



Version 1.0 Users Guide

Revised 02-05-02

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Table of Contents

Chapter 1: Introduction	1
About This Manual	1
Manual Assumptions	1
How to Use This Manual	1
Manual Conventions	2
For Further Information	3
About Wavelink TelnetCE	3
Chapter 2: Setting Up TelnetCE	5
Mobile Device Requirements	5
Features Available by Device Type	5
TelnetCE and Wavelink Clients	6
Installing TelnetCE	7
Authorizing TelnetCE	14
Chapter 3: Starting Wavelink TelnetCE	16
Chapter 4: Host Connections	17
Configuring a Host Connection	17
Editing a Host Connection	19
Connecting to a Host	20
Disconnecting from a Host	20
Chapter 5: Terminal Settings	21
Standard Settings	21
Standard Options	22
General Options	23
Logging Options	25
Font Settings	26
Scroll Options	28
Beeps Settings	30
Scanner Options	32
Symbology Options	33
Advanced Symbology Options	34
Emulator Settings	36
IBMHOST Emulator Settings	36
VTXX Emulator Settings	39
Wavelink Emulator Settings	44
Chapter 6: Connection Settings	46
Restoring Default Terminal Settings	47

Chapter 7: Custom Configuration	49
Base Configuration File	49
External Configuration of Terminal Settings	50
External Configuration Files	52
External Configuration of Host Connections	53
Using Configuration File Parameters	56
Descriptions of Configuration Parameters	57
Limiting Terminal Configuration Access	68
Creating Keyboard Maps	68
Creating a Keyboard Map	68
Commenting a Keyboard Map File	69
Linking to Other Keyboard Map Files	70
An Example of Creating a Keyboard Map	70
Key Type Definitions	71
Chapter 8: Host Sessions	73
Working with Multiple Sessions	73
Using Special Keys	73
Sending Function Keys	74
Status Messages	74
Alerts	75
Setting View Modes	76
Setting Fonts	76
Changing the Terminal Settings	78
Chapter 9: Menu commands	79
Term Menu	79
App Menu	80
View Menu	80
Sessions Menu	81
Keys Menu	81
Chapter 10: Troubleshooting	82
General Error Messages	82
Authorization Error Messages	84
Chapter 11: Extensions	85
EBCDIC Character Sets	86

Chapter 1 Introduction

Welcome to the Wavelink TelnetCE User Manual. This manual is designed to help you maximize Wavelink TelnetCE for your business.

If you are new to Wavelink TelnetCE, it is recommended that you read through this introductory section, which covers the basic principles and components of Wavelink TelnetCE. Then, once you install the software as described in *Installing TelnetCE* on page 7, read through the rest of the manual to learn more about Wavelink TelnetCE's capabilities.

If you are an experienced user of Wavelink TelnetCE, you might want to skim the Introduction section and then read about how each of the Wavelink TelnetCE components operate.

About This Manual

This section discusses the assumptions behind this manual, how to use this manual effectively, and the typographical conventions used in this manual.

Manual Assumptions

Before you use this manual, please be sure you understand the following concepts:

- User interface of Microsoft Windows, including how to navigate and access programs and files
- Networking basics, such as IP addresses
- Basic operations and requirements of the host applications you want to access with TelnetCE.

How to Use This Manual

The first section of this manual is the Introduction section. Refer to this section if you need a general overview of Wavelink TelnetCE components, or if you require clarification on the typographical conventions used in this manual.

The next sections of this manual are *Chapter 2, Setting Up TelnetCE* on page 5 and *Installing TelnetCE* on page 7. These sections address the hardware and

software requirements of Wavelink TelnetCE, and take you step-by-step through the installation process.

After *Chapter 2, Setting Up TelnetCE* on page 5 and *Installing TelnetCE* on page 7 follow several sections that discuss, in detail, the components that comprise Wavelink TelnetCE. Refer to these sections to ensure that Wavelink TelnetCE is maximized for your network. These sections also include additional files you might want to create for Wavelink TelnetCE, such as configuration and keyboard map files, as well as a troubleshooting section to help you quickly identify any system errors that might occur.

Manual Conventions

This manual uses the following typographical conventions:

Courier New

Any time you interact with a Wavelink Sentinel option, such as a button, or type specific information into a field, such as a file pathname, that option appears in the *Courier New* text style. This text style is also used for any keyboard commands that you might need to press.

Examples:

Click *Next* to continue.

Press *CTRL+ALT+DELETE*.

Bold

Any time this manual refers to an option, such as descriptions of different options in a dialog box, that option appears in the **Bold** text style.

Examples:

Click **Open** from the **File** Menu.

The **Add** button displays a screen that allows you to add new host connections.

Italics

Any time this manual refers to another section within the manual, that section appears in the *Italic* text style.

Example:

See the *Keyboard Maps* section for more information.

For Further Information

We are very interested in improving the Wavelink TelnetCE documentation, and welcome all criticisms and suggestions for improvement. Please direct comments to:

Wavelink TelnetCE Documentation

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About Wavelink TelnetCE

Wavelink TelnetCE communicates directly with host systems by using the Telnet protocol of the TCP/IP protocol suite. With Wavelink TelnetCE, a user can log on to a Unix host system, a mainframe, or an AS/400, enabling the user's computer to function as a terminal attached to the host.

Wavelink TelnetCE includes the following features and capabilities:

Broad Scale Emulation Many products on the market are built to only communicate with a single system. Wavelink TelnetCE, however, includes the most widely-used emulations in a single product—including TN3270, TN5250, VT100, and VT220 terminal emulation. TelnetCE is the only application you need for Mobile Units to access mainframes, AS/400's, and Unix systems.

Terminal Display Control

Wavelink TelnetCE allows on-the-fly selection of view modes to suit your host applications. The view modes Wavelink TelnetCE includes are Follow Cursor, Fixed, and Watermark. You can also take advantage of built-in TelnetCE or local system resources to control font settings and audio messages.

Session Memory

When you configure a host, the settings you select are automatically saved as named connections so you can quickly and easily re-connect as soon as you open the program.

Extensibility

You can seamlessly integrate special hardware support and customized resources into the base emulator product as Wavelink TelnetCE extensions. Extensions that provide the following types of support are available:

- Alternate input devices
- Scanner integration
- Printer integration
- Device control
- Authentication
- Resources (such as the EBCDIC character sets)

Integrated Debugging and Monitoring

Debugging of your Wavelink TelnetCE sessions is built-in, providing vital data for troubleshooting purposes.

Chapter 2 Setting Up TelnetCE

The base system requirements for the complete Wavelink TelnetCE are minimal. The following chart shows the optimal configuration for the software.

Operating System	Operating RAM	Free RAM Disk Space
WinCE 2.11 or higher	16MB	390K

Table 2-1: *TelnetCE Requirements*

NOTE You must have a configured TCP/IP network connection before using Wavelink TelnetCE.

Mobile Device Requirements

Because the capabilities of a mobile device vary widely from unit to unit, some TelnetCE features are unavailable to certain devices. Also, certain devices have different display capabilities, which can result in option screens that appear different from those illustrated in this manual.

This section lists which options are available for many mobile devices, as well as which devices have specific display capabilities.

NOTE Because there are many types of mobile devices, some device types might not be listed in this section. If you have questions regarding a specific device, please contact your Wavelink sales representative.

Features Available by Device Type

The following list details the features available to different mobile devices.

Symbol PPT 2740 Supports all TelnetCE features and functions.

Symbol PDT 7240

This device can be configured only through external configuration files. Configuration through a user interface is not supported.

This device does not support the Configure option under the **Term** menu or the **Advanced** button located on the Edit Connection dialog box.

Certain TelnetCE dialog boxes described in this manual are split into two separate boxes for the 7240. These boxes are linked by a **Continue** button, located on the bottom right corner of the dialog box.

Symbol PDT 7540

This device can be configured only through external configuration files. Configuration through a user interface is not supported.

This device does not support the Configure option under the **Term** menu or the **Advanced** button located on the Edit Connection dialog box.

Certain TelnetCE dialog boxes described in this manual are split into two separate boxes for the 7240. These boxes are linked by a **Continue** button, located on the bottom right corner of the dialog box.

TelnetCE and Wavelink Clients

The features of TelnetCE are available in several Wavelink Studio and TNCE clients. These clients are:

- Symbol PDT7200
- Symbol PDT7500
- Intermec 700
- Unitec PT900
- HandHeld Dolphin 7400

For information on how to configure these clients to connect to your network, see the corresponding client documentation. This documentation is available for download from the Wavelink Web site: www.wavelink.com.

Installing TelnetCE

To install TelnetCE, follow these steps:

NOTE Before you install Wavelink TelnetCE, close all other application programs.

- 1 If you downloaded the self-extracting Wavelink TelnetCE software from the official Wavelink TelnetCE Web site, locate the self-extracting file (represented by an open box icon) in the directory you used to download the file (for example, C:\Windows\Temp).
- 2 Double-click `Setup.exe` to begin the installation process.

NOTE To install Wavelink TelnetCE, you must install Microsoft ActiveSync on your desktop computer. See your Windows CE documentation for more information.

After you start the Wavelink TelnetCE Setup program, the Welcome dialog box appears.

