, Inbox starts a Web connection using the connection you specified when setting up the current mail service. If you are

already connected through a Web connection other than the one you specified in the mail service, you will be asked if you want to use the current connection. If you choose not to, you will need to disconnect from the current connection before you can check for new messages. The procedure is:

1. In the left-hand pane of Inbox, click on the + next to the service you want to use
2. Select the **Services** menu and make sure that the service you want to use is selected (the selected service has a bullet next to it.)
3. Select **Services** > **Connect**.
4. If you did not enter a password and elect to save it when adding the service, you will be asked for a password.
5. The messages on your terminal and mail server are synchronized: new messages are downloaded to the Inbox folder, messages in the Outbox folder are sent, and messages that have been deleted on the server are removed from the device Inbox. Double-click a message in the message list to open it.
6. If you read a message and decide that you need the full copy, select **File** > **Get Full Copy** while in the message window or **Services** > **Get Full Copy** while in list view. This will also download message attachments and meeting requests if you have those options selected in the **Inbox Preferences** dialog box. You can also choose to download full copies of messages by default.
7. When finished, select **Services** > **Connect** to disconnect. You also need to disconnect your dial-up connection by double-clicking the icon in the status bar and selecting **Disconnect**.

Notes:
- Receiving entire messages consumes storage memory.
- The size column in the Inbox list view displays the local size and server size of a message. Even when a message has been downloaded fully, these numbers may differ because the size of a message can vary between the server and the device.
- When using IMAP4 to get Outlook or Schedule+ data, you will see the contents of your Journal folder. File editing transactions and documents (such as Task items, e-mail messages, and Word documents) attached using drag and drop will appear as shortcuts on the device. A copy of the document will not be moved to your device, and the shortcut on the device cannot be used to access the document. To move documents associated with a journal entry to the device, attach the document to the entry rather than dragging and dropping it. Also, be sure to set your IMAP4 service to receive full copies of messages, attachments, and meeting requests. For more information on using Journal, see the Help for the desktop version of Outlook.

Reply To or Forward a Message

1. Open the message, and then select **Compose** > **Reply to Sender**, **Reply to All**, or **Forward**.
2. Enter your response.
3. Select **File** > **Send**.
   - Selections in the **Options** dialog box determine whether the original text is included.
   - To see more header information, select the inverted triangle in the lower-right corner of the header area. Select the triangle again to collapse the header area.

Add the Sender to Address Book

1. Open the message, and then select **Compose** > **Add Sender to Address Book**. A new contact card will open with the sender's name and e-mail address already entered.
2. Enter other desired information.

Or

1. Select **Go > Address Book**.
   - To add a new entry, select **New**. Enter the name you want to type in the **To** and **CC** fields of messages in the **Name** field.
   - To delete an entry, select it, and then select **Delete**.

- To edit an entry, select it, and then select **Edit**.

Check Inbox Status

In list view, select **Compose** > **Status**. You can view details such as the number of messages to be sent, deleted, and copied, and the number of attachments to be downloaded.

Include the Original Message in a Reply

1. Select **Services** > **Options** > **Compose** tab.
2. Under **Reply**, select **Include Body**. This setting will place a copy of the original message beneath your response text.
3. To indent the original message, select **Indent**.
4. To add leading characters (such as >) to the original message lines, select **Add leading character**, and enter the character you want.

Enlarge the Message Font

1. Open the message you want to read.
2. Select **File** > **Large Font**.
3. To return the font to its original size, select **File** > **Large Font** again.

Organize Messages

Move or Copy a Message

1. Select the message.
2. Select **File** > **Move To** or **File** > **Copy To**.
3. Select the destination folder.

If you are working offline, the message will be moved or copied from the server the next time you connect.

Caution: When you move a message that you have received through POP3 or synchronization to a folder you created on your device, the copy of the message on the server is deleted. This prevents duplicate copies of messages. Although the complete message is moved, message attachments will be deleted if you have not selected the option to download attachments. Once the message is moved, you will be able to access the message only from your device.

Delete a Message

Select the message and select **File** > **Delete**. Messages are moved to the Deleted (local) folder and deleted according to the option you have selected in **Services** > **Options** > **Delete** tab:

- **On connect/disconnect**: Deletes messages when you connect or disconnect from your mail service or exit Inbox.
- **Immediately**: Deletes messages as soon as you select **File** > **Delete**.
- **Manual**: Deletes messages when you select **File** > **Empty Deleted (local)**.

Note If you are working offline, messages that have been deleted from the server will be deleted from the device the next time you connect.

Empty the Deleted (local) Folder

Select **File** > **Empty Deleted (local)**. This permanently deletes messages in the Deleted (local) folder. To check or adjust the current settings for deleting messages, select **Services** > **Options** > **Delete** tab.

Clear Messages and Folders

When receiving mail from a POP3 or IMAP4 server, select the service that contains the folders and messages you want to clear, and then select **Service** > **Clear All**. All messages and folders that are linked to the selected service are cleared and memory space is expanded on the device without deleting messages on the server. The next time you connect, the messages and folders are downloaded again.

Unmark a message

To unmark a message that is marked for download, double-click the marked message.

Compose and Edit Messages

1. In list view, select **Compose** > **New Message**.
2. Enter the address of one or more recipients in the **To:** entry box, separating them with a semicolon. If the recipient is listed in the Address Book, enter a few letters of the recipient's name and select **Compose** > **Check Names**. If there is only one match, the e-mail address is inserted. If there is more than one match, select the correct address from the **Choose E-mail Recipients** dialog box. If there is no match, add a new e-mail address through **Choose E-mail Recipients**.
3. To send copies to other addresses, press the **Tab** key to open the **Cc:** entry box. Enter the addresses of copy recipients, separating multiple entries with semicolons.
4. Press the **Tab** key to open the **Subject** entry box. Enter the subject.
5. To attach a file, select **File** > **Attachments** > **Add Attachment**.
   - In the Add Attachment dialog box, browse to the desired file.
6. Compose your message in the message entry box.
7. Select **File** > **Send**. If you are working offline, the message is moved to the Outbox folder and will be sent the next time you connect.

To see more header information, select the triangle in the lower-right corner of the header area. Select the triangle again to collapse the header area.

Save a Message

Select **File** > **Save** to save the message you are composing or editing. The message is not sent and is saved in the Inbox folder of the active service.

Save Copies of Sent Messages

By default, sent messages are not saved on your terminal. To automatically save sent messages:
1. Select **Services** > **Options** > **Compose** tab.
2. Select **Keep copy of sent mail in Sent folder**.

Work with Message Attachments

Receive Attachments

If you receive messages through a remote mail server, in Inbox on the terminal, select the **Get file attachments and meeting requests** (IMAP4) or **Get meeting requests** (POP3) setting in the **Inbox Preferences** dialog box.

Notes:
- Embedded images and OLE objects cannot be received as attachments.
- Embedded messages can be viewed as an attachment when using IMAP4 to receive e-mail. However, this feature does not work if TNEF is enabled so that you can receive meeting requests.

Check Attachment Status

- An attachment sent with an e-mail message, whether it has been downloaded or not, will appear as an icon at the bottom of the message in its own windowpane. If you do not see this pane, select **File** > **Attachments** > **Show Attachments**. If TNEF is turned on so you can receive meeting requests, you will not see attachments until they are fully downloaded.
- To mark an attachment for downloading in a POP3 or IMAP4 service, double-click it. The attachment will be downloaded the next time you connect. You can also set Inbox to download attachments automatically when you get a full copy of a message.

