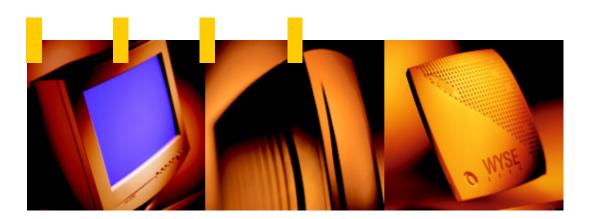
# Winterm<sup>™</sup> 3000 Series Windows<sup>®</sup>-based Terminal

Administrators Guide





# Winterm 3000 Series Windows<sup>®</sup>-based Terminal Administrators Guide

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Wyse Technology Inc. 3471 North First Street San Jose, CA 95134-1803

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

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

## Caution

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

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Models 3200LE, 3320SE, 3350SE, 3360SE, and 3720SE terminals meet Class B requirements.

## **Canadian DOC Notices**

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

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# **About the Administrators Guide**

The *Winterm 3000 Series Windows-based Terminal Administrator's Guide* contains the information you will need to install, configure, connect, and troubleshoot a WBT (Windows-based Terminal). This guide is written for network system administrators and covers the Models 3200LE, 3320SE, 3350SE, 3360SE, and 3720SE terminals.

# **Guide Overview**

The administrator's guide consists of the following chapters:

- Terminal Installation
- Advanced User Interface
- Connection Configuration
- External Devices
- Firmware Upgrades
- Client Security
- Getting Help

This guide contains information about:

- Terminal specifications and installations
- The WBT user interface
- Physical and network connections, and protocols supported
- Firmware upgrades
- Terminal security
- Getting help

# **Guide Conventions**

# **Text Format**

Table 1 lists the text format conventions used in this document.

Table 1 Text Format Conventions

Convention	Where Used
Italic	New term, book title or emphasis.
Bold	Screen display, keycaps, and user input.
Vote Note	This convention indicates a note. A note adds information.
⊠ Caution	This convention indicates a caution. A caution indicates actions that may cause damage to equipment, erase files, or destroy data.
+	Keystroke sequences such as:
	Ctrl+Alt+Del
1	Instructions about invoking a menu such as:
	Network   SNMP Network   Location

# **User Interface Menu Control**

Table 2 describes the command buttons used for user interface menu control on a 3000 series WBT.

Command Button	Function
X	Found in the upper right corner of a dialog box. Click on this command button to quit a dialog box or properties sheet without saving changes.
ок	Found in dialog boxes and on properties sheets. Click on this command button to save your changes and quit a dialog box or properties sheet.
Cancel	Found in dialog boxes and on properties sheets. Click on this command button at any time to quit a dialog box or properties sheet without saving changes.
Apply	Found in dialog boxes and on properties sheets. Click on this command button to save changes without quitting a dialog box or properties sheet.
Next or Accept	Found in wizards. Click on these command buttons to display the next dialog box in the sequence.
Back	Found in wizards. Click on this command button to return to the previous dialog box.
Finish	Found in wizards. Click on this command button to finish the wizard.

Table 2 User Interface Menu Control

ххх

# **Terminal Installation**

- 1 Model 3200LE Terminal Installation
- 2 Model 3320SE Terminal Installation
- 3 Model 3350SE Terminal Installation
- 4 Model 3360SE Terminal Installation
- 5 Model 3720SE Terminal Installation

# 1

# Model 3200LE Terminal Installation

This section discusses the procedures for installing the 3200LE terminal. The following paragraphs describe how to set up and connect the terminal in the freestanding position.

Note Optional desktop stand and wall-mount kits are

available. For more information call 1-800-800-WYSE (9973).

# Locating the Terminal

Position the terminal on a clean, horizontal surface that is free from vibration and out of direct sunlight. Refer to "Windows-based Terminal Specifications" for environmental specifications.

# **Connecting the Terminal**

Make all connections to the back panel before connecting the terminal to power. Figure 1-1 shows the terminal's back panel connectors.

#### Figure 1-1 3200LE Terminal Back Panel Connectors

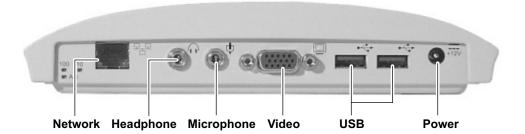


Table 1-1 summarizes the back panel connectors.

Connector	Description
Network	LAN connector, 10/100Base-T
Headphone	Audio output jack for headphones
Microphone	Audio input jack for microphones
Video	Monitor connector
USB (2)	USB ports
Power	Power connector

 Table 1-1
 3200LE Terminal Back Panel Connectors

Proceed as follows to connect the terminal.

- 1. Connect the monitor to the Video connector.
- 2. Connect the keyboard to either USB port.

# Mote

You can also connect the keyboard using a USB hub or a multiple-port Digi device.

- **3.** Connect the mouse to the Mouse connector on the numeric keypad side of the keyboard.
- **4.** If you will be using a network connection, connect a 10Base-T or 100Base-T network cable to the LAN connector.
- 5. Connect the power supply cable to the Power connector.

#### Caution

Do not force a connector into its socket. If any undue resistance is encountered, ensure that the connector is oriented correctly to the socket.

- 6. Plug the AC cord into the power supply, then into an AC outlet.
- 7. After the cables are connected, install the terminal in its planned location.

# **Turning On the Terminal**

The terminal is powered-up and operating when the power supply is connected to AC power. To toggle the display off or on, press and release the power management button. If the button is continuously depressed for 3-5 seconds, the unit will perform a hard boot. See Figure 1-2 for the location of the power management button.

#### Figure 1-2 3200LE Power Management Button



The logo will appear on the screen, followed by:

- The Setup Wizard, if it is the first time that you have turned on your terminal.
- The Winterm Connection Manager dialog box, if the Setup Wizard has been completed.

If desired, adjust the display's geometry and intensities to your preferences. Adjustments to the display can be made at any time, whether or not the terminal is connected to a server. See "Changing Terminal Properties" for more information.

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# 2

# Model 3320SE Terminal Installation

This section discusses the procedures for installing the 3320SE terminal. The terminal can be freestanding or, optionally, mounted on a wall. The following paragraphs describe how to connect and set up a terminal in both configurations.

# Locating the Terminal

Position the terminal on a clean, horizontal surface that is free from vibration and out of direct sunlight. Refer to "Windows-based Terminal Specifications" for environmental specifications.

# **Connecting the Terminal**

Make all connections to the back panel before connecting the terminal to power. A shroud and cable retaining loop (described in "Shroud and Cable Retaining Loop Attachment") can be installed after the cables are connected and the terminal is mounted in place. Figure 2-1 shows a terminal's back panel connectors.

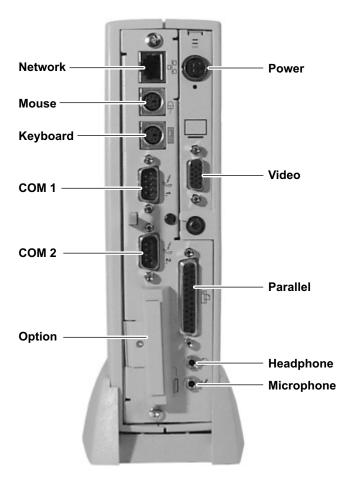


Figure 2-1 3320SE Terminal Back Panel Connectors

The following table summarizes the back panel connectors' functions.

Connector	Description	
Network	LAN connector, 10/100Base-T	
Com1	Serial port 1:	
	<ul> <li>Can be connected to an external modem.</li> <li>Can be used for a direct connection to a local server.</li> <li>Can be connected to a serial printer.</li> </ul>	
Com2	Serial port 2:	
	<ul> <li>Can be connected to an external modem.</li> <li>Can be used for a direct connection to a local server.</li> <li>Can be connected to a serial printer.</li> </ul>	
Parallel Port	Local printer output	
Video	Monitor interface	
Keyboard	Keyboard interface	
Mouse	Mouse interface	
Power	Power module output cable interface	
Option	PCMCIA card slot	
Headphone	Audio output for headphones	
Microphone	Audio input for microphones	

Table 2-1 3320SE Terminal Back Panel Connectors

Proceed as follows to connect the terminal. If necessary, remove the desktop mounting stand (one Phillips-head screw on the bottom).

### Mote

Before connecting the cables, decide which mounting configuration will be used and ensure that the cables are of the correct lengths. If permanent desktop or wall-mounting configuration is to be used, drill the desktop mounting holes or install the mounting bracket wall anchors before connecting the cables.

- 1. Connect the monitor to the Video connector.
- 2. Connect the keyboard to the Keyboard connector.
- 3. Connect the mouse to the Mouse connector.
- **4.** If you will be using a network connection, connect a 10Base-T or 100Base-T network cable to the Network connector. Depending on your configuration needs, connect a printer to the parallel port, and/or connect a modem/server serial cable or serial device to the serial ports, as appropriate.
- 5. Connect the power supply output cable to the Power connector.

#### Caution

Do not force a connector into its socket. If any undue resistance is encountered, ensure that the connector is oriented correctly to the socket.

- 6. Plug the AC cord into the power supply, then into an AC outlet.
- 7. After the cables are connected, install the terminal in its planned location, either on a desktop or mounted to a wall.

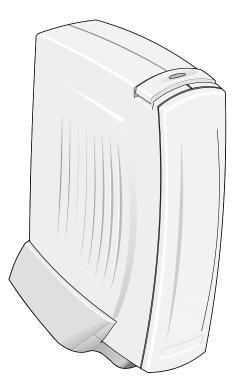
# **Mounting the Terminal**

The terminal can be freestanding or attached to a wall (an optional wall mount kit is required). Instructions for mounting your terminal are provided in the following paragraphs; use the instructions that are appropriate for the desired method of mounting your terminal.

#### **Freestanding Desktop Mounting**

The terminal is shipped with a desktop mounting stand attached so it can immediately be put into desktop operation. The mounting stand is weighted and equipped with non-skid feet. A single screw attaches the mounting stand to the terminal housing. The following figure shows the terminal mounted on the desktop mounting stand.

#### Figure 2-2 3320SE Freestanding Desktop Mounting



# Wall Mounting

The terminal can be mounted on a wall using the optional wall-mounting bracket. The following figure shows the wall-mount configuration.



It is best to connect the cables before mounting the terminal on a wall. However, cables can be attached at any convenient time, as long as power is disconnected.

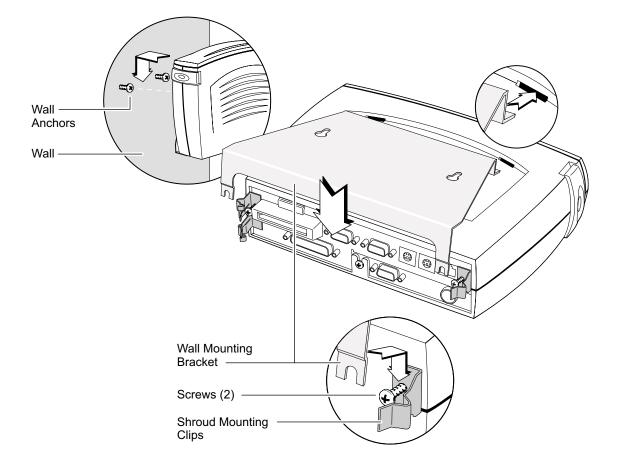


Figure 2-3 3320SE Optional Wall Mount Configuration

Follow these instructions to mount the terminal on a wall.

#### Caution

The following procedure has the bracket mounted to the terminal first, and then the complete assembly is placed on wall-anchor screws. If there is any risk that the terminal could be bumped from its mounting, the bracket should be securely anchored to the wall first, and then the terminal housing mounted to the bracket.

- 1. Use the wall-mount bracket as a template to determine the positions of the mounting holes on the wall.
- 2. Mark the locations of the mounting holes.

#### Mote

When determining location, take into account the cable lengths of the monitor, keyboard, mouse, power supply, and peripherals.

- **3.** Install the (user-provided) wall anchors. Any standard anchoring method may be used, such as screws, butterfly anchors, or expansion bolts. The anchor screw heads must have just enough clearance to allow the bracket to slip onto them when hanging the assembled terminal (see the Caution above).
- 4. Loosen (but do not remove) the two screws securing the mounting clips to the back panel. Leave enough clearance so the lower tabs of the mounting bracket can slip under the screws.
- **5.** Insert the upper tabs of the mounting bracket into the slotted holes in the back of the terminal housing.
- **6.** Slip the lower tabs of the mounting bracket under the two screws loosened in step 4. The tabs should go between the screw heads and the mounting clips.
- 7. Tighten the screws to hold the bracket firmly in place.
- 8. Hang the terminal assembly on the wall-anchor mounting screws.
- **9.** Install the cable retaining loop and shroud using the procedure that follows.

# **Cable Retaining Clip and Shroud Installation**

The plastic shroud may be installed to conceal the cable connectors at the rear of the terminal housing. A retaining loop is included to keep the cables together. Proceed as follows.

- 1. Attach the upper and lower shroud mounting clips as shown in Figure 2-5, using the existing screws.
- **2.** Attach the cables to their respective connectors on the back panel of the terminal (see "Connecting the Terminal").
- **3.** Gather the cables together and place the retaining loop over them. Insert the ends of the retaining loop into the catches on the lower shroud mounting clip (see the following figure).

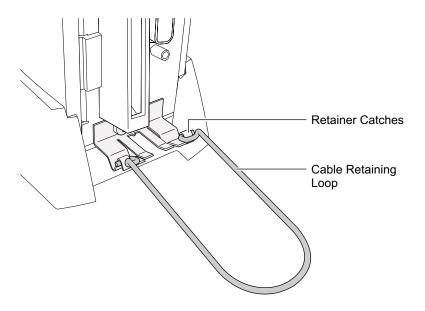
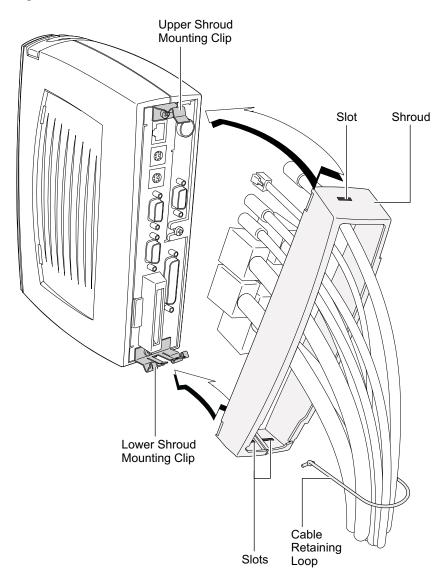


Figure 2-4 3320SE Cable Retaining Clip Installation

- 4. Gently pull the lower ends of the shroud apart and place it over the cables.
- **5.** Place the slots in the lower end (split end) of the shroud under the lower shroud mounting clip, as shown in the following figure.
- **6.** Rotate the upper end of the shroud until the top slot goes over and engages the upper mounting clip, as shown in the following figure.

Figure 2-5 3320SE Shroud Installation



# **Turning On the Terminal**

The 3320SE terminal is powered-up and operating when the power supply is connected to AC power. To toggle the display off or on, press and release the power management button.

#### Mote

If the button is continuously depressed for 3-5 seconds, the unit will perform a hard boot.

See the following figure for the location of the power management button.



Figure 2-6 3320SE Power Management Button

The logo will appear on the screen, followed by:

- The Setup Wizard, if it is the first time that you have turned on your terminal.
- The Winterm Connection Manager dialog box, if the Setup Wizard has been completed.

If desired, adjust the display's geometry and intensities to your preferences. Adjustments to the display can be made at any time, whether or not the terminal is connected to a server. See "Changing Terminal Properties" for more information.

# 3

# Model 3350SE Terminal Installation

This section discusses the procedures for installing the 3350SE enhanced modular terminal. This terminal can be freestanding or, optionally, mounted on a wall. It can instead be permanently mounted on a desktop, if desired. The following paragraphs describe how to connect and set up the terminal in all three configurations.

# Locating the Terminal

Position the terminal on a clean, horizontal surface that is free from vibration and out of direct sunlight. Refer to "Windows-based Terminal Specifications" for environmental specifications.

# **Connecting the Terminal**

Make all connections to the back panel before connecting the terminal to power. A shroud (described in "Shroud Attachment") can be installed after the cables are connected and the terminal is mounted in place. Figure 3-1 shows the terminal's back panel connectors.

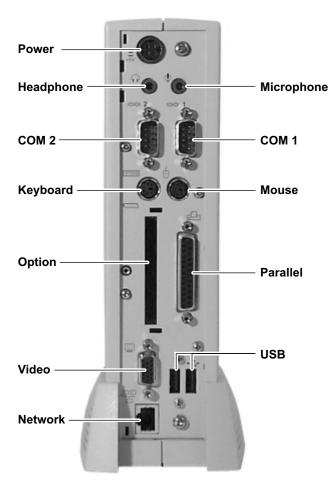


Figure 3-1 3350SE Terminal Back Panel Connectors

Table 3-1 summarizes the back panel connectors' functions.

Connector	Description	
Network Connector	LAN connector, 10/100Base-T	
Com1	Serial port 1:	
	<ul> <li>Can be connected to the external modem or used for direct connection to a local server.</li> </ul>	
	<ul> <li>Can be used for the emergency download of the operating system programs from the host computer.</li> </ul>	
	Can be connected to a serial printer.	
Com2	Serial port 2:	
	<ul> <li>Can be connected to an external modem.</li> <li>Can be used for a direct connection to a local server.</li> </ul>	
	Can be connected to a serial printer.	
Parallel Port	Local printer output	
Video	Monitor interface	
Keyboard	Keyboard interface	
Mouse	Mouse interface	
Power	Power module output cable interface	
Card Bus	PCMCIA card slot	
Headphone	Audio output for headphones	
Microphone	Audio input for microphones	
USB	Universal Serial Bus	

 Table 3-1
 3350SE Terminal Back Panel Connectors

Proceed as follows to connect the terminal:

#### Mote Note

Before connecting the cables, decide which mounting configuration will be used and ensure that the cables are of the correct lengths. If permanent desktop or wall-mounting configuration is to be used, drill the desktop mounting holes or install the mounting bracket wall anchors before connecting the cables.

- 1. Connect the monitor to the Video connector.
- 2. Connect the keyboard to the Keyboard connector.
- 3. Connect the mouse to the Mouse connector.
- 4. If you will be using a network connection, connect a CAT5 UTP cable to the Network connector. Depending on your configuration needs, connect a printer to the parallel port and/or connect a modem/server serial cable to the serial ports, as appropriate.
- 5. Connect the power supply output cable to the Power connector.

#### Caution

Do not force a connector into its socket. If any undue resistance is encountered, ensure that the connector is oriented correctly to the socket.

- 6. Plug the AC cord into the power supply, then into an AC outlet.
- After the cables are connected, install the terminal in its planned location, either on a desktop or mounted to a wall (see the next section "Mounting the Terminal").

### Mounting the Terminal

The terminal can be freestanding, attached to a wall (an optional wall mount kit is required), or mounted permanently on a desktop. Instructions for mounting your terminal are provided in the following paragraphs; use the instructions that are appropriate for the desired method of mounting your terminal.

#### **Freestanding Desktop Mounting**

Model 3350SE terminals are built with a desktop mounting stand as part of the housing, so they can immediately be put into desktop operation. The terminal is also weighted and equipped with non-skid feet. "Terminal Features" shows the Model 3350SE terminal.

	2	
,		

Caution

Always mount the terminal vertically, with the base down, to ensure proper cooling.

### **Permanent Desktop Mounting**

If desired, the terminal can be permanently mounted on a desktop. Holes in the base plate are threaded to receive the mounting bolts. Two 6 mm (M6) mounting bolts must be provided by the user.

The mounting bolts must not protrude more than 9 mm (3/8 in) through the top of the desktop mounting surface. Damage to the terminal housing and internal components could occur if the mounting bolts protrude past the tops of the guide holes.

Follow these instructions for permanent desktop mounting:

- 1. Make a template of the desktop mounting holes using the bottom of the terminal, and use it to mark the desktop area where you want to mount the terminal.
- **2.** Drill holes for the mounting bolts through the desktop mounting surface at the marked locations.
- 3. Place the terminal in position over the holes drilled in the desktop.
- **4.** Insert the mounting bolts up through the holes in the desktop and into the threaded holes in the terminal base plate. Tighten the bolts until snug.

#### **Wall Mounting**

The terminal can be mounted on a wall using the optional wall-mounting bracket. Figure 3-2 shows the wall-mount configuration.



For wall mounting, it is generally best to connect the cables before mounting the terminal on a wall. However, cables can be connected at any convenient time, as long as power is disconnected.

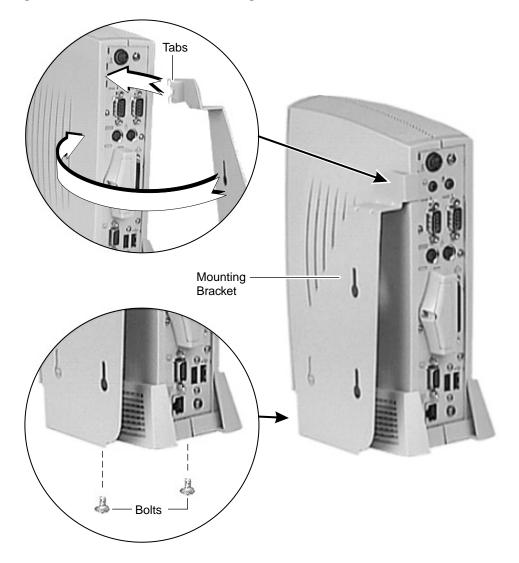


Figure 3-2 3350SE Wall Mount Configuration

Follow these instructions to mount the terminal on a wall:

# Mote

The following procedure has the bracket mounted to the terminal first, and then the complete assembly is placed on wall anchor screws. 1. Use the wall-mount bracket as a template to determine the positions of the mounting holes on the wall, then mark the locations of the mounting holes.

### Mote

When determining location, take into account the cable lengths of the monitor, keyboard, mouse, power supply, and peripherals.

- **2.** Install the (user-provided) wall anchors. Any standard anchoring method may be used, such as screws, butterfly anchors, or expansion bolts.
- 3. Install the anchor screws. The anchor screw heads must have just enough clearance to allow the bracket to slip onto them when hanging the assembled terminal (see the Note above).
- **4.** Insert the tabs at the top of the mounting bracket into the slotted holes in the back of the terminal housing.
- 5. Swing the mounting bracket to the side of the terminal.
- **6.** Insert the mounting bolts up through the holes in the bottom of the mounting bracket and into the threaded holes in the terminal base plate.
- 7. Tighten the mounting bolts to hold the bracket firmly in place.
- 8. Hang the terminal assembly on the wall-anchor mounting screws.
- **9.** Install the cable retaining loop and shroud using the procedure below.

# **Shroud Attachment**

The plastic shroud may be installed to conceal the cable connectors at the rear of the terminal housing.

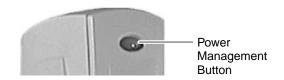
Proceed as follows:

- 1. Attach the cables to their respective connectors on the back panel of the terminal (see "Connecting the Terminal").
- 2. Install the shroud-mounting clips.
- 3. Gently pull the lower ends of the shroud apart and place it over the cables.
- **4.** Place the slots in the lower end (split end) of the shroud under the lower shroud mounting clip.
- **5.** Rotate the upper end of the shroud until the top slot goes over and engages the upper mounting clip.

# **Turning On the Terminal**

Once the terminal is installed and all back panel connections have been made, press and release the power management button (see the following figure) to power-up the terminal.

#### Figure 3-3 3350SE Power Management Button



The logo will appear on the screen followed by:

- The Setup Wizard, if it is the first time that you have powered-up your terminal.
- The Winterm Connection Manager dialog box, if the Setup Wizard has been completed.

If desired, adjust the display's geometry and intensities to your preferences. Adjustments to the display can be made at any time, whether or not the terminal is connected to a server.

# 4

# Model 3360SE Terminal Installation

This section discusses the procedures for installing the 3360SE terminal. The terminal can be freestanding or, optionally, mounted on a wall. The following paragraphs describe how to connect and set up the terminals in both configurations.

# Locating the Terminal

Position the terminal on a clean, horizontal surface that is free from vibration and out of direct sunlight. Refer to "Windows-based Terminal Specifications" for environmental specifications.

# **Connecting the Terminal**

Make all connections to the back panel before connecting the terminal to power. A shroud and cable retaining loop (described in "Shroud and Cable Retaining Loop Attachment") can be installed after the cables are connected and the terminal is mounted in place. Figures 4-1 shows a terminal's back panel connectors.

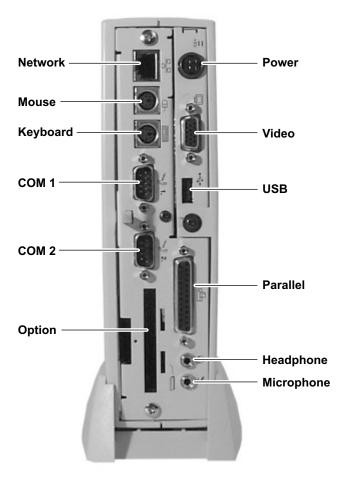


Figure 4-1 3360SE Terminal Back Panel Connectors

The following table summarizes the back panel connectors' functions.

Connector	Description
Network Connector	LAN connector, 10Base-T (10/100Base-T for 3320SE)
Com1	Serial port 1:
	<ul> <li>Can be connected to an external modem.</li> <li>Can be used for a direct connection to a local server.</li> <li>Can be connected to a serial printer.</li> </ul>
Com2	Serial port 2:
	<ul> <li>Can be connected to an external modem.</li> <li>Can be used for a direct connection to a local server.</li> <li>Can be connected to a serial printer.</li> </ul>
Parallel Port	Local printer output
Video	Monitor interface
Keyboard	Keyboard interface
Mouse	Mouse interface
Power	Power module output cable interface
Option Slot	PCMCIA card slot
Headphone	Audio output for headphones
Microphone	Audio input for microphones

Table 4-1 3360SE Terminal Back Panel Connectors

Proceed as follows to connect the terminal. (If necessary, remove the desktop mounting stand (one Phillips-head screw on the bottom.)

### Mote

Before connecting the cables, decide which mounting configuration will be used and ensure that the cables are of the correct lengths. If permanent desktop or wall-mounting configuration is to be used, drill the desktop mounting holes or install the mounting bracket wall anchors before connecting the cables.

- 1. Connect the monitor to the Video connector.
- 2. Connect the keyboard to the Keyboard connector.
- 3. Connect the mouse to the Mouse connector.
- **4.** If you will be using a network connection, connect a 10Base-T or 100Base-T network cable to the Network connector. Depending on your configuration needs, connect a printer to the parallel port, and/or connect a modem/server serial cable to the serial ports, as appropriate.
- 5. Connect the power supply output cable to the Power connector.

#### Caution

Do not force a connector into its socket. If any undue resistance is encountered, ensure that the connector is oriented correctly to the socket.

- 6. Plug the AC cord into the power supply, then into an AC outlet.
- 7. After the cables are connected, install the terminal in its planned location, either on a desktop or mounted to a wall (see the next section "Mounting the Terminal").

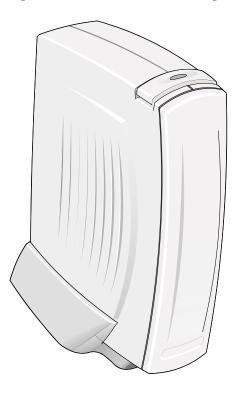
# **Mounting the Terminal**

The terminal can be freestanding or attached to a wall (an optional wall mount kit is required). Instructions for mounting your terminal are provided in the following paragraphs; use the instructions that are appropriate for the desired method of mounting your terminal.

#### Freestanding Desktop Mounting

The terminal is shipped with a desktop mounting stand attached so it can immediately be put into desktop operation. The mounting stand is weighted and equipped with non-skid feet. A single screw attaches the mounting stand to the terminal housing. The following figure shows the terminal mounted on the desktop mounting stand.

#### Figure 4-2 3360SE Freestanding Desktop Mounting



# Wall Mounting

The terminal can be mounted on a wall using the optional wall-mounting bracket. The following figure shows the wall-mount configuration.



It is best to connect the cables before mounting the terminal on a wall. However, cables can be attached at any convenient time, as long as power is disconnected.

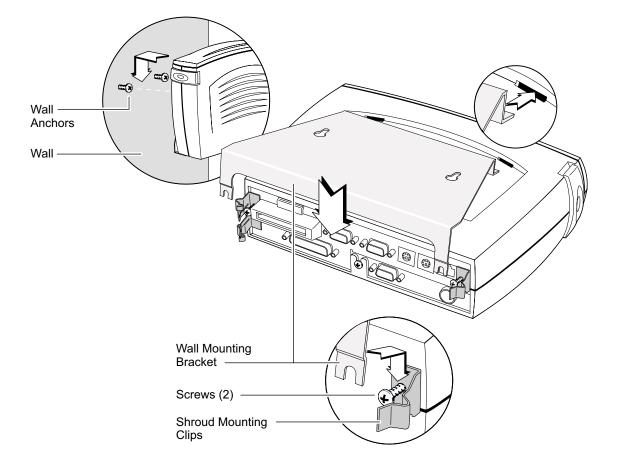


Figure 4-3 3360SE Optional Wall Mount Configuration

Follow these instructions to mount the terminal on a wall.