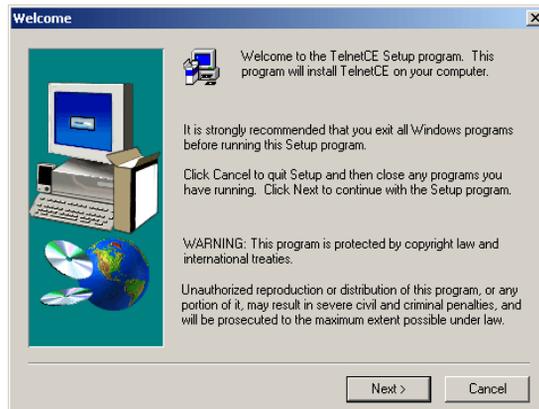


Figure 2-1. The Wavelink TelnetCE Install Program Welcome Dialog Box

- 3 Click `Next >` to begin the installation process.

NOTE If you install Wavelink TelnetCE on a Windows NT system, you must have local administrator privileges.

The Setup program displays the License Agreement dialog box.

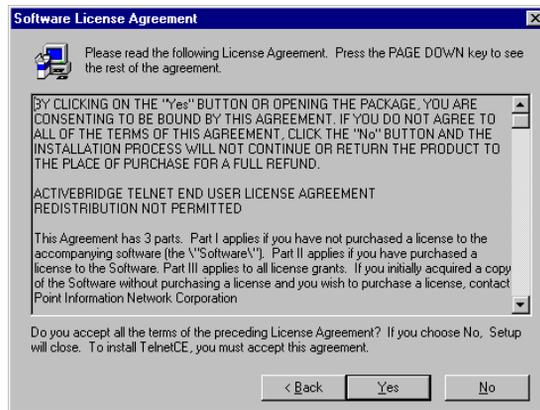


Figure 2-2. *The Wavelink TelnetCE License Agreement Dialog Box*

- 4 After reading the complete Wavelink TelnetCE License Agreement, click **Yes** to accept the terms of the license agreement and continue with the installation process.

If you do not agree to the terms of use, click **No** to cancel the software installation.

After you accept the licensing terms, the User Information dialog box appears.

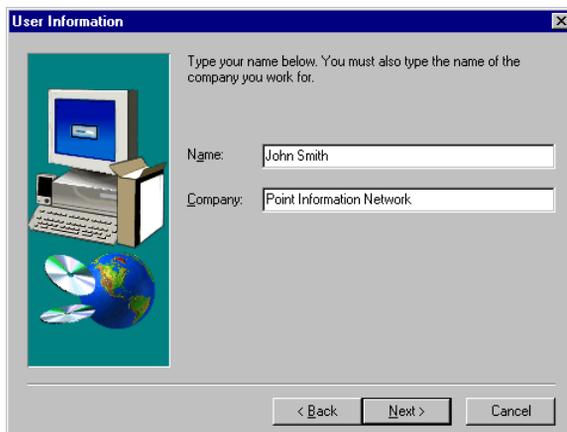


Figure 2-3. *The User Information Dialog Box*

- 5 Type your name in the **Name** field.
- 6 Type the name of your company in the **Company** field.
- 7 Click **Next >**.

The Choose Destination Location dialog box appears. Use this dialog box to set the directory where the Wavelink TelnetCE files will be installed on your desktop computer.



Figure 2-4. *The Choose Directory Dialog Box*

- 8 To accept the default directory, `C:\Programs\Microsoft ActiveSync\TelnetCE` (shown in the **Destination Folder** field), click `Next>`.

To manually select a location for the Wavelink TelnetCE files, click `Browse`.

After you click `Next>`, the Setup Type dialog box appears. In this screen you select your preferred installation type.

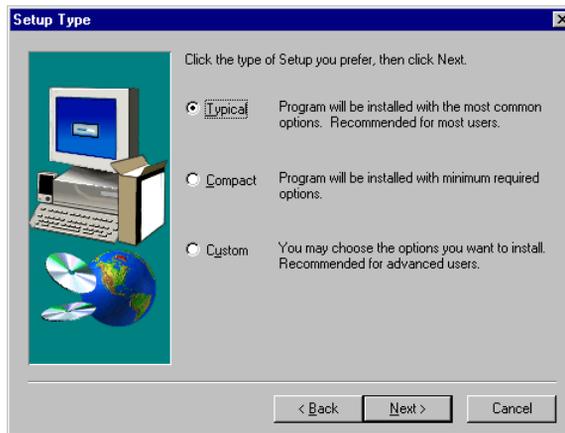


Figure 2-5. *The Setup Type Dialog Box*

- 9 Select one of the three available installation options: Typical, Compact, or Custom.

Select the **Typical** option to install the most common options needed to run and develop Wavelink TelnetCE applications.

Select the **Compact** option to install the minimum options required to run Wavelink TelnetCE. The compact installation saves disk space but does not install the online help.

Select the **Custom** option to install specific components of the Wavelink TelnetCE program. This option opens a dialog box (not shown) in which you can select the desired components to be installed.

- 10 After you select the type of installation, click `Next>`.

The Wavelink TelnetCE Setup program displays the Select Program Folder dialog box. In this screen you determine the Programs menu group in which the Wavelink TelnetCE applications will appear on your Windows computer.

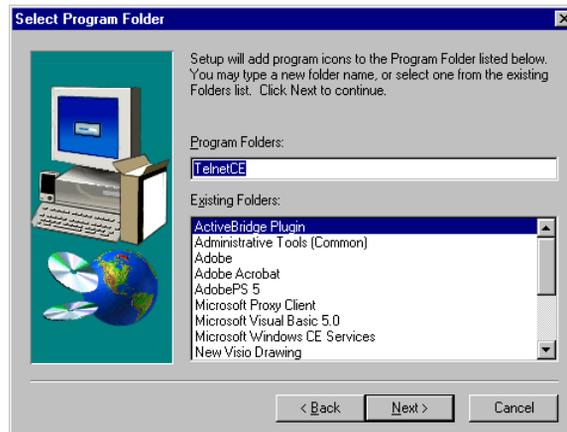


Figure 2-6. *The Select Program Folder Dialog Box*

11 To select the default program folder, Wavelink TelnetCE, click **Next >**.

To create a new program folder, type the name in the **Program Folders** field.

To select an existing program folder, select the desired folder from the **Existing Folders** list.

Once you select a program folder for Wavelink TelnetCE, click **Next >**.

After you select the program folder, the Setup program automatically processes the Application Manager dialog box (not shown), and displays a message to indicate it is retrieving application data from the Mobile Unit. The Installing Applications dialog box immediately appears.



Figure 2-7. *The Installing Applications Dialog Box*

- 12** To install Wavelink TelnetCE in the default application directory on your Mobile Unit, click **Yes**.

If you do not want to install Wavelink TelnetCE in the default application directory, click **No**.

If you cancel the installation by clicking **Cancel**, you start Windows CE Application Manager. From the Application Manager, you can choose to continue or abort the installation. See your Windows CE Users Guide for more information about the Application Manager.

The Setup program begins decompressing the necessary files and copying them into memory on your Mobile Unit. The following window appears on your desktop computer indicating installation progress.

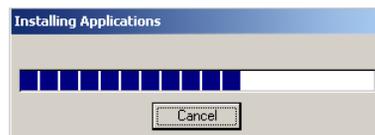


Figure 2-8. *The Installing Applications Message Box*

Your Mobile Unit displays an installation message (not shown), while the following message appears on your desktop computer.



Figure 2-9. *The Application Downloading Complete Dialog Box*

13 Check to see if a message on your Mobile Unit indicates that additional steps are required to complete the installation.

14 Click **OK**.

The Setup program displays the Setup Complete dialog box, informing you that setup is complete.

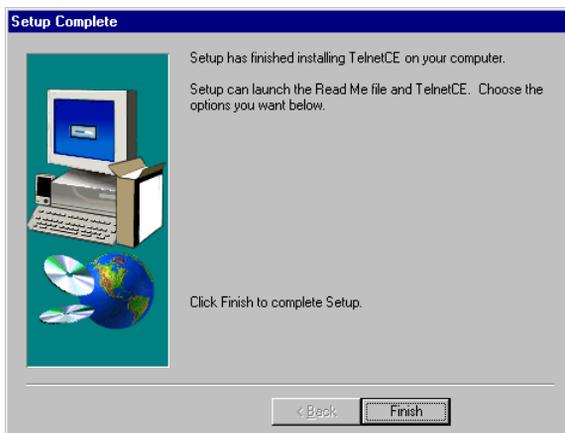


Figure 2-10. *The Setup Complete Dialog Box*

15 Click **Finish**.

After the necessary files have been copied in a typical installation, the following commands appear in the Programs menu on your desktop computer under Wavelink TelnetCE.

TelnetCE Home

Select this hyperlink to go www.Wavelink.com, the official Web site of Wavelink TelnetCE (this requires an existing Internet account and browser).

Wavelink TelnetCE Help Select this option to run the Wavelink TelnetCE online Help. This online Help is an expanded version of the online Help file that runs on your mobile device.

NOTE You must authorize Wavelink TelnetCE before you can use it. See *Authorizing TelnetCE* on page 14 for more information.

Authorizing TelnetCE

You must authorize Wavelink TelnetCE before you use it. From the Authorization screen, you can enter the appropriate registration values and upgrade your license for Wavelink TelnetCE.

Wavelink TelnetCE automatically opens the Authorization dialog box after the initial installation. You can also open the Authorization dialog box at any time by selecting *Authorization* from the TelnetCE **Term** menu.