Open an Attachment

You can open any attached file that has a name extension compatible with one of the viewers listed in **Start>Programs**. With the message open, double-click the attachment's icon at the bottom of the message. The appropriate viewer will open automatically. If you do not see the attachment pane, select **File** > **Attachments** > **Show Attachments**.

Store an Attachment

1. Select **Services** > **Options** > **Storage** tab.
2. Select to store attachments on internal RAM or external USB storage (if available).

Note: Once you make the above selection, *all* attachments will be moved to the selected site.

Delete an Attachment

1. To delete an attachment from a message you are sending, select the attachment, and then select **Edit** > **Clear** or press the **DEL** key on the keyboard.
2. To delete an attachment you have received, delete the message without storing the attachment.

Microsoft Internet Explorer

These terminals use Internet Explorer 6.0, which has most of the features of the PC version, but does not support Java Virtual Machine, Active X, or Flash. New Web connections take on the default properties established in Configure Terminal Properties|Internet Settings, except for the Start Page. In Desktop Shell, there is a default browser connection on the Desktop, but this is not available in WBT Shell. If you want a browser connection in WBT Shell, add it here. In Desktop Shell, if you want to configure a second browser connection, add it here or from **Start>Programs**.
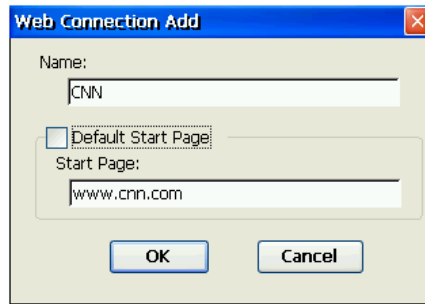
Web Connection Add Dialog Box

- **Name**. This name will appear in the Connection Name list of Connections Manager.
- **Default Start Page**. Check this box to use the default Start Page. If you want a unique Start url, leave the box unchecked and enter that url here.

Microsoft Remote Desktop Client

The WTS Connection Wizard is used to create a new RDP connection to a Microsoft Terminal Server. When you are finished, a new connection will be added to the Connection Name list in the Terminal Connection Manager. There are four dialog boxes for the WTS Connection Wizard process.
1.
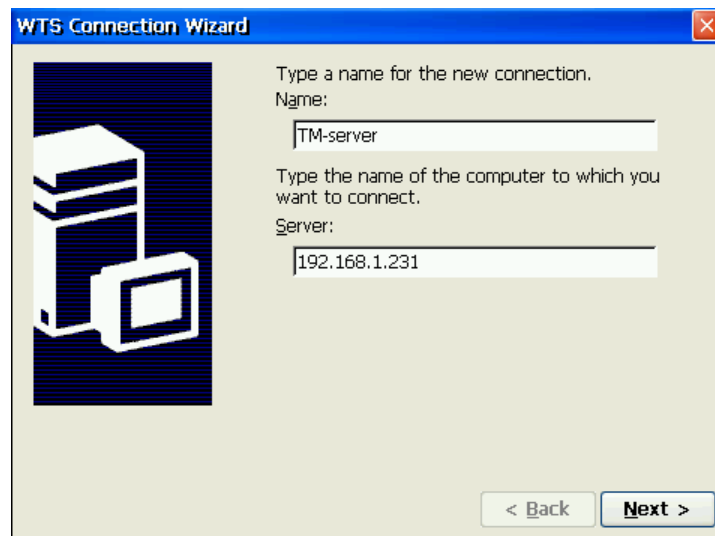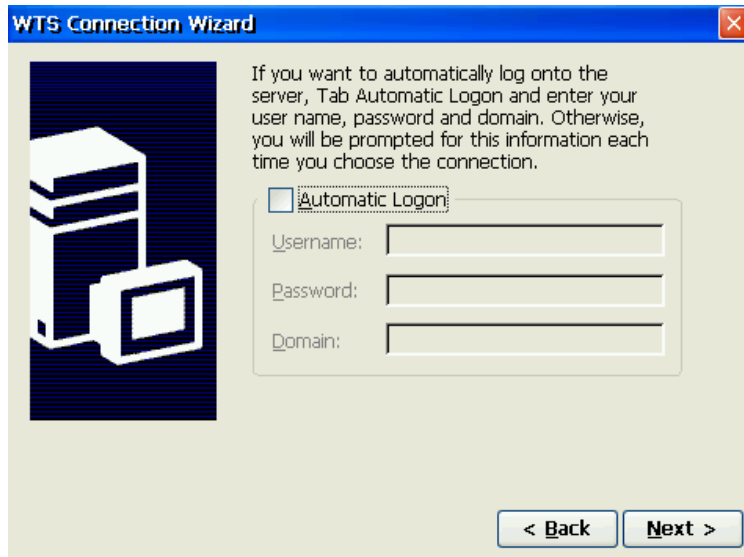
WTS Connection Wizard Dialog Box #1

- **Name**. Enter the connection name to be listed in the Connections Name list of Connection Manager.
- **Server**. If you have a local DNS or WINS server, enter the network name of the selected server. Otherwise, enter the IP address of the selected server.

2.

WTS Connection Wizard Dialog Box #2

Check the box to enable automatic logon. The **Username**, **Password,** and **Domain** fields will be enabled, and you can enter the necessary logon information.

3.

WTS Connection Wizard Dialog Box #3

- **Desktop**. Click on this button to start the session with the server desktop.
- **Application file name**. Click on this button if you want this connection to open in a specific application on the server after the logon to the Terminal Server is successful. Then, in the first field, enter the path and executable file name of an application. **Working Directory** lets you associate a directory with the application specified in the first field. For example, if the application **Notepad.exe** is in the **C:\WTSRV** directory on the Terminal Server, type **C:\WTSRV\Notepad.exe** in the first field. If you use Notepad to work on documents in the **C:\My Documents** directory, type **C:\My Documents** in the **Working Directory** field. When you log on to the Terminal Server, Notepad begins. In Notepad, if you click the File menu, the directory **C:\My Documents** is displayed

4.
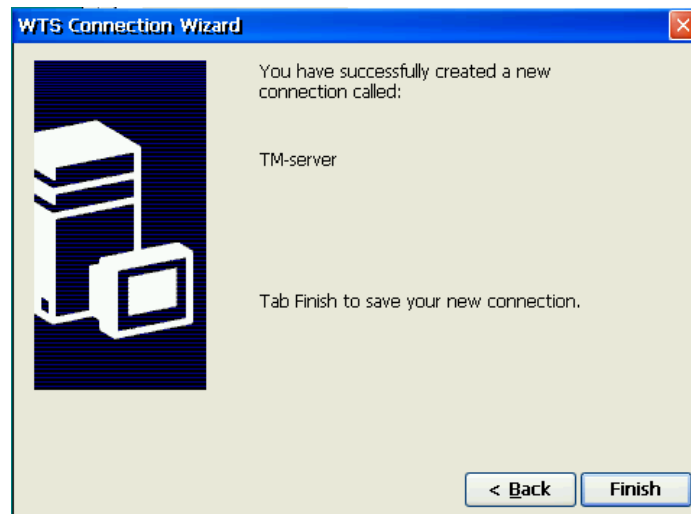
WTS Connection Wizard Dialog Box #4

Note: Microsoft Corporation has acknowledged three not-so-obvious RDP connection issues with Windows 2000 Terminal Services & Windows NT 4.0 Terminal Server.