#### Caution

The following procedure has the bracket mounted to the terminal first, and then the complete assembly is placed on wall-anchor screws. If there is any risk that the terminal could be bumped from its mounting, the bracket should be securely anchored to the wall first, and then the terminal housing mounted to the bracket.

- 1. Use the wall-mount bracket as a template to determine the positions of the mounting holes on the wall.
- 2. Mark the locations of the mounting holes.

#### Mote

When determining location, take into account the cable lengths of the monitor, keyboard, mouse, power supply, and peripherals.

- **3.** Install the (user-provided) wall anchors. Any standard anchoring method may be used, such as screws, butterfly anchors, or expansion bolts. The anchor screw heads must have just enough clearance to allow the bracket to slip onto them when hanging the assembled terminal (see the Caution above).
- 4. Loosen (but do not remove) the two screws securing the mounting clips to the back panel. Leave enough clearance so the lower tabs of the mounting bracket can slip under the screws.
- **5.** Insert the upper tabs of the mounting bracket into the slotted holes in the back of the terminal housing.
- **6.** Slip the lower tabs of the mounting bracket under the two screws loosened in step 4. The tabs should go between the screw heads and the mounting clips.
- 7. Tighten the screws to hold the bracket firmly in place.
- 8. Hang the terminal assembly on the wall-anchor mounting screws.
- **9.** Install the cable retaining loop and shroud using the procedure that follows.

# **Cable Retaining Clip and Shroud Installation**

The plastic shroud may be installed to conceal the cable connectors at the rear of the terminal housing. A retaining loop is included to keep the cables together. Proceed as follows.

- 1. Attach the upper and lower shroud mounting clips as shown in Figure 4-5, using the existing screws.
- **2.** Attach the cables to their respective connectors on the back panel of the terminal (see "Connecting the Terminal").
- **3.** Gather the cables together and place the retaining loop over them. Insert the ends of the retaining loop into the catches on the lower shroud mounting clip (see the following figure).

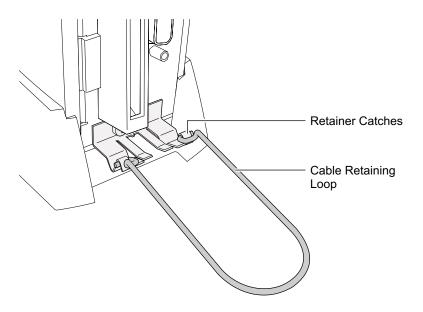
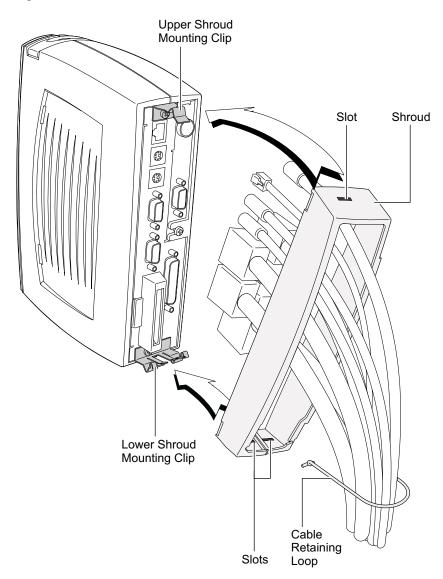


Figure 4-4 3360SE Cable Retaining Clip Installation

- 4. Gently pull the lower ends of the shroud apart and place it over the cables.
- **5.** Place the slots in the lower end (split end) of the shroud under the lower shroud mounting clip, as shown in the following figure.
- **6.** Rotate the upper end of the shroud until the top slot goes over and engages the upper mounting clip, as shown in the following figure.

Figure 4-5 3360SE Shroud Installation



# **Turning On the Terminal**

Once the terminal is installed and all back panel connections have been made, power it up. It is powered-up and operating when the power supply is connected to AC power; to toggle the display off or on, press and release the power management button.

#### Mote

If the button is continuously depressed for 3-5 seconds, the unit will perform a hard boot.

See the following figure for the location of the power management button.



Figure 4-6 3360SE Power Management Button

The logo will appear on the screen, followed by:

- The Setup Wizard, if it is the first time that you have turned on your terminal.
- The Winterm Connection Manager dialog box, if the Setup Wizard has been completed.

If desired, adjust the display's geometry and intensities to your preferences. Adjustments to the display can be made at any time, whether or not the terminal is connected to a server. See "Changing Terminal Properties" for more information.

# 5

# Model 3720SE Terminal Installation

The following section discusses installation of the integrated-CRT terminal.

# Locating the Terminal

Position the terminal on a clean, horizontal surface that is free from vibration and out of direct sunlight. Allow 75 mm (3 in) of clearance on all sides of the terminal, for air circulation and movement of the tilt/swivel mechanism. Refer to "Windows-based Terminal Specifications" for environmental specifications.

# **Connecting the Terminal**

Before powering-up the terminal, connect it to all of its peripheral devices. Figure 5-1 shows the terminal's back panel connectors.

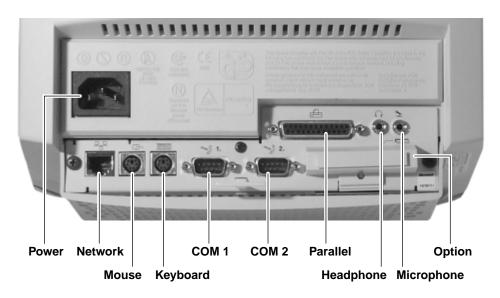


Figure 5-1 3720SE Terminal Back Panel Connectors

The following table summarizes the back panel connectors' functions.

Connector	Description
Network Connector	LAN connector, 10/100Base-T
Com1	Serial port 1:
	<ul> <li>Can be connected to the external modem or used for direct connection to a local server.</li> <li>Can be used for the emergency download of the operating system programs from the host computer.</li> <li>Can be connected to a serial printer.</li> </ul>
Com2	Serial port 2:
	<ul> <li>Can be connected to an external modem.</li> <li>Can be used for a direct connection to a local server.</li> <li>Can be connected to a serial printer.</li> </ul>
Parallel Port	Local printer output
Keyboard	Keyboard interface

 Table 5-1
 3720SE Terminal Back Panel Connectors

Connector	Description
Mouse	Mouse interface
Power	AC power cord interface
Option Slot	PCMCIA card slot
Headphone	Audio output for headphones
Microphone	Audio input for microphones

 Table 5-1
 3720SE Terminal Back Panel Connectors, Continued

Follow these instructions to connect the terminal to its peripheral devices:

- 1. Connect the keyboard to the Keyboard connector.
- 2. Connect the mouse to the Mouse connector.
- 3. Plug the AC cord into the back panel of the terminal, then into an AC outlet.
- 4. Connect a 10Base-T network cable to the Network connector.

The terminal is now ready for operation.

# **Turning On the Terminal**

The 3720SE terminal is powered-up and operating when the power supply is connected to AC power. To toggle the display off or on, press and release the power management button.

#### Mote Note

If the button is continuously depressed for 3-5 seconds, the unit will perform a hard boot.

See the figure on the following page for the location of the power management button.

The logo will appear on the screen, followed by:

- The Setup Wizard, if it is the first time that you have turned on your terminal.
- The Winterm Connection Manager dialog box, if the Setup Wizard has been completed.

Make sure that the display's geometry and intensities are set to your preferences. This can be done at any time, whether or not the terminal is connected to a server. If your terminal is installed with an optional touchscreen, calibrate it now. Refer to "Input Configuration" for the procedure.

#### **Display Adjustments**

The following sections explain how to adjust the screen's brightness, contrast, horizontal and vertical size and phase, pincushion, and trapezoid.

The terminal uses an OSD (on-screen display) adjustment feature. The OSD is invoked with the buttons on the front panel (see **Terminal Front Panel** below).

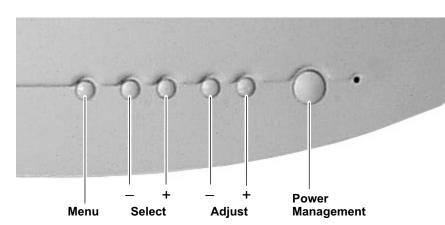


Figure 5-2 3720SE Terminal Front Panel

Button	Function
MENU (OSD)	To use:
	<ol> <li>Press the MENU button to invoke the OSD (refer to the following figure).</li> </ol>
	<ol> <li>Press the plus [+] or minus [-] SELECT buttons to select the adjustment you want to make (see the following table, OSD Alignment, for settings).</li> </ol>
	<ol> <li>Press the ADJUST plus [+] or minus [-] buttons to make your adjustment.</li> </ol>
	<ol> <li>Press MENU to save your adjustments and close the OSD.</li> </ol>
	Note The OSD can be invoked at any time the terminal is on, even while running an application. It automatically closes after a period of inactivity (2 minutes). If this happens before you complete your adjustments, press the <b>MENU</b> button to invoke the OSD again.
SELECT (Brightness)	Press the plus [+] and minus [-] buttons on the terminal's front panel to increase or decrease the display's brightness.
ADJUST (Contrast)	Press the plus [+] and minus [-] buttons on the terminal's front panel to increase or decrease the display's contrast.

Table 5-2 3720SE Terminal Front Panel

#### Figure 5-3 3720SE OSD (On-Screen Display) Menu

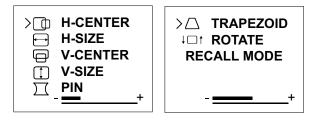
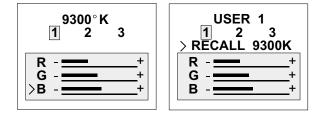


Table 5-3 describes the functions of the OSD menu.

Table 5-3 3720SE OSD Menu

Function	Description
H-CENTER	H-CENTER adjusts the screen's horizontal center from left to right.
H-SIZE	H-SIZE adjusts the screen's width.
V-CENTER	V-CENTER adjusts the screen's vertical center, top to bottom.
V-SIZE	V-SIZE adjusts the screen's height.
PIN	<b>PIN</b> (Pincushion) adjusts screen distortion, where both sides of the display sag inward toward the center or bow outward from it.
TRAPEZOID	<b>TRAPEZOID</b> adjusts the screen's right- and left-hand sides so they are parallel.
ROTATE	<b>ROTATE</b> corrects the screen's rotation. Use this function if the display tilts left or right.
RECALL MODE	Select this item to reset the display to the factory preset color temperatures (also see the following figure):
	RECALL MODE Preset 1 is 9300 <sup>o</sup> K Preset 2 is 6550 <sup>o</sup> K Preset 3 is 5500 <sup>o</sup> K
	The color adjustments are:
	<b>R</b> This adjusts the display's red hues.
	<b>G</b> This adjusts the display's green hues.
	<b>B</b> This adjusts the display's blue hues.



42 Terminal Installation

### **Advanced User Interface**

- 6 Initial Terminal Setup
- 7 Changing Terminal Properties
- 8 Network Configuration
- 9 Additional Terminal Applications
- 10 ICA Client Settings

## Initial Terminal Setup

The **Setup Wizard** is used for initial setup of the terminal's properties. The wizard runs when:

- You power-up your terminal for the first time.
- Your terminal has been restarted with a G key reset.
- A new image has been downloaded to your terminal but is older than the image currently in use.
- You use the **Reset the Terminal to Factory-Default Property Settings** function on the **General** properties sheet.

#### **Using the Setup Wizard**

The **Setup Wizard** lets you set terminal network configuration and terminal display parameters. There are six dialog boxes that display in succession during the process. Each dialog box is self-explanatory. Some dialog boxes are informational and require no user input. Other dialog boxes will prompt you for network and display information. See Figure 6-1 to view the first dialog box of the wizard.

#### Mote 🗹

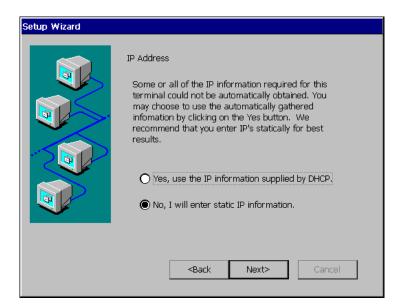
Any future changes can be made using the **Terminal Properties** dialog box. You can launch this dialog box from the **Winterm Connection Manager** by pressing the **F2** key. See "Resetting Terminal Properties."

#### Figure 6-1 Welcome Dialog Box

Setup Wizard	
	Attempting to AutoConfigure Press "Next>" to skip Auto Configuration and continue with this Setup Wizard. Countdown in second: 14 Copyright © 1999, WYSE Technology Inc. Product ID: 00000000-0000-0000-0000-0080640C210A Welcome This wizard will help you set up your terminal to connect to a Windows Terminal Server.
	<back next=""> Cancel</back>

This dialog box is mostly informational, providing product information. The one function the **Welcome** dialog box carries is a countdown:

- Click on **Next** during the countdown to zero to continue with the wizard.
- Let the count go to zero to auto configure the terminal.



Click on one of the two radio buttons to select a method for supplying IP addresses. The buttons are mutually exclusive, with **No**, I will enter static IP information as the default:

- If you keep the default and click on **Next**, the **Specify an IP Address** (Figure 6-3) will display, followed by the **Optional Information** dialog box.
- If you select Yes, use the IP information supplied by DHCP and click on Next, the Optional Information dialog box will display, skipping the Specify an IP Address dialog box.

#### Figure 6-2 IP Address Dialog Box

Figure 6-3 Specify an IP Address Dialog Box

Setup Wizard	
	Specify an IP Address You must specify the following network information. If you do not know this information, ask your network administrator.
	IP Address:
	<back next=""> Cancel</back>

Enter the addressing information requested in the fields provided. By default the fields are blank.

	Fill in the following optional information to configure the terminal's name resolution.
	r 🗖 Enable DNS
	Default Domain Name:
	Primary Server IP:
	Secondary Server IP:
. Sel	
	Pri <u>m</u> ary Server IP:
	Se <u>c</u> onday Server IP:
	<back next=""> Cancel</back>

#### Figure 6-4 Optional Information Dialog Box

Check a box to enable name resolution:

- Enable DNS Enables Domain Name Services
- Enable WINS Windows Internet Naming Services

Enter the information in the text fields that are activated. By default the check boxes are unselected and the text fields are inactivated.

Figure 6-5 Desktop Area and Refresh Frequency Dialog Box

Setup Wizard	
	Desktop Area and Refresh Frequency The best available Desktop Area (resolution) and Refresh Frequency has been selected for you. You may choose other combinations from the list. Desktop Area and Refresh Frequency 540 x 480 @ 60Hz Test
	< <u>Back</u> Next> Cancel

The following table discusses the functions of the **Desktop Area and Refresh Frequency** dialog box.

Table 6-1	Desktop Area and Refresh Frequency Dialog Box
-----------	-----------------------------------------------

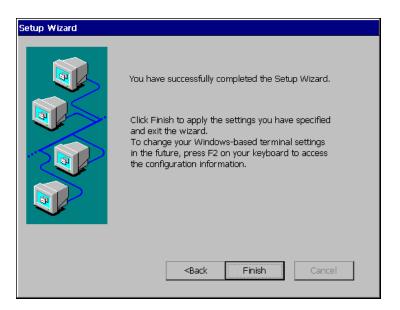
Function	Description	
Desktop Area and Refresh Frequency	Select from the scroll list to set your resolution. Other settings are:	
	Best Available Using DDC Supported in all terminals.	
	640 x 480 @ 60Hz Supported in all terminals.	
	640 x 480 @ 75Hz Supported in all terminals.	
	640 x 480 @ 85Hz Supported in all terminals.	
	800 x 600 @ 60Hz Supported in all terminals.	

#### Table 6-1 Desktop Area and Refresh Frequency Dialog Box

Function	Description	
	800 x 600 @ 75Hz Supported in all terminals.	
	800 x 600 @ 85Hz Supported in all terminals.	
	<b>1024 x 768 @ 60Hz</b> Supported in all terminals.	
	<b>1024 x 768 @ 75Hz</b> Supported in all terminals.	
	<b>1024 x 768 @ 85 Hz</b> Supported in all terminals.	
	<b>1280 x 1024 @ 65 Hz</b> Supported in the 3350SE, 3360SE and 3720SE terminals.	
Test	Click on this command button to test the selection you made in <b>Desktop Area and Refresh Frequency</b> . The following dialog box displays:	
	Testing Mode       Image: Comparison of the set to the new mode will be tested. Your graphics adapter will be set to the new mode temporarily so you can determine whether it works properly. Please press OK and then wait 5 seconds.         OK       Cancel	

Follow the instructions on the dialog box to continue.

#### Figure 6-6 Finish Dialog Box



This dialog box is informational.

Click on the **Finish** command button to apply your selections and quit the **Setup Wizard**. After the **Setup Wizard** closes, the **Terminal Settings Change** dialog box displays. See "Resetting Terminal Properties" for further information.

## **Changing Terminal Properties**

Terminal properties can be changed or reconfigured at any time during normal terminal operation using the **Terminal Properties** dialog box. Figure 7-1 shows this dialog box.

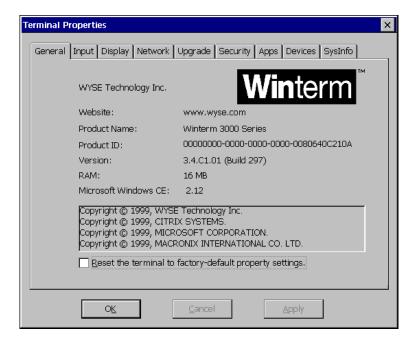


Figure 7-1 Terminal Properties Dialog Box

#### Mote

The amount of RAM that is available depends on the model of terminal in use.

#### **Using the Terminal Properties Dialog Box**

Invoke this dialog box by pressing the **F2** key from the **Winterm Connection Manager**.

The **Terminal Properties** dialog box consists of a total of nine properties sheets that can be invoked by clicking on their individual tabs. The following five sheets are used to change terminal properties:

- Network discussed in "Network Configuration."
- Upgrade discussed in "FTP Pull Firmware Upgrades."
- Security discussed in "Security Properties."
- Apps discussed in "Additional Applications."
- Devices discussed in "Dial-Up Connections."

These properties sheets are discussed in detail in the following chapters of this guide. The **General**, **SysInfo**, **Input**, and **Display** properties sheets are discussed in "General Terminal Information" and "Display and Keyboard/Mouse Configuration" in the *Winterm 3000 Series WBT Users Guide*.

#### **Resetting to Factory Defaults**

There is one function on the **General** properties sheet, **Reset the Terminal to Factory Default Property Settings**. Use this function to reset the terminal to factory default settings:

- 1. Click on the **Reset the Terminal to Factory Default Property Settings** check box. Figure 7-2 shows the dialog box that displays.
- 2. Click on Yes to return to the Terminal Properties dialog box.
- Click on OK in the Terminal Properties dialog box. (The System Settings Change dialog box displays. See "Shutting Down the Terminal" for more information about this dialog box).
- 4. Click on **Restart** in the **System Settings Change** dialog box to reset to factory defaults.

#### Figure 7-2 System Settings Change Dialog Box



#### **Terminal Settings Change Dialog Box**

When you change terminal properties using the **Setup Wizard** or the **Terminal Properties** dialog box, you will click on either the **Finish** or **OK** command button to save your new settings and close the application. The **Terminal Settings Change** dialog box will then display. Figure 7-3 shows the **Terminal Settings Change** dialog box.

#### Figure 7-3 Terminal Settings Change Dialog Box



This dialog box contains the **Restart** command button. The terminal must be restarted in order for your new settings to take effect. Click on **Restart** to restart the terminal. The **Winterm Connection Manager** displays. See "Connections Management" for detailed information about configuring and making terminal connections.

## **Network Configuration**

The **Network** properties sheet lets you configure your network. See Figure 8-1 to view this properties sheet.

Figure 8-1	Network	<b>Properties</b>	Sheet
------------	---------	-------------------	-------

Terminal Properties	×
General Input Display Network Upgrade Security Apps Devices SysInfo	
Obtain an IP address from a DHCP server C Specify an IP address	
IP Address:	
Subnet Mask:	
Gateway:	
Network Speed: Auto Detect	
O <u>K</u> <u>C</u> ancel <u>A</u> pply	

#### **Using the Network Properties Sheet**

To invoke this properties sheet:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Network tab.

The following table discusses the functions of the **Network** properties sheet.

 Table 8-1
 Network Properties Sheet

Function	Description
Obtain an Address from a DHCP Server	Click on this radio button to enable DHCP addressing. An IP address will be automatically assigned to your terminal by the DHCP server.
Specify an IP Address	Use this group box to enter a specific IP address.
	IP Address Enter a static IP address in this field.
	Subnet Mask Enter the subnet mask of the IP address.
	Gateway Enter the gateway of the IP address.
Network Speed	Use this scroll list to select a network communication speed. The choices are (in Mb/s):
	<ul> <li>Auto Detect</li> <li>10 Mbs - Half Duplex</li> <li>10 Mbs - Full Duplex</li> <li>100 Mbs - Half Duplex</li> <li>100 Mbs - Full Duplex</li> </ul>

#### Table 8-1 Network Properties Sheet

Function	Description
Advanced Network	Click on this command button to invoke the <b>Advanced</b> <b>Network Settings</b> dialog box:
	Advanced Network Settings
	Default Domain: AcmeCo.com
	Primary Server IP Address: <a href="https://www.example.com">IP Address</a> Secondary Server IP Address: <a href="https://www.example.com">IP Address</a>
	Enable WINS
	Primary Server IP Address: <a href="https://www.server.com">KIP Address</a>
	Secondary Server IP Address: <a href="https://www.server.com">KIP Address&gt;</a>

The **Advanced Network** command button is activated when **Specify an IP Address** is selected. By default this command button is deactivated.

#### **Enable DNS**

Use this group box to set domain, primary, and secondary IP addresses for DNS. Enable the function by clicking to check **Enable DNS**. The default for the function is disabled

#### **Enable WINS**

Use this group box to set the primary and secondary IP addresses of a WINS server. Enable the function by clicking to check **Enable WINS**. The default for the function is disabled.

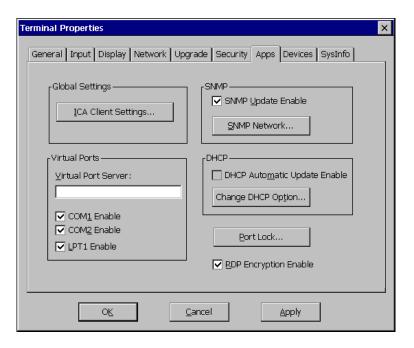


If you do not know your network's communication speed or whether the communication link should be half- or full-duplex, contact your system administrator.

# Additional Terminal Applications

The **Apps** properties sheet contains functions for ICA, RDP, virtual port, DHCP, and SNMP management options. See Figure 9-1.

SE model terminals display an **Apps** properties sheet that is different from that on Model 3200LE terminals.



#### Figure 9-1 Apps Properties Sheet (SE Model Terminals)

#### Using the Apps Properties Sheet for SE Model Terminals

To invoke the Apps properties sheet:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Apps tab in the Terminal Properties dialog box.

Table 9-1 describes the functions of the Apps properties sheet.

Table 9-1	Apps Properties Sheet for SE Model Terminals
-----------	----------------------------------------------

Function	Description
Global Settings	Group box used to manage ICA sessions.
	ICA Client Settings Click on the ICA Client Settings command button in the Global Settings group box. See "ICA Connections" in Connection Configuration for detailed information about ICA session management.

Function	Description			
Virtual Ports	Group box used to set the virtual port option.			
	Virtual Port Server Type in the address of the virtual port server.			
	<b>Com1 Enable</b> Click on this check box to assign this port as a virtual port. This function is not mutually exclusive.			
	<b>Com2 Enable</b> Click on this check box to assign this port as a virtual port. This function is not mutually exclusive.			
	<b>LPT1 Enable</b> Click on this check box to assign this port as a virtual port. This function is not mutually exclusive.			
SNMP Update Enable	Check this box to enable terminal firmware updates through SNMP.			
SNMP Network	Use this command button to invoke the <b>SNMP</b> <b>Network Administration</b> dialog box. See "SNMP Firmware Upgrades" in Firmware Upgrades for details about this dialog box.			
DHCP Automatic Update Enable	Check this box to enable automatic firmware upgrades. See "DHCP Firmware Upgrades" in Firmware Upgrades for details.			
Change DHCP Option	Use this command button to invoke the <b>Change DHCP</b> <b>Option IDs</b> dialog box. See "DHCP Firmware Upgrades" in Firmware Upgrades for details.			
Port Lock	Click on the <b>Port Lock</b> command button to invoke the <b>Port Lock</b> dialog box:			
	Port Lock			

Table 9-1 Apps Properties Sheet for SE Model Terminals, Continued

Port Lock ×
Enable COM <u>1</u> Enable COM <u>2</u> Enable LPT
OK Cancel

Function	Description			
	This dialog box lets you lock a port from communicating with other devices. Use the list of check boxes in the dialog box to select which ports you want to lock. The default is all boxes checked.			
RDP Encryption Enable	Click this check box to check and enable RDP encryption. By default this function is enabled.			
	Caution If your WTS server does not support encryption, this function must be disabled.			

 Table 9-1
 Apps Properties Sheet for SE Model Terminals, Continued

#### Using the Apps Properties Sheet for Model 3200LE Terminals

Terminal Properties	×
General Input Display Network Upgrade Security Apps Devices SysInfo	_
Global Settings	
DHCP — DHCP Automatic Update Enable	
Change DHCP Option	
RDP Encryption Enable	
OK <u>C</u> ancel Apply	

To invoke the Apps properties sheet:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Apps tab in the Terminal Properties dialog box.

Table 9-2 describes the functions of the **Apps** properties sheet.

 Table 9-2
 Apps Properties Sheet

Function	Description
Global Settings	Use this group box used to manage ICA sessions.
	ICA Client Settings Click on the ICA Client Settings command button in the Global Settings group box. See "ICA Connections" in Connection Configuration for detailed information about ICA session management.
SNMP Update Enable	Check this box to enable terminal firmware updates through SNMP.

Function	Description		
SNMP Network	Use this command button to invoke the <b>SNMP</b> <b>Network Administration</b> dialog box. See "SNMP Firmware Upgrades" in Firmware Upgrades for details about this dialog box.		
DHCP Automatic Update Enable	Check this box to enable automatic firmware upgrades. See "DHCP Firmware Upgrades" in Firmware Upgrades for details.		
Change DHCP Option	Use this command button to invoke the <b>Change DHCP</b> <b>Option IDs</b> dialog box. See "DHCP Firmware Upgrades" in Firmware Upgrades for details.		
RDP Encryption Enable	Click this check box to check and enable RDP encryption. By default this function is enabled.		
	Caution If your WTS server does not support encryption, this function must be disabled.		

 Table 9-2
 Apps Properties Sheet, Continued

# **10** ICA Client Settings

ICA client settings are handled in the **Global ICA Client Settings** dialog box. This dialog box is invoked through the **Apps** properties sheet found in the **Terminal Properties** dialog box. See "Additional Terminal Applications" for detailed information about the **Apps** properties sheet. Figure 10-1 shows the **Global ICA Settings** dialog box.

#### Figure 10-1 Default Hotkeys Properties Sheet

Global ICA Client Se	ettings			ок 🗙
Hotkeys Preferences	Server Location Fire	wall Settings		
Status Dialog	Etri 6	CTRL-ESC	Ctrl 💌 5 💌	
Close Session	Ctrl 🗨 2	ALT-ESC	Ctrl 🔽 7 💌	
Toggle Title Bar	Ctrl 🔻 3	ALT-TAB	Ctrl 🔻 8 💌	
CTRL-ALT-DEL	Ctrl 🔻 4	ALT-BACKTAB	Ctrl 🔻 9 💌	

#### Using the Global ICA Client Settings Dialog Box

To invoke the Global ICA Settings dialog box:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Apps tab in the Terminal Properties dialog box.
- 3. Click on the ICA Client Settings command button in the Global Settings group box.

There are four properties sheets associated with the **Global ICA Client Settings** dialog box. A description of the functions of each sheet follows.

#### **Setting the Default Hotkeys**

Hotkeys can be used during ICA sessions to invoke various functions. Some hotkeys control the behavior of ICA Windows, while others emulate standard Windows hotkeys. To set hotkeys, access the **Default Hotkeys** properties sheet. It is the default properties sheet for the **Global ICA Client Settings** dialog box. The following figure shows the **Default Hotkeys** properties sheet.

Use the pull-down scroll boxes on the **Default Hotkey** properties sheet to customize default hotkey key sequences. The following table describes the hotkeys.

Function	Description	
Status Dialog	This function displays ICA connection status.	
Close Session	This function disconnects an ICA client from a server and closes the client window on the local desktop. When you use this hotkey, the open session continues to run on the server. If you do not want to leave the session running in a disconnected state, log off.	
Toggle Title Bar	This function alternately hides and displays the client window title bar:	
	<ul> <li>Use the title bar to drag the client window to different positions on a local desktop.</li> </ul>	
	Remove the title bar to maximize your work space.	
Ctrl+Alt+Del	This hotkey displays the <b>Windows NT Security</b> dialog box.	