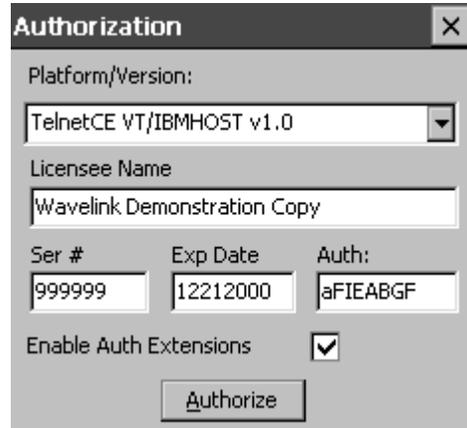


Figure 2-11. *The Authorization Dialog Box*

Wavelink TelnetCE enters default registration values in the Authorization fields. If you accepted these values by clicking *Authorize* at the time of installation, the Setup program installed Wavelink TelnetCE as a trial version that is limited to 30 days of use.

To authorize Wavelink TelnetCE beyond the 30-day trial period, you must complete the Authorization dialog box by typing the registration information that you received at the time of your product purchase. Type the correct information in the **Licensee Name**, **Serial Number**, **Expiration Date**, and **Authorization Code** fields.

Click **Authorize** to complete the authorization process.

To determine which emulators are currently licensed, select **About** from the **Help** menu. The About dialog box appears.

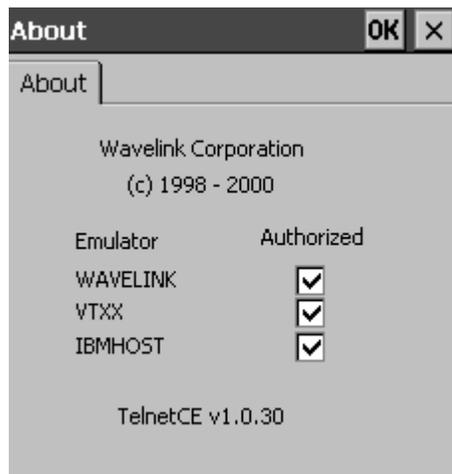


Figure 2-12. *The About Dialog Box*

If the desired emulator is not enabled, your authorization has expired. Contact support@Wavelink.com for help obtaining a Wavelink TelnetCE license.

Chapter 3 Starting Wavelink TelnetCE

To start Wavelink TelnetCE, select TelnetCE from the **Start** menu.

NOTE If you installed a trial version of TelnetCE, you start TelnetCE by selecting Programs > TelnetCE from the Start menu.

The Wavelink TelnetCE main screen appears. The dimensions and characteristics of this screen are platform-dependent. An example of the main application screen is shown here.



Figure 3-1. *The TelnetCE Main Application Screen*

NOTE The main application screen typically includes the name of the Mobile Unit using TelnetCE.

Chapter 4 Host Connections

This section describes how to configure and connect to a host.

You must configure a connection before you can communicate with a host.

Configuring a Host Connection

To configure a host connection:

- 1 Select **Connect** from the **Term** menu located on the main TelnetCE screen.

The Connecting to Host dialog box appears.

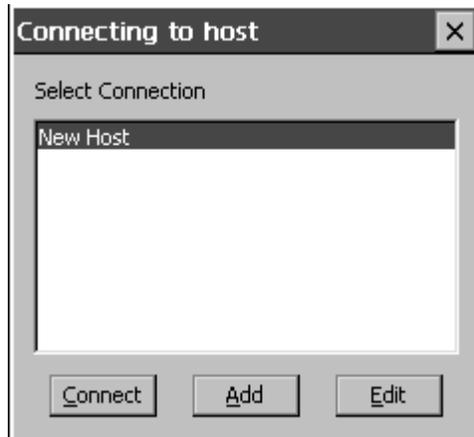


Figure 4-1. *The Connecting to Host Dialog Box*

If the **Select Connection** field is empty, a message box (not shown) appears informing you that you must create a host entry prior to connecting. Click **OK** in this message box to return to the Connecting to Host dialog box.

- 2 Click **Add**.

The Edit Connection dialog box appears.

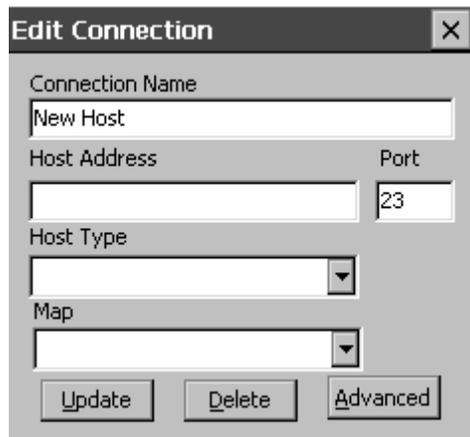


Figure 4-2. *The Edit Connection Dialog Box*

- 3** In the **Connection Name** field, type the name for the host connection. This value appears in the **Select Connection** field after the host connection is created.
- 4** In the **Host** field, type the address of the host. This value can be a name that resolves into an IP address or the "dotted quad" IP address—for example, 128.255.1.64.
- 5** In the **Port** field, type the TCP/IP port. The default TCP/IP port for Telnet connections is 23.
- 6** Select the emulator from the **Host Type** list. Your Wavelink TelnetCE license determines the options that appear in this list. The possible values are:
 - VTXx for Unix[®] host emulators
 - TN5250 (AS/400)
 - TN3270 (mainframe)
 - Wavelink
- 7** If you use customized keyboard maps, select the desired keyboard map in the **Map** list. Otherwise, this value is automatically assigned based on the emulator type.

See *Creating Keyboard Maps* on page 68 for more information on creating keyboard maps.

- 8 If you want to configure terminal settings at this time, click **Advanced**.

By adjusting terminal settings, you can control specific aspects of the emulation. However, it is not necessary to adjust terminal settings to initiate a host connection.

If you want to cancel your new host connection, click **Delete**.

NOTE If access to the terminal settings is password protected, you must enter the password before the configuration dialog boxes appear.

- 9 Click **Update** to confirm the settings.

- 10 Close the Edit Connections dialog box.

Wavelink TelnetCE creates the new connection. The name of the connection appears in the **Select Connection** field of the Connecting to Host dialog box.

If you want to immediately connect to a host, select the desired host and click **Connect**.

NOTE You can also configure hosts automatically through external configuration.

Editing a Host Connection

To edit a configured host connection:

- 1 Select **Connect** from the **Term** menu located on the main TelnetCE screen.
- 2 Select the host connection you want to edit in the **Select Connection** field.
- 3 Click **Edit**.
- 4 Edit the host connection values.

- 5 Click **Update** to update the host connection. Then close the dialog box.

If you want to delete the host connection, click **Delete**.

Connecting to a Host

To connect to a configured host, follow these steps.

- 1 Select **Connect** from the **Term** menu located on the main TelnetCE screen.

The Connecting to Host dialog box appears.

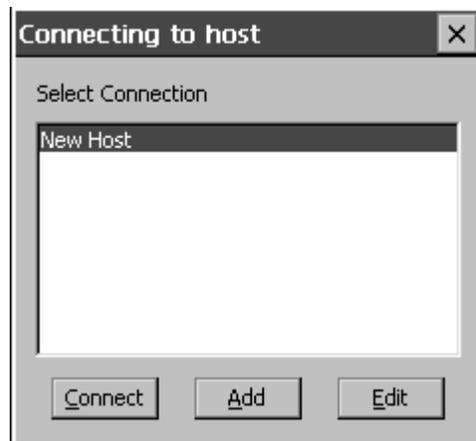


Figure 4-3. *The Connecting to Host Dialog Box*

- 2 Select the desired host from the **Select Host** field.
- 3 Click **Connect**.

NOTE If the **Select Host** field is empty, you must add a host before making a connection.

Disconnecting from a Host

To disconnect from a host, select **Disconnect** from the **Term** menu. This option is grayed out if there are no active host sessions.

Chapter 5 Terminal Settings

By adjusting terminal settings, you can control elements such as terminal display, font selection, logging, and audio messages. Because each terminal setting has been pre-set to a default value, it is not necessary to configure terminal settings to initiate a host connection.

You can apply these terminal settings at three different levels.

Standard Settings	These are general settings that apply to all host connections.
Emulator Settings	These settings are specific to a particular emulation type, such as VTX or Wavelink. When you change an Emulator setting from its default configuration, it overrides a corresponding Standard setting.
Connection Settings	These settings apply to a named connection with a specific host. When you change a Connection setting from its default configuration, it overrides corresponding Emulator and Standard settings.

Standard Settings

Standard settings apply to all emulations. However, when you alter higher-level settings (Emulator or Connection settings) from their defaults, the higher level settings override the corresponding Standard settings.

To configure Standard settings:

- 1 Select **Configure > Standard** from the **Term** menu. The Standard Settings dialog box appears.

- 2 Click the desired tab.

The tabs for Standard settings are Standard, General, Logging, Font, Scroll, Beeps, Scanner, and Symbology Options.

- 3 Select or enter new values in the fields you want to change.

- 4 If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

Standard Options

The Standard tab contains basic settings that must apply to all connections and emulations. These settings have no corresponding settings at the Emulator or Connection level.

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure options under the Standard tab:

- 1 Select `Configure > Standard` from the **Term** menu.
- 2 Click the Standard tab.

On this screen you can configure a monochrome display and the number of allowable sessions.