- **Issue #1**. Microsoft has acknowledged licensing issues when Thin Clients like the Affirmative YES*tation* connect to a Windows 2000 Terminal Services server. Microsoft strongly recommends applying the Terminal Services Licensing Enhancement Update, which can be found by accessing Microsoft's Knowledge Base Article: **Q287687**. Duplicate client licenses, inability for a thin client to connect, and other unknown repercussions could result if this update is not applied.
- **Issue #2**. If your organization connects to a Windows 2000 or Windows NT 4.0 Terminal Server with a host name, the RDP Server parameter in the YEStation requires a fully qualified name. For example, if your Windows 2000 Terminal Service host name is: **SERVER1** and the DNS Default Domain is: **COMPANY.COM**, then the fully qualified name is: **SERVER1.COMPANY.COM**
- **Issue #3**. If your organization connects to a Windows 2000 or Windows NT 4.0 Terminal Server using the RDP Protocol and you use DNS entries in your Thin Client setup, Microsoft requires a local DNS Server to resolve the server IP address or fully qualified name. Users who do not specify DNS entries in the YES*tation* Network setup will not need a DNS server to resolve the server's IP address.

PMail (WBT Shell)

PMail is the name for the email client in WBT Shell, but it is exactly the same as Inbox in Desktop Shell. In fact, if you configure Inbox, those same parameters will be seen in PMail, and vice-versa. See Inbox for configuration details.

PPPoE

Point to Point Protocol over Ethernet (PPPoE) allows users to connect to a broadband Internet Service Provider (ISP) on an as-needed basis rather than being always connected as is typical in a broadband connection. In this mode of operation, it uses a Point-to-Point protocol much like a dial-up connection to an ISP. Your system or network administrator will tell you if you need such a connection. If you do add a PPPoE connection, you will be led through three Setup wizard boxes.

1.

PPPoE Wizard Dialog Box #1

Enter a friendly name here. This name will be seen in the connection list of Connection Manager and in **Start>Programs>Connections**.

2.
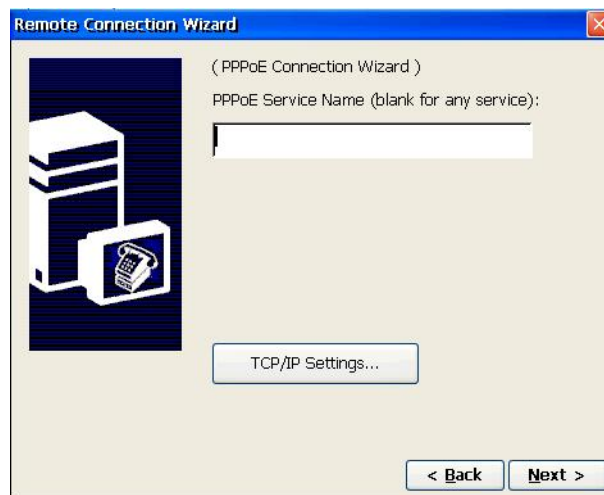
PPPoE Wizard Dialog Box #2

- **PPPoE Service Name**. You can enter a service name or IP address here if necessary.
- **TCP/IP Settings**. Click on this button to see the TCP/IP Settings dialog box.
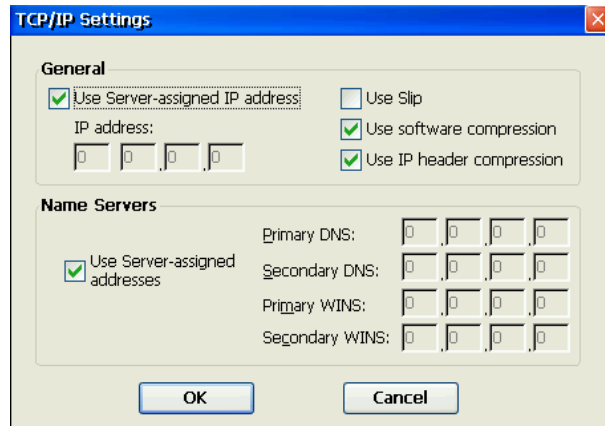
TCP/IP Settings Dialog Box

The default settings you see here seldom need changing. Your network administrator will give you any changes that are necessary.

3.

PPPoE Wizard Dialog Box #3

Click on **Finish** to complete the PPPoE connection setup.

Terminal Emulation (2x12 Only)

Six default IBM 5250 display connections are provided: 101GREEN, 101GUI, 101TBT, 122GREEN, 122GUI, and 122TBT. As the names indicate, each connection is designed to optimize the use of an Affirmative 101-key or 122-key keyboard along with a classic "green screen", contemporary graphical (GUI), or "green-screen" mouseless display style. If you are content with 5250 display connections, we recommend that you edit one of these default connections (see Editing an Existing Connection|Terminal Emulation) to your requirements.

If you want to configure a new connection from scratch, or need something other than a 5250 display connection, the Terminal Emulation selection allows you to add PowerTerm connections for 3270, 5250, and various types of ASCII terminal emulations. When you add a Terminal Emulation connection, the Connection Properties dialog appears.

Connection Properties Dialog Box

1. Click on the radio button for the desired terminal emulation.
2. Select a **Session Type** (not applicable for **IBM Terminals**).
3. In **Host Name**, supply the host IP address (non-**COM** sessions)
4. Type the **Terminal Name** if you are using named sessions (non-**COM** sessions).
5. Modify the **Port #** if necessary (non-**COM** sessions).
6. Click on the **Properties** button and set up the serial port parameters (**COM** sessions only).
7. Type the **Connection Name**. This name automatically appears in the **Setup Name** field.
   - If you want to use a terminal configuration that has already been established for another session, click on the **…** button and select one from the resulting Terminal Setups list. When you **OK** out of the list, that setup name will appear in the **Setup Name** field.
8. If you want to automatically run a script—one that has already been created in another session--at session logon, check **Run Script** and click on the **…** button. Select a script from the resulting Scripts list. When you **OK** out of the list, that script name will appear in the **Script Name** field.
9. If your host requires periodic activity in order to maintain a connection, enter a number (in seconds) in the **Keep Alive Timeout** field.
10. In the **Wait Before Connect** field, you can adjust the delay time before an Autostart connection attempts to connect. This is especially useful if the terminal is using a wireless LAN adapter, since wireless typically takes several seconds to establish a network connection. However, this feature is redundant here because you can also set a global Autostart delay time in **Connection Manager>Configure>Startup**.
11. Click **OK**. The new connection appears in the **Connection Name** list of Connection Manager and in **Start>Programs>Connections**.

Virtual Private Network

Follow the VPN Connection Wizard to configure a VPN connection.