Table 10-1 Default Hotkeys Properties Sheet

Function	Description			
Ctrl+Esc	<ul> <li>On WinFrame servers, pressing this key sequence displays the <b>Remote Task List</b>.</li> <li>On MetaFrame servers, pressing this key sequence displays the Windows NT <b>Start</b> menu.</li> </ul>			
Alt+Esc	This hotkey cycles the focus through the minimized icons.			
Alt+Tab	This hotkey cycles sequentially through applications that are open. A window appears to display the applications as you cycle through.			
Alt+Backtab	This hotkey cycles sequentially through applications that are open in a session, but in the opposite direction.			

 Table 10-1
 Default Hotkeys Properties Sheet, Continued

#### **Setting Terminal Preferences**

Use the **Preferences** properties sheet to change default settings. To invoke the **Preferences** properties sheet:

- 1. Click on the ICA Client Settings command button on the Apps properties sheet.
- 2. Click the Preferences tab.

The **Preferences** properties sheet displays. Figure 10-2 shows the **Preferences** properties sheet.

#### Figure 10-2 Preferences Properties Sheet

Global ICA Client Settings			ок 🗙
Hotkeys Preferences Server Location Firewall Setti	ings		
Serial Number: Default Window Colors: 🔿 16 🔘 256	Client Name:	WBT0080640C210A	

The following table describes each function of the properties sheet.

	•
Function	Description
Serial Number	This is the serial number of your ICA Client software. This field is only necessary when you are using the ICA Windows CE Client with a product such as WinFrame Host/Terminal, which requires each client to have a Citrix PC Client Pack serial number in order to connect to the server. If a serial number is required, you must enter it exactly as it appears on the serial number card. The <b>Serial Number</b> field is not used by MetaFrame servers.
Default Window Colors	In the <b>Window Colors</b> field, select <b>16</b> or <b>256</b> colors. When using a PPP connection, 16 color mode may provide better performance. If the window options specified exceed the capabilities of the client hardware, the maximum size and color depth supported by the CE operating system are used.
Client Name	This text box allows you to change the client name of your client device. The Citrix server uses the client name to uniquely identify resources (such as mapped printers) associated with a given client device. The client name should be unique for each computer running a copy of a Citrix ICA Client. If you do not use unique client names, device mapping and application publishing may not operate correctly. The default is <b>WBT<mac address=""></mac></b> .

Table 10-2 Preferences Properties Sheet

#### **Setting the Server Location**

Use the **Server Location** properties sheet to construct a list of ICA servers. To invoke this properties sheet:

- 1. Click on the ICA Client Settings command button on the Apps properties sheet.
- 2. Click the Server Location tab.

The **Server Location** properties sheet displays. The following figure shows this sheet.

Global ICA Client Se	ettings	ок 🗙
Hotkeys Preferences	Server Location Firewall Settings	
Ne	twork Protocol: TCP/IP	
Add (Au	to-Locate)	Default List
Delete		Server Group
Move Up		Primary
Move Do <u>w</u> n		Rename Group

The following table describes each of the functions of this sheet.

 Table 10-3
 Server Location Properties Sheet

Function	Description
Add	Click on this command button to add a server to the list.
Delete	Use this button to delete the name of a server from the list.
Move Up	Click on this button to move the name of a server up in the list.
Move Down	Click on this button to move a server down in the list.
	Note Delete, Move Up, and Move Down are not activated unless there multiple ICA servers listed in Network Protocol: TCP/IP. See the next table entry.
Network Protocol: TCP/IP	Use this list to select an ICA server. The default is (Auto-Locate).
Default List	Use this button to recall the previous server list.
Server Group	Use this scroll list to select the server group from which the list is built.
Rename Group	Use this command button to rename a server group.

#### Setting Up a SOCKS Firewall

Use the **Firewall Settings** properties sheet to set up a SOCKS (Socket Secure) firewall. To invoke this properties sheet:

- 1. Click on the ICA Client Settings command button on the Apps properties sheet.
- 2. Click the Firewall Settings tab.

The properties sheet displays. The following figure shows this sheet.

#### Figure 10-4 Firewall Settings Properties Sheet

Global ICA Client Settings	ок 🗙
Hotkeys Preferences Server Location Firewall Settings	
Use alternate address through firewalls	
Connect via SOCKS proxy	
Address of proxy to use Port 1080	

The following table describes each of the functions of this sheet.

Table 10-4	Firewall Settings	Properties Sheet
------------	-------------------	------------------

Function	Description
Use Alternate Address Through Firewalls	By default the box is not checked.
SOCKS	Use this group box to enable and configure SOCKS protocol.
	<b>Connect Via SOCKS Proxy</b> Check this box to enable a SOCKS proxy connection. SOCKS is a protocol that sets up a proxy server between a client and a server. This proxy server then acts as a channel for communication between the client and server. By default the box is not checked.
	Address of Proxy to Use Enter in this text box the address of the proxy server. By default this box is deactivated.
	<b>Port</b> Enter in this text box the port number. By default this box is deactivated.

#### 74 Advanced User Interface

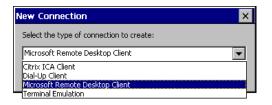
### **Connection Configuration**

- **11** Creating New Connections
- 12 ICA Connections
- 13 Dial-Up Connections
- 14 Dial-Up Dialing Properties and Configuration
- 15 Dial-Up TCP/IP Settings and Security
- **16 RDP Connections**
- **17** Terminal Emulation Connections
- **18 TCP/IP Telnet Configuration**
- **19 Editing ICA Connections**
- 20 Editing RDP, Dial-Up, and Terminal Emulation Connections

# **11** Creating New Connections

The **New Connection** dialog box is used to create new connections. Figure 11-1 shows the **New Connection** dialog box.

Figure 11-1 New Connection Dialog Box



# Using the New Connection Dialog Box

To invoke the dialog box:

- 1. Click on the **Configure** tab in the **Winterm Connection Manager** dialog box.
- 2. Click on Add command button on the Configure properties sheet.

See "Connection Management" for details about the **Winterm Connection** Manager.

Use the scroll list shown in the dialog box above to select the type of connection protocol you want. When you choose from the list above, you are deciding which connection protocol you want to use to connect to a server. Four selections are available.

## **Choosing a Connection Protocol**

The following table describes the differences between the connections available with your WBT.

Connection Protocol	Description
Citrix ICA Client	ICA (Independent Computing Architecture) protocol, which connects to an ICA (Winframe/Metaframe) server. See "ICA Connections" for further instructions about how to create this kind of connection.
Dial-Up Client	Connects using a modem and PPP (Point-to-Point Protocol). See "Dial-Up Connections" for further instructions about how to create this kind of connection.
Microsoft Remote Desktop Client	RDP (Remote Desktop Protocol), which connects to a WTS (Windows Terminal Server) server. See "RDP Connections" for further instructions about how to create this kind of connection.
Terminal Emulation	Connects to multiple terminal emulation applications. See "Terminal Emulation Connections" for further instructions about how to create this kind of connection.

Table 11-1 New Connection Dialog Box

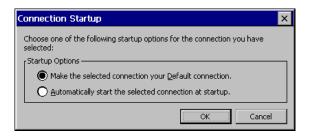
Once you have made your selection, click on **OK** to proceed with creating a connection.

# **Using the Startup Function**

Your terminal can be set to automatically connect to a server when you turn your terminal on. This function is set using the **Connection Startup** dialog box. The following figure shows this dialog box.

Click on one of the two radio buttons in the **Startup Options** group box (in the **Connection Startup** dialog box above) to select a start-up option:

### Figure 11-2 Connection Startup Dialog Box



To invoke the Connection Startup dialog box:

- 1. Click on the **Configure** tab in the **Winterm Connection Manager** dialog box.
- 2. Click on the Startup command button on the Configure properties sheet.

The following table describes the functions of this dialog box.

Table 11-2 Connection Startup Dialog Box

Function	Description
Make the Selected Connection Your Default Connection	Enable this function to use the connection you selected in the <b>Winterm Connection Manager</b> as the default connection. The default connection is the connection that always appears in the <b>Connection</b> <b>Name</b> list.
Automatically Start the Selected Connection at Startup	When you enable this function, your terminal will automatically use the connection you selected in the <b>Winterm Connection Manager</b> .

# Mote 🖌

The functions in the **Startup Options** group box are mutually exclusive.

# **12** ICA Connections

Use the **Specify Connection Type** dialog box to start configuring an ICA connection. The ICA protocol connects you to a server running Citrix WinFrame or MetaFrame.

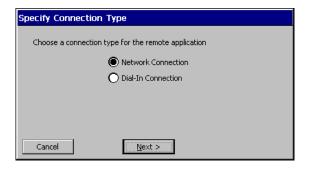
# **Using the ICA Connections Wizard**

When the **New Connection** dialog box is invoked (see "Creating New Connections"):

- 1. Use the drop-down scroll list to select Citrix ICA Client.
- 2. Click on OK.

Figure 12-1 shows the **Specify Connection Type** dialog box. This is the first dialog box that appears in the series.

### Figure 12-1 Specify Connection Type Dialog Box



- Network Connection
  - Click on this radio button to create a network ICA connection. This type of connection requires a direct line to the network, such as 10Base-T. See "Network Connections."
- Dial-In Connection
  - Click on this radio button to create a serial ICA connection. This type of connection is made using a modem. See "Dial-Up Connections."

## **Network Connections**

Select **Network Connection**, then click on the **Next** button. A Citrix search message displays:

#### Figure 12-2 Citrix Search Message

Searching for Citrix servers...

If the connection is found, the following sequence of dialog boxes displays. Use them to set up your network ICA connection.

#### Figure 12-3 Select a Citrix Server or Published Application Dialog Box

Select a Citrix Server or Published Applica	ition
Select a Citrix server from the list or type in a server n	iame.
Citrix Server     O Published Application	ico
	<u>R</u> efresh
You can change your server location settings by clickin	ig Server Location.
Primary Citrix server: (Auto-Locate) Server	Location
Cancel < <u>B</u> ack <u>N</u> ext > F	inish

To use the Select a Server or Published Application dialog box:

- 1. Click on either Citrix Server or Published Application.
- **2.** Select a server or an application from the drop-down scroll list, or type the information in the text entry box.

# Mote

The **Refresh** command button refreshes the drop-down scroll list.

The **Server Location** command button invokes the **Server Location** dialog box. The server in **Server Location** will act as a master browser for creation of the **Address** list. See Figure 12-4.

#### Figure 12-4 Server Location Dialog Box

Server Locat	×	
Server G	iroup Primary	-
	Address	
<u>A</u> dd	(Auto-Locate)	ОК
<u>D</u> elete	i	Cancel
Move <u>U</u> p		
Move Do <u>w</u> n		Default <u>L</u> ist
Network Protocol: TCP/IP		

**3.** If you want to add a server address, click on the **Add** command button to invoke the **Add Server Address** dialog box.

#### Figure 12-5 Add Server Address Dialog Box

Add Server Address	×	
Enter in a new Citrix server		
ОК	Cancel	

- 4. Enter the name of the Citrix server, then click on OK twice.
- 5. Click on Next.

#### Figure 12-6 Select a Title for the ICA Connection Dialog Box

Select a Title for the ICA Connection	
Select a title for the ICA connection.	(jca
Cancel < <u>B</u> ack <u>N</u> ext > Finish	

Enter a connection in the text box in the **Select a Title for the ICA Connection** dialog box, then click on **Finish**.

#### Figure 12-7 Specify an Application Dialog Box



To use the Specify an Application dialog box:

- **1.** Enter the command line and directory of the application that you intend to invoke.
- 2. Click on Next.

### Figure 12-8 Specify Logon Information Dialog Box

Specify Logon Information		
If desired, you can specify logon information to be used when connecting to the remote application.		
Username:		
Password:		
Domain:		
Note: If the application is an anonymous published application, any logon information that you specify here is ignored.		
Cancel < Back Next > Finish		

To use the Specify Logon Information dialog box:

- **1.** If needed, enter a user name, a password, and a domain for connecting to an application.
- 2. Click on Next.

## Figure 12-9 Select Window Options Dialog Box

Select Window Options		
These settings specify how the application window will appear on your desktop:		
Cancel < Back Next > Finish		

To use the Select Window Options dialog box:

- 1. Click on the desired number of colors to display, either 16 or 256.
- 2. Click on Next.

## Figure 12-10 Compression, Cache, Encryption and Sound Dialog Box

Compression, Cache, Encryption and Sound		
✓ Compress Data Stream		
Cache		
Enable Sound		
Sound Quality:		
Encryption Level: Basic		
Cancel < <u>B</u> ack <u>N</u> ext > Finish		

To use the Compression, Cache, Encryption and Sound dialog box:

- **1.** Enable or disable the following functions:
  - a. Compress Data Stream Applies compression.
  - **b.** Cache Click on this check box to enable caching.
  - c. Sound High, Medium, and Low sound quality selectable with this function.
  - d. Encryption Level Not yet supported.
- 2. Click on Next.

Figure 12-11 Firewall Settings Dialog Box

Fir	Firewall Settings		
	Use alternate address through firewalls		
	socks		
	Connect via SOCKS proxy		
	Address of proxy to use Port		
	: 1080		
	Cancel < Back Finish		

- **1.** Enable or disable the following functions:
  - a. Use Alternate Address Through Firewalls
  - b. SOCKS
  - c. Connect Via SOCKS Proxy
  - d. Address of Proxy to Use
  - e. Port
- 2. Click on Finish.

# **Dial-In Connection**

# Mote

This section applies only to Model 3320SE, 3350SE, 3360SE and 3720SE terminals.

Choose **Dial-In Connection**, then click on the **Next** button. The following sequence of dialog boxes displays. Use them to set up your dial-in ICA connection.

## Figure 12-12 Dial-In Devices Dialog Box

Dial-In Devices		
Dial-In Device:	Hayes Compatible on COM2	2: 💌 Configure
Area	Phone Number	Country
-		
📃 Use Area a	and Country Codes	
<	K <u>B</u> ack <u>N</u> ext >	Cancel

To use the Dial-In Devices dialog box:

- 1. From the **Dial-In Device** drop-down scroll list, select one of the following:
  - a. A modem connection such as Hayes Compatible on Com1.
  - b. A serial connection such as Serial Cable on Com1.
- 2. Enter the area code, the phone number, and the country code in the appropriate fields.

- 3. Click on **Configure** to use the **Device Properties** dialog box. (See "Using the Device Properties and Configure Command Buttons" for more information on the **Configure** command button).
- **4.** See Figure 12-6 through Figure 12-11 and the related text for information about the remainder of the dialog boxes in this sequence.

When you are finished with the configuration, the **Winterm Connection Manager** displays, listing your new ICA connection.

# **13** Dial-Up Connections

Use the **Dial-Up Configuration Wizard** to configure a dial-up connection. Dial-up connections use a modem and PPP to connect to a server.

# **Using the Dial-Up Configuration Wizard**

When the **New Connection** dialog box is invoked:

- 1. Use the drop-down scroll list to select **Dial-Up Client**.
- 2. Click on OK.

Following are the three dialog boxes that display in succession during a dial-up configuration process. When you are finished with the configuration, the new connection will be added to the **Connection Name** list in the **Winterm Connection Manager**. See Figure 13-1 to view the first dialog box of the wizard.

Figure 13-1 Dial-Up Configuration Wizard 1

Dial-Up Configuration Wizard 🛛 🗙		
	This wizard will help you configure a dial-up connection. Enter a <u>d</u> escription for dial-up connection:	
	<back next=""> Cancel</back>	

To use the first dialog box:

- **1.** Enter a name for your dial-up connection (a maximum of 20 characters).
- 2. Click on Next.

Figure 13-2 Dial-Up Configuration Wizard 2

Dial-Up Configuration Wizard		
	Serial Port: Hayes Compatible on COM1: Country Code Area Code 1 Telephone Number Use Country Code and Area Code	Dialing Properties Configure TCP/IP Settings Secur_ity
	<back next=""></back>	Cancel

To use the second dialog box of the wizard:

- 1. Select from the Serial Port drop-down scroll list one of the following:
  - a. A modem connection such as Hayes Compatible on Com1.
  - **b.** A cable connection (serial connection) such as **Serial Cable on Com1**.
- 2. Enter your information in the pertinent fields. Country Code and Area Code will activate if Use Country Code and Area Code is enabled.
- See "Using the Dialing Properties and Configure Command Buttons" in Connection Configuration to get information about the Dialing Properties and Configure... command buttons.
- See "Using the TCP/IP Settings and Security Command Buttons" in Connection Configuration for information about the TCP/IP Settings... and Security command buttons.
- 5. Click on Next.

Dial-Up Configuration Wizard		
	Dial-Up Login Information User Name: Password: Domain: Domain: Palways Prompt for Password Select Connection(s) Below to Launch After Dialing in: Default ICA Connection {ICA} Default RDP Connection {RDP} SJ-CDG-WTS {ICA}	
	< <u>Back</u> <u>Einish</u> <u>C</u> ancel	

### Figure 13-3 Dial-Up Configuration Wizard 3

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To use the third dialog box:

- 1. Enter your information in the pertinent fields. If you do not know the information, contact your system administrator.
- 2. Click on Finish.

The Winterm Connection Manager displays, listing your new dial-up connection.

# **14** Dial-Up Dialing Properties and Configuration

The following sections provide information about some of the elements of the **Dial-Up Configuration Wizard**. This chapter covers dialing properties and device properties. Dialing properties are set using the **Dialing Properties** dialog box (Figure 14-1). Device properties are set using the **Device Properties** dialog box (Figure 14-2).

#### Figure 14-1 Dialing Properties Dialog Box

Dialing Properties		ок 🗙		
-Local Settings:				
Local <u>A</u> rea Code: 4	108	Ione Dialing		
Local Country Code: 1		O <u>P</u> ulse Dialing		
🗌 Disable Call <u>W</u> aiti	Disable Call Waiting by Dialing:			
Dialing Patterns:				
You may edit the	e Dialing Patter	ns for each type of call below.		
Local Calls Dialing: (Examp	Local Calls Dialing: (Example: G)			
9,G				
Long Distance Calls Dialing: (Example: 1FG)				
9,1FG				
International Calls Dialing: (Example: 011,EFG)				
9,011,EFG				
(E, e = Country Code; F, f = Area Code; G, g = Number)				

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# **Using the Dialing Properties Dialog Box**

Use the **Dialing Properties** dialog box to set the dialing properties for your dial-up connection. See "Dial-Up Connections" to find out how to invoke this dialog box.

The following table discusses the functions of the dialog box.

 Table 14-1
 Dialing Properties Dialog Box

Function	Description
Local Settings	Set local dialing locale and dialing type in this group box.
	Local Area Code Enter the local area code that you want to use.
	<b>Local Country Code</b> Enter the local country code of the country that you are dialing to. The default for this field is <b>1</b> .
	Note Refer to a phone directory for country codes.
	Disable Call Waiting By Dialing:
	1. Click on the check box.
	<ol><li>Select from the drop-down scroll list one of the following:</li></ol>
	• *70,
	• 70#,
	• 1170,
	Tone Dialing Click on this radio button to enable tone dialing. Tone Dialing is the default.
	<b>Pulse Dialing</b> Click on this radio button to enable pulse dialing.

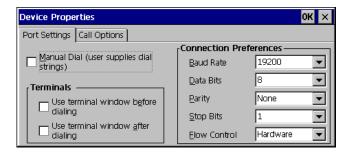
Function	Description	
Dialing Patterns	Use this group box to set your modem's dialing patterns.	
	Local Calls Dialing Enter the local call dialing pattern. The default is <b>9,G</b> .	
	Local Long Distance Calls Dialing Enter the long distance call dialing pattern. The default is <b>9,1FG</b> .	
	International Calls Dialing Enter the international call dialing pattern. The default is 9,011,EFG.	
	Note An explanation of the lettering scheme for dialing patterns is located below the function International Calls Dialing.	

Table 14-1 Dialing Properties Dialog Box, Continued

# Using the Device Properties Dialog Box

Use the **Device Properties** dialog box to configure a device (modem) for a dial-up connection.

Figure 14-2 Device Properties Dialog Box



See "Dial-Up Connections" to find out how to invoke this dialog box.

The Device Properties dialog box contains two properties sheets:

- Port Settings
- Call Options

The following sections discuss these properties sheets.

### **Port Settings**

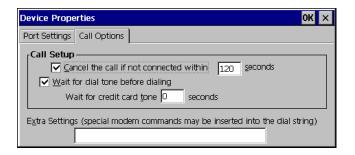
See Figure 14-2 to view the **Port Settings** properties sheet. It is the default of the **Device Properties** dialog box. The following table discusses the functions of this properties sheet.

Table 14-2 Port Settings Properties Sheet

Function	Description
Manual Dial	Click on this check box to set up for manual dialing.
Terminals	<ul> <li>Use this group box to record terminal windowing information:</li> <li>Use Terminal Window Before Dialing</li> <li>Use Terminal Window After Dialing</li> </ul>
Connection Preferences	Use this group box to set modem connection parameters.

# **Call Options**

Figure 14-3 Call Options Properties Sheet



Click on the **Call Options** tab to invoke the **Call Options** properties sheet. The following table discusses the functions of this properties sheet.

Function	Description
Call Setup	Use this group box to configure the following call parameters:
	<ol> <li>Cancel the Call if Not Connected Within</li> <li>Enter in this field the number of seconds to wait before a call is canceled.</li> <li>Click the check box to enable the function.</li> </ol>
	The default is <b>120</b> with the function enabled.
	Wait for Dial Tone Before Dialing Click on the check box to enable the function. The default for this function is enabled.
	Wait for Credit Card Tone Enter in the field the period (in seconds) of time to wait. The default is <b>0</b> .
Extra Settings	Use this field for special modem commands. See "Modem AT Commands" in Getting Help for more details.

Table 14-3 Call Options Properties Sheet

# Mote

See "Null Modem Cable Pin Assignments" for a suggested null modem cable for use with your terminal.

# **15** Dial-Up TCP/IP Settings and Security

The following sections provide information about some of the elements of the **Dial-Up Configuration Wizard**. This chapter covers TCP/IP settings and dial-up security.

# Using the TCP/IP Settings Dialog Box

Click on the **TCP/IP Settings** command button in the second dialog box of the **Dial-Up Configuration Wizard** to set TCP/IP dial-up settings. When this command button is pressed, the **TCP/IP Settings** dialog box displays. Figure 15-1 shows this dialog box.

Figure 15-1 TCP/IP Settings Dialog Box

TCP/IP Settings	ок 🗙	
<ul> <li>✓ Use software compression</li> <li>✓ Use IP header compression</li> <li>Use Sip</li> <li>✓ Use Server-assigned addresses —</li> </ul>	Use assigned IP address	
Primary DNS:	Primary <u>W</u> INS:	
Secondary DNS:	Secondary WINS:	
✓ Use default gateway on remote network		

The following table discusses the functions in this dialog box.

Function	Description
Use Software Compression	Click on this check box to enable this function. By default, this function is activated and enabled.
Use IP Header Compression	Click on this check box to enable <b>Use</b> <b>IP Header Compression</b> . By default, this function is activated and enabled.
Use SLIP	Click on this check box to enable this function. SLIP is Serial Line Internet Protocol. By default, this function is not enabled.
Use Assigned IP Address	Click here to activate this text box. By default, the text entry box is not activated.
Use Server-Assigned IP Addresses	Click here to disable server-assigned addresses and to activate the text entry boxes for typing-in addresses. By default, the text entry box is not activated.
Use Default Gateway on Remote Network	Click on this check box to enable this function. By default, the function is activated and enabled.

#### Table 15-1 TCP/IP Settings Dialog Box

# Using the Security Settings Dialog Box

Click on the **Security...** command button in the second dialog box of the **Dial-Up Configuration Wizard** to configure dial-up security. When this command button is pressed, the **Security Settings** dialog box displays. Figure 15-2 shows this dialog box.



The following table discusses the functions in this dialog box.

Table 15-2	Security	<b>Settings</b>	Dialog	Box
------------	----------	-----------------	--------	-----

Function	Description
Accept Any Authentication Including Clear Text	Click on this radio button to set your terminal to accept any authentication including clear text. Authentication determines whether a request originated from the correct user or application.
Accept Only Encrypted Authentication	Click on this radio button to set your terminal to accept only encrypted authentication. Encryption is a method of "hiding" data that is transmitted across a network.
Accept Only Microsoft Encrypted Authentication	Click on this radio button to set your terminal to accept only Microsoft encrypted authentication.

# Connection Configuration

# **16** RDP Connections

Use the **WTS Connection Wizard** to configure an RDP connection. RDP connects to a server running Microsoft WTS (Windows Terminal Server).

# Using the WTS Connection Wizard

When the **New Connection** dialog box is invoked (see "Creating New Connections"):

- 1. Use the drop-down scroll list to select Microsoft Remote Desktop Client.
- 2. Click on OK.

Following are the four dialog boxes that display in succession during the configuration process. When you are finished with the wizard, the new connection will be added to the **Connection Name** list in the **Winterm Connection Manager**. See Figure 16-1 to view the first dialog box of this wizard.

Figure 16-1 WTS Connection Wizard 1

WTS Connection Wizard	
	Type a name for the new connection. Name: Type the name of the computer to which you want to connect. Server: Click Low Speed Connection if you are connecting across a slower network. Decomposition
	< <u>B</u> ack <u>N</u> ext> Cancel

To use the first dialog box:

- 1. Enter a name for your dial-up connection in Name.
- 2. Enter the name of the server in Server.
- 3. Check the Low Speed Connection check box if appropriate.
- 4. Click on Next.

WTS Connection Wizard	
	If you want to automatically log onto the server, click Automatic Logon and enter your user name, password and domain. Otherwise, you will be prompted for this information each time you choose the connection.
	< <u>B</u> ack <u>N</u> ext> Cancel

To use the second dialog box:

- 1. Check the Automatic Logon check box if appropriate.
- 2. Enter a user name, password, and a domain to complete the information.
- 3. Click on Next.

Figure 16-3 WTS Connection Wizard 3

WTS Connection Wizard	
	On connection, the Windows NT desktop is displayed by default. To start an application when you connect, select Application file name and type its name.
	<back next=""> Cancel</back>

To use the third dialog box in the wizard:

- 1. Click on either the **Desktop** or **Application File Name** radio buttons.
- 2. If you clicked on **Desktop**, click on **Next**.
- 3. If you clicked on Application File Name:
  - **a.** Enter the name of the application.
  - **b.** Enter the name of the directory where it resides.
  - c. Click on Next.

Figure 16-4	WTS Connection Wizard 4	
-------------	-------------------------	--

WTS Connection Wizard	
	You have successfully created a new connection called: <connection name=""></connection>
	Click Finish to save your new connection.
	<back cancel<="" finish="" th=""></back>

To use the fourth dialog box, click on **Finish**. The **Winterm Connection Manager** displays, listing your new RDP connection.

# Connection Configuration

# **17** Terminal Emulation Connections



The portions of this chapter that refer to serial, Com1 or Com2, or parallel apply only to Model 3320SE, 3350SE, 3360SE and 3720SE terminals.

Use the **TE Client Connection Wizard** to set up a terminal emulation connection. Terminal emulation connections use VT (Virtual Terminal) and Telnet to connect to servers.

# **Using the TE Client Connection Wizard**

When the **New Connection** dialog box is invoked (see "Creating New Connections"):

- 1. Use the drop-down scroll list to select **Terminal Emulation**.
- 2. Click on OK.

Following are the three dialog boxes of this wizard. When you are finished configuring a connection, the new connection will be added to the **Connection Name** list in the **Winterm Connection Manager**. See Figure 17-1 to view the first dialog box of this wizard.

#### Figure 17-1 TE Client Connection Wizard - Connection Information

TE Client Connection Wizard - Connection Information		
Connection Name:		
Emulation:	VT400 7-Bit	
<u>V</u> T TerminalID:	vt420 💌	
<back next=""></back>	Cancel	
<dark mexica<="" th=""><td></td></dark>		

To use the **Connection Information** dialog box:

- 1. Enter the connection name in **Connection Name** text box.
- 2. Select the emulation type in the Emulation scroll list.
- 3. Select the terminal type from the VT TerminalID scroll list.

Table 17-1 describes the available functions in the VT TerminalID scroll list.

Terminal Emulation	Terminal Type
Select:	Then select from VT TerminalID:
VT52, VT100, VT400 7-Bit (default), or VT400 8-Bit	vt100, vt101, vt102, vt125, vt220, vt240, vt320, vt340, vt420 (default), vt131, or vt132
Select:	The function is deactivated.
ANSI BBS, SCO Console, WY50, WY50+, TVI910, TVI920, TVI925, ADDS A2, HZ1500, or WY60, IBM 3151	
Select:	1. Then select from IBM 3270 Model:
IBM3270	<ul> <li>3278-2-E, 3278-3-E, 3278-4-E, 3278-5-E, 3279-2, 3279-3, 3279-4, 3279-5, or 3287-1</li> <li>Check the Right Ctrl Acts as Enter Key or the Left Ctrl Acts as Reset Key check boxes if you want these functions enabled for 5250 emulation.</li> </ul>
Select:	1. Select from IBM 5250 Model:
IBM5250	5291-1, 5292-2, 5251-11, 3179-2, 3196-A1, 3180-2, 3477-FC, 3477-FG, 3486-BA, 3487-HA, or 3487-HC
	2. Check the Right Ctrl Acts as Enter Key, the Left Ctrl Acts as Reset Key, or the IBM5250 Monochrome check boxes if you want these functions enabled for 5250 emulation.