Figure 5-1. *The Standard Dialog Box*

The value you enter in the **Sessions** field determines the maximum number of concurrent sessions Wavelink TelnetCE supports. This number has no internal limit.

To force a monochrome display mode, select the **Force B/W** check box. Enable this option if colors on a Windows CE device do not display correctly.

If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

General Options

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure general options for terminal settings:

- 1 Follow the procedure for configuring a Standard, Emulator, or Connection setting.
- 2 Click the General tab.

The General tab contains settings that allow you to configure the view mode. The current view mode in Wavelink TelnetCE determines how the emulator screen appears during a host session.

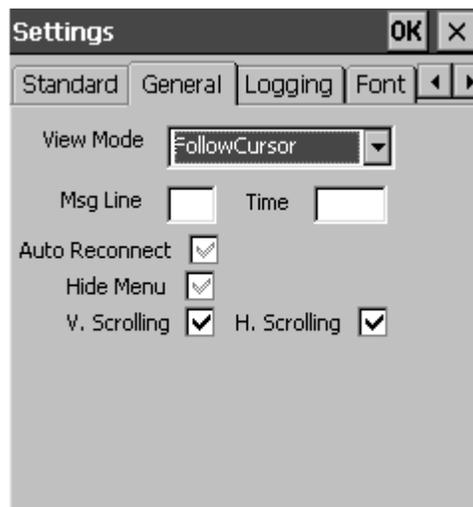


Figure 5-2. *The General Dialog Box*

You can configure the following options on this screen.

View Mode	Select the desired view mode. The following view modes are available. Select the Fixed option if you want the display to remain in a fixed location on the host screen. Select the Follow Cursor option if you want the display to “attach” to the cursor on the host screen and follow it around. Select the Watermark option if you want the cursor remains fixed in the center of the emulator screen. The host screen moves in the background.
------------------	--

NOTE To adjust specific parameters for each view mode, see *Scroll Options* on page 28 for more information.

Msg Line	Specifies the line from the host screen that Wavelink TelnetCE reads to display as the message line on the emulator. The row number must be from 0-24. The default row is 0. The emulator displays the message line each time its contents change. When the contents of the message line are not visible, the line appears in reverse video at the top of the display.
Time	Type the time, in seconds, that the emulator displays the message line.
Auto Reconnect	Select this check box if you want the emulator to automatically attempt to reconnect to a host after the host system closes a connection.
Hide Menu	Select this check box if you want to hide the menu bar during emulation. Choosing this option is recommended should you want more screen space available for the emulated application.
V. Scrolling	Select this check box to allow your users to navigate the emulated application with the vertical scrollbar.

H. Scrolling

Select this check box to allow your users to navigate the emulated application with the horizontal scrollbar.

If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

Logging Options

You can configure Wavelink TelnetCE to log debugging information for all host sessions.

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure logging options, select the **Configure > Standard** command from the **Term** menu.

NOTE You can configure these logging options as Standard settings only.

The following screen appears.

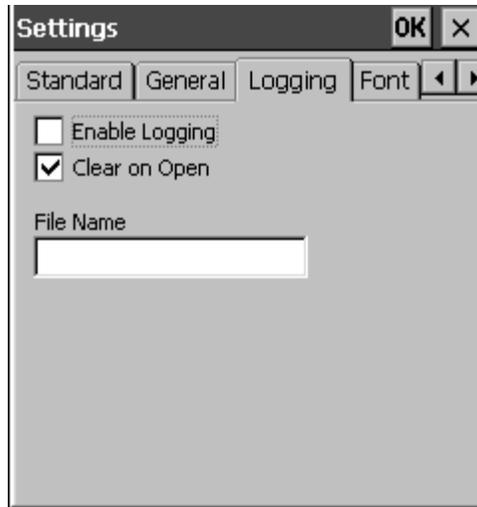


Figure 5-3. *The Logging Dialog Box*

The following fields determine the parameters for Wavelink TelnetCE session logging.

- | | |
|-----------------------|---|
| Enable Logging | Select this check box to log all communication between the emulator and the host. |
| Clear on Open | Select this check box to clear the log whenever you run Wavelink TelnetCE. |
| File Name | Type the complete path including the file name for the log. |

If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

Font Settings

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure Font settings:

- 1 Follow the procedure for configuring a Standard, Emulator, or Connection setting.
- 2 Click the Font tab.

Wavelink TelnetCE displays the following screen.

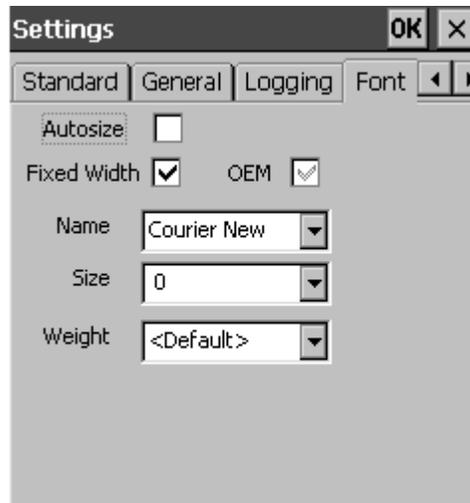


Figure 5-4. *The Font Dialog Box*

- 3 Type or select values on this screen to control how fonts are displayed by the emulator.

You can configure the following options on this screen.

- | | |
|--------------------|--|
| Autosize | When you enable the Autosize option, Wavelink TelnetCE automatically selects the best available font size to fit the emulator screen. You can restore the default value to this field by selecting a grayed-out check mark. |
| Fixed Width | Select the Fixed Width check box to restrict the types of fonts available for display to fixed-width fonts. |
| OEM | Select the OEM check box to restrict the types of fonts available for display to OEM fonts. |

Name	To select a specific font, select one from the Name list.
Size	To select a specific font size, select one from the Size list.
Weight	To choose a specific font weight, select one from the Weight list.

Scroll Options

Wavelink TelnetCE includes several view modes that determine how the emulator screens appear on the terminal.

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure view mode options:

- 1 Follow the procedure for configuring a Standard, Emulator, or Connection setting.
- 2 Click the Scroll tab.

NOTE If the Scroll tab does not appear, use the left and right navigation buttons (located below the close window button) to access the tab.

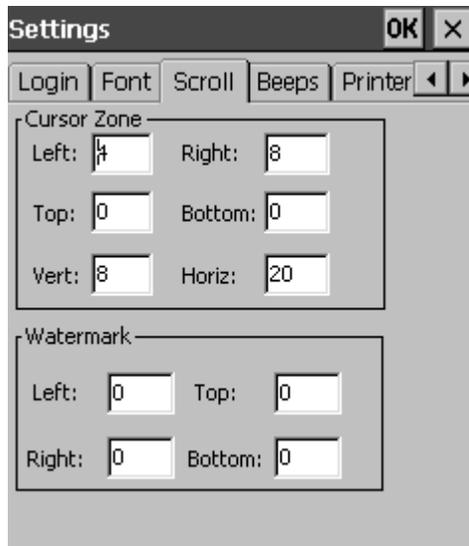


Figure 5-5. The Scroll Settings Dialog Box

NOTE To set the view mode that is used by the emulator, see *General Options* on page 23.

The Cursor Zone fields contain configuration options for Follow Cursor mode. When you set Follow Cursor mode as the current view mode, the display conforms to the cursor location, following it around the host screen.

Left, Right

Determine the left and right border of the cursor zone inside the emulator screen. This distance, measured in characters from the edge of the screen, must be a value from 1-10. When the cursor moves outside the cursor zone border, Wavelink TelnetCE re-adjusts the display, centering the cursor on the emulator screen. The default value is 4 for the left border and 1 for the right border.

Top, Bottom	Determine the top and bottom borders of the cursor zone inside the emulator screen. This distance, measured in rows from the edge of the screen, must be a value from 1-10. When the cursor moves outside the cursor zone border, Wavelink TelnetCE re-adjusts the display, centering the cursor on the emulator screen. The default value is 0 for the top and bottom border.
Vertical, Horizontal	Determine the number of rows or columns the emulator screen moves when the cursor crosses a vertical or horizontal edge of the screen. This value can be from 1-24 for the Vert. field and 1-80 for the Horiz. field.

When you set the current view mode to Watermark, the cursor attaches to a small portion of the screen, and the host screen appears to move in the background. The Watermark fields determine the position for the cursor on the emulator screen.

Left, Right, Top, and Bottom	These fields determine the four borders of the watermark zone. This distance is measured in characters.
-------------------------------------	---

You can switch between view modes during host sessions by selecting Mode > [view mode] from the **View** menu on the Wavelink TelnetCE main application screen.

NOTE When Fixed mode is set as the current view mode, Wavelink TelnetCE positions the display over the upper left corner of the host screen. If you switch to Fixed mode during a host session, the display locks into its current position.

If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

Beeps Settings

You can configure audio messages issued by a host through the Beeps parameters.

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure beeps settings:

- 1 Follow the procedure for configuring a Standard, Emulator, or Connection setting.
- 2 Click the Beeps tab.

The following dialog box appears.

NOTE If the Beeps tab does not appear, use the left and right navigation buttons (located below the close window button) to access the tab.