1.
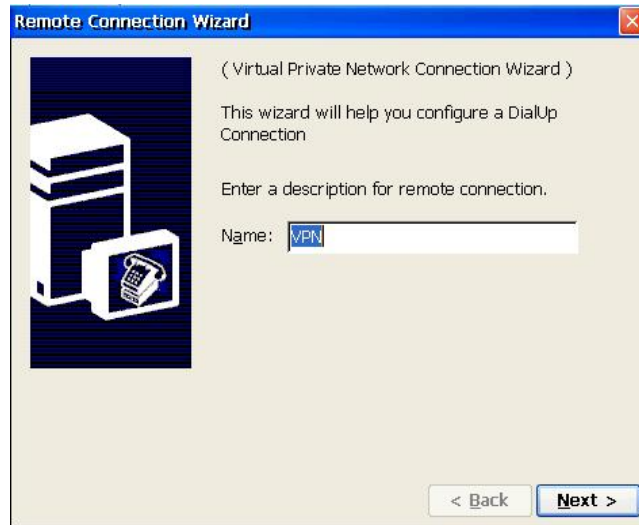
VPN Connection Wizard Dialog Box #1

Enter a friendly name here. This name will be seen in the connection list of Connection Manager and in **Start>Programs>Connections**.

2.

VPN Connection Wizard Dialog Box #2

- **Please key in…**. Enter the VPN host name or IP address.
- **Automatic Logon**. Check this box and enter the logon information if you want an automatic logon after communication is established with the host.
- **TCP/IP Settings**. Click on this button to see the TCP/IP Settings dialog box.

98
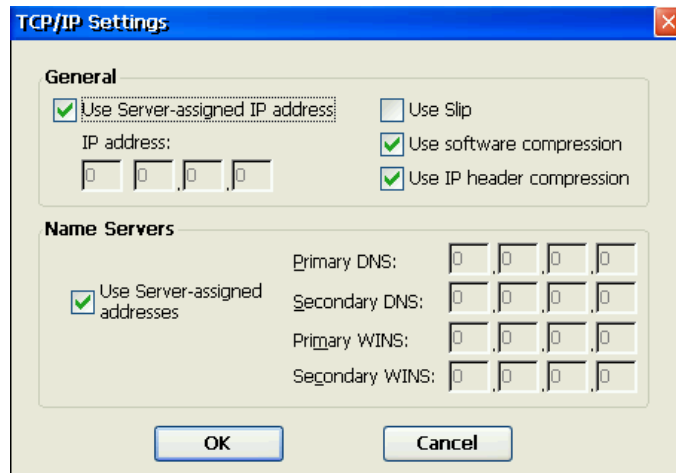
TCP/IP Settings Dialog Box

The default settings you see here are commonly used to access a VPN server, and seldom need changing. Your network administrator will give you any changes that are necessary.

3.
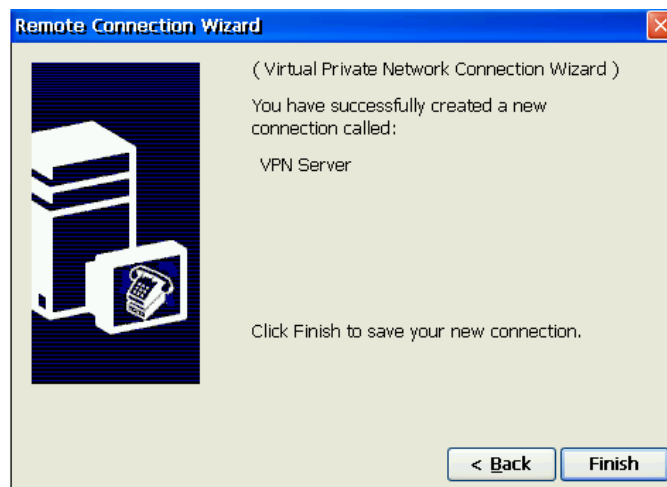
VPN Connection Wizard Dialog Box #3

Click on **Finish** to complete the VPN connection setup.

VNC Viewer

This connection can be made either from Connection Manager or from **Start>Programs**. See Configure Terminal Properties\Control Panel|VNC Viewer Settings for an explanation of VNC viewing. In that Control Panel utility, you can create a VNC Viewer connection that will Autostart whenever the terminal is booted up. The VNC Viewer connection added here must be manually started whenever you want to use it. The process for adding a connection is:

Creating a New Connection

1. The first time that you add a VNC Viewer, you will see this dialog box.
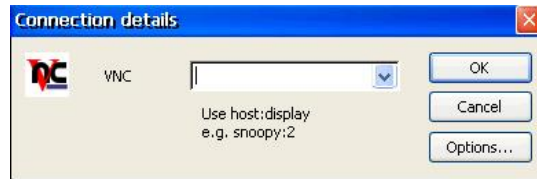
VNC Connection Details Dialog Box

- **VNC**. Enter the network name or the IP address of the VNC server that you wish to view, along with the display number on the server (display 0 always works for me). For example, if the server name is snoopy, the entry will be **snoopy:0**. An IP address entry might be **100.100.10.10:0**.
- **Options**. Click on this button to open the Connection Options dialog box.
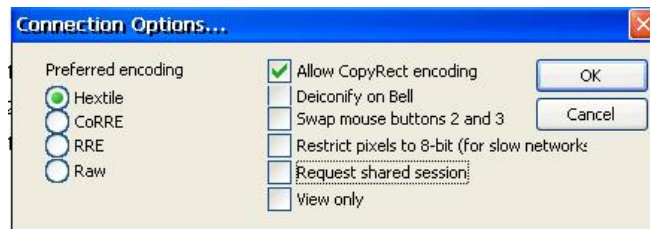
Connection Options Dialog Box

Probably the most important option here is **View only**. As the name implies, if this box is checked, you can only view the server desktop. If the box is not checked, you can provide keyboard and mouse input to the server desktop, much like an ICA or RDP session. For details on using other options, see the documentation at http://www.realvnc.com. **Note:** Any option changes that you make here will be lost when you close the session.

2. When you press **OK**, the viewer will attempt to make a connection to the server identified in the **VNC** field. If the server software is on at that device, you will see a dialog box asking for the password that has been configured in the VNC server properties. After entering the correct password, you will see a rendition of the server desktop. **Note:** When the viewer window is open, you cannot get back to Connection Manager. You can switch to other sessions by using **Ctrl+Alt+UpArrow/DownArrow**, but **Ctrl+Alt+End** will return you to the open viewer window.

3. In the session window, you will see a Menu bar in the upper left corner. See Configure Terminal Properties\Control Panel|VNC Viewer Settings for information on using the menus.

4. To close the viewer window, click on **Close** in the Connection menu.

5. Whenever you want to use VNC Viewer, you will have to go to the Connection Details dialog box from **Start>Programs** or **Connection Manager|Configure>Add**. But the VNC server information will still be in the dialog box *until you reboot*, so all you have to do in subsequent viewings is click on **OK** unless you want to go to a different server or unless you reboot.

Opening a Program

The items discussed in this section are not "Connections" in the strict sense defined in the section on Connection Manager. These items are the Microsoft viewers—more accurately called "Programs" since they do not invoke or configure connections to servers. They are included in this section for convenience since they are opened in WBT Shell from the New Connection drop-down list of **Connection Manager/Configure**. In Desktop Shell, they are opened from **Start>Programs**.

Four viewers, Excel, PDF, PowerPoint, and Word, are provided in WBT Shell, and those four plus two more, Media Player and Image Viewer, are provided in Desktop Shell. The appropriate viewer will open automatically when a document is downloaded in a browser session. **Note:** When trying to open a downloaded document, you may get an error message "xxx Viewer encountered an internal error trying to load or display the requested file". This usually means that there is not enough room in your browser cache. You can try any or all of the following corrective procedures:

- Clear cache in **View>Internet Options** and download again.
- Increase the cache size in **View>Internet Options** and download again.
- Close the browser session, reopen, and download again.