 Table 17-1
 Terminal Emulation and Terminal Type

3. Click on Next.

Figure 17-2 TE Client Connection Wizard - Host Information

TE	TE Client Connection Wizard - Host Information		
	Connection Type		
	● <u>I</u> CP/IP	Host Nam <u>e</u> :	
	<u> </u>	Configuration Name:	<new session=""></new>
	O Serial	C <u>o</u> nnect to:	<b>V</b>
		Ad <u>v</u> anced	
	< <u>B</u> ack	K <u>N</u> ext>	⊆ancel

To use the Host Information dialog box:

- 1. Click on TCP/IP, Modem, or Serial:
- 2. If you clicked on TCP/IP:
  - a. Enter the host name in Host Name.
  - b. Use the Advanced command button if appropriate. (See "Using the TCP/IP Telnet Configuration Dialog Box" for information about the Advanced command button).
  - **c.** Click on **Next**. The **Automate Login Process** dialog box displays. See Figure 17-3 and proceed with these instructions.
- 3. If you clicked on Modem:
  - a. Select a configuration from Configuration Name.
  - **b.** Use the **Configure** command button if appropriate. (See "Using the Modem Settings Dialog Box" for information about the **Configure** command button).
  - c. Click on Next. The Automate Login Process dialog box displays. See Figure 17-3 and proceed with these instructions.

- 4. If you clicked on Serial:
  - a. Make a selection from Connect To.
  - b. Use the Configure command button if appropriate. (See "Using the Configuration of Serial Cable on Com1 Dialog Box" for information about the Configure command button).
  - **c.** Click on **Next**. The **Automate Login Process** dialog box displays. See Figure 17-3 and proceed with these instructions.

Figure 17-3 TE Client Connection Wizard - Automate Login Process

TE Client Connection Wizard - Automate Login Process				
Parameters	[Script			
Set Initiation String	Act on Send			
<u>W</u> ait For: <u>Add -&gt;</u>				
Respond With	511			
< <u>B</u> ack <u>N</u> ext>				

To use the Automate Login Process dialog box:

- 1. Fill in the **Parameters** group box as appropriate using the following functions:
  - a. Set Initiation String Set the scripts initiation string.
  - **b.** Wait For Act on an selected event in the Act On list such as login.
  - c. Respond With The scroll list recieves input from the Insert command button and the Insert command button inserts an item from the scroll list.
- 2. Use the Add and Remove command buttons to add or remove lines from the Script scroll list.
- 3. Use the **Remove All** command button to remove all the scripts from the **Script** scroll list.

- 4. Select a script from the Script scroll list as appropriate.
- 5. Click on Next.

Figure 17-4 TE Client Connection Wizard - Printer Port Settings

TE Client Connection Wizard - Printer Port Settings		
Use Network F	Printer (LPR)	
Printer <u>P</u> ort: LPD <u>H</u> ostname:	Parallel Cable on LPT1:	
C FormFeed Terr		
< <u>B</u> ack	<u>N</u> ext>	

To use the Printer Port Settings dialog box:

- 1. Click on the Use Network Printer check box to print from a printer in your network.
- 2. Select the appropriate printer port from the **Printer Port** list.
- 3. Enter in the LPD Host Name text box the name of the network printer.
- 4. Click on FormFeed Terminator or Auto Line Feed, if appropriate.
- 5. Use the **Configure** command button, if appropriate. (See "Using the Configuration of Serial Cable on Com1" dialog box for information about the **Configure** command button).
- 6. Click on Next.

TE Client Connection Wizard - GUI Overrides			
Command Bar Items	Action on Host Close Display Options Shutdown Stay Alive Reconnect No connection Warning on close		
< <u>B</u> ack Finis	sh <u>C</u> ancel		

Figure 17-5 TE Client Connection Wizard - GUI Overrides

To use the GUI Overrides dialog box:

- 1. Select the appropriate functions from **Command Bar Items** list box. Command bar items are the menus on the top bar of the terminal emulation user interface.
- 2. Select the appropriate function from Action on Host Close. These functions are actions that will take place when the terminal emulation session is closed.
- 3. Click on the Disable Status Bar or No Connection Warning on Close check boxes as appropriate. Disable Status Bar deactivates the status bar in a terminal emulation session and No Connection Warning on Close deactivates any kind of warning before a session closes.

Click on **Finish**. The **Winterm Connection Manager** displays, listing your new terminal emulation connection.

# Connection Configuration

# **18** TCP/IP Telnet Configuration

# Using the TCP/IP Telnet Configuration Dialog Box

The **Advanced** command button invokes the **TCP/IP Telnet Configuration** dialog box. Figure 18-1 shows this dialog box.

Figure 18-1 TCP/IP Telnet Configuration Dialog Box

TCP/IP Telnet Configuration	ок 🗙
Port Number : 🔀	Telnet Name : vt420
Suppress	Force Negotiation
Echo	Binary No 💌
☑ 3270 Regime	E <u>O</u> R No
✓ IN3270E 3270 Options	Break Settings
✓ T№5250E <u>5250 Options</u>	✓ T <u>M</u> with Break <u>C</u> R with Break

The following table discusses the functions of a Telnet connection.

Table 18-1 TCP/IP Telnet Configuration

Function	Description		
Port Number	Enter the Telnet port number. The default is <b>23</b> .		
Suppress	Use the functions of this group box as needed:		
	<ul> <li>Echo</li> <li>3270 Regime</li> <li>TN3270E</li> <li>TN5250E</li> </ul>		

The following dialog box shows the **TN3270 Options** dialog box, displayed when the **3270 Options** command button is pressed.

TN3270 Options OK ×	
[3270 LU Device Name	
Connect :	
TN3270E Options	
Responses	
SysReq	
🔽 LU <u>1</u> Printer	
U <u>3</u> Printer	

Use this dialog box to set up 3270 options:

**3270 LU Device Name** - This group box is used to identify the LU (Logical Unit).

**TN3270E Options** - This group box is used to set TN3270E options. The options are:

Bind - BIND (Berkely Internet Name Domain) DNS server

Responses - System respones

**SysReq** - System requests

Function	Description
	Note Associate, LU1 Printer, and LU3 Printer are deactivated.
	TN5250 Options
	The following dialog box shows the <b>TN5250 Options</b> dialog box, displayed when the <b>5250 Options</b> command button is pressed.
	TN5250 Options       OK       ×         Environment
	Use this dialog box to set up 5250 options. The options are: <b>Device Name</b> - Name of the device assigned to a Telnet session. <b>User, Password, Library,</b> and <b>Menu</b> - Initial entries on a standard startup screen. <b>Program</b> - Name of the initial program.
	Note All entries are 10 characters or less.
Telnet Name	Enter the Telnet virtual terminal name. The default depends on emulation (VT400, 7-bit, default is <b>vt420)</b> .
Force Negotiation	Use the <b>Binary</b> and <b>EOR</b> drop-down scroll lists to configure negotiation parameters. The default for <b>Binary</b> is <b>No</b> and the default for <b>EOR</b> is <b>No</b> .
Break Settings	Use the <b>TM with Break</b> and <b>CR with Break</b> check boxes to configure break settings.

 Table 18-1
 TCP/IP
 Telnet
 Configuration,
 Continued

### Using the Modem Settings Dialog Box

The **Configure** command button invokes the **Modem Settings** dialog box. Figure 18-2 shows this dialog box.

#### Figure 18-2 Modem Settings Dlalog Box

Modem Settings		ок 🗙
Configuration <u>N</u> ame:	Area Code:	Telephone Number
Select a Modem Hayes Compatible on COM2:	Country Code	Dialing from: Work Dialing Properties distance Force local

The following table discusses the available modem settings.

Table 18-2	Modem	Settings	<b>Dialog Box</b>
------------	-------	----------	-------------------

Function	Description
Configuration Name	Enter the name of your configuration.
Select a Modem	Select a modem from the drop-down scroll list.
Configure	See "Using the Dialing Properties and Configure Command Button" in Connection Configuration for information about this function.
Area Code	Enter the area code in this text box.
Telephone Number	Enter the telephone number in this text box.
Country Code	Enter the country code in this text box.
Dialing From:	This field automatically lists where you are calling from.
Dialing Properties	See "Using the Dialing Properties and Configure Command Button" in Connection Configuration for information about this function.
Force Long Distance	Check this box to force long distance calling.
Force Local	Check this box to force local calling.

## Using the Configuration of Serial Cable on Com1 Dialog Box

The **Configure** command button invokes the **Configuration of Serial Cable on Com1** dialog box. Figure 18-3 shows this dialog box.

Configuration of Seria	I Cable on COM1:	ok ×
Baud Rate	Bata Bits	
Parity None	Stop Bits	
Elow Control	Unlimited	

The following table discusses this dialog box.

 Table 18-3
 Configuration of Serial Cable on Com1 Dialog Box

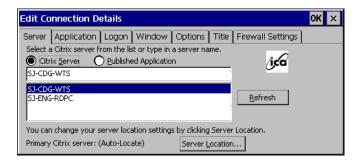
Function	Description
Configuration of a Serial Cable on Com1	Use these functions to configure a serial cable: <ul> <li>Baud Rate</li> <li>Parity</li> <li>Flow Control</li> <li>Data Bits</li> <li>Stop Bits</li> <li>Transmit Limit</li> </ul> Each is presented as a drop-down scroll list. Click on the upper-right down arrow to display the list and select a value. The defaults are listed (consecutive to the Function list to the left) as follows: <ul> <li>9600</li> <li>None</li> <li>Input</li> <li>8</li> <li>1</li> <li>Unlimited</li> </ul>
Local Echo	Click on this check box to enable local echo.

## Connection Configuration

# **19** Editing ICA Connections

The **Winterm Connection Manager** lets you edit individual ICA connection parameters. It is done through the **Edit Connection Details** dialog box. The following figure shows this dialog box.

#### Figure 19-1 Edit Connection Details Dialog Box



# Using the Edit Connection Details Dialog Box

The **Edit Connection Properties** dialog box consists of seven properties sheets. Use any or all of these properties sheets to edit connection parameters. To invoke the dialog box:

- 1. Click on the **Configure** tab in the **Winterm Connection Manager** dialog box.
- 2. Click to select an ICA connection from the Connections Name list.
- 3. Click on the Edit command button on the Configure properties sheet.

### **Using the Server Properties Sheet**

The **Server** properties sheet is displayed by default for the dialog box. Table 19-1 describes the functions of the **Server** properties sheet.

 Table 19-1
 Server Properties Sheet

Function	Description
Select a Citrix Server From the List or Type in a server Name	<ul> <li>Click on:</li> <li>Citrix Server Enable this radio button to connect to a Citrix server.</li> <li>Published Application Enable this radio button to connect directly to an application.</li> </ul>
Server Location	Click on this command button to invoke the <b>Server Location Dialog Box</b> .
	<ul> <li>Server Group</li> <li>Select from a scroll list:</li> <li>Primary</li> <li>Backup 1</li> <li>Backup 2</li> <li>Primary is the default.</li> </ul>
	Add Click on this command button to add a server to the list.
	<ul> <li>Delete</li> <li>Click on this command button to delete a server from the list:</li> <li>1. Select a server from the list.</li> <li>2. Click on the Delete command button.</li> </ul>
	<b>Move Up</b> Click on this command button to move a server up the list:
	<ol> <li>Select a server to move up.</li> <li>Click on the Move Up command button.</li> </ol>

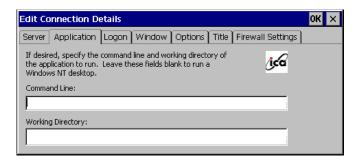
Function	Description
	<b>Move Down</b> Click on this command button to move a server down the list:
	1. Select a server to move down.
	<ol> <li>Click on the Move Down command button.</li> </ol>
	Address Lists the servers.
	<b>Default List</b> Lists the default servers.
	<b>Network Protocol</b> Lists the network protocol used by the server.

#### Table 19-1 Server Properties Sheet, Continued

#### **Using the Applications Properties Sheet**

The Applications properties sheet is shown in Figure 19-2.

#### Figure 19-2 Applications Properties Sheet



Invoke the properties sheet by clicking on the **Applications** tab. Table 19-2 describes the functions of the properties sheet.

Table 19-2 Applications Properties Sheet

Function	Description
Command Line	Enter the command line used to invoke the application.
Working Directory	Enter the directory where the application is stored.

#### **Using the Logon Properties Sheet**

The Logon properties sheet is shown in Figure 19-3.

#### Figure 19-3 Logon Properties Sheet

Edit Connection Details	ок 🗙
Server Application Logon Window Options Title Firewall Settings	
If desired, you can specify logon information to be used when connecting to the remote application.	
Username:	
Password:	
Domain:	
Note: If the application is an anonymous published application, any logon information that you specify here is ignored.	

Invoke the properties sheet by clicking on the **Logon** tab. Table 19-3 describes the functions of the **Logon** properties sheet.

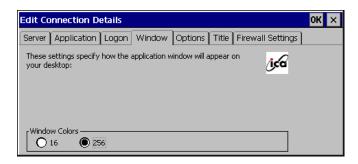
 Table 19-3
 Logon Properties Sheet

Function	Description
Username	Enter the user name used to log into the server.
Password	Enter the password used to log into the server.
Domain	Enter the domain name of the server.

#### **Using the Window Properties Sheet**

The Window properties sheet is shown in the following figure.

#### Figure 19-4 Window Properties Sheet



Invoke the properties sheet by clicking on the **Window** tab. Table 19-4 describes the functions of the **Window** properties sheet.

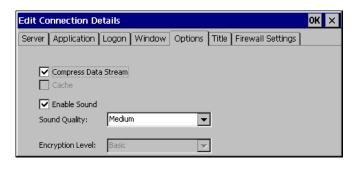
Table 19-4 Window Properties Sheet

Function	Description
Window Colors	Use this group box to configure the color scheme of the application you will be using. The default is <b>256</b> .
	<b>16</b> Click on this radio button to select a 16-color scheme.
	<b>256</b> Click on this radio button to select a 256-color scheme.

#### **Using the Options Properties Sheet**

The **Options** properties sheet is shown in Figure 19-5.

#### Figure 19-5 Options Properties Sheet



Invoke the properties sheet by clicking on the **Options** tab. Table 19-5 describes the functions of the **Options** properties sheet.

 Table 19-5
 Options Properties Sheet

Function	Description
Compress Data Stream	Click on this check box to enable compressed data streaming. By default the box is checked.
Cache	Click on this check box to enable caching.
Enable Sound	Click on this check box to enable sound. By default the box is unchecked.

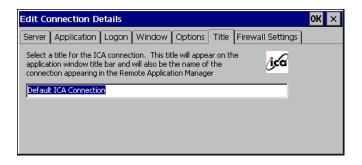
Function	Description
Sound Quality	Select from:
	• High
	Medium
	• Low
	By default <b>Sound Quality</b> is <b>Medium</b> .
Encryption Level	Select from:
	• <b>Basic</b> (8 bit)
	• <b>40</b> (40 bit)
	• <b>56</b> (56)
	• <b>128</b> (128)
	128-bit Logon

Table 19-5 Options Properties Sheet, Continued

#### **Using the Title Properties Sheet**

The Title properties sheet is shown in Figure 19-6.

#### Figure 19-6 Title Properties Sheet

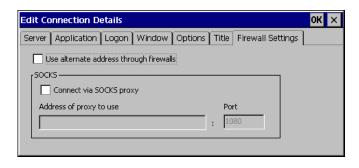


This properties sheet contains only one function. Enter the title of your ICA connection in the text box on the sheet.

#### **Using the Firewall Settings Properties Sheet**

The Firewall Settings properties sheet is shown in Figure 19-7.

#### Figure 19-7 Firewall Settings Properties Sheet



Invoke this properties sheet by clicking on the **Firewall Settings** tab. Table 19-6 describes the functions of the properties sheet.

Function	Description
Use Alternate Address Through Firewalls	Click on this check box to enable the function. By default the box is unchecked.
SOCKS	SOCKS (Sockets) is networking proxy protocol. It enables hosts on one side of a SOCKS server to gain access to hosts on the other side of the SOCKS server. The SOCKS server authenticates and authorizes the requests, establishes a proxy connection, and relays data.
	<b>Connect Via SOCKS Proxy</b> Click on this check box to enable connection to a SOCKS proxy server. By default the check box is unchecked.

perties Sheet, Continued	
Description	
Address of Proxy to Use	

Table 19-6 Firewall Settings Properties Sheet, Continued

Function

Enter in this text box the IP address of the SOCKS proxy server. Activate this box by clicking on **Connect Via SOCKS Proxy**. By default this box is deactivated.

#### Port

Enter the port number to connect to. Activate this box by clicking on **Connect Via SOCKS Proxy**. By default this box is deactivated.

# Connection Configuration

# **20** Editing RDP, Dial-Up, and Terminal Emulation Connections

# **Dial-Up and Terminal Emulation Connections**

Edit dial-up and terminal emulation connections through the **Winterm Connection Manager:** 

- 1. Click on the Configure tab.
- 2. Click to select a connection from the Connection Name list.
- 3. Click on the Edit command button.

To edit a dial-up connection you invoke the **Dial-Up Configuration Wizard**. See "Dial-Up Connections" for detailed information about using this wizard. To edit terminal emulation you invoke the **TE Client Connection Properties** dialog box. See "Terminal Emulation Connections" for detailed information.

## **RDP Connections**

The **Winterm Connection Manager** lets you edit individual RDP connection parameters. It is done through the **Properties** dialog box. The following figure shows the **Properties** dialog box.

Figure 20-1 Properties Dialog Box

Properties	×
Net Connections Application	
Connection	
Name: Default RDP Connection	
Server: 132.237.250.50	
Automatic Logon	
Username:	
Password:	
Do <u>m</u> ain:	
Connection Speed	
Low Speed Connection	
OK Cancel Apply	

#### Using the Properties Dialog Box

The **Properties** dialog box consists of two properties sheets. Depending on your connections configuration, you use one of these properties sheets to edit connection parameters. To invoke the dialog box:

- 1. Click on the Configure tab in the Winterm Connection Manager dialog box
- 1. Click on an RDP connection in the Connections Name list.
- 2. Click on the Edit command button on the Configure properties sheet.

#### **Using the Net Connections Properties Sheet**

The **Net Connections** properties sheet is displayed by default for the **Properties** dialog box. Use this properties sheet to reconfigure the network portion of the connection.

Table 20-1 describes the functions of the **Net Connections** properties sheet.

Function	Description
Connection	Select a connection from the <b>Connection Name</b> list in the <b>Terminal Connection Manager</b> . Use the following functions to change the connection's network parameters:
	<b>Name</b> Enter the name of the connection in this field. When <b>OK</b> is selected, your changes will be saved and <b>Name</b> will replace what was selected.
	<b>Server</b> Enter the address of the server in this field.
Automatic Logon	Click on this check box to enable automatic logon for your terminal. Enabling this function enables the <b>Username</b> , <b>Password</b> , and <b>Domain</b> fields:
	<b>Username</b> Enter your user name.
	<b>Password</b> Enter your password.
	<b>Domain</b> Enter your domain.
Connection Speed	Low Speed Connection Click on this to enable low-speed connection. This function is used when connecting with a modem.

Table 20-1 Net Connections Properties Sheet

#### **Using the Application Properties Sheet**

Invoke the **Application** properties sheet by clicking on the **Application** tab in the **Properties** dialog box. Use this properties sheet to reconfigure the applications-related portion of the connection.Figure 20-2 shows this sheet.

#### Figure 20-2 Application Properties Sheet

Properties	×
Net Connections Application	
Application to run	
Desktop	
Eile name:	
Desktop	
Working Directory:	
OK Cancel Appl	У

The following table describes the functions of the **Application** properties sheet.

 Table 20-2
 Application Properties Sheet

Function	Description
Application to Run	Select a connection from the <b>Connection Name</b> list in the <b>Terminal Connection Manager</b> . Use the following functions to edit application types:
	<b>Desktop</b> Click on this radio button to include a desktop application in your connection parameters.
	File Name Click on this radio button to include files you will work in your connection parameters. Enter the name of the file in the field provided.
	Working Directory Enter the directory path to the file provided in File Name.

# Mote

**Desktop** and **File Name** are mutually exclusive. **File Name** must be selected in order to use the **File Name** and **Working Directory** fields.

# Connection Configuration

# **External Devices**

- 21 Devices Properties Sheet
- 22 Managing Network Adapters
- 23 PC Card Adapters for Modems
- 24 Touchscreens
- 25 Local Printers
- 26 PC Card Adapters for Token Ring Networks
- 27 PC Card Adapters for Wireless Networks

# **21** Devices Properties Sheet

There are two different types of **Devices** properties sheet. Model 3200LE terminals display a one type while all the SE models display another type (see Figure 21-1 and Figure 21-2). The **Devices** properties sheet for the SE models contain functions for:

- Changing ISDN settings
- Adding modems or changing the configuration of a modem
- Adapter configuration
- Touchscreen configuration
- LPD configuration
- Token ring configuration
- WaveLAN configuration

Model 3200LE Devices properties sheets contain functions for:

- Touchscreen configuration
- LPD configuration

The following sections discuss both properties sheets.

# **Devices Properties Sheet for SE Model Terminals**

Terminal Properties	×
General Input Display Network Upgrade Security Apps Devices SysInfo	
Modern Configuration	
ISDN Settings	
Adapters ELO Touch LPD RACORE - TRTouchscreen	
WaveLAN	
O <u>K</u> <u>C</u> ancel <u>Apply</u>	

Figure 21-1 Devices Properties Sheet (SE Models)

To invoke this properties sheet,

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Devices tab in the Terminal Properties dialog box.

Table 21-1 describes the functions of this properties sheet.

Function	Description
ISDN Settings	Click on this command button to invoke the <b>ISDN</b> <b>Settings</b> dialog box. For more detailed information see "PCMCIA Adapter for Modems" in External Devices. By default this command button is activated.
Add/Change Modem	Click on this command button to invoke the <b>Adding</b> <b>New Modems</b> dialog box. For detailed information see "PCMCIA Adapter for Modems" in External Devices. This command button will only be activated if a PC card modem is inserted in to the terminal's PC card slot.
Adapters	Click on this icon to invoke the <b>Adapters</b> <b>Configuration</b> dialog box. For detailed information see "Managing Network Adapters" in External Devices.
ELO Touch	Click on this icon to invoke the <b>ELO Touchscreen</b> dialog box. For detailed information see "Touchscreens" in External Devices.
LPD	Click on this icon to invoke the <b>LPD Config</b> dialog box. For detailed information see "Local Printers" in External Devices.
RACORE-TR	Click on this icon to invoke the <b>RACORE - Token Ring</b> <b>Adapter Settings</b> dialog box. For detailed information see "PC Card Adapters for Token Ring Networks" in External Devices.
Touchscreen	Click on this icon to invoke the <b>MicroTouch</b> <b>Touchscreen Properties</b> dialog box. For detailed information see "Touchscreens" in External Devices.
WaveLAN	Click on this icon to invoke the <b>WaveLAN/IEEE</b> <b>Settings</b> dialog box. For detailed information see "PC Card Adapters for Wireless Networks" in External Devices.

Table 21-1 Devices Properties Sheet (SE Models)

# **Devices Properties Sheet for LE Model Terminals**

Terminal Properties	×
General Input Display Network Upgrade Security Apps Devices SysInfo	
Modem Configuration	
ISDN Settings Add/Change Modem	
ELO Touch LPD TRTouchscreen	
O <u>K</u>	

Figure 21-2 Devices Properties Sheet (3200LE)

To invoke this properties sheet,

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Devices tab in the Terminal Properties dialog box.

Table 21-2 describes the functions of this properties sheet.

Function	Description
ELO Touch	Click on this icon to invoke the <b>ELO Touchscreen</b> dialog box. For detailed information see "Touchscreens" in External Devices.
LPD	Click on this icon to invoke the <b>LPD Config</b> dialog box. For detailed information see "Local Printers" in External Devices.
Touchscreen	Click on this icon to invoke the <b>MicroTouch</b> <b>Touchscreen Properties</b> dialog box. For detailed information see "Touchscreens" in External Devices.

Table 21-2 Devices Properties Sheet (SE Models)

External Devices

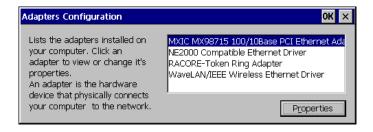
# 22 Managing Network Adapters

#### Mote

This chapter applies only to Model 3320SE, 3350SE, 3360SE and 3720SE terminals.

An adapter is a device that physically connects a terminal to a network. The **Adapters Configuration** dialog box gives you the ability to configure the adapters on a terminal. Figure 22-1 shows the dialog box.

Figure 22-1 Adapters Configuration Dialog Box



# Using the Adapters Configuration Dialog Box

To invoke this dialog box:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Devices tab.
- 3. Click on the Adapters icon in the icon container on the Devices properties sheet.

The following table discusses the functions of the **Adapters Configuration** dialog box.

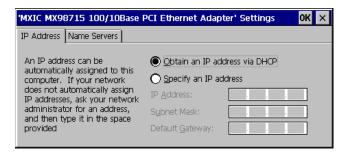
Function	Description
Adapters	This is a list of all the available adapters on a terminal.
Properties	<ul> <li>Click on this command button to invoke a properties dialog box:</li> <li>Click on an item in the list.</li> <li>Click on the command button.</li> <li>A properties dialog box displays. In the dialog box are the <b>IP Address</b> properties sheet and the <b>Name Server</b> properties sheet. The following sections discuss these properties sheets.</li> </ul>

 Table 22-1
 Adapter Configuration Dialog Box

#### **IP Address Properties Sheet**

Use the **IP Address** properties sheet to enter the IP address of the terminal that is using the adapter. Figure 22-2 shows the **IP Address** properties sheet.

#### Figure 22-2 IP Address Properties Sheet



The following table discusses the functions of the **IP Address Properties Sheet**.

Function	Description
Obtain an IP Address Via DHCP	Click on this radio button to let the terminal obtain an IP address automatically using DHCP. This button is selected by default.
Specify an IP Address	Click on this radio button to enter an IP address, subnet, and gateway. By default this function is disabled.
IP Address	Enter an IP address in this field. By default this text box is blank.
Subnet	Enter a subnet in this field. By default this text box is blank.
Default Gateway	Enter a gateway in this field. By default this text box is blank.

 Table 22-2
 IP Address Properties Sheet

# Name Server Properties Sheet

Use the **Name Server** properties sheet to enter the IP addresses of the DNS and WINS servers for the terminal using the adapter. Figure 22-3 shows the **Name Server** properties sheet.

## Figure 22-3 Name Servers Properties Sheet

'MXIC MX98715 100/10Base F	CI Ethernet Adapte	er' Settings	ок 🗙
IP Address Name Servers			
Name server addresses may be automatically assigned if DHCP is enabled on this adapter. You can specify additional WINS or DNS resolvers in the space provided	Primary <u>D</u> NS: Secondary D <u>N</u> S: Primary <u>WI</u> NS: Secondary W <u>I</u> NS:		

The following table discusses this properties sheet.

Function	Description
Primary DNS	Enter the IP address of your primary DNS (Domain Name Service) server. By default this text box is blank.
Secondary DNS	Enter the IP address of your secondary DNS server. By default this text box is blank.
Primary WINS	Enter the IP address of your primary WINS (Windows Internet Naming Service) server. By default this text box is blank.
Secondary WINS	Enter the IP address of your secondary WINS server. By default this text box is blank.

# Table 22-3 Name Server Properties Sheet

# **23** PC Card Adapters for Modems

# Mote

This chapter applies only to Model 3320SE, 3350SE, 3360SE and 3720SE terminals.

Your WBT supports PCMCIA adapted modems. This chapter discusses the setup for PCMCIA modems. Figure 23-1 shows the **Add or Change Modem** dialog box. Use this dialog box to set up a PCMCIA modem.

Figure 23-1 Add or Change Modem Dialog Box

Add or Change Modem 🛛 🗙
Modem Name: AD_PC_CARD-RC288ACL-5DA6
Init Commands ("AT" Command Strings Separated by " <cr>" Delimiters):</cr>
AT&F E0 V1 &C1 &D2 <cr>ATW0 S95=0<cr></cr></cr>
Flow Settings ("AT" Command Strings Separated by " <cr>" Delimiters)</cr>
Elow Hardware: AT&K3 <cr></cr>
Flow Software: AT&K4 <cr></cr>
Flow Off: AT&KO <cr></cr>
O <u>K</u> <u>C</u> ancel

To invoke the dialog box, click on the Add/Change Modem... command button on the **Devices** properties sheet. Table 23-1 discusses the functions of this dialog box.