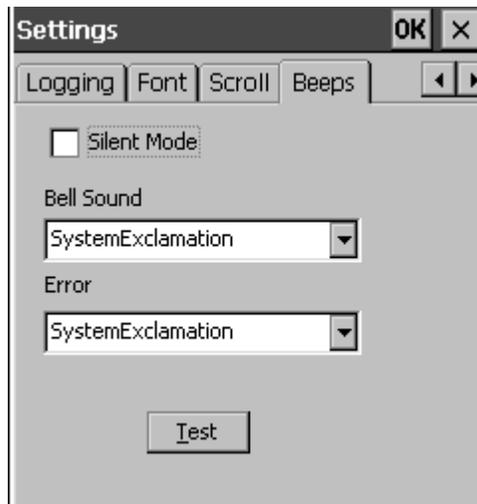


Figure 5-6. *The Beeps Settings Dialog Box*

To configure the Mobile Unit to operate without sound, select the **Silent Mode** option.

To configure sounds, select the desired sound either the **Bell Sound** or **Error** list. The possible values are either Windows sound names or file names.

If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

Scanner Options

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure basic scanner options:

- 1 Follow the procedure for configuring a Standard, Emulator, or Connection setting.
- 2 Click the Scanner tab.

The following dialog box appears.

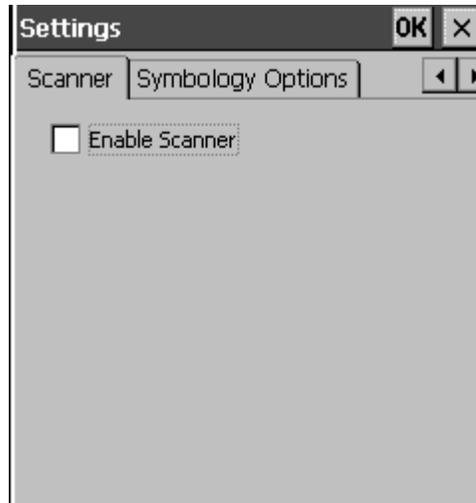


Figure 5-7. *The Scanner Dialog Box*

- 3 To enable the use of a scanner, select the **Enable Scanner** option.

Symbology Options

Wavelink TelnetCE includes numerous options that determine how the emulator interprets a scanned barcode based on its symbology.

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure these options:

- 1 Follow the procedure for configuring a Standard, Emulator, or Connection setting.
- 2 Click on the Symbology Options tab.

The following dialog box appears.

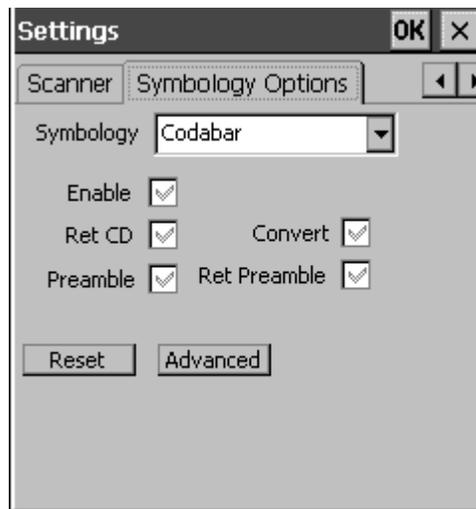


Figure 5-8. *The Symbology Options Dialog Box*

This dialog box contains the following options:

Symbology

Select the type of barcode for which you want to set or modify options from the **Symbology** list.

Enable	Select this check box if you want to allow the emulator to read the specified symbology. If you do not select this check box, the symbology is disabled. Although you can still scan disabled symbologies, the data is not passed to the emulator.
Ret CD	Select this check box to return the verified check digit along with the scanned data. This option is disabled by default.
Convert	Select this check box to convert the scanned data to an alternate symbology. The conversion is based on the currently selected symbology and results in the equivalent label in the new barcode format.
Preamble	Select this check box to return the preamble (first) character along with the scanned data. This option is valid for 3270 and 5250 emulators.
Ret Preamble	Select this check box to return the preamble (first) character along with the scanned data. This option is valid for VTXX emulators.
Reset	This option resets all settings for the currently selected symbology to their default values.
Advanced	Click <i>Advanced</i> to configure advanced symbology options.

Advanced Symbology Options

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure advanced options for a barcode symbology, click *Advanced* in the Symbology Options tab. Wavelink TelnetCE displays the following dialog box.



Figure 5-9. *The Advanced Symbology Options Tab*

This dialog box contains the following options:

- | | |
|------------------|---|
| Symbology | Select the barcode type for which you want to set or modify advanced options from the Symbology list. |
| Preamble | Specify the prefix string to include with scanned data based on its symbology in the Preamble field. |
| Postamble | Specify the suffix string to include with scanned data based on its symbology in the Postamble field. |
| Min Len | Determines the minimum length, in characters, for the currently selected barcode. This value can be any value from 0-255. |
| Max Len | Determines the maximum length, in characters, for the currently selected barcode. This value can be any value from 0-255. |

NOTE You can configure Wavelink TelnetCE to accept a barcode of any length by setting the minimum and maximum length values to 0.

- | | |
|--------------------|---|
| Strip Start | Determines the number of characters stripped from the beginning of the barcode. The default value is 0. |
|--------------------|---|

Strip End	Determines the number of characters stripped from the end of the barcode. The default value is 0.
Reset	Click <code>Reset</code> to reset all settings for the currently selected symbology to their default values.
Basic	Click <code>Basic</code> to configure basic symbology options.

If you configure these options on a desktop computer, click `Apply`.

If you configure these options on a Mobile Unit, click `OK`.

Emulator Settings

Emulator settings affect all host emulators of a specific type, such as IBMHOST, VTX or Wavelink. If you change Emulator settings from their default values, the Emulator settings override corresponding Standard settings.

To configure Emulator settings:

- 1 Select the `Configure > [emulator name]` command from the **Term** menu.

The Settings dialog box for the selected emulator appears.

- 2 Click the desired tab.
- 3 Select or type new values in the fields you want to change.
- 4 If you configure these options on a desktop computer, click `Apply`.

If you configure these options on a Mobile Unit, click `OK`.

IBMHOST Emulator Settings

To configure IBMHOST Emulator settings, select `Configure > IBMHOST` from the **Term** menu. The dialog box for the IBMHOST emulator appears. The terminal settings you configure on these screens apply to TN3270 and TN5250 emulators.

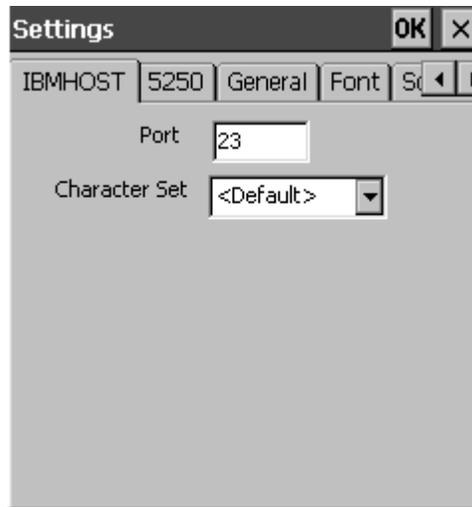


Figure 5-10. IBMHOST Settings Dialog Box

The IBMHOST Emulator settings dialog box includes the following tabs: IBMHOST, 5250, General, Font, Scroll, Beeps, Scanner, and Symbology Options.

IBMHOST Options

Under the IBMHOST tab, you can set the following options.

Port	Determines the default Telnet port for IBM host emulators.
Character Set	Determines the IBM character set associated with the emulator.

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

5250 Options

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure TN5250 options for the IBMHOST emulator:

- 1 Select the **Configure > IBMHOST** command from the **Term** menu.
- 2 Select the **5250** tab.

The following dialog box appears.

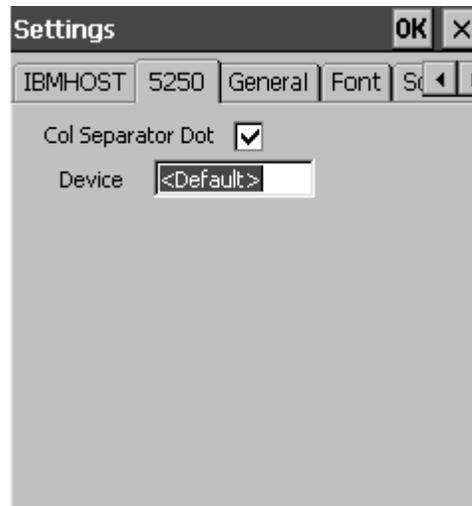


Figure 5-11. *The 5250 Settings Dialog Box*

This dialog box contains the following options.

Col Separator Dot

On the 5250 tab, you determine whether the emulator displays a period or a vertical line between each character when the host system uses a special column format mode. To configure the emulator to display a period, enable the **Col Separator Dot** check box.

Device

With TelnetCE, you can assign Mobile Unit names manually by entering a name for the Mobile Unit in the **Device** field. If you choose to leave this field at its default setting, a Mobile Unit name is automatically generated when the Mobile Unit first connects to the host.

If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

NOTE For information on the remaining tabs (General, Logging, Font, Scroll, and Beeps) see *Standard Options* on page 22.

VTXX Emulator Settings

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure VTXX Emulator settings, select **Configure > VTXX** from the **Term** menu. Wavelink TelnetCE displays the dialog box for the VTXX emulator.