You can also view email attachments, files in USB storage, and files in shared network drives with the following procedure:
1. Click on **Add** in the Configure tab.
2. Select the desired viewer from the drop-down list.
3. Click on **OK**.
4. In the resulting window, open the **File** menu.
5. Click on **Open**.
6. Browse to the desired file.
    - For email attachments, browse to **Program Files\Inbox\Mail Attachments**.
    - For USB storage, browse to **USB Storage**.
    - For shared network drives, type the path in the **Name** field.
7. Close the viewer from the **File** menu when you are finished. You will have to repeat the procedure when you want to again use a viewer.

Note: When a viewer window is open in WBT Shell, you cannot get back to Connection Manager. You can switch to other active sessions by using **Ctrl+Alt+UpArrow/DownArrow**, but **Ctrl+Alt+End** will return you to the open viewer window.

This Page Intentionally Left Blank.

Editing an Existing Connection

Most connection properties are edited in the Configure tab of Connection Manager. Highlight the connection of interest and click on **Edit**. Any exceptions to this procedure will be explained below.

Citrix ICA Client

When you click on **Edit**, you will see an Edit Connection Details window with seven properties tabs.
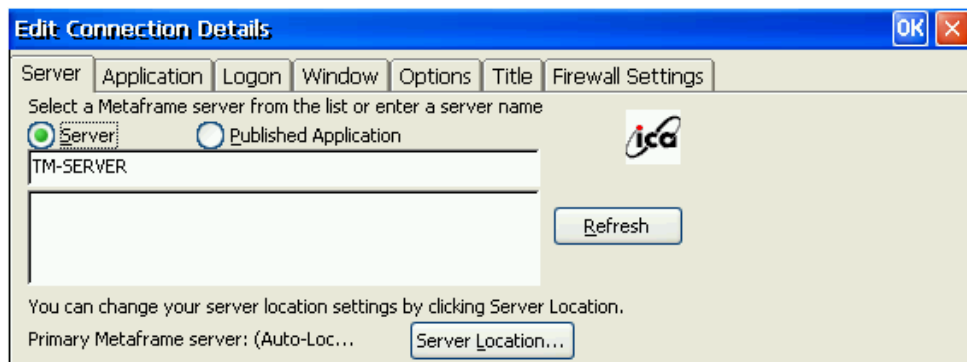
Edit Connection Details Window

The properties in each of these tabs exactly correspond to the properties specified in the dialog boxes of Creating a New Connection|Citrix ICA Client.

Dial-Up Client

When you click on **Edit**, you will be led through the same Remote Connection Wizard described in Creating a New Connection|Dial-Up Client.

Inbox/PMail

The procedure for this one is slightly different. Open Inbox from **Start>Programs**, or PMail from **Connection Manager>Configure>Add**. Then you can edit service parameters in the same way that you added a service in Creating a New Connection|Inbox.

Microsoft Internet Explorer

When you click on **Edit**, you will see the same Web Connection Add Dialog Box seen in [Creating a New Connection|Microsoft Internet Explorer](). Other options can be edited within a session from the **Internet Options** selection of the View menu.

Microsoft Remote Desktop Client

When you click on **Edit**, you will see an Edit Connection window with two tabs.
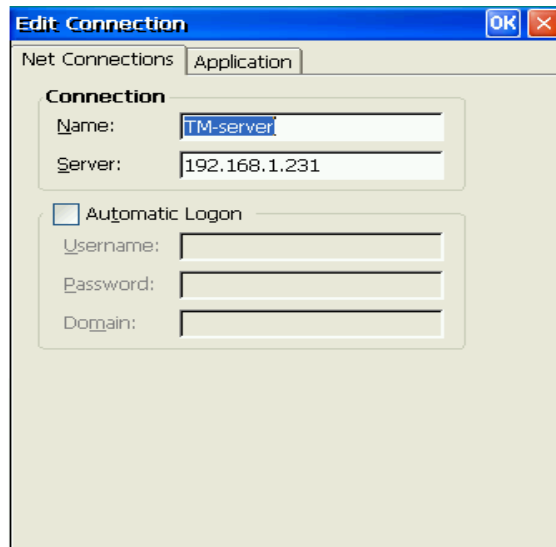
RDP Edit Connection Window

The properties in these two tabs are exactly the same as those specified in the WTS Connection Wizard in [Creating a New Connection|Microsoft Remote Desktop Client]().

PPPoE

When you click on **Edit**, you will be led through the same Remote Connection Wizard described in [Creating a New Connection|PPPoE]().

Terminal Emulation (2x12 only)

You have two types of configuration options: edit an existing default 5250 display connection, or initiate a new connection. We recommend that you edit one of the default connections, since they have been configured to take advantage of the most useful options and keyboard mapping..

Editing a Default 5250 Display Connection

Six 5250 default connections are provided: 101GREEN, 101GUI, 101TBT, 122GREEN, 122GUI, and 122TBT. As the names indicate, each connection is designed to optimize the use of an Affirmative 101-key or 122-key keyboard along with a classic "green screen", contemporary graphical (GUI), or "green-screen" mouseless display style. Proceed as follows:

1. Each default connection is configured to connect over the Internet to the Affirmative Computer Products demonstration AS/400 server. Before you make any modifications, we recommend, if your terminal has an Internet connection, that you connect to our server to verify your network configuration and to experience the display alternatives. Use **DEMO1** for the user name and password.
2. After you have decided which default connection most closely fits your needs, go to **Connection Manager>Configure**, highlight the connection name, and double-click on that connection name or click on **Edit**. A Connection Properties window will appear.

Connection Properties Window for Default Connection 122GUI

3. Change the **Host Name** to the IP address or DNS-defined name of your host server. Each emulator connection can have a different host if desired.
4. If you are using named sessions, enter the session name recognized by the host in **Terminal Name**.
5. The **Port Number** is a commonly used default, so you generally do not need to enter anything here.
6. The **Setup Name** will show the name of the default connection that you selected. There is no need to change it.
7. The **Connection Name** is the identifying connection name shown in the Connection Manager window. You will probably want to change it.
8. Click on **OK**, and the new connection name will appear in Connection Manager.
9. If you want to edit properties beyond those available in the Connection Properties window, you will need to open (connect) the connection to complete the configuration.
10. In the open connection, open the **Terminal** menu and select **Setup**. You will see a window with five tabs.
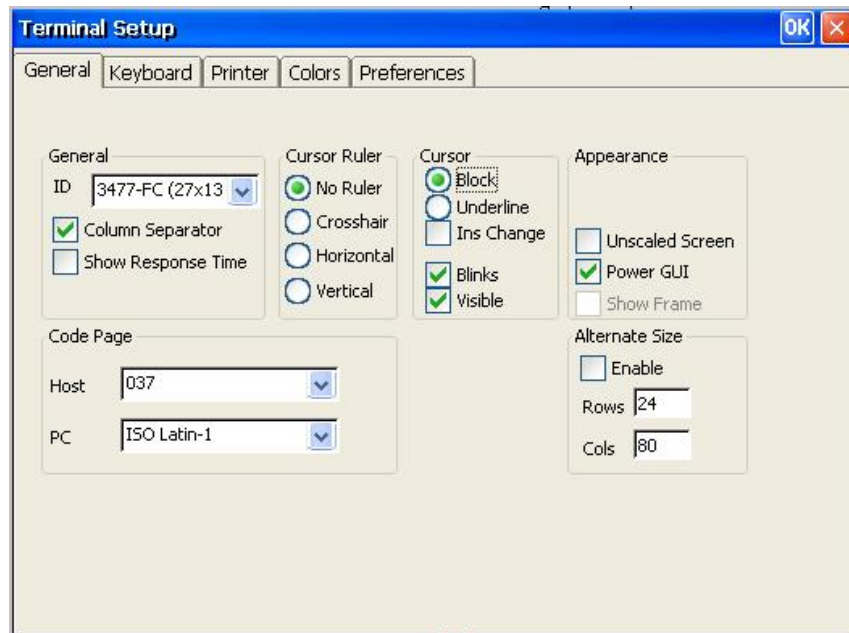
Terminal Setup Window for 5250 Display Connection

11. Most of these selections are intuitive.
- The **General** tab offers several options. If you are in the US, you will probably want to use the default host code page of **037**, unless you want to use the Euro symbol. To use the Euro symbol, choose code page **1140**.
- If you are connecting a local printer to do local Print Screens from a display session, select the **Printer** tab and configure it. The same restrictions apply as when configuring a printer connection (see below).