 Table 23-1
 Add or Change Modem Dialog Box

Function	Description
Modem Name	This field displays the brand name of the modem in your system.
Init Commands	Enter a modem initialization command string in this field. The default is <b>ATEOV1&amp;C1&amp;D1<cr></cr></b> .
Flow Settings	Use this group box to set the following flow settings:
	Flow Hardware Enter a flow hardware command string in this field. The default is AT&K3 <cr>.</cr>
	Flow Software Enter a flow software command string in this field. The default is AT&K4 <cr>.</cr>
	Flow Off Enter a flow hardware command string in this field. The default is AT&K0 <cr>.</cr>



# Mote

The Hayes command set is discussed in greater detail in "Modem AT Commands."

# **ISDN Settings**

Use the **ISDN Settings** dialog box to set the terminal's ISDN (Integrated Services Digital Network) settings. If you do not know this information, ask your system administrator. Figure 23-2 shows the dialog box.

# Mote

These settings are specific to EiCon-Tech modems only.

# Figure 23-2 ISDN Settings Dialog Box

IS	GDN Settings	×
	Modem Name: EiCon_Technology_Corporation-DIVA_T/A-895D	
	Primary ISDN Parameters	7
	Switch Type: AT & T SESS	
	Service Profile ID <u>1</u> (SPID 1): 0195481110	
	Service Profile ID 2 (SPID 2): 0195410020	
	Protocol: Multilink PPP	2

To invoke the dialog box, click on the **ISDN Settings...** command button on the **Devices** properties sheet. Table 23-2 discusses the functions of the **ISDN Settings** dialog box.

 Table 23-2
 ISDN Settings Dialog Box

Function	Description	
Modem Name	This field displays the brand name of the modem in your system.	

Function	Description
Primary ISDN Parameters	Use this group box to configure the following ISDN parameters:
	<b>Switch Type</b> Use this drop-down scroll list to select the switch type. The default is <b>AT &amp; T 5ESS</b> .
	Service Profile ID 1 Use this field to enter Service Profile ID 1. Only numbers are allowed in this text box. The default is 0195481110.
	Service Profile ID 2 Use this field to enter Service Profile ID 2. Only numbers are allowed in this text box. The default is 0195410020.
Protocol	Use this drop-down scroll list to select a protocol. The default is <b>Multilink PPP</b> .

# Table 23-2 ISDN Settings Dialog Box

# 24 Touchscreens

Your WBT supports touchscreens. This chapter discusses the setup for the two touchscreens the terminal supports ELO and MicroTouch.

# **ELO Touchscreen**

Figure 24-1 shows the **ELO Touchscreen** dialog box. Use this dialog box to calibrate an ELO touchscreen.

ок 🗙
Cali <u>b</u> rate

Figure 24-1 ELO Touchscreen Dialog Box

To invoke this dialog box:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Devices tab.
- 3. Click on the ELO Touch icon in the properties sheet's icon container.

### Table 24-1 discusses the dialog box.

Function	Description
Cable Connection	<ul> <li>Select from this scroll list the Com port to which the touchscreen is connected:</li> <li>Disable</li> <li>Serial Cable on COM1</li> <li>Serial Cable on COM2</li> <li>The default for the list is Disable.</li> </ul>
Calibrate	Click on this command button to calibrate the touchscreen. The button will be deactivated if a touchscreen is not connected to one of the terminal's Com ports or USB connectors.
	Note After a Com port or USB connector is selected, the terminal must be restarted. When you click on <b>Calibrate</b> , a white screen with a single crosshair in the upper left-hand corner displays:
	<ol> <li>Touch the crosshair. The crosshair will move to the lower right-hand corner.</li> </ol>
	<ol> <li>Touch the crosshair. The crosshair will move to the upper right-hand corner.</li> </ol>
	<ol> <li>Touch the crosshair. The ELO Touchscreen dialog box displays.</li> </ol>
	<b>4.</b> Click on <b>OK</b> . Calibration is complete.

# Table 24-1 ELO Touchscreen Dialog Box

# **MicroTouch Touchscreen**

Figure 24-2 shows the **Microtouch Touchscreen Properties** dialog box. Use this dialog box to set up a Microtouch touch screen.

Figure 24-2 Microtouch Touchscreen Properties Dialog Box

MicroTouch Touchscreen Properties	ок 🗙
Calibrate Touch Settings Cursor Hardw	vare
[Information —	Connection
Controller Type:	Port:
Firmware Version:	Baud Rate: 9600 💌
Status: NOT FOUND	Eind touchscreen

To invoke this dialog box:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Devices tab.
- 3. Click on the Touchscreen icon in the properties sheet's icon container.

The **Microtouch Touchscreen Properties** dialog box contains four properties sheets. The rest of this section discusses these properties sheets.

# **Hardware Properties Sheet**

The **Hardware** properties sheet is displayed by default and is shown in Figure 24-2. The following table discusses the properties sheet.

Table 24-2 Hardware Properties Sheet

Function	Description
Information	This group box displays information about the touchscreen that is connected to your terminal. To display the information, click on <b>Find</b> <b>Touchscreen</b> (see below).
	<b>Controller Type</b> This field shows the controller type.

Function	Description	
	<b>Firmware Version</b> This field shows the firmware version.	
	Status This field shows the status: • OK	
	Not Found	
	If there is no MicroTouch touch screen connected to the terminal, the <b>Status</b> field will display <b>Not Found</b> .	
Connection	Use this group box to configure the connection between the terminal and the touchscreen.	
	<b>Port</b> Select the Com port that the touchscreen is connected to.	
	<b>Baud Rate</b> Select the proper baud rate for the connection.	
	<b>Find Touchscreen</b> Click on this command button to detect the touchscreen.	

### Table 24-2 Hardware Properties Sheet

# **Cursor Properties Sheet**

The **Cursor** properties sheet is shown in Figure 24-3.

### Figure 24-3 Cursor Properties Sheet

MicroTouch Touchscreen Properties OK 🗙		
Calibrate Touch Settings Cursor Har	dware	
Cursor Offset Set distance between finger and cursor.	Stabilize Cursor Adjust controller frequency for current display settings.	
Vertical         Set           Horizontal Edge Adjust         Image: Adjust	Stabilize	

Table 24-3 discusses the **Cursor** properties sheet.

### Table 24-3 Cursor Properties Sheet

Function	Description
Cursor Offset	Use this properties sheet to set the distance between your finger and the cursor.
	<b>Vertical</b> Check this check box to set the vertical distance.
	Horizontal Edge Adjust Check this check box to set the horizontal distance.

Function	Description
	<b>Set</b> Click on this command button to invoke a dialog box that will allow you to set distances:
	To define the cursor offset, buch the screen below the tip of the arrow and lift off.

## Table 24-3 Cursor Properties Sheet

Follow the instructions on the dialog box.

**Stabilize Cursor** 

This command button is always deactivated.

Cancel

# **Touch Settings Properties Sheet**

Figure 24-4 shows the **Touch Settings** properties sheet.

# Figure 24-4 Touch Settings Properties Sheet

MicroTouch Touchscreen Properties	ок 🗙
Calibrate Touch Settings Cursor Hardware	
Touch Mode	
Desktop	
O Dra <u>w</u> ing	
O Button	

The following table discusses this properties sheet.

### Table 24-4 Touch Settings Properties Sheet

Function	Description
Touch Mode	Use this group box to configure a touch mode. A touch mode specifies actions that equate to mouse click, double-click, and drag events.
	<b>Desktop</b> Check this check box to enable desktop mode. Desktop mode is used for general desktop applications.
	<b>Drawing</b> Check this check box to enable drawing mode. Drawing mode is used for graphics applications.
	<b>Button</b> Check this check box to enable button mode. Button mode is used for applications that use button-type UIs.

# **Calibrate Properties Sheet**

The Calibrate properties sheet is shown in Figure 24-5.

### Figure 24-5 Calibrate Properties Sheet



The **Calibrate** properties sheet has one command button. Click on the **Calibrate** command button to begin the calibration process. A white screen with a single crosshair in the upper left hand corner displays:

- 1. Touch the crosshair. The crosshair will move to the lower righthand corner.
- 2. Touch the crosshair. The crosshair will move to the upper right-hand corner.
- 3. Touch the crosshair. The ELO Touchscreen dialog box displays.
- 4. Click on OK.

Calibration is complete.

# **25** Local Printers

Your WBT supports local printing. This chapter discusses the configuration of local printing using the **LPD Config** dialog box.

LPD can only be used with the parallel port of a terminal.

### Figure 25-1 LPD Config Dialog Box

LPD Config		ОК 🗙
Enable Prin	nter	
Printer <u>N</u> ame	Noname	
Port	515	
Send Form Feed		

# Using the LPD Config Dialog Box

To invoke this dialog box:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Devices tab.
- 3. Click on the LPD icon in the icon container.

Table 25-1 discusses the dialog box.

Table 25-1 LFD Connig Dialog Dox	Table 25-1	LPD Config Dialog Box
----------------------------------	------------	-----------------------

Function	Description
Enable Printer	Check this check box to enable a printer connected to your terminal.
Printer Name	Type in this field the name of the enabled printer. The default for this field is <b>Noname</b> .
Port	Type in this field the virtual port number. Virtual port is a logical device assigned when you set up LPD services on your server. The default for this field is <b>515</b> .
Send Form Feed	Check this check box to enable form feeds.

# 26 PC Card Adapters for Token Ring Networks



This chapter applies only to Model 3320SE, 3350SE, 3360SE and 3720SE terminals.

Your WBT supports PCMCIA adapted RACORE token ring PCMCIA cards. This chapter discusses the setup for RACORE token ring card. Figure 26-1 shows the **RACORE Token Ring Adapter Settings** dialog box. Use this dialog box to configure a RACORE token ring card.

RACORE-Token Ring Adapter Settings	ок 🗙
User Defined MAC Address: (Valid Digit: 0 - 9, a - f) D0000000000	
Token Ring Speed <u>4</u> MegaBits/Second () 1 <u>6</u> MegaBits/Second	
	-

# Using the RACORE - Token Ring Adapter Settings Dialog Box

To invoke this dialog box:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Devices tab.
- 3. Click on the **RACORE TR** icon in the icon container on the **Devices** properties sheet.

Table 26-1 discusses the dialog box.

### Table 26-1 RACORE - Token Ring Adapter Settings

Function	Description
User Defined MAC Address	Use this text field to enter the MAC address of the token ring PC card. The default is <b>0000000000000</b> .
Token Ring Speed	Use this group box to select the speed of your token ring network. The default is <b>16 Megabits/Second</b>
	<b>4 Megabits/Second</b> Click on this radio button if your network is set to a passing speed of 4 megabits.
	<b>16 Megabits/Second</b> Click on this radio button if your network is set to a passing speed of 16 megabits.

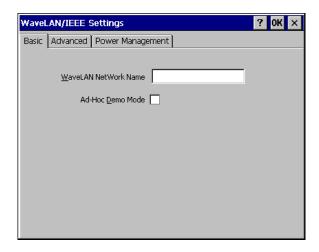
# **27** PC Card Adapters for Wireless Networks



This chapter applies only to Model 3320SE, 3350SE, 3360SE and 3720SE terminals.

Your WBT supports PCMCIA adapters for WaveLAN wireless networks. This chapter discusses the setup for these adapters. Figure 27-1 shows the **WaveLAN/ IEEE Settings** dialog box.

Figure 27-1 WaveLAN/IEEE Settings Dialog Box



# Using the WaveLAN/IEEE Settings Dialog Box

To invoke this dialog box:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Devices tab.
- 3. Click on the WaveLAN icon in the icon container.

The **WaveLAN/IEEE Settings** dialog box contains three properties sheets. The rest of this section discusses these properties sheets.

# **Basic Properties Sheet**

The **Basic** properties sheet is the default of the dialog box and is shown in Figures 27-1. The following table discusses the properties sheet.

Function	Description
WaveLAN Network Name	Enter in this field the name of the LAN network that you want to connect to. You can enter any. If you enter any, the terminal will connect to any network that provides good communications quality. The default for this field is blank.
Ad-Hoc Demo Mode	Click here to enable <b>Ad-hoc Demo</b> <b>Mode</b> . Enabling this mode will allow the terminal to connect to a small wireless workgroup. In this mode the terminal will:
	<ul> <li>Ignore WaveLAN Network Name.</li> </ul>
	<ul> <li>Ignore WavePOINT-II access points.</li> </ul>
	<ul> <li>Fix the radio to operate at factory default.</li> </ul>
	By default the check box is unchecked.

Table 27-1 Basic Properties Sheet

# **Advanced Properties**

The Advanced properties sheet is shown in Figure 27-2.

Note Advanced properties normally should not need to be changed. The default values should be sufficient for normal network use.

## Figure 27-2 Advanced Properties Sheet

WaveLAN/IEEE Settings	? OK ×
Basic Advanced Power Manage	ement
MAC Address	
<u>A</u> P Density	Low Density
<u>T</u> ransmit Rate	High 💌
Eixed	
Medium <u>R</u> eservation	Off

The following table discusses this properties sheet.

Function	Description
MAC Address	Enter in this field a user assigned MAC address. You will not have to change this parameter for most networks. You will only have to assign an address if your network uses local MAC addressing. By default this field is blank.
AP Density	Select in this scroll box an AP density (access point density) value. This parameter controls the roaming sensitivity of the terminal. The values are:
	Low Density
	Medium Density
	High Density
	This parameter is set by:
	<ul> <li>The density of access points in the network.</li> </ul>
	<ul> <li>The configuration of the access points.</li> </ul>
	The default is Low Density.
Transmit Rate	Select in this scroll box the transmission rate of the connection. The values are:
	• Low
	Standard
	Medium
	• High
	The default is <b>High</b> .

 Table 27-2
 Advanced Properties Sheet

Function	Description
Fixed	Click to check this box to disable the Auto-Transmit Rate Select function. The default is unchecked.
Medium Reservation	Select from this scroll list: <ul> <li>Off</li> </ul>
	Hidden Stations
	This function improves wireless performance in a network. It prevents message collision. The default is <b>Off</b> .

 Table 27-2
 Advanced Properties Sheet

# **Power Management**

Figure 27-3 shows the **Power Management** properties sheet.

Figure 27-3	<b>Power Management Properties Sheet</b>
-------------	------------------------------------------

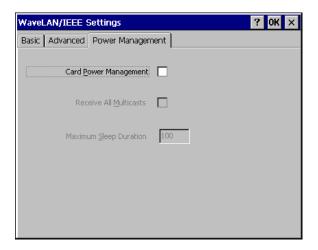


Table 27-3 discusses the properties sheet.

Function	Description
Card Power Management	Click to check this box to enable power management. Power management conserves the life of the battery of a portable device. When <b>Card Power</b> <b>Management</b> is enabled, the other functions of the properties sheet are activated. By default the box is unchecked.
Receive All Multicasts	Click to check this box to enable the terminal to wake up and receive multicasts. The default for this box is deactivated.
Maximum Sleep Duration	Enter in this field the maximum time the terminal is allowed to sleep. The default is <b>100</b> .

 Table 27-3
 Power Management Properties Sheet

# **Firmware Upgrades**

- 28 Cable Firmware Upgrades
- 29 FTP Pull Firmware Upgrades
- 30 SNMP Firmware Upgrades
- 31 DHCP Firmware Upgrades

# **28** Cable Firmware Upgrades

# 🗹 Note

This chapter applies only to Model 3320SE, 3350SE, 3360SE and 3720SE terminals.

The following section describes the cable method of firmware download. The cable method for all terminals is parallel download, using a Laplink<sup>®</sup> cable and the MS-DOS xfer.exe program.

# Setup

The following equipment may be needed, depending on the download procedure used:

- IBM-compatible PC with a CD-ROM drive and a parallel port.
- Terminal firmware upgrade diskette or CD.
- LapLink or equivalent parallel port communications cable (used only if parallel port is used for downloading).

## Mote

For convenience, drive D:\ is used here for the CD drive. You should substitute the appropriate drive letter for your PC.

# **Flash Parallel Download Procedure**

This procedure includes both manual and auto download instructions. The download procedure will not work unless your PC is booted to DOS.

**1.** Record the terminal's current configuration.

### Caution

All previous settings will be lost. Upgrading the firmware defaults the current configuration to the factory default settings.

- 2. Turn off the terminal.
- **3.** Connect a parallel LapLink cable from the parallel port of your PC to the parallel port of the terminal.
- 4. Insert the firmware upgrade CD into your PC.
- Type *D*: I at the DOS prompt to select the drive where the download files exist. Use the *dir* command to find the files.
- 6. Perform either "Manual Download" or "Auto Download."

# Manual Download

Use the following instructions to perform a manual download.

- 1. Type *xfer < filename.ext*> at the DOS prompt
- 2. Press Enter, and the Download Utility dialog box appears. See the following figure.

### Figure 28-1 Download Utility Dialog Box

Download Utility	
File:	
Number of bytes sent:	
waiting to download data	
Exit	

3. Power-up the terminal to initiate the download.

The **Firmware Upgrade** dialog box appears, showing that the download is in progress. When the download is complete, disconnect the parallel cable. The **Setup Wizard** will appear.

# Mote

If the download dialog box remains on the screen longer than 1 minute, press the **Enter** key. A prompt to repeat or quit the operation appears. If the download fails, quit the procedure, check all cables and connections, then repeat from Step 2.

# Auto Download

Use the following instructions to perform an auto download:

- Log on to the root of the drive where the installation batch file resides (usually D:).
- 2. Type install at the DOS prompt, then press Enter. The Download Utility dialog box appears and the install program prompts you through the download procedures.
- **3.** When you are finished with your download, disconnect the LapLink cable and reconnect the peripheral cables.
- 4. Power-up the terminal and reconfigure its communications and options settings.
- 5. Check the **About** dialog box to verify the download revision.

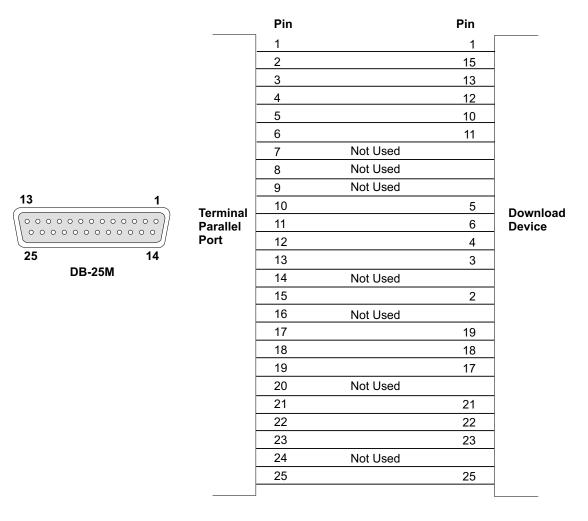
# **Cable Pinouts**

# **Parallel Download Cable Pinouts**

The following table lists the parallel download cable pinouts.

PC Side Te	rminal Side
Pin 01 Pir	n 01
Pin 02 Pir	n 15
Pin 03 Pir	n 13
Pin 04 Pir	n 12
Pin 05 Pir	n 10
Pin 06 Pir	n 11
Pin 07 *	
Pin 08 *	
Pin 09 *	
Pin 10 Pir	n 05
Pin 11 Pir	n 06
Pin 12 Pir	า 04
Pin 13 Pir	n 03
Pin 14 Pir	n 14
Pin 15 Pir	n 02
Pin 16 Pir	n 16
Pin 17 Pir	n 17
Pins 18 to 25 Pir	n 25 Gnd
* - Pin(s) not connected	

Table 28-1 Parallel Download Cable Pinouts



## Figure 28-2 Parallel Download Cable Connectors

Firmware Upgrades

# **29** FTP Pull Firmware Upgrades

Use the Upgrade properties sheet to:

- 1. Set up a terminal for communication with an FTP server.
- 2. Perform FTP pull upgrades.

See Figure 29-1.

Figure 29-1	Upgrade	<b>Properties</b>	Sheet
-------------	---------	-------------------	-------

Terminal	Properties	×
	I Input Display Netw al Firmware Upgrade : -	vork Upgrade Security Apps Devices SysInfo About
	O Use ETP Informatio	n From DHCP Server
	- 🖲 Use Local FTP Infor	mation
	Server <u>N</u> ame:	
	Server <u>D</u> irectory:	
	User <u>I</u> D:	anonymous
	Password:	****
	Status:	Save Password
	<u> </u>	
		Upgrade
	OK	<u>C</u> ancel <u>Apply</u>

# **Using the Upgrade Properties Sheet**

To invoke this properties sheet:

- 1. Press the F2 key.
- 2. Click on the Upgrade tab in the Terminal Properties dialog box.

The following table describes the functions found on this properties sheet.

 Table 29-1
 Upgrade Properties Sheet

Function	Description
Local Firmware Upgrade	Use this group box to upgrade your terminal's firmware using an FTP server. The functions are:
	<b>Use FTP Information from DHCP Server</b> Select this function if you want to get the FTP server and directory information from a DHCP server. Click on this radio button to select the function. By default the function is disabled.
	<b>Use Local FTP Information</b> Select this function if you want to enter the FTP server you will use for the upgrade. Click on the radio button to select the function. By default the function is enabled.
	Server Name Enter the name or IP address of the FTP server where the binary and params.ini reside. The default is blank.
	<b>Server Directory</b> Enter the directory on the FTP server where the binary and params.ini reside. The default is blank.
	<b>User ID</b> Enter your user account in this field. The default is <b>Anonymous</b> .
	<b>Password</b> Enter your password in this field. The default is *****.

Function	Description
	<b>Status</b> This display box shows status information about the connection to the FTP server, and the firmware download. Connect and download errors are also reported. The default is blank.
	<b>Save Password</b> Check this box to save the entered password in the registry.
Upgrade	Click on this command button to initiate the upgrade procedure. By default the button is disabled until an entry is made in the <b>FTP Server</b> field.

Table 29-1 Upgrade Properties Sheet, Continued

## FTP and Bootstrap.exe

## Mote

Bootstrap.exe and params.ini must be installed on your FTP server to upgrade the 3350SE terminal. For all other models, params.ini is required and bootstrap.exe is not required. To install these files, drag and drop them from the CD-ROM to the appropriate directory on your FTP server. The upgrade firmware can be obtained from the manufacturer's customer support.

Download is initiated through the **Upgrade** command button on the **Upgrade** properties sheet. Information in the **Upgrade** properties sheet must be filled out to ensure a proper download. See "Changing Terminal Properties" in Advanced User Interface for more details about this properties sheet.

# The Upgrade Process

To upgrade:

- 1. Place bootstrap.exe, params.ini, and the new firmware file on your FTP server.
- 2. Press F2 to invoke the Terminal Properties dialog box.
- **3.** Click on the **Upgrade** properties sheet tab and enter the appropriate information.

4. Click on the Upgrade command button.

The bootstrap program uses **Server Name**, **User ID**, **Password**, and **Server Directory** from the **Upgrade** properties sheet to access the FTP server. The program performs the upgrade, checks for errors, and reboots the terminal.

An upgrade can not be cancelled once it has started.

A series of dialog boxes displays during the upgrade.

#### Figure 29-2 Firmware Upgrade Dialog Box 1

Firmware Upgrade	
⚠	Warning! You are about install new firmware. Once this process has started, you cannot cancel. You must let it complete or risk corrupting the flash memory.
	<u>Start</u>

This is the first dialog box that displays. Read for information and click on **Start** to upgrade, or **Cancel** to quit the process.

## Mote

If you are downloading the same version of firmware that is already on the terminal, a dialog box displays reporting that you are downloading the same version.

#### Figure 29-3 Firmware Upgrade Dialog Box 2

Firmware Upgrade	
Reading file: FW.bin	
Start	

Click on **Start** to begin the download. The process is:

- The image gets read.
- The flash gets erased.
- The image gets written to the flash.

When the upgrade is complete, the terminal will reboot to the **Winterm Connection Manager**.

Fimware Upgrades

# **30** SNMP Firmware Upgrades

# Using the SNMP Network Administration Dialog Box

The **SNMP Network Administration** dialog box contains the functions that you can use to administer to the terminals on your SNMP network. See Figure 30-1.

SNMP Network Administration				
SNMP Communication	Trap Destination           Server 1:           Server 2:           Server 3:           Server 4:			
Terminal Information Description Terminal Name: Location: Contact:	Custom Eield 1: Fjeld 2: Figld 3:			
<u>ok</u>	Cancel			

Figure 30-1 SNMP Network Administration Dialog Box

To invoke this dialog box:

- 1. Press the F2 key to invoke the Terminal Properties dialog box.
- 2. Click on the Apps tab to invoke the Apps properties sheet.
- 3. Click on the SNMP Network Administration command button.

The following table discusses the functions of this dialog box.

 Table 30-1
 SNMP Network Administration Dialog Box

Function	Description	
SNMP Communication	Use this group box to set up SNMP communication using the following functions:	
	Enable Authenticating Failure Trap Check this box to enable the authenticating failure trap.	
	<b>Community</b> Use this group box to configure the network management of a community.	
	<b>Get</b> This field takes the name of the community the SNMP management software will manage with read permission only. If this field is left blank, the community for that terminal will be public. The default for this field is <b>Public</b> .	
	<b>Set</b> This field contains the name of the community the SNMP management software will manage with write permission. By default, the set community that the terminal belongs to is called <b>WBTADMIN</b> . The default for this field is <b>WBTADMIN</b> .	
	Note All Get and Set names are case sensitive.	
	Trap Destination Server 1:, Server 2:, Server 3:, and Server 4: are fields that supply the names or IP addresses of the servers to which the terminal sends SNMP traps.	

Function	Description
<b>Terminal Information</b>	Use this group box to list information about terminals.
	<b>Description</b> Use this group box to describe a terminal.
	<b>Terminal Name</b> Type the name of a terminal in this field. On default, this displays the WBT and the MAC address of the product.
	Location Type the location of the terminal in this field.
	<b>Contact</b> Type the name of the administrator of the subject terminal in this field.
	Custom Use the following fields to type in any custom message associated with the subject terminal: • Field 1 • Field 2 • Field 3
	Each field will take 16 characters maximum.

#### Table 30-1 SNMP Network Administration Dialog Box, Continued

# **The Upgrade Process**

1. Ensure that the Wyse custom MIB (Management Information Base) is compiled by your SNMP manager.



# Mote

In order to initiate an SNMP upgrade, you must know the FTP or TFTP server's IP address or machine name, and the absolute path to the image on the FTP or TFTP server.

### Mote

In the Wyse custom MIB the enterprise number for Wyse is 1.3.6.1.4.1.714.

- 2. Enable SNMP Update Enable if it is not enabled.
- Using the SNMP/Network Administrator dialog box, verify that the community and set community names for the terminal match the community and set community names in the SNMP manager.

#### Mote

You can set the **Set Community** name for a terminal if you have DHCP enabled by setting DHCP Option **164** to the set community name your SNMP manager uses.

- 4. Using your SNMP manager:
  - a. Go to Wyse 1.2.3.8.1.2 (wbt3UpDnLoadTable).
  - **b.** Go to Wyse 1.2.3.8.1.2.1.2 (wbt3UpDnLoadID), user defined string.

#### Mote

The above is used in traps to identify the download operation.

- Go to Wyse 1.2.3.8.1.2.1.3 (wbt3UpDnLoadOp), and set its value to 1 (Download).
- d. Go to Wyse 1.2.3.8.1.2.1.4 (wbt3UpDnLoadSrcFile), and set its value to the absolute path of the directory where the image file and params.ini are located.
- Go to Wyse 1.2.3.8.1.2.1.6 (wbt3UpDnLoadFileType), and set its value to 0 (Binary).
- f. Go to Wyse 1.2.3.8.1.2.1.7 (wbt3UpDnLoadProtocol), and set its value to 0 or 1 (FTP or TFTP).
- **g.** Go to Wyse 1.2.3.8.1.2.1.8 (wbt3UpDnLoadFServer), and set its value to the IP address or DNS name of the FTP or TFTP server.
- h. Go to Wyse 1.2.3.8.1.4 (wbt3SubmitLoadJob), and set its value to 1 (Ready).

Step 4h will initiate an SNMP upgrade to your terminal. If the download is configured properly, the new image will download and the terminal will reboot automatically to factory defaults.

Refer to Chapter 29, FTP Pull Firmware Upgrades, to view the dialog boxes that display during the process.

Firmware Upgrades

# **31** DHCP Firmware Upgrades

# Using the Change DHCP Option IDs Dialog Box

Use the **Change DHCP Option IDs** dialog box to set up DHCP option IDs for terminal administration and upgrade. See Figure 31-1 for a view of this dialog box.

Change DHCP Opti	on IDs	
Common Option : <u>R</u> emote Logon Use Logon <u>P</u>	Ds Server : 155 er Name: 156 Domain: 157 assword: 158 and Line: 159	FTP Option IDs Eile Server: 161 File Rgot Path: 162 SNMP Option IDs Irap Server IP List : 163 Set Community: 164 Terminal Emulation Option IDs Emulation Mode : 166 Terminal ID: 167
RDP Option ID — Startup <u>Ap</u>	plication: 165	Virtual Port Option ID Server: 168 Cancel Reset To Defaults

Figure 31-1 Change DHCP Option IDs Dialog Box



Option 158 is not supported yet. It is reserved for future use.

Your terminal uses DHCP and the information on the **Change DHCP Option IDs** dialog box to:

- Help establish ICA and RDP connections
- Perform automated firmware updates
- Help define terminal emulation connections
- Specify the virtual port server
- Implement remote management of SNMP parameters

To invoke this dialog box:

- 1. Press the F2 key.
- 2. Click on the Apps tab.
- 3. Click on the Change DHCP Option command button.