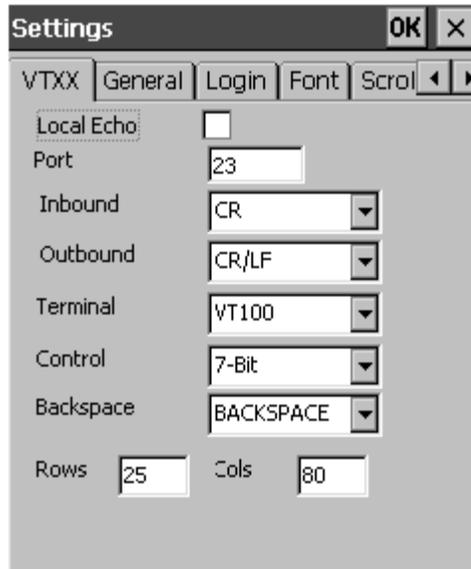


Figure 5-12. *The VTXX Settings Dialog Box*

The VTXX Emulator settings dialog box includes the following tabs: VTXX, General, Login, Font, Scroll, Beeps, Scanner, and Symbology Options. Options found under these tabs (with the exception of the VTXX tab) resemble the Standard setting options.

The options available for configuration with the VTXX tab selected are as follows.

- | | |
|-------------------|--|
| Local Echo | Determines whether TelnetCE echoes characters received from a VTXX host on the emulator screen. Select this check box if the host is not echoing characters. |
| Port | Type the default Telnet port for VTXX emulators. The default port is 23. |
| Inbound CR | Determines whether the emulator interprets a carriage return from the host as a carriage return or a carriage return/line-feed. |

Outbound CR	Determines whether the emulator sends a carriage return or a carriage return/line-feed command to the host when it receives a carriage return command from the keyboard.
Terminal Type	Select DEC-VT100, DEC-VT220, VT100, or VT220 for the terminal type.
Control Codes	Select either 8-bit or 7-bit control codes.
Backspace	Determines whether a delete or backspace control character is sent to the host when the Backspace key is pressed.
Rows	Type the number of rows for the VTXX emulator. If this value exceeds the maximum number of rows on the terminal display, you can use the scroll bars to view hidden portions of the screen. The default value is 25.

NOTE Changing this setting may affect the font display size if the Autosize option under the Font tab is enabled.

Columns	Enter the number of columns for the VTXX emulator. If this value exceeds the maximum number of columns on the terminal display, the scroll bars may be used to view hidden portions of the screen. The default value is 80.
----------------	---

NOTE Changing this setting may affect the font display size if the Autosize option under the Font tab is enabled.

If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

NOTE See *Standard Settings* on page 21 for more information on the remaining tabs.

Login Tab

You can configure Wavelink TelnetCE to automatically log on to hosts.

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To configure login parameters:

- 1 Follow the procedure for configuring a VTXE Emulator.
- 2 Click the Login tab.

Wavelink TelnetCE displays the following screen.

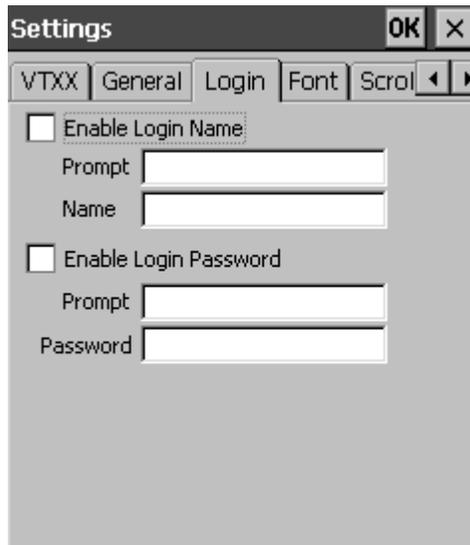


Figure 5-13. *The Login Dialog Box*

You can configure the following options on this screen.

Enable LoginName Select this check box to automatically logon with a specified name to a host.

The value you type in the **Prompt** field under the **Enable LoginName** check box must match the caption for the login field on the host screen.

In the **Name** field, type the user name which Wavelink TelnetCE will use to logon to the host.

The command format for the **Name** field is "username\r," where "r" is the keycode for a carriage return.

Enable LoginPassword Select this check box to automatically send a specified password to a host.

The value you type in the **Prompt** field under the **Enable LoginPassword** check box must match the caption for the password field on the host screen.

Password Type the password that Wavelink TelnetCE will use to logon to the host.

The command format for the **Password** field is "password\r," where "r" is the keycode for a carriage return.

NOTE You can use any valid Wavelink TelnetCE escape sequence within the Name and Password fields.

If you configure the options under the Login tab on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

Columns Type the number of columns on the Mobile Unit display. The default value is 21.

NOTE If the Font > Auto command under the View menu is enabled, the font will be re-sized automatically to fit altered row and column settings.

Dir Type the complete path where Wavelink temporary files will be stored.

If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

Chapter 6 Connection Settings

Connection settings affect a single named connection that has been configured in the Connecting to Hosts dialog box. When you change Connection settings from their defaults, they override corresponding Emulator or Standard settings.

To configure Connection settings, take the following steps.

- 1 Select **Connect** from the **Term** menu.

The Connecting to Host dialog box appears.

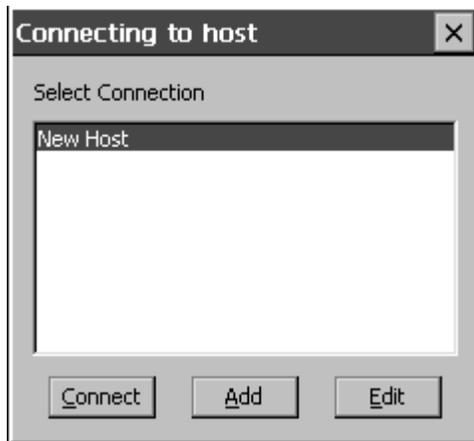


Figure 6-1. *The Connecting to Host Dialog Box*

- 2 Select the desired connection in the **Select Connection** field.
- 3 Click **Edit**.
- 4 In the Edit Connection dialog box, click **Advanced**.

The dialog box (not shown) pertaining to the specified emulator appears. These dialog boxes resemble the dialog boxes that appear when you configure Emulator settings. In addition to tabs for the specific emulator type, the following tabs also appear: General, Font, Scroll, Beeps, Scanner Options, and Symbology Options.

- 5 Select or type new values in the fields you want to change.

The values you enter in the fields are specific to the named connection only.

6 If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

NOTE The emulator-specific tabs for Connection settings override corresponding Emulator settings. See *Emulator Settings* on page 36 for information about configuring these options. The General, Font, Scroll, and Beeps tabs for Connection settings override the corresponding Emulator and Standard settings. See *Standard Settings* on page 21 for information about configuring these options.

Restoring Default Terminal Settings

You can restore a default value to a terminal setting so that a lower level setting overrides it. You can restore the default value in specific ways, depending on the field type:

- For a field containing a list, select the <default> option, if present.
- For a text box, delete the text entry.
- For a check box with three possible states, click it so that the check mark appears grayed out.

NOTE You may have to click twice depending on the current state of the checkbox.

If you configure these options on a desktop computer, click **Apply**.

If you configure these options on a Mobile Unit, click **OK**.

NOTE You cannot restore a default value to a list field if it does not have a <default> option. The basic rule for terminal settings, which has no exceptions, takes effect: the highest level setting that has been changed from its default value takes precedence.

Chapter 7 Custom Configuration

Wavelink TelnetCE allows you to customize terminal settings and host connections by using external configuration files. These configuration files, with the exception of the base configuration file, can reside either on a mobile device or on a remote server.

Wavelink TelnetCE uses the following sequence to determine how to apply terminal and host connection settings:

- 1 Wavelink TelnetCE applies all default settings.
- 2 Wavelink TelnetCE then applies all terminal settings entered on the mobile device.

These settings are divided into three different levels: Standard, Emulator, and Connection, with each level taking precedence over the previous one. See *Chapter 5, Terminal Settings* on page 21 for more information.

- 3 Wavelink TelnetCE then applies the settings from in the base configuration file, `TelnetCE.cfg`.

This base configuration file is the only configuration file that must reside on the mobile device.

- 4 Wavelink TelnetCE then applies the settings in the applicable external terminal configuration file.

There is a separate configuration file for each terminal emulator type: VTXX, IBMHOST, and Wavelink. The settings in a specific terminal configuration file apply only to that terminal type.

- 5 Wavelink TelnetCE then applies the settings in the applicable host configuration file.

There is a separate configuration file for each host connection. The settings in a specific host connection file apply only to that host connection.

Base Configuration File

Wavelink TelnetCE uses a base configuration file, `TelnetCE.cfg`, to control external configuration of terminal settings and host connections. This base

configuration file is a standard text-based file that must reside in the same Windows CE directory as the Wavelink TelnetCE executable.

The base configuration file must be named `TelnetCE.cfg`. A `TelnetCE.cfg` file is included in all installations and defines the device ID.

NOTE You must precede all comments in a configuration file with either the # or ; sign.

You can use three types of parameters in the base configuration file:

- 1 Parameters that allow you to implement multiple configuration files and locate the external configuration files.

For several examples that show you how to set these parameters, see *External Configuration of Terminal Settings* on page 50 and *External Configuration of Host Connections* on page 53 for more information.

- 2 Parameters that configure Wavelink TelnetCE, but do not apply to individual terminals.
- 3 Parameters that configure terminal settings.

You can override these parameters by setting the same parameters in a configuration file for an individual terminal or host connection. These parameters will override the same terminal settings modified on the device.