12. Default connections come with keyboard maps that are optimized for Affirmative Computer Products 5250/PC keyboards. If you need to change a keyboard map, keyboard mapping, Power Pad options, and other miscellany are available under the **Options** menu in the session screen. If you change the keyboard mapping, be sure to execute a **Save Keyboard File** and a **Save Terminal Setup** from the **File** menu.

13. If you change any connection properties, you must save the changes. Exercise **File>Save Terminal Setup** (if you want to use the current setup name) or **Save Terminal Setup As** (if you want to use a different name) before exiting the session. After you do this, these selections can be transferred to any new connection by selecting that setup name when creating the new connection. If you do not do a Save, you will lose all these selections and return to the defaults when you next open this connection.

Editing a New 5250 Display Connection

If you have added a new connection, you may want to edit its properties beyond those available in the Connection Properties window. If so, follow the same procedure as listed above for a default connection, but there is one additional procedure—selecting a keyboard map:

1. From an open connection screen, open the **File** menu.
2. Click on **Open Keyboard File…**. The Keyboard Settings list will appear.

Default Keyboard Map List

3. Four 5250 122-key keyboard maps, three 5250 101-key keyboard maps, and one 3270 122-key keyboard map have been predefined in the firmware for use with Affirmative Computer Products keyboards. Choose one of these by selecting **Open Keyboard Setup**, highlighting your selection, and clicking on **OK**. **DO NOT CLICK ON DELETE FOR ANY OF THESE PRE-DEFINED SETUPS**. If you do not make a selection, your keyboard setup will default to a 101-key 5250 or 3270 map intended for use with a standard PC keyboard.
4. If you do some custom keyboard mapping and want to save it for later use, be sure to use **Save Keyboard Setup** before exiting the session. If you do not, you will lose this custom map. When you save, the keyboard setup will automatically be given the same name as the connection name. If you do not want that name, use **Save Keyboard Setup As**.

NOTE: Keyboard and terminal setup names and connection names must not contain a space or a "\" character. An invalid name will result in the map/parameters being lost.

Editing a New 5250 Printer Connection

1. Open the printer connection.
2. Open the **Terminal** menu and select **Setup**. You will see a window with three tabs.
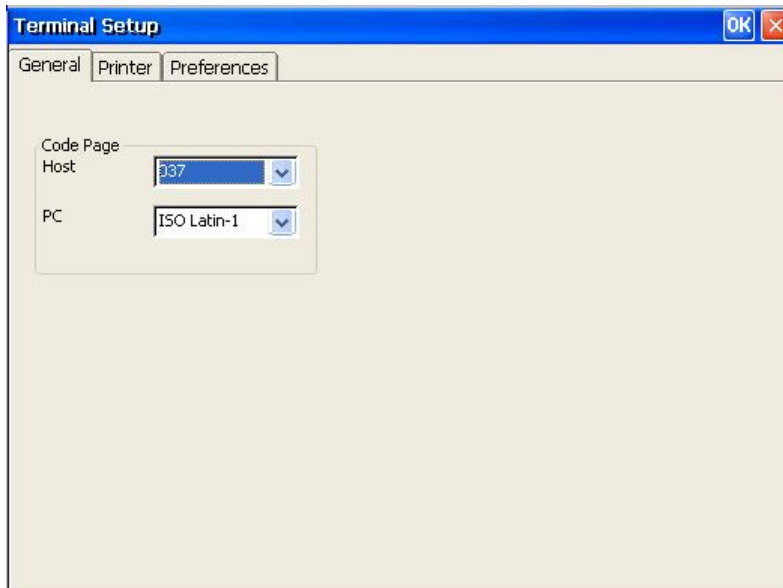
Terminal Setup Window for 5250 Printer Connection

3. Most of these selections are intuitive.
   - The **General** tab offers several options. If you are in the US, leave the code pages at their default settings unless you want to use the Euro symbol. In that case, choose host code page **1140**.
   - In the **Printer** tab, choose **Device**, for parallel or serial printing, or **NETWORK**. Go to **Advanced Printing** to define the printer parameters.
     o If you wish to use serial printing, go to the **Device Name** field and overwrite the default **LPT1:** with **COM1:**. The default serial parameters are 9600 8 N 1.
     o Network printing can only be done to a Microsoft shared printer on the network, and there can be only *one* network printer emulation connection on a terminal. If you wish to use network printing, choose **NETWORK** in the **Device Name** field and specify the network path as follows:
       1. **OK** out of the Terminal Setup window.
       2. From the **File** menu, click on **Print Setup**. You will see the following dialog box.

Print Dialog Box

       3. Select **Network** from the **Port** drop-down list.
       4. Enter the printer path *in upper-case characters* in the **Net Path** field.
       5. Ignore the rest of the parameters and **OK** out.
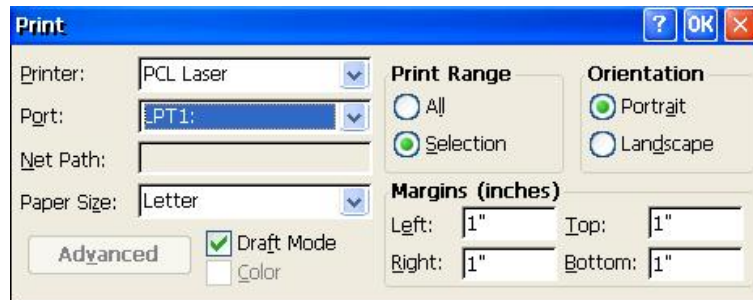4. If you change any printer connection properties, you must save the changes. Exercise **File>Save Terminal Setup** (if you want to use the current setup name) or **Save Terminal Setup As** (if you want to use a different name) before exiting the session. If you do not do a Save, you will lose all these selections and return to the defaults when you next open this session.

NOTE: Terminal setup names and connection names must not contain a space or a "\" character. An invalid name will result in the parameters being lost.

For further details on editing PowerTerm emulation connections, see the Affirmative Computer Products Web site at http://www.affirmative.net/pub/PowerTermUserGuide.pdf.

Virtual Private Network

When you click on **Edit**, you will be led through the same Remote Connection Wizard described in Creating a New Connection|Virtual Private Network.

VNC Viewer

The procedure for this one is slightly different. Open VNC Viewer from **Start>Programs** or from **Connection Manager>Configure>Add**. Then you can edit parameters in the same way that you added the connection in Creating a New Connection|VNC Viewer.