The following table describes the functions of this dialog box.

 Table 31-1
 Change DHCP Option IDs Dialog Box

Function	Description
Common Option IDs	Group box used to assign DHCP option IDs to common DHCP variables. The number in each field is the DHCP option ID. The following field titles are the DHCP variables:
	<ul> <li>Remote Server</li> <li>Logon User Name</li> <li>Domain</li> <li>Logon Password - reserved for future use</li> <li>Command Line</li> <li>Working Directory</li> </ul>
RDP Option IDs	Group box used to set the following RDP option IDs:
	Startup Application
FTP Option IDs	Group box used to set the following FTP option IDs:
	<ul><li>File Server</li><li>File Root Path</li></ul>
SNMP Option IDs	Group box used to set the following SNMP option IDs:
	<ul><li>Trap Server IP List</li><li>Set Community</li></ul>

Function	Description		
Terminal Emulation Option IDs	Group box used to set the following terminal emulation option IDs:		
	<ul><li>Emulation Mode</li><li>Terminal ID</li></ul>		
Virtual Port Option IDs	Group box used to set the following virtual port option IDs:		
	Server		
Reset To Defaults	Click on this command button to reset all option IDs to the default values.		
	Note The values shown in Figure 31-1 are the terminal default values.		

Table 31-1 Change DHCP Option IDs Dialog Box, Continued

# **The Upgrade Process**

- 1. Press the F2 key for the Terminal Properties dialog box.
- 2. Click on the Network tab.
- Click on the Obtain an IP Address From DHCP Server radio button, if the function is not enabled.
- 4. Click on the Apps tab.
- 5. Click on the DHCP Automatic Update Enable check box on the Apps properties sheet, if the function is not enabled.

## Mote Note

You have now enabled the automatic DHCP function. You will also need to configure your DHCP option IDs. Make sure your DHCP options match the options on the DHCP server.

- 6. Click on the Change DHCP Option... command button.
- 7. Use the Change Option IDs dialog box to change options, then click on OK to save.

## Mote

Pay special attention to these FTP Option IDs functions: **File Server** (the location of the server where the firmware resides), and **File Root Path** (the location of the firmware). If they are not correct, the upgrade will fail.

- 8. Click on the Upgrade tab.
- 9. Click on the Use FTP Information From DHCP Server radio button on the Upgrade properties sheet.

🗹 Note

You will need the image, bootstrap.exe, and the params.ini files on the FTP server to do the upgrade.

**10.**Shut down the terminal. See "Shutting Down the Terminal" for more information.

Your terminal will automatically upgrade itself when it is turned on again.

# Manual DHCP Firmware Upgrades

- 1. Follow instruction 1 through 3 and 5 through 8 in "Automatic Firmware Upgrades."
- 2. Click on the Upgrade... command button on the Upgrade properties sheet.

This will initiate the firmware upgrade. Once the upgrade is complete, the terminal will reboot to the **Setup Wizard**.

# **Client Security**

- 32 Security Properties Sheet
- **33 Terminal Accounts**
- 34 Creating Terminal Accounts
- 35 Modifying and Deleting Terminal Accounts
- 36 Terminal Login
- 37 Failover

# **32** Security Properties

Use the **Security** properties sheet to access security functions and global terminal functions. You can also use this sheet to set up terminal accounts. Figure 32-1 shows the **Security** properties sheet.

Terminal Properties					×
General Input Display N Genera	Conne □ Aut Uger I Sin Conne Defau	grade Secur toLogin Enabl Name: Consection CP Connection CP Connection Name It ICA Connecto To Fail Recove	n Enable and Type: 	vices SysInfo	
Account Name Administrator	Privilege Admin	AutoStart No	AutoLogin No	Add <u>U</u> ser <u>M</u> odify User Delete User	
Cl <u>o</u> se		<u>C</u> ancel	App	bly	

Figure 32-1 Security Properties Sheet

# **Using the Security Properties Sheet**

To invoke the Security properties sheet:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Security tab.

The following table describes the functions of this properties sheet.

Table 32-1 Security Properties Sheet

Function	Description
Security Enable	This group box is used to enable terminal security and access connection configurations. It contains the following functions:
	Security Enable Click to enable terminal security and deactivate the Hide Configure Tab function. By default this function is disabled.
	Hide Configure Tab Click to enable. This function hides the Configure tab in the Winterm Connections Manager. By default this function is disabled.
Failover Enable	Use this group box to manipulate connection parameters. See "Failover" for more information.
	<b>Failover Enable</b> Click to enable the failover function. Enabling this function deactivates the <b>PingBeforeConnect</b> function. and activates <b>Multiple Connect</b> and <b>Verbose</b> functions. By default this function is disabled.
	<b>Multiple Connect</b> Click to enable this function. Failover must be enabled before you can access this function. By default this function is not activated.
	<b>PingBeforeConnect</b> Click to enable this function. Enabling this function will activate <b>Verbose</b> . By default this function is disabled.

Function	Description
FailOver Enable	Verbose Click to enable the Verbose connection function. By default the box is not activated. This function becomes activated when either FailOver or PingBeforeConnect is enabled.
AutoLogin Enable	This group box is used to configure login parameters. See "Autologin and Autoconnect" for more information about autologin.
	AutoLogin Enable Click to enable the function. AutoLogin is enabled only for the user name currently highlighted in the User Accounts list box. Enabling the autologin function activates Single Button Connect. By default the function is disabled.
	<b>User Name</b> This field is activated by enabling <b>AutoLogin Enable</b> . By default the field is blank.
	<b>Single Button Connect</b> Click to enable the function. See the chapter "Terminal Login" for more information. By default the function is not activated.
DHCP Connection Enable	Use this group box to access the DHCP connection list. It contains the following functions:
	DHCP Connection Enable Click to enable automatic DHCP connection. Enabling this function activates the Connection Name and Type list. By default this function is enabled.
	<b>Connection Name and Type</b> A scroll list that displays all connections available to your terminal. You must select the connection that will use information supplied by DHCP. By default this function is <b>Default ICA Connection {ICA}</b> .

 Table 32-1
 Security Properties Sheet, Continued

Function	Description	
Auto Fail Recovery	Click on the check box to enable the function. Auto Fail Recovery is a function that checks the validity of a disconnect, and closes down a connection if disconnect checks true. By default the function is activated but not enabled.	
G Key Enable	Check this box to enable <b>G</b> key reset.	
	Note This function is not supported by the 3200LE terminal.	
User Accounts	This is a list box displaying:	
	Account Name Lists the account names.	
	<b>Privilege</b> Lists the privilege type, either <b>Admin</b> , <b>User</b> , or <b>Guest</b> .	
	AutoStart Lists the autostart permission, either <b>Yes</b> or <b>No</b> .	
	AutoLogin Lists the autologin permission, either Yes or No. For more information about user accounts see "Terminal Accounts."	
Add User	See "Adding Terminal Accounts."	
Modify User	See "Modifying and Deleting Terminal Accounts."	
Delete User	See "Modifying and Deleting Terminal Accounts."	

 Table 32-1
 Security Properties Sheet, Continued

# **33** Terminal Accounts

A terminal account is a group of connection and configuration parameters organized into an account (file) and assigned to a terminal user. Terminal accounts can include specific connections, security enable, password protection, Autologin and/or Autostart and Single Button Connect. The three types of accounts are:

- Guest
- User
- Administrator

# **Guest Accounts**

The **Guest** account has the fewest amount of privileges. With this account you can not:

- Configure a connection
- Gain access to the password function

With this account type you can:

- Use the Energy Savers, Character Repeat, Mouse, and Keyboard Locale functions
- Adjust display resolution

# **User Accounts**

With a **User** account, you will not be able to configure the connection for the account. You will be able to access the password function. You can also:

- Use the Network properties sheet
- Use the Apps properties sheet with the exception of SNMP and DHCP
- Use the Devices properties sheet with the exception of Add/Change Modem
- Use the Input properties sheet
- Use the Display properties sheet

# **Administrator Accounts**

The **Administrator** account has the greatest amount of privileges. With this account you can:

- Use Enable Password Change (change the password for an account)
- · Configure or reconfigure the connection for an account
- · Use all the other functions of the terminal

# **Using Terminal Accounts**

Terminal accounts are created and managed by using the **Add User...**, and **Modify User...** command buttons. Terminal accounts are deleted using the **Delete User...** command button. These buttons are found on the **Security** properties sheet.

## Mote 🗹

There is a built-in account called **Administrator**. It can not be deleted or revised. The account's password can be changed and is **<blank>** by default.

For more information about terminal accounts, see:

- "Security Properties"
- "Creating Terminal Accounts"
- "Modifying and Deleting Terminal Accounts"

# **34** Creating Terminal Accounts

The **Add User Account** dialog box is used to create terminal accounts. The following figure shows this dialog box.

Add User Account			
Confirm Password:		Account Pri <u>A</u> dmi User © Guest	nistrator
		Allo <u>w</u> Access to Co	onnection Manager
Available Connections Type Default ICA Connection ICA Default RDP Connection RDP klhjg TEC	Agsign > Unassign < Up > Down > Toggle AutoStart >	Connection Name	Type AutoStart
<u> </u>		Cancel	

Figure 34-1 Add User Account Dialog Box

# Using the Add User Account Dialog Box

Use the **Add User Account** dialog box to set up the parameters for new terminal accounts. To invoke this dialog box:

- 1. Press F2 while in the Winterm Connection Manager.
- 2. Click on the Security tab in the Terminal Properties dialog box.
- 3. Click on the Add User... command button.

The following table describes the functions of the Add User Account dialog box.

#### Table 34-1 Add User Account Dialog Box

Function	Description
Enable Password Change	Group box used to set up password functions.
	Note The fields of this group box are limited to 20 characters or less.
	<b>Enable Password Change</b> Click to enable. Enabling the function will allow the user to change a password. This function is activated by assigning the account <b>User</b> account privilege. By default <b>Enable Password</b> <b>Change</b> is deactivated.
	<b>User Name</b> Type in the new user name. By default the field is blank.
	<b>Password</b> Type in the password. By default the field is blank.
	<b>Confirm Password</b> Type in the password again. By default the field is blank.

Function	Description
Available Connections	This is a list box displaying all the terminal's connections. It contains:
	Available Connections This list shows the connections available for terminal accounts.
	<ul> <li>Type</li> <li>This section of the list displays the connection type for each connection:</li> <li>ICA</li> <li>DialUp</li> <li>RDP</li> <li>TEC (terminal emulation)</li> </ul>
Assign	Click on this command button to copy a connection from <b>Available Connections</b> to <b>Connection Name</b> . You must first select (highlight) the connection you want to copy.
Unassign	Use this button to delete a connection from <b>Connection</b> <b>Name</b> . You must first select the connection you want to delete.
Up	Select a connection and click on the <b>Up</b> command button to move it up one place in the <b>Connection Name</b> list. If there are no connections listed in <b>Connection Name</b> , the command button is deactivated.
Down	Select a connection and click on the <b>Down</b> command button to move it down one place in the <b>Connection Name</b> list. If there are no connections listed in <b>Connection Name</b> , the command button is deactivated.
Toggle AutoStart	Click on this command button to toggle between <b>Yes</b> and <b>No</b> . These two choices are listed under <b>AutoStart</b> in <b>Connection</b> <b>Name</b> .

Table 34-1 Add User Account Dialog Box, Continued

## Table 34-1 Add User Account Dialog Box, Continued

Function	Description
Connection Name	List box displaying connections. To learn more, see the following:
	<b>Connection Name</b> This list shows the connections available to a terminal account.
	<b>Type</b> This section of the list displays the connection type of each connection. See <b>Type</b> above.
	AutoStart This section of the list displays whether the connection will or will not start automatically.
Account Privilege	Group box used to assign an account an account privilege:
	Administrator Click this radio button to assign the privileges of administrator to an account. If this function is enabled:
	<ul> <li>All connections in Available Connections are automatically assigned to Connection Name for use.</li> </ul>
	• Enable Password Change is deactivated but enabled. Administrators will always have the ability to change their passwords.
	<b>User</b> Click this radio button to assign the privilege of user to an account. If <b>User</b> is enabled, <b>Enable Password Change</b> is activated. Administrators can give users the ability to change their password.
	<b>Guest</b> Click this radio button to assign the privilege of guest to an account. If <b>Guest</b> is enabled, then <b>Enable Password Change</b> is deactivated. Users with this account type can not change passwords.
Allow Access to Connection Manager	Click on this check box to allow the user of the account to have access to the <b>Winterm Connection Manager</b> . The function will deactivate when you set up an account as an administrator account. By default the function is disabled.

# **35** Modifying and Deleting Terminal Accounts

The **Modify User Account** dialog box is used to modify and delete terminal accounts. The **Delete** command button, discussed later in Deleting Terminal Accounts, is used to delete terminal accounts. Figure 35-1 shows the **Modify User Account** dialog box.

Modify User Account:				
Enable Password Change User Na <u>m</u> e: <u>P</u> assword: Confirm Password:			ount Privilege 	
Available Connections Type Default ICA Connection ICA Default RDP Connection RDP	Agsign > Unassign < Up > Down > Toggle AutoStart >	Connection Name		oStart
OK	]	Cance	əl	

#### Figure 35-1 Modify User Account Dialog Box

# Using the Modify User Account Dialog Box

To invoke this dialog box:

- 1. Press F2 from the Winterm Connection Manager.
- 2. Click on the Security tab in the Terminal Properties dialog box.
- **3.** Highlight the account to be modified and click on the **Modify User...** command button.

The following table describes the functions of the **Modify User Account** dialog box.

Function	Description
Enable Password Change	<ul> <li>Group box used to set up password functions.</li> <li>✓ Note         The fields of this group box are limited to 20 characters or less.     </li> </ul>
	<b>Enable Password Change</b> Click to enable. Enabling the function will allow the user to change a password. This function is activated by assigning the account <b>User</b> account privilege. By default <b>Enable Password Change</b> is deactivated.
	<b>User Name</b> Displays the user name. By default the text box is deactivated.
	<b>Password</b> Type in the password. By default the text box is blank.
	<b>Confirm Password</b> Type in the password again. By default the text box is blank.

Table 35-1 Modify User Account Dialog Box

Function	Description
Available Connections	This is a list box displaying all the terminal's connections. It contains:
	Available Connections This list shows the connections available for terminal accounts.
	<b>Type</b> This section of the list displays the connection type for each connection:
	<ul> <li>ICA</li> <li>DialUp</li> <li>RDP</li> <li>TEC (terminal emulation)</li> </ul>
Assign	Click on this command button to copy a connection from <b>Available Connections</b> to <b>Connection Name</b> . You must first select to highlight the connection you want to copy.
Unassign	Use this button to delete a connection from <b>Connection Name</b> . You must first select to highlight the connection you want to delete.
Up	Select a connection and click on the <b>Up</b> command button to move it up one place in the <b>Connection</b> <b>Name</b> list. If there are no connections listed in <b>Connection Name</b> , the button is deactivated.
Down	Select a connection and click on the <b>Down</b> command button to move it down one place in the <b>Connection</b> <b>Name</b> list. If there are no connections listed in <b>Connection Name</b> , the button is deactivated.
Toggle AutoStart	Click on this command button to toggle between <b>Yes</b> and <b>No</b> . These two choices are listed under <b>AutoStart</b> in <b>Connection Name</b> .

 Table 35-1
 Modify User Account Dialog Box, Continued

Function	Description
Connection Name	List box displaying connections. To learn more, see the following:
	<b>Connection Name</b> This list shows the connections available to a terminal account.
	<b>Type</b> This section of the list displays the connection type of each connection. See <b>Type</b> above.
	AutoStart This section of the list displays whether the connection will or will not start automatically.
	Note Connection Name, Type and AutoStart comprise a list box. When the Modify User dialog box displays, what appears in this list box is the connection type in the last account that you created.

 Table 35-1
 Modify User Account Dialog Box, Continued

Function	Description
Account Privilege	Group box used to assign an account an account privilege:
	<ul> <li>Administrator</li> <li>Click this radio button to assign the privileges of administrator to an account. If this function is enabled:</li> <li>All connections in Available Connections are automatically assigned to Connection Name for use.</li> </ul>
	• Enable Password Change is deactivated but enabled. Administrators will always have the ability to change their passwords.
	<b>User</b> Click this radio button to assign the privilege of user to an account. If <b>User</b> is enabled, <b>Enable Password</b> <b>Change</b> is activated. Administrators can give Users the ability to change their password.
	Guest Click this radio button to assign the privilege of guest to an account. If Guest is enabled, then Enable Password Change is deactivated. Users with this account type can not change passwords.
Allow Access to Connection Manager	Click on this check box to allow the user of the account to have access to the <b>Winterm Connection Manager</b> . The function will deactivate when you set up an account as an administrator account. By default the function is disabled.

Table 35-1 Modify User Account Dialog Box, Continued

# **Deleting Terminal Accounts**

Terminal accounts can be deleted from the **User Accounts** list on the **Security** properties sheet. To delete an account:



Caution

You can not recover a deleted account.

- 1. Click on the account that you want to delete in the User Accounts list.
- 2. Click on the Delete User... command button.

The following dialog box will display.

#### Figure 35-2 Delete User Account Confirmation Dialog Box

Delete User Account Confirm	ation
Do you want to delete the ACCOUNT? Assigned conr also be deleted.	
<a>Account Name&gt;</a>	
Yes	No

To delete the listed account, click on the Yes command button. The terminal account is removed from the database.



# Mote

You can not delete the built-in Administrator account.

# **36** Terminal Login

Terminal login is used as a terminal security measure. Only users with the correct **User Name** and **Password** will be able to log into the terminal. Figure 36-1 shows the **Terminal Login** dialog box.

#### Figure 36-1 Terminal Login Dialog Box

Terminal Login	
User <u>N</u> ame:	
<u>P</u> assword:	
	QK

# Logging Into the Terminal

To use the login feature:

- 1. Enable security. See "Security Properties" for more details.
- 2. Log out of the terminal by clicking on the Shut Down... command button in the Winterm Connection Manager.
- 3. Click on the Logout radio button in the Shutdown Window dialog box.
- 4. Click on the OK command button.

The Terminal Login dialog box displays. In this dialog box:

- 1. Type in the correct User Name and Password.
- 2. Click on OK to log into the terminal again.

## **Autologin and Autoconnect**

## Autologin

The autologin feature is an automatic login function that does not use a dialog box as a prompt to log you into your terminal again. Whether you restart or log off, the **AutoLogin** dialog box displays, counts five seconds, then returns you to the **Winterm Connection Manager**.

This is a global function, so it does not matter what other functions you have enabled. Autologin is associated with an account and only one account can have autologin associated with it. It will always act in the same manner. The following figure shows the **AutoLogin** dialog box.

#### Figure 36-2 Autologin Dialog Box

AutoLogin
AutoLogin in Progress
Count Down (in Second): 2

### AutoStart

**AutoStart** is a function that automatically connects you once you have logged into your terminal. Autostart can be added to any defined connection in any account. Each user can have different and/or multiple autostart connections. To use the function:

- 1. Enable security.
- 2. Select the account you want Autostart added to and click on the **Modify User...** command button.
- 3. Use the Modify User dialog box to add Autostart.
- 4. Restart or log off of your terminal.

The **Terminal Login** dialog box displays. Use it to log into your terminal. The **AutoStart** function will then automatically connect you to the connection that has autostart associated with it.

See "Shutting Down the Terminal" for more details about logging into the terminal.

## **Single Button Connect**

The **Single Button Connect** feature is an automatic login function that uses a dialog box as a prompt to log you into your terminal again after logging out. Figure 36-3 shows this dialog box.

#### Figure 36-3 Single Button Connect Dialog Box

Press Enter to start
Connect
Note: Depending on the type of connection, this unit may take a moment to establish a remote session.

Single button connect is a global and automatic function, and is not included as a terminal account parameter. This function will:

- 1. Log you into your terminal using the account that has autologin associated with it.
- Make the first connection listed in the Connection Name list in the Modify User Account dialog box (unless another connection in the list has been made with Autostart).

To enable this function:

- 1. Press F2 to invoke the Terminal Properties dialog box.
- 2. Click on the Security tab to invoke the Security properties sheet.
- 3. Highlight the user's name in User Accounts.
- 4. Click on the AutoLogin Enable check box to enable the function.
- 5. Click on the Single Button Connect check box to enable the function.
- 6. Click on OK.
- 7. Click on the Shut Down... command button in the Winterm Connection Manager.
- 8. Click on the Logout radio button to log out of the terminal.

The **Single Button Connect** dialog box appears. Click on **Connect** to log into the terminal again.

# **37** Failover

Failover is a connection feature that is enabled using the **Security** properties sheet. It forces the terminal to "ping" the intended device before making a connection to it. The function operates when **FailOver Enable** is enabled on the **Security** properties sheet. Failover is global and wholly automatic to the terminal. It will work regardless of what connection you are trying to make, or what type of account you are logged in using. See "Security Properties" for more information about this function and how to invoke the properties sheet.

# Mote

Ping (Packet Internet Groper) is a network utility. It tests communication with nodes in a network by sending packets to each selected node. Ping then waits to receive the echo response from that selected node.

Failover operates as follows:

- **1.** The terminal pings the intended connection, to determine whether or not it is available.
- **2.** If pinging the intended device fails, the terminal pings each successive connection in the list.
- 3. For each connection:
  - **a.** If ping is successful, the connection is made.
  - **b.** If ping is not successful, the terminal pings the next connection.
  - **c.** If the next connection is a serial connection, ping will stop. Ping will not work on a serial connection. Failover will not continue after encountering a serial connection, but will launch the serial connection if it is valid.

If failover pings all the connections in the list and a connection is not made, the function stops. The following figure displays.

#### Figure 37-1 Failover Message Box



Once failover is finished, the **Failover Log Window** dialog box displays. Figure 37-2 shows this dialog box.



The **Verbose** function on the **Security** properties sheet must be enabled for the **FailOver Log Window** dialog box to display.

Figure 37-2 Failover Log Window Dialog Box



The **Failover Log Window** is a list of all the connections that were pinged. The list reports both successful and unsuccessful pings.

### **Getting Help**

- 38 Windows-based Terminal Specifications
- 39 How to...
- 40 Terminal Port Pin Assignments
- 41 Terminal Connector Pin Assignments
- 42 Null Modem Cable Pin Assignments
- 43 Modem AT Commands
- 44 Noise Suppressor Installation

# **38** Windows-based Terminal Specifications

The following table lists the specifications for the 3200LE terminal.

Specification	3200LE
Power Requirements	
Voltage	90 to 264V ac, Worldwide autosensing
Frequency	47-63 Hz
Power Consumption	10.3W operating
Physical Characteristics	
Height	3.66 cm (1.44 in)
Width	19.53 cm (7.69 in)
Depth	15.88 cm (6.25 in)
Net Weight	.64 kgs (1.44 lbs)
Power Cord	6 ft (1.83m)
Environmental	
Operating Temperature	0° to 40°C (32° to 104°F)
Nonoperating Temperature	–10° to 60°C (-14° to 140°F)
Operating Humidity	20% to 80% noncondensing

#### Table 38-1 Specifications for the 3200LE Terminal

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Specification	3200LE
Storage Humidity	80% maximum, noncondensing
Operating Altitude	0 to 10,000 ft
Nonoperating Altitude	0 to 40,000 ft
Cooling System	Convection, fanless
EPA	
Energy Saving	Automatic power-down sleep mode
Regulatory Compliance	
RF Interference, power brick	FCC B
RF Interference, terminal	<ul> <li>FCC B</li> <li>EN55022B</li> <li>CE Mark</li> <li>VCCI</li> </ul>
Safety, power brick	<ul><li>UL1950</li><li>CSA950</li><li>Japan T mark</li></ul>
Safety, terminal	<ul> <li>UL1950</li> <li>CSA 950</li> <li>TUV-GS approved</li> <li>EN 60950 approved</li> <li>NOM</li> </ul>
Ergonomics	
	<ul><li>ZH1/618</li><li>EN29241-3</li></ul>
Communications Ports	
Ethernet	10Base-T or 100Base-T network
USB	Type A 4-pin receptacle

#### Table 38-1 Specifications for the 3200LE Terminal, Continued

The following table lists the specifications for the 3320SE and 3350SE terminals.

Specification	3320SE	3350SE
Power Requirements		
Voltage	90 to 264V ac, Worldwide autosensing	90 to 264V ac, Worldwide autosensing
Frequency	47-63 Hz	47-63 Hz
Power Consumption	13.3W operating	15.6W operating
Physical Characteristics		
Height	22.6 cm (8.9 in)	22.6 cm (8.9 in)
Width	6.0 cm (2.36 in)	6.0 cm (2.36 in)
Depth	17.4 cm (6.85 in)	17.4 cm (6.85 in)
Net Weight	1.7 kgs (3.7 lbs)	1.97 kgs (4.125 lbs)
Power Cord	6 ft (1.83m)	6 ft (1.83m)
Environmental		
Operating Temperature	10° to 40°C (50° to 104°F)	0° to 40°C (32° to 104°F)
Nonoperating Temperature	–10° to 60°C (14° to 140°F)	–10° to 60°C (14° to 140°F)
Operating Humidity	20% to 80% noncondensing	80% maximum, noncondensing
Storage Humidity	80% maximum, noncondensing	95% maximum, noncondensing
Operating Altitude	0 to 10,000 ft	0 to 10,000 ft
Nonoperating Altitude	0 to 40,000 ft	0 to 40,000 ft
Cooling System	Convection, fanless	Convection, fanless

 Table 38-2
 Specifications for the 3320SE and 3350SE Terminals

Specification	3320SE	3350SE
EPA		
Energy Saving	Automatic power-down sleep mode	Automatic power-down sleep mode
Regulatory Compliance		
RF Interference, power brick	FCC B	FCC B
RF Interference, terminal	<ul><li>FCC B</li><li>EN55022B</li><li>CE Mark</li><li>VCCI</li></ul>	<ul> <li>FCC B</li> <li>EN55022B</li> <li>CE Mark</li> <li>VCCI</li> <li>BCIQ</li> </ul>
Safety, power brick	<ul><li>UL1950</li><li>CSA950</li><li>Japan T mark</li></ul>	<ul><li>UL1950</li><li>CSA950</li><li>Japan T mark</li></ul>
Safety, terminal	<ul> <li>UL1950</li> <li>CSA 950</li> <li>TUV-GS approved</li> <li>EN 60950 approved</li> </ul>	<ul> <li>UL1950</li> <li>CSA 950</li> <li>TUV-GS approved</li> <li>EN 60950 approved</li> <li>NOM</li> </ul>
Ergonomics		
	<ul><li>ZH1/618</li><li>EN29241-3</li></ul>	<ul><li>ZH1/618</li><li>EN29241-3</li></ul>
<b>Communications Ports</b>		
Serial Port	<ul> <li>Com1 is a 16C550 (FIFO), up to 115.2 kBaud RS-423/232, DB-9M connector</li> <li>Com2 is a 16C550 (FIFO), up to 115.2 kBaud RS-232, DB-9M connector</li> </ul>	<ul> <li>Com1 is a 16C550 (FIFO), up to 115.2 kBaud RS-423/232, DB-9M connector</li> <li>Com2 is a 16C550 (FIFO), up to 115.2 kBaud RS-232, DB-9M connector</li> </ul>

#### Table 38-2 Specifications for the 3320SE and 3350SE Terminals, Continued

Specification	3320SE	3350SE
Parallel Port	Centronics compatible, DB-25M connector	Centronics compatible, DB-25M connector
Ethernet Port	10Base-T or 100Base-T network	10Base-T or 100Base-T network
USB	N/A	Type A 4-pin receptacle
⊠ Caution		

Table 38-2 Specifications for the 3320SE and 3350SE Terminals, Continued

Your 3350SE terminal may contain a battery. There is a danger of explosion if the battery is incorrectly replaced. Replace the battery with only the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

The following table lists the specifications for the 3360SE and the 3720SE terminals.