NOTE See *Using Configuration File Parameters* on page 56 for a complete list of the parameters that you can include within the configuration file.

External Configuration of Terminal Settings

You can create multiple configuration files to configure terminal and host connection settings for a mobile device. You have the option of storing these files either on a mobile device or on a remote server. The `ExternalConfigEmulator` and `ExternalConfigHost` parameters in the base configuration file tell Wavelink TelnetCE that these files exist and where they are located.

ExternalConfigEmulator Parameter

The ExternalConfigEmulator parameter allows you to assign a configuration file to a specific emulation type by defining its URL or its directory. You must name this file VTXX if the emulation type is VTXX, IBMHOST if the emulation type is TN3270 or TN5250, and Wavelink for the Wavelink Client.

If the external terminal configuration file resides on the mobile device, then you must set the ExternalConfigEmulator parameter in the base configuration file to the file location on the mobile device. The following example shows the use of this parameter:

```
ExternalConfigEmulator=\%s.cfg
```

If the external terminal configuration file resides on a remote location, then you must set the ExternalConfigEmulator parameter in the base configuration file to the URL for that file. The following example shows the use of this parameter:

```
ExternalConfigEmulator=http://your.config.emu/  
GetEmu.asp?Emu=%s.cfg
```

In these examples, the %s notation is a variable that contains the name of the terminal emulation type. For example, if a mobile device uses the IBMHOST terminal emulation type, Wavelink TelnetCE will use the ExternalConfigEmulator parameter to locate the configuration file named IBMHOST.cfg.

The preceding examples designate that the file extension for an external configuration file is .cfg; however, this designation is optional. You can assign any extension you want to this parameter, so long as it matches the extension of the desired configuration file. If you do not designate an extension in this parameter, you must ensure that the configuration file also does not have an extension attached to its filename.

ExternalConfigHost Parameter

You can also create a configuration file based on a specific host connection using the ExternalConfigHost parameter. Settings contained in a host-specific configuration file override the same settings contained in an emulation-specific configuration file.

If the external host connection configuration file resides on the mobile device, then you must set the ExternalConfigHost parameter in the base configuration file to the file location on the mobile device. The following example shows the use of this parameter:

```
ExternalConfigHost=\%s
```

If the external host connection configuration file resides on a remote location, then you must set the ExternalConfigHost parameter in the base configuration file to the URL for that file. The following example shows the use of this parameter:

```
ExternalConfigHost=http://your.config.emu/  
GetHost.asp?Host=%s
```

The %s notation is a variable that contains the name of the host connection as shown in the Connecting to Host dialog box. For example, if a mobile device connects to a host connection named "Receiving," TelnetCE will use the ExternalConfigHost parameter to locate the configuration file named "Receiving."

These examples do not designate a file extension for the external configuration file. You can assign any extension you want to this parameter, so long as it matches the extension of the desired configuration file. If you do not designate an extension in this parameter, you must ensure that the configuration file also does not have an extension attached to its filename.

External Configuration Files

All external configuration files are standard text-based files and have the same format. Comment lines are preceded by either the # or ; characters. The standard format for the xternal configuration file is as follows:

```
# Comment  
  
<parameter>=<value>
```

In the preceding example, <parameter> is one of the parameters listed in the *Descriptions of Configuration Parameters* on page 57 and <value> is the corresponding value for that parameter. Not all parameters can be used in all configuration files. Some are specific to the base configuration file, while others are specific to a particular terminal emulation type. If you use a parameter inappropriately, Wavelink TelnetCE will ignore it.

The following is an example of a configuration file:

```
# Configuration file for VTXX terminals.  
  
ViewMode=Fixed  
  
FontSize=10
```

```
FontWeight=400
```

```
InitialMenuHidden=True
```

See the *Descriptions of Configuration Parameters* on page 57 for a detailed description of these parameters.

External Configuration of Host Connections

You can also create external files that define host connections. Like external configuration files for terminal settings, external host connection configuration files can reside on a mobile device or on a remote location. The ExternalHostList parameter defines the URL or directory for the External Host List file, and the ExternalHostDetail parameter defines the URL or directory for the External Host Detail file or files.

The ExternalHostList parameter allows you to define the location of the host list. If this file resides on the mobile device, you must set the parameter as follows:

```
ExternalHostList=\filename
```

Where *filename* is replaced by the filename and extension for the desired host list file. For example, if the host list file was named `HostList.txt`, the ExternalHostList parameter would read as follows:

```
ExternalHostList=\HostList.txt
```

If the host list file resides on a remote location, then you must set the ExternalHostList parameter to the URL for that file. The following example shows the use of this parameter:

```
ExternalHostList=http://yourhost.com/TelnetCE/  
HostList.txt
```

External Host List File

The host list file contains a list of named host connections. An example of a host list is as follows:

```
#Lines beginning with a # or ; are comments  
A=VTXX_SLNET  
B=TN5250_3270  
C=Wavelink
```

The host names are user defined and do not adhere to any naming convention. In the preceding example, Wavelink TelnetCE will display VTXX_SLNET, TN5250_3270, and WaveLink in the Connecting to Host dialog box, along with any host connections added on the mobile device. The connections defined in the external host list file are identified in the Connecting to Host dialog box by prepending an [E] to the host name. Users cannot edit externally defined host connections on the mobile device.

The entry on the left of the equal sign is an arbitrary value that is not used, but must be included in the file format.

Once the mobile device user selects a host connection, Wavelink TelnetCE will load the corresponding host detail file. See *ExternalHostDetail Parameter* on page 54 for more information.

ExternalHostDetail Parameter

The ExternalHostDetail parameter allows you to define the location of one or more host detail files. If these files reside on the mobile device, you must set the parameter as follows:

```
ExternalHostDetail=\%s.hst
```

If the host detail files reside on a remote location, you must set the ExternalHostDetail parameter as follows:

```
ExternalHostDetail=http://yourhost.com/TelnetCE/GetHost.asp?Host=%s.hst
```

Notice the %s notation in these examples. This notation is used as a variable that contains the name of the host detail file. For example, if a mobile device uses the VTXX_SLNET host detail file, Wavelink TelnetCE will use the preceding ExternalHostDetail parameter to locate any local file named VTXX_SLNET.hst.

These examples designate that the file extension for a host detail file is .hst; however, this designation is optional. You can assign any extension you want to this parameter, so long as it matches the extension of the desired host detail file. If you do not designate an extension in this parameter, you must ensure that the host detail file also does not have an extension attached to its filename.

External Host Detail File

You must have an external host detail file for each host defined in the external host list file.

The external host detail file must have the same name as the string on the right side of the equals sign in the external host list file, with the extension defined in the ExternalHostDetail parameter. For example, if an external host list file contains the entry

```
A=VTXX_SLNET
```

Then the name of the host detail list must be `VTXX_SLNET.hst` if the ExternalHostDetail parameter is defined as in the preceding example.

An example of a host detail file is as follows:

```
# Lines beginning with a # are comments
Type=VTXX
Description=VTXX_SLNET
Host=192.168.1.18
KeyMap=SLNET
Port=23
```

A host detail file must contain the following information:

Type	The Type field contains the terminal emulation type to be used when connecting to the host. This field can have the following values: VTXX, TN5250, TN3270, or Wavelink.
Description	The Description field contains the description of the host that appears in the Sessions menu. In order to make the hosts listed in the connection box match the hosts listed in the sessions menu, this entry should be the same as the one on the right of the equals sign in the host list file.
Host	The Host field contains the IP address of the host.

KeyMap

The KeyMap field contains the key map that this host must use. The type of key map used is dependent on the host type.

The default key maps provided with Wavelink TelnetCE for each terminal type are listed in the following table:

Type	Map
VTXX	VTXX, SLNET
TN5250	5250, 3270
TN3270	5250, 3270
Wavelink	Wavelink

Port

The Port field contains the host port to be used.

Using Configuration File Parameters

This section focuses on the types of configuration file parameters that you can use with Wavelink TelnetCE.

The following table describes the parameter types used in the configuration files, and provides an example for each..

Type	Description	Examples
URL	Contains an Internet address or an UNC	http://your.config.host/HostList.asp ftp://user:password@your.config.host/HostList.txt file:///c:/config/HostList.txt \\config\HostList.txt
Boolean	Contains either a True (on) or False (off) value.	TCPAutoConn=True
String	Contains alphanumeric characters	ViewMode=Follow Cursor
Number	Contains numbers	MaxSessions=99

Table 7-1: *Types of Parameters used in configuration files*

String values can use spaces and must not be delineated by quotation marks. The # and ; characters denote comments and cannot be used within a string value.

Escape Sequences

An escape sequence is used to send special instructions or commands to a host. For example, you can append a carriage return to the automatic logon password with the escape sequence for a carriage return.

You can use the following escape sequences in Wavelink TelnetCE.

Escape Sequence	Result
\\	Single "\"
\n	Line feed
\r	Carriage return
\t	Tab
\xx	xx = hex digits

Table 7-2: *Escape Sequences*

You can use these escape sequences in the external configuration files (automatic logon parameters) or in the Login tab for terminal settings. As an example of configuring an automatic logon, you could enter the following parameter in a configuration file.

```
LoginPassword=abracadabra\r
```

The "\r" automatically sends a carriage return to the host along with the password.