Firmware Upgrade Utilities

You can do a field upgrade of the terminal firmware and/or terminal Desktop wallpaper (see Configure Terminal Properties|Display|Background). There are two upgrade methods.

Upgrade from FTP Server

This method can be used when an FTP server is available on your Local Area Network (LAN) or on a Wide Area Network. **Notes:**

- **The FTP server must be able to respond to a file size query from the terminal**. The FTP server included in Windows 2000 servers does provide this information, but some shareware FTP servers do not.
- **Your FTP server should not have Proxy protection**.

WARNING: You may lose all your configuration information, since some firmware upgrades require a Reset to Factory Defaults after the upgrade. So record your configuration information before upgrading.

The procedure is:
At the FTP server:
1. Ignore steps 2 and 3 if you are only upgrading your Desktop wallpaper.
2. Download the latest-version firmware from the Affirmative Computer Products Web site, per the Affirmative Computer Products Technical Support instructions.
3. Extract the downloaded file if it came in a compressed format: the extracted file should have a **.bin** extension.
4. Save the extracted **.bin** file or the wallpaper **.bmp** file in your FTP server with a known path.
5. Configure your FTP server software with the desired User Name, User Password, and path to the firmware file, as required by your particular FTP software package.
At the terminal:
6. Open Control Panel.
7. Double-click on the **FTPUpdate** icon to see the FTPUpdate dialog box.

FPTUpdate Dialog Box

109
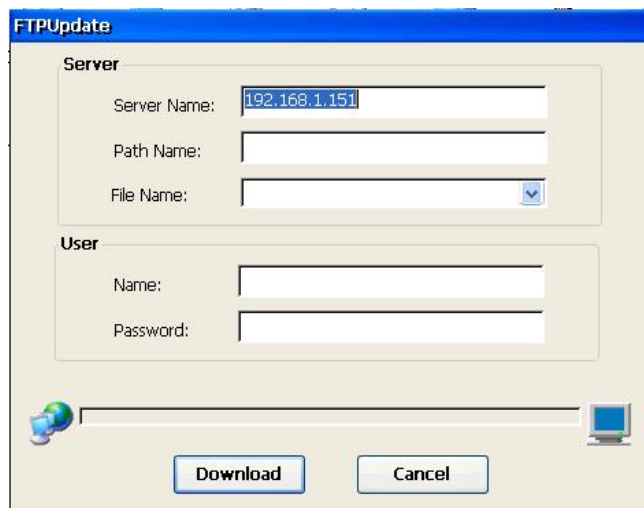
8. Enter the information in the fields.
   - **Server Name**. Enter the FTP server's IP address.
   - **Server Path Name**. Depending upon how you have configured your FTP server, you may have to enter path information to the desired firmware .bin file.
   - **Server File Name**. Enter the firmware **.bin** or wallpaper **.bmp** file name. An attractive alternative is to click on the drop-down arrow at the right of this field. You will see a drop-down list of all the available **.bin** and **.bmp** files in the server path, and you can select the one you want. If you do not see a drop-down list, there is an error in your path information or in your network connection.
   - **User Name**. Enter your User Name to access the FTP server.
   - **User Password**. Enter your Password to access the FTP server.
9. Activate the **Download** button to start the upgrade. **WARNING:** DO NOT make any change that may corrupt the upgrade procedure, such as turning off power or disconnecting from the network, after you activate the **Download** button.
10. A progress bar will show if you connect to the FTP server successfully. The upgrade process is done in two phases, with a progress bar for each phase. In phase 1, the new firmware or wallpaper is transferred over the network into terminal RAM. If there are any problems in this phase, an error message will pop up; in that case
   - Activate the **OK** button and re-check your upgrade information. Check the file name for accuracy and verify that you have established the correct path information at your FTP server. The error may also possibly be caused by incorrect settings in the Network tab.
11. In phase 2, which happens automatically after phase 1 is completed, the new file will be written into flash.
12. If you downloaded new wallpaper, you are done. The wallpaper will take effect immediately if **My Wallpaper** is selected in **Control Panel>Display>Background**.
13. If you downloaded new firmware, you will be told that the terminal must be rebooted before the upgrade takes effect. You may think that you have a choice at this point, but you really don't. You cannot proceed any further without rebooting.
14. If necessary, go through the Setup Wizard and reconfigure your terminal.

.

Upgrade Using Remote Central Management

If eProManager central management software is installed on your network, you can use it to remotely upgrade your firmware. This method is usually used on large network systems with a large quantity of terminals. Please see the eProManager User Guide for this upgrade procedure.

Troubleshooting Your YES*tation*

The following table provides some solutions to common problems that can occur during setting up or using your YES*tation* terminal.

	Problems	Solution
1	The monitor screen is blank	• Make sure the terminal is turned on. • Make sure the monitor is plugged into an AC outlet and turned on. • Make sure the VGA connector is plugged into the terminal.
2	Your monitor cannot display after advancing past the logo screen or after changing the display setting.	The display setting may be at a higher resolution or refresh frequency than the monitor will support. Execute one of the following recovery options: • Use a better monitor for display. • Use a better monitor for display while changing the display settings to be compatible with the original monitor. • Ask your MIS or network administrator to reset your terminal to factory default settings through the Remote Management" software, if it is installed at your server site.
3	The mouse does not work.	• Make sure the mouse is plugged into the mouse port, not the keyboard port. • Test the terminal using a known good PS/2 mouse.
4	The keyboard does not respond.	• Make sure the keyboard is plugged into the keyboard port, not the mouse port. • Test the terminal using a known good PS/2 keyboard.
5	The network connection does not work.	• Check the network connection. • Verify the terminal IP address is correct in the Network properties sheet of Control Panel. • Check the server's IP address. • If you are using the terminal default setting of DHCP address assignment, make sure there is a workable DHCP server on your network. • If you are using a specified IP address, make sure that there is not another network device with the same IP address.
6	Forgot the password setting and cannot reconfigure the terminal.	• Obtain the master password from Affirmative Computer Products Technical Support. • Ask your MIS or network administrator to reload your firmware through the eProManager remote management software, if it is installed at your server site.

	Problems	Solution
7	You have created a Dial-up connection, but it cannot dial out through an external modem.	Make sure that the Dialing Properties are correct in the Dial-Up Connection dialog box of the Dialup properties sheet of Control Panel.
8	Your Dial-up connection dials out through your external modem, but it cannot make a connection with the server.	• Your modem may not be 100% Hayes-compatible. If not, you will have to specify a special modem initialization string in the Call Options dialog box. • Your Login Name or Password may be incorrect in the Dial-Up Remote Connection Wizard dialog box #3. • Your Connection Preferences are incorrect in the Port Settings part of the Device Properties dialog box in the Dialup properties sheet of Terminal Properties.
9	When trying to open a downloaded document, you get an error message "xxx Viewer encountered an internal error trying to load or display the requested file.	There is not enough room in your browser cache. You can try any or all of the following corrective procedures: • Clear cache in **View>Internet Options** and download again. • Increase the cache size in **View>Internet Options** and download again. • Close the browser session, reopen, and download again.
10	You cannot ping your terminal from another device on the network.	See #5 above.
11	eProManager cannot communicate with your terminal.	• See #5 above. • Make sure that eProManager has the current IP address for your terminal.
12	You are having erratic printing problems with a local parallel port printer	Verify that the parallel port type configured in the terminal BIOS matches the type supported by your printer. The default is **Extended Capabilities (ECP)**. Contact Affirmative Computer Products Technical Support for information on accessing the BIOS.