Specification	3360SE	3720SE
Power Requirements		
Voltage	90 to 264V ac, Worldwide autosensing	90 to 264V ac, Worldwide autosensing
Frequency	47-63 Hz	47-63 Hz
Power Consumption	12.7W operating	84W operating
Physical Characteristics		
Height	2.26 cm (8.9 in)	38.8 cm (15.3 in)
Width	.6 cm (2.4 in)	36.0 cm (14.2 in)
Depth	1.74 cm (6.9 in)	40.6 cm (16.0 in)
Net Weight	12.5 lbs (5.5 kgs)	48 lbs (21.8 kgs)
Power Cord	6 ft (1.83m)	6 ft (1.83m)

Table 38-3 Specifications for the 3360SE and 3720SE Terminals

Specification	3360SE	3720SE
Environmental		
Operating Temperature	0° to 40°C (32° to 104°F)	10° to 40°C (50° to 104°F)
Nonoperating Temperature	-10° to 60°C (-14° to 140°F)	-20° to 60°C (-4° to 140°F)
Operating Humidity	20% to 80% noncondensing	80% maximum, noncondensing
Storage Humidity	80% maximum, noncondensing	80% maximum, noncondensing
Operating Altitude	0 to 10,000 ft	0 to 10,000 ft
Nonoperating Altitude	0 to 40,000 ft	0 to 40,000 ft
Cooling System	Convection, fanless	Convection, fanless
EPA		
Energy Saving	Automatic power-down sleep mode	Automatic power-down sleep mode and EPA Energy Star
Regulatory Compliance		
RF Interference, power brick	FCC B	N/A
RF Interference, terminal	<ul> <li>FCC B</li> <li>EN55022B</li> <li>CE Mark</li> <li>VCCI</li> </ul>	<ul><li>FCC B</li><li>EN55022B</li><li>CE Mark</li></ul>
Safety, power brick	<ul><li>UL1950</li><li>CSA950</li><li>Japan T mark</li></ul>	N/A

#### Table 38-3 Specifications for the 3360SE and 3720SE Terminals, Continued

Specification	3360SE	3720SE
Safety, terminal	<ul> <li>UL1950</li> <li>CSA 950</li> <li>TUV-GS approved</li> <li>EN 60950 approved</li> </ul>	<ul> <li>UL1950</li> <li>CSA 950</li> <li>TUV-GS approved</li> <li>EN 60950 approved</li> <li>DHHS</li> <li>SEMKO</li> <li>DEMKO</li> <li>NEMKO</li> <li>FIMKO</li> </ul>
Ergonomics		
	<ul><li>ZH1/618</li><li>EN29241-3</li></ul>	<ul> <li>ZH1/618</li> <li>EN29241-3, -8</li> <li>MPR 1990:10 guidelines for low electromagnetic and low electrostatic emissions</li> </ul>
<b>Communications Ports</b>		
Serial	<ul> <li>Com1 is a 16C550 (FIFO), up to 115.2 kBaud RS-423/232, DB-9M connector</li> <li>Com2 is a 16C550 (FIFO), up to 115.2 kBaud RS-232, DB-9M connector</li> </ul>	<ul> <li>Com1 is a 16C550 (FIFO), up to 115.2 kBaud RS-423/232, DB-9M connector</li> <li>Com2 is a 16C550 (FIFO), up to 115.2 kBaud RS-232, DB-9M connector</li> </ul>
Parallel	Centronics compatible, DB-25M connector	Centronics compatible, DB-25M connector
Ethernet	10Base-T or 100Base-T network	10Base-T or 100Base-T network
USB	Type A 4-pin receptacle	N/A

 Table 38-3
 Specifications for the 3360SE and 3720SE Terminals, Continued

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# **39** How to...

Turn off Autologin:

- 1. Press F2 on your keyboard to invoke the Terminal Properties dialog box.
- 2. Click on the Security tab in the Terminal Properties dialog box.
- 3. Click (to uncheck) the AutoLogin Enable check box.
- 4. Click on the OK command button on the Security properties sheet to return to Winterm Connection Manager.

Check your terminal's build number and firmware revision:

- 1. Press F2 on your keyboard to invoke the Terminal Properties dialog box.
- 2. Read the build number and firmware revision listed in Version: on the General properties sheet.
- 3. Click on the Close command button on the General properties sheet to return to Winterm Connection Manager.

Adjust your mouse speed:

- 1. Press F2 on your keyboard to invoke the Terminal Properties dialog box.
- 2. Click on the Input tab in the Terminal Properties dialog box.
- 3. Click on the **Properties** command button in the **Mouse** group box on the **Input** properties sheet.
- 4. Use the **Pointer Acceleration** and **Pointer Speed** group boxes in the **Mouse Properties** dialog box to adjust your mouse speed.
- 5. Click on the OK command button on the Input properties sheet to return to Winterm Connection Manager.

Make a basic PPP connection:

- 1. Click on the **Configure** tab in the **Winterm Connection Manager** to invoke the **Configure** properties sheet.
- 2. Click on the Add command button on the **Configure** properties sheet to invoke the **New Connection** dialog box.
- 3. Select from the scroll list **Dial-Up Client**, then click **OK** to invoke the **Dial-Up Configuration Wizard**.
- 4. Set the minimum parameters for a dial up connection:
  - a. Enter a name for the connection in Enter a Description for Dial-Up Connection: text box in the first dialog box of the wizard.
  - **b.** Enter a telephone number in **Telephone Number** in the second dialog box of the wizard.
  - c. Select in the second dialog box of the wizard:

•Serial Port (modem type)

•Use Country Code and Area Code (if appropriate)

•Appropriate Local Settings and Dialing Patterns in the Dialing Properties dialog box (invoked by the Dialing Properties command button)

•Appropriate **Port Settings** and **Call Options** in the **Device Properties** dialog box (invoked by the **Configure** command button)

- d. Select a connection from the Select Connection Below to Launch After Dialing In list box in the third dialog box of the wizard.
- e. Click on the Finish command button to return to the Winterm Connection Manager.

The connection will display in the **Connections** list.

Find a modem that works with your terminal:

Visit the following address to see a list of supported modems:

http://www.wyse.com/service/3000peripheral.htm

Switch between multiple sessions:

- Press **Ctrl+Alt+**<sup>↑</sup> to proceed to the previous session.
- Press **Ctrl+Alt+** $\downarrow$  to proceed to the next session.

Reset your terminal:

- 1. Press F2 on your keyboard to invoke the Terminal Properties dialog box.
- 2. Click on (to check) the Reset the Terminal to Factory Default Property Settings check box.
- 3. Click on Yes in the System Settings Change dialog box.

or

Reset the terminal to factory default by performing the following steps while the power is still on and while holding down the **G** key on the keyboard of your terminal:

- 1. Press and hold the power management button until the LED turns to amber (approximately 3 to 5 seconds).
- 2. Release the power management button.
- 3. Wait approximately 7 seconds for the system to reboot.
- 4. Wait for the Setup wizard to display, then release the G key.

The terminal is reset to factory defaults.

Determine the size of the onboard memory:

- 1. Press F2 on your keyboard to invoke the Terminal Properties dialog box.
- 2. Read the firmware revision number listed in **RAM**: on the **General** properties sheet.
- 3. Click on the Close command button on the General properties sheet to return to Winterm Connection Manager.

Configure a local printer:

If you are using the Winframe 1.7/ICA platform:

- **1.** Log in to your Winframe server.
- 2. Click on Print Manager in Program Manager.
- 3. Click on Connect to Printer on the Printer menu.
- 4. Click on Client Network, then Client on the Shared Printer menu.
- 5. Select your <clientname#port>, then click on OK.

If you are using the MetaFrame 1.0/ICA platform:

- 1. Log in to your MetaFrame server.
- 2. Click on My Computer in the ICA Session dialog box.
- 3. Click on Printers, then Add Printer.
- 4. Select Network Printer Server, then click Next.
- 5. Click on Client Network, then Client in the Shared Printers dialog box.
- 6. Select your <clientname#port>, then click on OK.
- 7. Click Next, then Finish.

If you are using a Winframe 1.8 or MetaFrame 1.8/ICA platform:

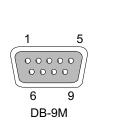
- 1. Log in to your Citrix server.
- 2. If it is a MetaFrame server:
  - a. Click on Start, then Programs.
  - b. Click on MetaFrame, then Tools.
  - c. Click on ICA Client Printer Configuration.
- **3.** If it is a WinFrame server:
  - a. Click on ICA Client Printer Configuration in the Administrative Tools program group in the Program Manager.
  - **b.** Click on **New** on the **Printer** menu to display the **Add ICA Client Printer** wizard.
  - c. Follow the steps of the wizard to add your local printer.

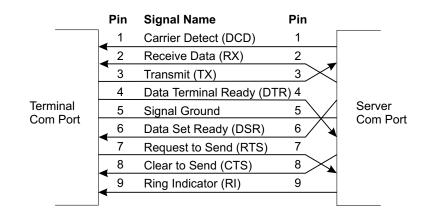
### **40** Terminal Port Pin Assignments

#### Mote

This chapter applies only to Model 3320SE, 3350SE, 3360SE and 3720SE terminals.

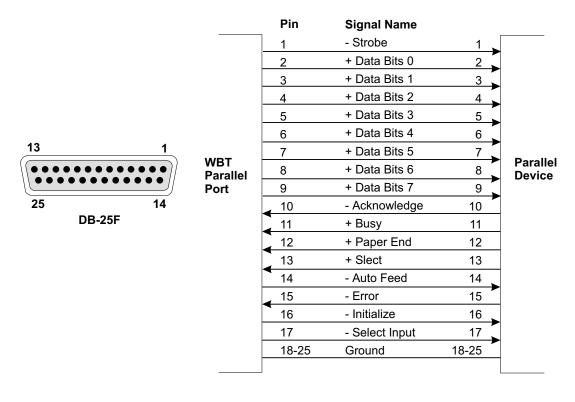
The following two figures show the pin assignments for the serial and parallel ports. These ports are located on the back panel of your terminal. See Terminal Installation for information about terminal back panels.





#### Figure 40-1 Serial Port







The pin assignments for Terminal Parallel Port above are Centronics-compatible. The pin assignments for Parallel Device above are the standard pin assignments for a parallel device.

### 41 **Terminal Connector Pin** Assignments

The following figure shows the pin assignments for the 10Base-T and 100Base-T connector. This connector is located on the back panel of your terminal. See "Terminal Features" for information about the back panel.

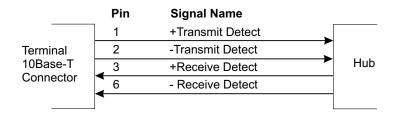


#### Note

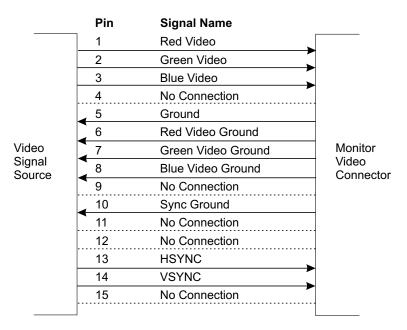
It is recommended that you use Category 5 twisted-pair cable to connect your terminal to a hub.

Figure 41-1 10Base-T and 100Base-T Connector

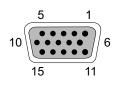




The following figure lists the connector pin assignments for the terminal's VGA connector. This connector is located on the back panel of your terminal. See "Terminal Features" for information about the back panel.



#### Figure 41-2 VGA Connector



#### Mote

This section applies only to Model 3200LE, 3350SE and 3360SE terminals.

The following figure lists the connector pin assignments for the terminal's USB connectors. These connectors are located on the back panel of your terminal. See "Terminal Features" for information about the back panel.

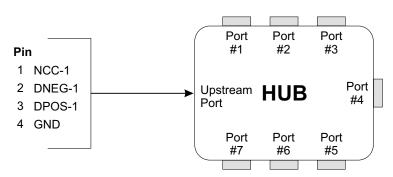


Figure 41-3 USB Connector

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### 42 Null Modem Cable Pin Assignments

Table 42-1 outlines the pin assignments for a 9-pin serial port to a 25-pin serial port null modem cable.

25 Pin	9 Pin
2 (transmit data)	2 (receive data)
3 (receive data)	3 (transmit data)
4 (request to send)	8 (clear to send)
5 (clear to send)	7 (request to send)
6, 8 (data set ready, carrier detect)	4 (data terminal ready)
7 (ground)	5 (ground)
20 (data terminal ready)	6, 1 (data set ready, carrier detect)

#### Table 42-1 Null Modem Cable Pin Assignments



#### Note

All other pins on either connector of the cable are not used.

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# **43** Modem AT Commands

The tables of this section list typical modem AT command sets.

Command	Description
B, B0	ITU-T (CCITT) V.22 mode when at 1200 bps; V.21 at 300 bps
E1	Enable character echo to terminal in command mode
H, H0	Go on-hook (hang up)
N1	Connection speed set to highest possible DCE rate, Automode
Q, Q0	Modem returns result codes (Quiet disabled)
Т	Tone dialing
V1	Full-word result codes (Verbose enabled)
W2	Negotiation progress codes disabled. Result code is DCE rate
X4	Modem recognizes dialtone and busy, CONNECT nnnn result code enabled
Y, Y0	Disable long-space disconnect
Z, Z0	Reset modem and recall User Profile 0

Table 43-1 AT Commands with No Lead-in Character

Command	Description
&B1	Disable port rate adjust
&C1	Carrier detect follows data carrier
&D2	Hang up and go to command mode during On-to-Off DTR transition
&F, &F0	Recall factory settings as active configuration
&M0	Asynchronous mode
&N, &N0	Microcom QX/4232hs-compatible numeric result codes displayed
&Q5	Error Correction Mode V.42=> MNP=> Async
&T4	Grant request from remote for remote digital loopback test
&U1	Data compression enabled
&V	View active configuration, profiles (0,1), and numbers
&W, &W0	Save active configuration as User Profile 0
&Y, &Y0	Recall User Profile 0 on power-up

 Table 43-2
 AT Commands Beginning with "&"

Table 43-3 AT Commands Beginning with "\"

Command	Description
\A3	Maximum MNP block size = 256 characters
\G, \G0	Disable port flow control DCE to DCE
\J, \J0	Disable port rate adjust
\L, \L0	MNP stream link
\N7	Set Auto-reliable mode (LAPM with fallback to MNP, then to normal)

Command	Description
\Q3	Bidirectional hardware flow control
\S	Display current Configuration, Long Version
\V, \V0	Disable /REL connect codes
\X, \X0	XON/XOFF pass-through disabled

 Table 43-3
 AT Commands Beginning with "\", Continued

Table 43-4 AT Commands Beginning with "%"

Command	Description
%C1	Data compression requested (V.42bis in LAPM, MNP5 in MNP)
%E, %E0	Disable Auto-retrain
%L	Report Line Signal Level in -dBm
%Q	Report Line Signal Quality
%R	Display all S registers
%V	Display firmware version

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## **44** Noise Suppressor Installation

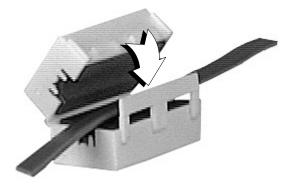
#### Mote

This chapter applies only to Model 3350SE terminals.

A noise suppressor (ferrite bead) must be installed on the network cable of your terminal. This installation is necessary to maintain compliance with US FCC B limits and Europe CISPR B EN55022 Class B limits. The noise suppressor is supplied by the manufacturer and should be packed in your terminal's shipping carton.

Figure 44-1 shows the noise suppressor.

#### Figure 44-1 Noise Suppressor



To install:

- 1. Open the casing.
- **2.** Fit the casing over the network cable, as close as possible to the back of the cable's connector.
- 3. Snap the casing shut.

# A SNMP

### SNMP Remote Configuration Chart

The following chart is provided to help network administrators make remote configuration changes to WBTs in a managed network. These changes are made by physically writing to the managed devices using the logical objects listed in the MIB as reference. This chart lists:

- The lower-most subgroup the logical object belongs to
- The object's name
- What can be written to the object
- Where the UI is modified by the write

#### Mote

For detailed information about each Wyse MIB group and its objects see the sections SNMP and DHCP Groups, Physical Devices Groups, and Network and Connections Groups in the network administrator's guide.

You can use Wyse Remote Administrator 3000 or an SNMP management tool and the following chart to remotely affect changes to the terminals in your network.

For the Logical Object	You Can Write	To Modify
wbt3I/ODevice Group		
wbt3kbLanguage	Any of the following numbers:	The <b>Locale</b> scroll list on the <b>Input</b> properties sheet
	0 = English-US 1 = English-UK 2 = French 3 = German 4 = Spanish 5 = Italian 6 = Swedish 7 = Danish 8 = Norwegian 9 = Dutch 10 = Belgian-French 11 = Finnish 12 = Swiss-French 13 = Swiss-German 14 = Japanese 15 = Canadian-French 16 = Belgian-Dutch 17 = Portuguese 18 = Brazilian-ABNT 19 = Italian-142 20 = Latin-American 21 = US-International 22 = Canadian-Fr-Multi 23 = Canadian-Eng-Multi 24 = Spanish-Variation	
wbt3CharacterRepeatDelay	Any following number (in milliseconds): <b>250</b>	The <b>Repeat Delay</b> slide control on the <b>Input</b> properties sheet
	500 750 1000	
wbt3CharacterRepeatRate	Any integer from <b>0</b> to <b>31</b>	The <b>Repeat Rate</b> slide control on the <b>Input</b> properties sheet

For the Logical Object	You Can Write	To Modify
wbt3Display Group		
wbt3EnergySaver	Any following number: <b>0</b> = none <b>1</b> = use a screen saver <b>2</b> = use monitor off	The <b>Screen Saver</b> and <b>Turn Off Monitor</b> radio buttons on the <b>Display</b> properties sheet
wbt3ScreenTimeOut	Any integer from <b>1</b> to <b>1440</b>	The <b>Wait</b> scroll list on the <b>Display</b> properties sheet
wbt3TouchScreen	Any following number: <b>0</b> = no touchscreen <b>1</b> = use Com1 <b>2</b> = use Com2	The <b>Port</b> scroll list in the <b>MicroTouch</b> <b>Touchscreen Properties</b> dialog box
wbt3DispCharacteristic Group		
wbt3DispFreq Note This can not be set if DDC is used.	Any following number (in Hz): 60 75 85	The Desktop Area and Refresh Frequency scroll list on the Display properties sheet Mote On 3350SE only.
wbt3DispHorizPix	Any following number (in pixels): 640 800 1024 1280	The Desktop Area and Refresh Frequency scroll list on the Display properties sheet Mote On 3350SE only.
wbt3DispVertPix	Any following number (in pixels): 480 600 768 1024	The Desktop Area and Refresh Frequency scroll list on the Display properties sheet Mote On 3350SE only.

For the Logical Object	You Can Write	To Modify
wbt3DispUseDDC	Any following number:	The <b>Desktop Area and</b> <b>Refresh Frequency</b> scroll
	<b>0</b> = do not use DDC <b>1</b> = use DDC	list on the <b>Display</b> properties sheet
	I = use DDC	Note
		On 3350SE only.
wbt3DHCPoptionIDs Group		
RemoteServer	Any integer that corresponds to a DHCP option to change the default Option <b>155</b> to another option	The <b>Remote Server</b> field in the <b>Change DHCP</b> <b>Option ID's</b> dialog box
LogonUserName	Any integer that corresponds to a DHCP option to change the default Option <b>156</b> to another option	The Logon User Name field in the Change DHCP Option ID's dialog box
Domain	An integer that corresponds to a DHCP option to change the default Option <b>157</b> to another option	The <b>Domain</b> field in the <b>Change DHCP Option</b> <b>ID's</b> dialog box
Password	An integer that corresponds to a DHCP option to change the default Option <b>158</b> to another option	The Logon Password field in the Change DHCP Option ID's dialog box
CommandLine	An integer that corresponds to a DHCP option to change the default Option <b>159</b> to another option	The <b>Command Line</b> field in the <b>Change DHCP</b> <b>Option ID's</b> dialog box
WorkingDirectory	An integer that corresponds to a DHCP option to change the default Option <b>160</b> to another option	The Working Directory field in the Change DHCP Option ID's dialog box

For the Logical Object	You Can Write	To Modify
FTPFileServer	An integer that corresponds to a DHCP option to change the default Option <b>161</b> to another option	The File Server field in the Change DHCP Option ID's dialog box
FTPRootPath	An integer that corresponds to a DHCP option to change the default Option <b>162</b>	The File Root Path field in the Change DHCP Option ID's dialog box
TrapServerList	An integer that corresponds to a DHCP option to change the default Option <b>163</b> to another option	The <b>Trap Server IP List</b> field in the <b>Change DHCP</b> <b>Option ID's</b> dialog box
SetCommunity	An integer that corresponds to a DHCP option to change the default Option <b>164</b> to another option	The <b>Set Community</b> field in the <b>Change DHCP</b> <b>Option ID's</b> dialog box
RDPStartupApp	An integer that corresponds to a DHCP option to change the default Option <b>165</b> to another option	The Startup Application field in the Change DHCP Option ID's dialog box
EmulationMode	An integer that corresponds to a DHCP option to change the default Option <b>166</b> to another option	The <b>Emulation Mode</b> field in the <b>Change DHCP</b> <b>Option ID's</b> dialog box
TerminalID	An integer that corresponds to a DHCP option to change the default Option <b>167</b> to another option	The <b>Terminal ID</b> field in the <b>Change DHCP Option ID's</b> dialog box

For the Logical Object	You Can Write	To Modify
VirtualPortServer	An integer that corresponds to a DHCP option to change the default Option <b>168</b> to another option	The <b>Server</b> field in the <b>Change DHCP Option</b> <b>ID's</b> dialog box
wbt3CustomFields Group		
wbt3CustomField1	Any alphanumeric character to a text string using a maximum of 60 characters	The Field 1: text box in the SNMP Network Administration dialog box
wbt3CustomField2	Any alphanumeric character to a text string using a maximum of 60 characters	The <b>Field 2:</b> text box in the <b>SNMP Network</b> <b>Administration</b> dialog box
wbt3CustomField3	Any alphanumeric character to a text string using a maximum of 60 characters	The <b>Field 3:</b> text box in the <b>SNMP Network</b> <b>Administration</b> dialog box
wbt3Administration Group		
wbt3SNMPupdate	Any following integer: <b>0</b> = not checked <b>1</b> = checked	The <b>SNMP Update</b> <b>Enable</b> check box on the <b>Apps</b> properties sheet
wbt3DHCPupdate	Any following integer: <b>0</b> = not checked <b>1</b> = checked	The <b>DHCP Automatic</b> <b>Update Enable</b> check box on the <b>Apps</b> properties sheet
wbt3UpDnLoad Group		
wbt3UpDnLoadNum	Any integer from 15	This object does not correspond to any fields in the UI
wbt3AcceptReq	Any following integer: <b>0</b> = request not accepted <b>1</b> = request accepted	This object does not correspond to any fields in the UI

For the Logical Object	You Can Write	To Modify
wbt3SubmitLoadJob	Any following integer:	This object does not correspond to any fields in
	<b>0</b> = job not ready <b>1</b> = job ready	the UI
wbt3UpDnLoadIndex	Any integer from 0UpDnLoadNum	This object does not correspond to any fields in the UI
wbt3UpDnLoadId	Any alphanumeric character to a text string	This object does not correspond to any fields in the UI
wbt3UpDnLoadOp	Any following integer:	This object does not correspond to any fields in
	<b>0</b> = request upload <b>1</b> = request download	the UI
wbt3UpDnLoadSrcFile	Any alphanumeric character to a text string	This object does not correspond to any fields in the UI
wbt3UpDnLoadDstFile	Any alphanumeric character to a text string	This object does not correspond to any fields in the UI
wbt3UpDnLoadFileType	Any following integer:	This object does not correspond to any fields in the UI
	<b>0</b> = binary <b>1</b> = ASCII	
wbt3UpDnLoadProtocol	Any following integer:	This object does not correspond to any fields in the UI
	0 = FTP 1 = TFTP	
wbt3UpDnLoadFServer	Any alphanumeric character to a text string	This object does not correspond to any fields in the UI
wbt3UpDnLoadTimeFlag	<b>0</b> = immediate execution	This object does not correspond to any fields in the UI

For the Logical Object	You Can Write	To Modify
wbt3Action Group		
wbt3RebootRequest	Any following integer:	This object does not correspond to any fields in the UI
	<b>0</b> = do not reboot <b>1</b> = reboot	
wbt3ResetToFactoryDefault	Any following integer:	The Reset the Terminal to Factory Default
	0 = not checked 1 = checked	Property Settings check box on the General properties sheet
wbt3FTPSettings Group		
wbt3ServerName	Any alphanumeric character to a text string	The <b>Server Name</b> text box on the <b>Upgrade</b> properties sheet
wbt3Directory	Any alphanumeric character to a text string	The <b>Server Directory</b> text box on the <b>Upgrade</b> properties sheet
wbt3UserID	Any alphanumeric character to a text string	The <b>User ID</b> text box on the <b>Upgrade</b> properties sheet
wbt3Password	Any alphanumeric character to a text string	The <b>Password</b> text box on the <b>Upgrade</b> properties sheet
wbt3SavePassword	Any following integer:	The <b>Save Password</b> check box on the
	0 = unchecked 1 = checked	Upgrade properties sheet
wbt3InfoLocation	Any alphanumeric character to a text string	The <b>Status</b> text box on the <b>Upgrade</b> properties sheet
wbt3Security Group		
wbt3SecurityEnable	Any following integer:	The <b>Security Enable</b> check box on the <b>Security</b> properties sheet
	0 = unchecked 1 = checked	

For the Logical Object	You Can Write	To Modify
wbt3HideConfigTab	Any following integer:	The <b>Hide Configure Tab</b> check box on the <b>Security</b>
	0 = unchecked 1 = checked	properties sheet
wbt3FailOverEnable	An integer, select:	The <b>Failover Enable</b> check box on the <b>Security</b>
	0 = unchecked 1 = checked	properties sheet
wbt3MultipleConnect	Any following integer:	The <b>Multiple Connect</b> check box on the <b>Security</b>
	0 = unchecked 1 = checked	properties sheet
wbt3PingBeforeConnect	Any following integer:	The <b>Ping Before</b> <b>Connect</b> check box on the
	0 = unchecked 1 = checked	Security properties sheet
wbt3Verbose	Any following integer:	The <b>Verbose</b> check box on the <b>Security</b> properties sheet
	0 = unchecked 1 = checked	
wbt3AutoLoginEnable	Any following integer:	The <b>Autologin Enable</b> check box on the <b>Security</b>
	0 = unchecked 1 = checked	properties sheet
wbt3AutoLoginUserName	Any alphanumeric character to a text string	The <b>User Name</b> scroll list on the <b>Security</b> properties sheet
wbt3SingleButtonConnect	Any following integer:	The <b>Single Button</b> <b>Connect</b> check box on the
	0 = unchecked 1 = checked	Security properties sheet
wbt3AutoFailRecovery	Any following integer:	The <b>Auto Fail Recovery</b> check box on the <b>Security</b>
	0 = unchecked 1 = checked	properties sheet

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For the Logical Object	You Can Write	To Modify
wbt3TrapServers Group		
wbt3TrapServer1	Any alphanumeric character to a text string using a maximum of 60 characters	The <b>Server 1</b> text box in the <b>SNMP Network</b> <b>Administration</b> dialog box
wbt3TrapServer2	Any alphanumeric character to a text string using a maximum of 60 characters	The <b>Server 2</b> text box in the <b>SNMP Network</b> Administration dialog box
wbt3TrapServer3	Any alphanumeric character to a text string using a maximum of 60 characters	The <b>Server 3</b> text box in the <b>SNMP Network</b> Administration dialog box
wbt3TrapServer4	Any alphanumeric character to a text string using a maximum of 60 characters	The <b>Server 4</b> text box in the <b>SNMP Network</b> Administration dialog box
wbt3Network Group		
wbt3dhcpEnable	Any following integer: <b>0</b> = unchecked <b>1</b> = checked	The Obtain an IP Address From a DHCP Server/Specify an IP Address radio buttons on the Network properties sheet
wbt3NetworkAddress	Any alphanumeric character to a text string	The <b>IP Address</b> text box on the <b>Network</b> properties sheet
wbt3SubnetMask	Any alphanumeric character to a text string using a maximum of 60 characters	The <b>Subnet Mask</b> text box on the <b>Network</b> properties sheet
wbt3Gateway	Any alphanumeric character to a text string using a maximum of 255 characters	The <b>Gateway</b> text box on the <b>Network</b> properties sheet

For the Logical Object	You Can Write	To Modify
wbt3dnsEnable	Any following integer:	The <b>Enable DNS</b> check box in the <b>Advanced</b> <b>Network Settings</b> dialog box
	0 = unchecked 1 = checked	
wbt3defaultDomain	Any alphanumeric character to a text string using a maximum of 255 characters	The <b>Default Domain</b> text box in the <b>Advanced</b> <b>Network Settings</b> dialog box
wbt3primaryDNSserverIPaddress	Any alphanumeric character to a text string using a maximum of 255 characters	The <b>Primary Server IP</b> Address text box in the Advanced Network Settings dialog box
wbt3secondaryDNSserverIPaddres	Any alphanumeric character to a text string using a maximum of 255 characters	The Secondary Server IP Address text box in the Advanced Network Settings dialog box
wbt3winsEnable	Any alphanumeric character to a text string using a maximum of 255 characters	The <b>Enable WINS</b> check box in the <b>Advanced</b> <b>Network Settings</b> dialog box
wbt3primaryWINSserverIPaddress	Any alphanumeric character to a text string using a maximum of 255 characters	The <b>Primary Server IP</b> Address (Enable WINS) text box in the Advanced Network Settings dialog box
wbt3secondaryWINSserverIPaddress	Any alphanumeric character to a text string using a maximum of 255 characters	The Secondary Server IP Address (Enable WINS) text box in the Advanced Network Settings dialog box
wbt3NetworkSpeed	Any following integer:	The <b>Network Speed</b> scroll list on the <b>Network</b>
	<ul> <li>0 = Auto-detect</li> <li>6 = 100Mbs-full duplex</li> <li>7 = 100Mbs-half duplex</li> <li>8 = 10Mbs-full duplex</li> <li>9 = 10Mbs-half duplex</li> </ul>	properties sheet

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For the Logical Object	You Can Write	To Modify
	wbt3Apps Group	
wbt3RDPencryption	Any following integer: <b>0</b> = checked <b>1</b> = unchecked	The <b>RDP Encryption</b> <b>Enable</b> check box on the <b>Apps</b> properties sheet
wbt3VirtualPortServerIPaddress	Any alphanumeric character to a text string using a maximum of 255 characters	The <b>Virtual Port Server</b> text box on the <b>Apps</b> properties sheet
wbt3com1Share	Any following integer: <b>0</b> = checked <b>1 =</b> unchecked	The <b>Com1 Enable</b> check box on the <b>Apps</b> properties sheet
wbt3com2Share	Any following integer: <b>0</b> = checked <b>1</b> = unchecked	The <b>Com2 Enable</b> check box on the <b>Apps</b> properties sheet
wbt3parallelShare	Any following integer: <b>0</b> = checked <b>1</b> = unchecked	The <b>LPT1 Enable</b> check box on the <b>Apps</b> properties sheet
ICAStatusDialog	Any following integer: <b>0</b> = ctrl <b>1</b> = shift	The <b>Status Dialog</b> scroll list on the <b>Hotkeys</b> properties sheet
ICAStatusDialog2	Any integer from <b>09</b>	The number scroll list to the right of the <b>Status</b> <b>Dialog</b> scroll list on the <b>Hotkeys</b> properties shee
ICACloseRemoteApplication	Any following integer: <b>0</b> = ctrl <b>1</b> = shift	The <b>Close Session</b> scrol list on the <b>Hotkeys</b> properties sheet
ICACloseRemoteApplication2	Any integer from <b>09</b>	The number scroll list to the right of the <b>Close</b> <b>Session</b> scroll list on the <b>Hotkeys</b> properties sheet

For the Logical Object	You Can Write	To Modify
ICAtoggleTitleBar	Any following integer:	The <b>Toggle Title Bar</b> scroll list on the <b>Hotkeys</b>
	0 = ctrl 1 = shift	properties sheet
ICAtoggleTitleBar2	Any integer from <b>09</b>	The number scroll list to the right of the <b>Toggle</b> <b>Title Bar</b> scroll list on the <b>Hotkeys</b> properties sheet
ICActrIAltDel	0 = ctrl	The <b>CTRL-ALT-DEL</b> scroll list on the <b>Hotkeys</b> properties sheet
ICActrIAltDel2	Any integer from <b>0</b> 9	The number scroll list to the right of the <b>CTRL-ALT-DEL</b> scroll list on the <b>Hotkeys</b> properties sheet
ICActrIEsc	0 = ctrl	The <b>CTRL-ESC</b> scroll list on the <b>Hotkeys</b> properties sheet
ICActrIEsc2	Any integer from <b>09</b>	The number scroll list to the right of <b>CTRL-ESC</b> scroll list on the <b>Hotkeys</b> properties sheet
ICAaltEsc	Any following integer:	The <b>ALT-ESC</b> scroll list on the <b>Hotkeys</b> properties sheet
	0 = ctrl 1 = shift	
ICAaltEsc2	Any integer from <b>09</b>	The number scroll list to the right of the <b>ALT-ESC</b> scroll list on the <b>Hotkeys</b> properties sheet
ICAaltTab	Any following integer: <b>0</b> = ctrl <b>1</b> = shift	The <b>ALT-TAB</b> scroll list on the <b>Hotkeys</b> properties sheet

For the Logical Object	You Can Write	To Modify
ICAaltTab2	Any integer from <b>0</b> 9	The number scroll list to the right of the <b>ALT-TAB</b> scroll list on the <b>Hotkeys</b> properties sheet
ICAaltBackTab	Any following integer: <b>0</b> = ctrl <b>1</b> = shift	The <b>ALT-BACKTAB</b> scroll list on the <b>Hotkeys</b> properties sheet
ICAaltBackTab2	Any integer from <b>09</b>	The number scroll list to the right of the <b>ALT-BACKTAB</b> scroll list on the <b>Hotkeys</b> properties sheet
wbt3Connections Group		
wbt3ConnectionName	Any alphanumeric character to a text string: RDP = 37 characters maximum ICA = 32 characters	The Connection Name list in the Winterm Connection Manager
	maximum TEC = 42 characters maximum DialUp = 20 characters maximum	
wbt3ConnectionType	Any following integer:	The <b>Type</b> list in the
	0 = RDP 1 = ICA 2 = TEC 3 = DialUp	Winterm Connection Manager
wbt3ConnectionEntryStatus	Any following integer:	The Connection Name
	<ol> <li>1 = active</li> <li>2 = not in service</li> <li>3 = not ready</li> <li>4 = create and go</li> <li>5 = create and wait</li> <li>6 = destroy</li> </ol>	list in the Winterm Connection Manager

For the Logical Object	You Can Write	To Modify
wbt3RDPConnections Group		
wbt3RDPConnServer	Any alphanumeric character to a text string using a maximum of 32 characters	The <b>Server</b> text box in the <b>WTS Connection Wizard</b> (number 1)
wbt3RDPConnLowSpeed	Any following integer:	The <b>Low Speed</b> Connection check box in
	0 = not checked 1 = checked	WTS Connection Wizard (number 1)
wbt3RDPConnAutoLogon	Any following integer:	The <b>Automatic Logon</b> check box in <b>WTS</b>
	0 = not checked 1 = checked	Connection Wizard (number 2)
wbt3RDPConnUserName	Any alphanumeric character to a text string using a maximum of 32 characters	The <b>Username</b> text box in <b>WTS Connection Wizard</b> (number 2)
wbt3RDPConnDomain	Any alphanumeric character to a text string	The <b>Domain</b> text box in <b>WTS Connection Wizard</b> (number 2)
wbt3RDPConnStartApplication	Any following integer:	The <b>Desktop/Application</b> File Name radio buttons in
	<b>0</b> = desktop <b>1</b> = file name	WTS Connection Wizard (number 3)
wbt3RDPConnFilename	Any alphanumeric character to a text string using a maximum of 32 characters	The <b>Application File</b> <b>Name</b> text box in <b>WTS</b> <b>Connection Wizard</b> (number 3)
wbt3RDPConnWorkingDir	Any alphanumeric character to a text string using a maximum of 32 characters	The Working Directory text box in WTS Connection Wizard (number 3)

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For the Logical Object	You Can Write	To Modify
wbt3ICAConnCommType	The integer <b>0</b> = ctrl	The Network Connection/Dial-In Connection radio buttons in the Specify Connection Type dialog box
wbt3ICAConnServer	Any alphanumeric character to a text string	The Citrix Server/ Published Application text box in the Select a Citrix Server or Published Application dialog box
wbt3ICAConnCommandLine	Any alphanumeric character to a text string	The <b>Command Line</b> text box in the <b>Specify an</b> <b>Application</b> dialog box
wbt3ICAConnWorkingDir	Any alphanumeric character to a text string	The Working Directory text box in the Specify an Application dialog box
wbt3ICAConnUsername	Any alphanumeric character to a text string	The <b>Username</b> text box in the <b>Specify Logon</b> Information dialog box
wbt3ICAConnDomain	Any alphanumeric character to a text string	The <b>Domain</b> text box in the <b>Specify Logon</b> Information dialog box
wbt3ICAConnColors	Any following integer: <b>0</b> = 16 <b>1</b> = 256	The <b>Windows Colors</b> radio buttons in the <b>Select</b> <b>Window Options</b> dialog box
wbt3ICAConnDataCompress	Any following integer: <b>0</b> = not checked <b>1</b> = checked	The <b>Compress Data</b> <b>Stream</b> check box in the <b>Compression, Cache,</b> <b>Encryption and Sound</b> dialog box

For the Logical Object	You Can Write	To Modify
wbt3ICAConnSoundQuality	Any following integer: <b>0</b> = (none) <b>1</b> = low quality <b>2</b> = medium quality <b>3</b> = high quality	The <b>Sound Quality</b> scroll list in the <b>Compression</b> , <b>Cache, Encryption and</b> <b>Sound</b> dialog box
wbt3TermConnCommType	The integer <b>0</b> = network	The TCP/IP/Modem/ Serial radio buttons in the TE Client Connection Wizard - Host Information dialog box
wbt3TermConnServer	Any alphanumeric character to a text string using a maximum of 32 characters	The Connection Name text box in the TE Client Connection Wizard - Connection Information dialog box
wbt3TermConnEmuType	Any following integer: 0 = VT52 1 = VT100 2 = VT220 3 = VT400-7-Bit 4 = VT400-8-Bit 5 = ANSI-BBS 6 = SCO Console 7 = IBM3270 8 = IBM3151 9 = IBM5250 10 = WY50 11 = WY50+ 12 = TV1910 13 = TV1920 14 = TV1925 15 = ADDS-A2 16 = HZ1500 17 = WY60	The Emulation scroll list in the TE Client Connection Wizard - Connection Information dialog box

For the Logical Object	You Can Write	To Modify
wbt3TermConnVTEmuModel	<b>0</b> = VT100 <b>1</b> = VT101 <b>2</b> = VT102 <b>3</b> = VT125 <b>4</b> = VT220 <b>5</b> = VT240 <b>6</b> = VT320 <b>7</b> = VT340 <b>8</b> = VT420 <b>9</b> = VT131 <b>10</b> = VT132 <b>256</b> = not applicable	The VT Terminal ID scroll list in the TE Client Connection Wizard - Connection Information dialog box
wbt3TermConnIBM3270EmuModel	0 = IBM3278-2 1 = IBM3278-3 2 = IBM3278-4 3 = IBM3278-5 4 = IBM3278-2-E 5 = IBM3278-3-E 6 = IBM3278-4-E 7 = IBM3278-5-E 8 = IBM3279-2 9 = IBM3279-3 10 = IBM3279-4 11 = IBM3279-5 12 = IBM3287-1 256 = not applicable	The <b>IBM 3270 Model</b> scroll list in the <b>TE Client</b> <b>Connection Wizard -</b> <b>Connection Information</b> dialog box
wbt3TermConnIBM5250EmuModel	0 = IBM5291-1 1 = IBM5292-2 2 = IBM5251-11 3 = IBM3179-2 4 = IBM3196-4 5 = IBM3180-2 6 = IBM3477-FC 7 = IBM3477-FG 8 = IBM3486-BA 9 = IBM3487-BA 10 = IBM3487-HC 11 = not applicable	The IBM 5250 Model scroll list in the TE Client Connection Wizard - Client Information dialog box
wbt3TermConnPortNumber	Any integer from <b>1</b> to <b>65535</b>	The <b>Port Number</b> text box in the <b>TCP/IP Telnet</b> <b>Configuration</b> dialog box

For the Logical Object	You Can Write	To Modify
wbt3TermConnTelnetName	Any alphanumeric character to a text string	The <b>Connection Name</b> text box in the <b>Connection Information</b> dialog box
wbt3TermConnPrinterPort	The integer <b>0</b> = LPT1	The <b>Printer Port</b> scroll list in the <b>TE Client</b> <b>Connection Wizard -</b> <b>Printer Port Settings</b> dialog box
wbt3TermConnFormFeed	Any following integer: <b>0</b> = not checked <b>1</b> = checked	The FormFeed Terminator check box in the TE Client Connection Wizard - Printer Port Settings dialog box
wbt3TermConnAutoLineFeed	Any following integer: <b>0</b> = not checked <b>1</b> = checked	The Auto Line Feed check box in the TE Client Connection Wizard - Printer Port Settings dialog box
wbt3TermConnScript	Any alphanumeric character to a text string	The Script text box in the TE Client Connection Wizard - Automate Login Process dialog box
wbt3Users Group		
wbt3UsersStatus	Any following integer: 1 = active 2 = not in service 3 = not ready 4 = create and go 5 = create and wait 6 = destroy	This object does not correspond to any fields in the UI.
wbt3userName	Any alphanumeric character to a text string using a maximum of 20 characters	The User Name text box in the Add User Account and Modify User Account dialog boxes

For the Logical Object	You Can Write	To Modify
wbt3password	Any alphanumeric character to a text string	The <b>Password</b> text box in the <b>Add User Account</b> and <b>Modify User</b> <b>Account</b> dialog boxes
wbt3privilege	Any following integer: <b>0</b> = admin <b>1</b> = user <b>2</b> = guest	The Administrator/User/ Guest radio buttons in the Add User Account and Modify User Account dialog boxes
wbt3Connection1	Any alphanumeric character to a text string using a maximum of 20 characters	The first connection listed in the <b>Connection Name</b> list in the <b>Add User</b> <b>Account</b> and <b>Modify</b> <b>User Account</b> dialog boxes
wbt3Connection2	Any alphanumeric character to a text string using a maximum of 20 characters	The second connection listed in the <b>Connection</b> <b>Name</b> list in the <b>Add User</b> <b>Account</b> and <b>Modify</b> <b>User Account</b> dialog boxes
wbt3Connection3	Any alphanumeric character to a text string using a maximum of 20 characters	The third connection listed in the <b>Connection Name</b> list in the <b>Add User</b> <b>Account</b> and <b>Modify</b> <b>User Account</b> dialog boxes
wbt3Connection4	Any alphanumeric character to a text string using a maximum of 20 characters	The fourth connection listed in the <b>Connection</b> <b>Name</b> list in the <b>Add User</b> <b>Account</b> and <b>Modify</b> <b>User Account</b> dialog boxes
wbt3Connection5	Any alphanumeric character to a text string using a maximum of 20 characters	The fifth connection listed in the <b>Connection Name</b> list in the <b>Add User</b> <b>Account</b> and <b>Modify</b> <b>User Account</b> dialog boxes

For the Logical Object	You Can Write	To Modify
wbt3Connection6	Any alphanumeric character to a text string using a maximum of 20 characters	The sixth connection listed in the <b>Connection Name</b> list in the <b>Add User</b> <b>Account</b> and <b>Modify</b> <b>User Account</b> dialog boxes
wbt3Connection7	Any alphanumeric character to a text string using a maximum of 20 characters	The seventh connection listed in the <b>Connection</b> <b>Name</b> list in the <b>Add User</b> <b>Account</b> and <b>Modify</b> <b>User Account</b> dialog boxes
wbt3Connection8	Any alphanumeric character to a text string using a maximum of 20 characters	The eighth connection listed in the <b>Connection</b> <b>Name</b> list in the <b>Add User</b> <b>Account</b> and <b>Modify</b> <b>User Account</b> dialog boxes
wbt3AutoStart1	Any following integer: <b>0</b> = not checked <b>1</b> = checked	The first entry listed in the AutoStart list in the Add User Account and Modify User Account dialog boxes
wbt3AutoStart2	Any following integer: <b>0</b> = not checked <b>1</b> = checked	The second entry listed in the AutoStart list in the Add User Account and Modify User Account dialog boxes
wbt3AutoStart3	Any following integer: <b>0</b> = not checked <b>1</b> = checked	The third entry listed in the AutoStart list in the Add User Account and Modify User Account dialog boxes
wbt3AutoStart4	Any following integer: <b>0</b> = not checked <b>1</b> = checked	The fourth entry listed in the AutoStart list in the Add User Account and Modify User Account dialog boxes

For the Logical Object	You Can Write	To Modify
wbt3AutoStart5	Any following integer:	The fifth entry listed in the AutoStart list in the Add
	0 = not checked 1 = checked	User Account and Modify User Account dialog boxes
wbt3AutoStart6	Any following integer:	The sixth entry listed in the AutoStart list in the Add
	<b>0</b> = not checked	User Account and
	1 = checked	Modify User Account dialog boxes
wbt3AutoStart7	Any following integer:	The seventh entry listed in the <b>AutoStart</b> list in the
	<ul><li>0 = not checked</li><li>1 = checked</li></ul>	Add User Account and Modify User Account dialog boxes
wbt3AutoStart8	Any following integer:	The eighth entry listed in the <b>AutoStart</b> list in the
	<b>0</b> = not checked	Add User Account and
	1 = checked	Modify User Account dialog boxes
wbt3UserPasswordChange	Any following integer:	The <b>Enable Password</b> <b>Change</b> check box in the
	<b>0</b> = not checked	Add User Account and
	1 = checked	Modify User Account dialog box.

## Mote

This chart may not list all of the read-write objects in the MIB.

The following glossary is a list of commonly used terms in this guide.

Term	Definition
10Base-T	One of several adaptations of the Ethernet (IEEE 802.3) standard for Local Area Networks (LANs). The 10Base-T standard (also called Twisted Pair Ethernet) uses a twisted-pair cable with a maximum length of 100 meters. The cable is thinner and more flexible than the coaxial cable used for the 10Base-2 or 10Base-5 standards.
100Base-T	A networking standard that supports data transfer rates up to 100 Mbps (100 megabits per second). 100Base-T is based on the older Ethernet standard. Because it is 10 times faster than Ethernet, it is often referred to as Fast Ethernet. Officially, the 100Base-T standard is IEEE 802.3u. Like Ethernet, 100Base-T is based on the CSMA/CD LAN access method.
СНАР	Challenge-Handshake Authentication Protocol. An authentication scheme used by PPP servers to validate the identity of the originator of the connection upon connection or any time later.
CRT	Cathode-Ray Tube. A large vacuum tube with a viewing face in which an electron beam is focused and controlled to form characters and other images. A CRT is the display you see on the monitor you use with your terminal.
CTS	Clear to Send. Control signal sent from the DCE. It indicates that the DTE may send data. This signal is used in serial connections.
DCE	Data Communications Equipment. Devices that provide the functions required to establish, maintain, and terminate a data transmission connection, e.g., a modem.
DHCP	Dynamic Host Configuration Protocol. A protocol for assigning dynamic IP addresses to devices on a network.
DNS	Domain Name Service. A general-purpose distributed, replicated, data query service chiefly used on the Internet for translating host names into Internet addresses.

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Download	To transfer data from a processing unit to an attached device. For example, from a host to the terminal.
DSR	Data Set Ready. A hardware signal sent by a communications device to indicate readiness to send and receive data. This signal is used in serial connections.
DTE	Data Terminal Equipment. A device that acts as the source and/ or destination of data and which controls the communication channel. DTE includes terminals, computers, protocol converters, and multiplexors. DTE is usually connected via an RS-232 serial line to Data Communication Equipment (DCE).
DTR	Data Terminal Ready. A hardware signal sent by a terminal to indicate readiness to send and receive data. This signal is used in serial connections.
Ethernet	A baseband local area network specification developed jointly by Digital Equipment Corp., Xerox, and Intel to interconnect computer equipment using coaxial cable and transceivers. An Ethernet LAN provides millions of bits per second of capacity for high-speed terminal-to-computer communication or computer-to-computer file transfer.
FCC	Federal Communications Commission. The Government body that regulates all telecommunications originating in the U.S., including transmission over telephone lines.
Firmware	A computer program or software stored permanently in a PROM or ROM or semi-permanently in an EPROM.
Flow control	The procedure for regulating the flow of data between two devices, flow control prevents the loss of data when one device's receiving buffer has reached its capacity.
FTP	File Transfer Protocol. FTP is a program for transferring files in TCP/IP environments such as the intranet in which a user, acting as a client, downloads files from a remote server. FTP is a core component in TCP/IP system administration and is implemented at the Applications layer with respect to the OSI protocol model. Its operation is based on the Telnet program and TCP.

GUI	Graphical User Interface (pronounced "gooey"). The use of pictures rather than just words to represent the input and output of a program. A program with a GUI runs under some windowing system (e.g. Microsoft Windows <sup>®</sup> ). The program displays certain icons, buttons, and dialog boxes in its windows on the screen. The user mainly controls these objects by moving a pointer on the screen (typically controlled by a mouse) and selecting certain objects by pressing buttons on the mouse while the pointer is pointing at them.
Hz	Hertz. A unit of frequency equal to 1 cycle per second.
ICA	Independent Computing Architecture. A three-part server-based computing technology that separates an application's logic from its user interface and allows 100% application execution on the server. ICA was developed by Citrix Systems, Inc.
Integrated CRT terminal	A terminal with a monitor and connections on the back for a keyboard and mouse.
Interface	A shared boundary defined by common physical interconnection characteristics, signal characteristics, and meaning of interchanged signals.
Internet	The Internet is a global web of interconnected computers and computer networks that are interconnected under a common set of network protocols that allows them to function as a single large network (see TCP/IP).
IP address	Internet Protocol Address. The 32-bit, 4-byte address assigned to machines with TCP/IP. It is usually represented in dotted decimal notation. Provides interconnectivity among a variety of independent host systems.
Intranet	A network of WBT's within a company or organization.
ISDN	Integrated Services Digital Network. Evolving switched network standard that provides end-to-end digital voice and data communication services.
kb or kilobit	1,024 bits. Commonly referred to as 1 thousand bits.
kB or kilobyte	1,024 bytes. Commonly referred to as 1 thousand bytes.
kbps or kb/s	Kilobits per second. An abbreviation meaning thousands of bits per second.

Load Balancing Services	A management add-on to Citrix WinFrame and MetaFrame servers that allows administrators to group multiple WinFrame and/or MetaFrame servers into scalable "server farms" to deliver the best application performance and server resource utilization.
Mb or megabit	1,048,576 bits. Commonly referred to as 1 million bits.
Mbps or Mb/s	Megabits per second.
MetaFrame	The world's first Server-based Computing software for Microsoft Windows NT 4.0 Server, Terminal Server Edition multi-user software.
MIB	Management Information Base. A database of managed objects accessed by network management protocols.
Modem	(Mo)dulator/(dem)odulator. Data communication equipment (DCE) devices that provide connections for computers into the public switched telephone network (PSTN). They convert (modulate) the digital signals of computers into analog signals that can be transmitted over telephone lines. A modem at the other end of the link then demodulates the signals back to digital bits.
Modular terminal	Desktop client that works with existing standard monitors.
Network	An interconnected group of nodes; a series of points, nodes, or stations connected by communications channels; the assembly of equipment through which connections are made between data stations.
Null modem	A cable, typically an RS-232 cable, for connecting serial ports on two computers directly, rather than via modems. Since, according to the specification, both computers should transmit on pin three of their RS-232 connectors and receive on pin two, a null modem cable needs to connect one computer's pin two to the other's pin three and vice versa. It also needs to have male connectors at both ends (again, according to the specification).
OSD	On Screen Display. A menu that displays on your monitor.
Packet	A group of bits (including data and call control signals) transmitted as an identifiable unit on a packet-switched network (PSN).

ΡΑΡ	Password Authentication Protocol. An authentication scheme used by PPP servers to validate the identity of the originator of the connection. PAP applies a two-way handshaking procedure. After the link is established the originator sends an id-password pair to the server. If authentication succeeds the server sends back an acknowledgment; otherwise it either terminates the connection or gives the originator another chance.
Parallel port	An input/output port that allows the entire bit pattern for a single character to be sent at one time, usually used to connect a printer to a computer.
Parity check	The addition of non-information bits (specifically, parity bits) to make up a transmission block (a number of bits transmitted as unit) that ensures the total number of ones is always either even (even parity) or odd (odd parity). The parity check is used to detect transmission errors.
PCMCIA	Personal Computer Miniature Connector Interface Adapter. Hardware and software standards for credit-card-sized integrated circuit cards.
Ping	Packet InterNet Groper. A protocol used in the Transmission Control Protocol (TCP) environment to test whether a node or remote device is communicating on a local area network (LAN) or wide area network (WAN). The protocol provides for transporting an echo response from a host system, a client, or a gateway. It is a useful tool for locating problems on the network related to failed connections and software problems. One datagram is sent every second over the network and any response is displayed.
PPP	Point-to-Point Protocol. A serial communication protocol that operates over dialup or leased (dedicated) lines to provide connections into IP networks. It sets up and monitors router sessions and frames the data transmitted over the line.
Protocol	A set of formal rules describing how to transmit data, especially across a network. Low-level protocols define the electrical and physical standards to be observed, bit- and byte-ordering, and the transmission and error detection and correction of the bit stream. High level protocols deal with the data formatting, including the syntax of messages, the terminal to computer dialogue, character sets, sequencing of messages, etc.

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RAM	Random-Access Memory. A mass store that provides fast access to any storage location by means of vertical and horizontal coordinates. Information is written in or read out using the same procedure. The memory cycle time is the same for any location addressed because there is no waiting or sorting time required, as there is when data items are stored sequentially.
RAS	Remote Access Services. A service provided by Windows NT that allows most of the services which would be available on a network to be accessed over a modem link. The service includes support for dialup and logon, and then presents the same network interface as the normal network drivers (albeit slightly slower).
RDP	Remote Desktop Protocol. A presentation service protocol that governs input and output between a WBT and WTS (Windows Terminal Server). It is based on the T.share protocol.
RS-232 cable	A cable for serial interfaces between the terminal and communications devices, such as a modem. The cable connects to the 9-pin serial port at the back of the terminal. Maximum cable length is 50 feet; maximum signaling rate is 20 Kbits/sec.
RTS/CTS flow control	Request to Send/Clear to Send flow control. Enables flow control on the local serial line. RTS is the output of the terminal; CTS is the input to the terminal.
Serial port	Note The 3200LE terminal does not have a serial port. A connector on a computer to which you can attach a serial line connected to peripherals that communicate using a serial (bit-stream) protocol. The most common type of serial port is a 25-pin D-type connector carrying RS-232 signals. Smaller connectors (e.g. 9-pin D-type) carrying a subset of RS-232 are often used on personal computers.
Server	The control computer on a local area network that controls software access to workstations, printers, and other parts of the network.
SNMP	Simple Network Management Protocol. The industry standard protocol for managing TCP/IP networks. This protocol queries agents in managed devices and passes information to the management console.

Start bit	In asynchronous transmission, the first bit of any given character used to alert the receiving system to recognize the related incoming data.
Stop bit	In asynchronous transmission, the last bit of any given character, used to alert the receiving system that transmission of the character is complete.
TCP/IP	Transmission Control Protocol/Internet Protocol. TCP/IP was developed by DARPA for Internet working and encompasses both network layer and transport layer protocols (in the OSI model). While TCP and IP specify two protocols at specific protocol layers, TCP/IP is often used to refer to the entire DOD protocol suite based upon these, including Telnet, FTP, UDP and RDP.
Telnet	Telnet is the login and terminal emulation program for Transmission Control Protocol/Internet Protocol (TCP/IP) networks such as the Internet. Its primary function is to allow users to log into remote host systems.
Terminal emulation	Programs that allow a WBT to act like a particular brand or type of terminal. The WBT thus appears as a terminal to the host computer and accepts the same escape sequences for functions such as cursor positioning and clearing the screen.
Thin-client	A low-cost computing device that works in a server-centric computing model. Thin clients typically do not require state-of-the-art, powerful processors and large amounts of RAM and ROM because they access applications from a central server or network. Thin clients can operate in a Server-based Computing environment.
Timeout	A time interval within which certain operations must occur; for example, the time allotment for the terminal to connect to a login host. After the timeout, the process can either be repeated or discontinued.
Total Cost of Ownership (TCO)	A model that helps IT professionals understand and manage the budgeted (direct) and unbudgeted (indirect) costs incurred for acquiring, maintaining and using an application or a computing system. TCO normally includes training, upgrades, and administration as well as the purchase price. Lowering TCO through single-point control is a key benefit of Server-based Computing.

Touch screen	A type of display screen that has a touch-sensitive transparent panel that can sense when someone is touching it, and is able to furnish a computer with precise information as to exactly where on the screen the touch occurred. Touch screens are used with software that uses the information provided by the screen touch to respond to user requests.
USB	Universal Serial Bus. An external peripheral interface standard for communication between computer and external peripherals over an inexpensive cable using biserial transmission. USB works at 12 Mbps with specific consideration for low-cost peripherals. USB cables can be up to 5 meters long.
Virtual Port	Incoming Telnet and rlogin connections are not associated with a physical port. Instead, they are associated with a virtual port, port 0, which serves for the duration of the connection. Each virtual port is created with a default set of characteristics. The Define Port commands can be used to customize a virtual port during the Telnet/Rlogin session; however, these customizations can not be saved. The port reverts to the default set of characteristics when the session is closed.
WAN	Wide Area Network. A data-communications system covering a large geographic area, usually digital circuits having moderate to high data rates (e.g., 56 to 64 kbps up to 1.5 to 2 Mbps).
WBT	Windows-based Terminal. A thin-client device that connects to a Citrix WinFrame or MetaFrame server to provide application access. The key differentiator of a WBT from other type devices is that all the application execution occurs on the server. There is no downloading or local processing of applications at the client.
WinFrame	A multi-user Windows application server, based on Windows NT, developed under license from Microsoft. This application was developed by Citrix Systems, Inc.
WINS	Windows Internet Naming Service. WINS allows machines to dynamically register their name-to-address mappings. WINS is also a flat name space without the concept of hierarchy and requires each WINS server to maintain a complete database of entries through replication.
Winterm	Trademarked logo for Windows-based Terminals manufactured by Wyse Technology Inc.

WTSWindows Terminal Server. A server application that transmits<br/>Windows user interface data via a network to a WBT.X-ON/X-OFFTransmitter On/Transmitter Off. Control characters used for flow

Transmitter On/Transmitter Off. Control characters used for flow control, instructing serial devices to start transmission (X-ON) and stop transmission (X-OFF).

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