Support

Affirmative Computer Products offers Technical Support services for all the Affirmative products. You can access Affirmative Technical Support in one of the following ways:

- via Phone
  - 480-946-1444
  - 888-353-5250
- via Fax
  - 480-946-9250
- via E-mail
  - support@affirmative.net

Appendix 1. Specifications

22xx Models

ITEM	SPECIFICATIONS
Processor	SIS 550 200 MHz
Communication and Ports	- Microsoft RDP and Citrix ICA protocol compliant. 10/100 dual-speed Ethernet, Twisted Pair (RJ45). - One parallel port (DB-25 Female connector). - Enhanced ps/2 keyboard interface. - Enhanced ps/2 mouse interface. - Two USB ports. - Audio out.
Embedded O.S.	Microsoft Windows CE.net 4.2 with Microsoft IE 6.0 browser
Video	- SVGA 640x480, 800x600, 1024x768, and 1280x1024 with high color. - Refresh frequency up to 85 Hz
Memory	- SDRAM -- 64 MB SDRAM standard. (Max. 256MB) - Flash -- 32 MB DOC
Server Operating System Support	- Microsoft Windows 2003 Server - Microsoft Windows 2000 (Server Edition) - Microsoft Windows NT 4.0 (TSE) - Citrix MetaFrame XP - Citrix MetaFrame - Citrix WinFrame

Appendix 1. Specifications

ITEM		SPECIFICATIONS
Optional Devices		• USB storage • USB wireless LAN adapter • USB to COM port adapter • USB Touch screen
Software Features		• Remote Management client • Wake on LAN (WOL) • SNMP support • Time zone and SNTP support • Terminal access password for security • Multi-session Autostart with Fail-over • LPD & ThinPrint support • Virtual Private Network support • Office Viewers and PDF Viewer • VNC Viewer • Inbox email • RAS dial-up (option) • Terminal emulation (option) • Firmware upgrade over the network
Environment	Temperature	• Operating: 5 ºC to 40 ºC (41 ºF to 104 ºF) • Storage: -40 ºC to 60 ºC (-4 ºF to 140 ºF)
	Relative Humidity	90% maximum, non-condensing
	Operating Altitude Range	0 to 10,000 feet (0 to 3050 meters)
	Power	Full range auto-sensing 100 ~ 240 VAC at 50 Hz ~ 60 Hz • 10 Watts
Regulatory Compliance		• UL • C-UL • TUV • FCC Class B • CE mark
Physical Characteristics	Dimension (WxDxH)	194.5 x 151.5 x 40 (mm)
	Weight	0.65 Kg

23xx and 27xx Models

ITEM	SPECIFICATIONS
Processor	• **23xx**. SIS 552 integrated processor, video, and I/O • **27xx**. Transmeta 667MHz

Communication and Ports	• Microsoft RDP and Citrix ICA protocol compliant
	• 10/100 auto sensing Ethernet, Twisted Pair (RJ45)
	• One parallel port (DB-25 Female connector)
	• One serial port with RS-232C (DB-9 male connectors)
	• Enhanced ps/2 keyboard interface
	• Enhanced ps/2 mouse interface
	• PCI slot
	• PCMCIA slot supporting wireless LAN adapter
	• USB ports
	   o **23xx**. Two
	   o **27xx**. Four
	• Audio out and Microphone in

Embedded O.S.	Microsoft Windows CE.net 4.2 with Microsoft IE 6.0 browser
Video	• SVGA • 640x480, 800x600, and 1024x768 with high colors • 1600 x 1200 with 256 colors • Refresh frequency up to 85 Hz
Memory	• SDRAM -- 64 MB SDRAM standard. (Max. 256MB) • Flash -- 32 MB DOC
Server Operating System Support	• Microsoft Windows 2003 Server • Microsoft Windows 2000 (Server Edition) • Microsoft Windows NT 4.0 (TSE) • Citrix MetaFrame XP • Citrix MetaFrame • Citrix WinFrame

Appendix 1. Specifications

ITEM		SPECIFICATIONS
Optional Devices		• Touch Screen (Serial or USB) • USB storage • Wireless LAN adapter, 802.11b (PCMCIA) • USB to COM port adapter
Software Features		• Remote Management client • SNMP support • Time zone and SNTP support • Terminal access password for security • Multi-session Autostart with Fail-over • LPD & ThinPrint support • Virtual Private Network support • Office Viewers and PDF Viewer • VNC Viewer • Inbox email • RAS dial-up • PowerTerm terminal emulation • PPoE • PXE • Wake on LAN (WOL) • Firmware upgrade over the network
Environment	Temperature	• Operating: 5 ºC to 35 ºC (41 ºF to 95 ºF) • Storage: -10 ºC to 60 ºC (14 ºF to 140 ºF)
	Relative Humidity	90% maximum, non-condensing
	Operating Altitude Range	0 to 10,000 feet (0 to 3050 meters)
	Power	• Full range auto-sensing 100 ~ 240 VAC at 50 Hz ~ 60 Hz
Regulatory Compliance		• UL • FCC Class B • CE mark
Physical Characteristics	Dimension (WxDxH)	9.25 x 6.5 x 1.5 (inches)
	Weight	3 pounds

Appendix 2. TCP/IP Error Codes

Here is a comprehensive list of standard TCP/IP error codes that can occur during network operation. Some of them are quite esoteric and may not be applicable to YES*tation* operation, but this list should include any networking error code that you encounter. They should be useful in troubleshooting network errors, many of which are caused by incorrect configuration.

10004
Interrupted function call.

10013
Permission denied.

10014
Bad address.

10022
Invalid argument.

10024
Too many open sockets.

10035
Resource temporarily unavailable.

10036
Operation now in progress. A blocking operation is in progress.

10037
Operation already in progress.

10038
Socket operation on non-socket.

10039
Destination address required.

10040
Message too long.

10041
Protocol wrong type for socket.

10042
Bad protocol option.

10043
Protocol not supported.

10044
Socket type not supported.

10045
Operation not supported.

10046
Protocol family not supported.

10047
Address family not supported by protocol family.

10048
Address is already in use. If you attempt to set up a server on a port that is already is in use, you will get this error.

10049
Cannot assign requested address.

10050
Network is down.

10051
Network is unreachable.

10052
Network dropped the connection on reset.

10053
Software caused the connection to abort, usually due to connection or protocol error.

10054
Connection reset by peer. This occurs when an established connection is shut down for some reason by the remote computer.

10055
No buffer space available.

10056
Socket is already connected.

10057
Socket is not connected.

10058
Cannot send after socket shutdown.

10060
Connection timed out.

10061

Connection refused. You will usually see this error when a server refuses a connection from a client, because the server is not listening on that port.

10064

Host is down.

10065

No route to host.

10067

Too many processes.

10091

Network subsystem is unavailable.

10092

Unsupported version of WINSOCK.DLL.

10093

TCP networking has not been initialized on your computer.

10094

Graceful shutdown in progress.

11001

Host not found. (DNS error.)

11002

Non-authoritative host not found. Temporary DNS error.

11003

Non-recoverable error. (DNS error.)

11004

Valid name, no data record of requested type. (DNS error.)