Descriptions of Configuration Parameters

The following section describes the different configuration parameters available for Wavelink TelnetCE. These parameters are grouped by file application and function. Also, the default values for each parameter are provided. These default values are used if no other value has been set for that parameter either on the device or in an external configuration file.

TelnetCE.cfg Only Parameters

The following parameters are available for TelnetCE.cfg base configuration file only.

User Configuration Control

The following parameters define user configuration controls.

DisableUserConfig	Does not allow user to configure terminal settings. Type: Boolean Default: False
UserConfigPassword	Specifies the password that a user can enter to configure the terminal settings. Type: String Values: User Password Default: None

Session Logging

The following parameters define session logging controls

EnableLogging	Logs session communication. Type: Boolean Default: False
LogFileName	Defines location for the session log. Type: String Values: Complete path statement Default: TelnetCE.log for CE devices, Telnet.log for the desktop.
ClearOnOpen	Clears session log when starting Wavelink TelnetCE. Type: Boolean Default: True

External Configuration Control

The following parameters define external configuration controls.

ExternalConfigEmulator	Defines location of configuration file for VTXX or IBMHOST emulators and the Wavelink client. See <i>ExternalConfigEmulator Parameter</i> on page 51 for more information. Type: URL Default: None
-------------------------------	--

ExternalConfigHost	Defines location of configuration file for a specific host. See <i>ExternalConfigEmulator Parameter</i> on page 51 for more information. Type: URL Default: None
ExternalHostDetail	Defines location of a host connection file. See <i>ExternalHostDetail Parameter</i> on page 54 for more information. Type: URL Default: None
ExternalHostList	Defines location of the host list for external host connection files. See <i>External Host List File</i> on page 53 for more information. Type: URL Default: None

Other Parameters

The following parameters define non-categorized controls.

Force B/W	Forces monochrome display. Type: Boolean Default: False
MaxSessions	Maximum number of concurrent sessions. Type: Number Default: 999999
EnableAuthExtensions	Allows external Authorization from an extension. Type: Boolean Default: False

External Configuration File Parameters

The following parameters are available for external configuration files, including the base configuration file. Parameters set in the base configuration file apply to all terminals unless overridden by a specific terminal configuration file.

Cursor Configuration

The following parameters define cursor configuration.

ViewMode	Sets the current view mode. Type: String Values: Follow Cursor, Fixed, or Watermark Default: Follow Cursor (Fixed if screen size is smaller than 640 pixels wide or 480 pixels high)
BottomEdgeCursorZone	Bottom border of cursor zone in Follow Cursor mode, measured in characters from the bottom edge of the emulator screen. Type: Number Values: 1-10 Default: 0
LeftEdgeCursorZone	Left border of cursor zone in Follow Cursor mode, measured in characters from the left edge of the emulator screen. Type: Number Values: 1-10 Default: 4
RightEdgeCursorZone	Right border of cursor zone in Follow Cursor mode, measured in characters from the right edge of the emulator screen. Type: Number Values: 1-10 Default: 1
TopEdgeCursorZone	Top border of cursor zone in Follow Cursor mode, measured in characters from the top edge of the emulator screen. Type: Number Values: 1-10 Default 0
WatermarkBottom	Bottom border of the watermark zone, measured in rows from the bottom of the emulator screen. Type: Number Default: 0

WatermarkLeft	Left border of the watermark zone, measured in rows from the left edge of the emulator screen. Type: Number Default: 0
WatermarkRight	Right border of the watermark zone, measured in rows from the right edge of the emulator screen. Type: Number Default: 0
WatermarkTop	Top border of the watermark zone, measured in rows from the top of the emulator screen. Type: Number Default: 0

Sound Control

The following parameters define sound controls.

BellSound	Specifies the sound that occurs when the emulator plays the bell sound. Type: String Values: Any windows sound or wave file. Default: System exclamation
ErrorSound	Specifies the sound that occurs when one of the following error conditions occurs on an IBM host: Message Waiting, Prog Check, Comm Check, Machine Check. Type: String Values: Any windows sound or wave file Default: System exclamation
SilentMode	Disables audible beeps. Type: Boolean Default: False

Font Control

The following parameters define font controls

FontAutoSize	Allows emulator to automatically determine the font size. Type: Boolean Default: False if screen size is smaller than 640 pixels wide or 480 pixels high
FontSize	Specifies the font size. Type: Number Default: 12
FontWeight	Sets the font weight. Type: Number Values: These are defined in WinCE in the file wingdi.h. 0 = Don't Care 100 = Thin 300 = Light 400 = Normal 500 = Medium 700 = Bold 900 = Heavy Default: 0

Scroll Control

The following parameters define scroll controls.

EnableVScroll	Enables or disables the vertical scroll bar on the terminal emulation and Wavelink client window. Type: Boolean Default: True
EnableHScroll	Enables or disables the horizontal scroll bar on the terminal emulation and Wavelink Client windows. Type: Boolean Default: True

Other Controls

The following parameters define non-categorized controls.

InitialMenuHidden	This parameter applies to WinCE clients only. Specifies whether the menu bar is initially displayed in the terminal emulation and Wavelink client window. Type: Boolean Default: False
MsgLine	Specifies the message line on the host screen. Type: Number Values: 0-24 Default: 0
MsgLineTimeout	Amount of time, in milliseconds, that the message line remains on screen. Type: Number Default: 1000ms
TCPAutoConnectSession	Specifies if the emulator automatically attempts to reconnect after a connection is closed. Type: Boolean Default: False
TCPKeepAlive	Sends a periodic ping message to a host during a session. Type: Boolean Default: True

VTXX Configuration Parameters

The following parameters are available only for VTXX emulations.

Auto Login Control

The following parameters define auto login controls.

AutoLoginInitialCommand	Sends a command automatically at the initial command prompt. Type: Boolean Default: False
--------------------------------	---

CommandPrompt	Specifies the pattern describing the command prompt. Type: String Default: None
CommandText	Specifies the text automatically entered. You can append an escape sequence to the string if desired. Type: String Default: None
AutoLoginName	Sends a login name automatically. Type: Boolean Default: False
LoginPrompt	Specifies the pattern describing the login prompt. This pattern may use regular expressions. Examples: LoginPrompt=login LoginPrompt=log[oi]n Type: String Default: None
LoginName	Specifies the login name. You can append an escape sequence to the end of the string if desired. Type: String Default: None
AutoLoginPassword	Sends a login password automatically. Type: Boolean Default: False
PasswordPrompt	Specifies the pattern describing the password prompt. This pattern may use regular expressions. Examples: PasswordPrompt=password PasswordPrompt=[Pp]assword Type: String Default: None
LoginPassword	Specifies the login password. You can append an escape sequence to the string if desired. Type: String Default: None

Row and Column Control

The following parameters define row and column controls.

DefaultColsVTXX	Number of columns for the VTXX emulator. Type: Number Default: 80
DefaultRowsVTXX	Number of rows for the VTXX emulator. Type: Number Default: 25

Other Controls

The following parameters define non-categorized controls.

AlternateEscapeChar	Defines the escape character used by a VTXX host to parse escape sequences, for example, "\1b" (hex). Type: String Default: ESC
Answerback	Specifies the message to send upon receiving the ENQ character. Type: String Default: TelnetCE; 1; 01; 321\$
Backspace	Sends Backspace or Delete when Backspace key is pressed. Type: String Values: Backspace or Delete Default: Backspace
Control Codes	Specifies the control code for a VTXX terminal. Type: String Values: 7-bit or 8-bit Default: 7-bit
DefaultPort	Default Telnet port for a VTXX terminal. Type: Number Default: 23

InboundCRLF	Specifies whether a VTX terminal interprets a carriage return from a host as a carriage return or a carriage return/line feed. Type: String Values: CR or CR/LF Default: CR
OutboundCRLF	Specifies whether a VTX terminal sends a carriage return or a carriage return/line feed when the carriage return key is pressed. Type: String Values: CR/LF or CR Default: CR/LF
LocalEcho	Echoes characters for a VTX terminal. Type: Boolean Default: False
MapUnderline	Displays underlines in reverse video on the emulator. Type: Boolean Default: False
Terminal Type	Specifies the terminal type for a VTX host. Type: String Values: DEC-VT100, DEC-VT220, VT100, or VT220 Default: VT100

IBMHOST Configuration Parameters

The following parameters are available for IBMHOST emulation.

Print Controls

The following parameters define print controls.

NOTE Print controls are not supported on all devices.

EnablePrintIdentifier	Sends a print identifier with data to be printed. Type: Boolean Default: True
------------------------------	---

PrintIdentifierColumn	Column containing the print start identifier. Type: Number Default: 1
PrintIdentifierRow	Row containing the print start identifier. Type: Number Default: 3
PrintNullsToSpaces	Converts null characters to spaces before printing. Conversion occurs only if host cannot display spaces in the printer protocol stream. Type: Boolean Default: False
PrintStartIdentifier	Specifies the print start identifier preceding data to be printed (for example, PRN:). Type: String
PrintEndIdentifier	Specifies the print end identifier following data to be printed (for example, :PRN). Type: String Default: PRN

Other Controls

The following parameters define non-categorized controls.

ColumnSeparatorDot	Displays a period between characters when host uses a special column format mode (5250 only). Type: Boolean Default: True
IBMHOST CharacterSet	Specifies an EBCDIC character set for an IBMHOST emulator. Type: String Values: The name of the character set
HOST EmulationType	Specifies the emulation type. Type: String Values: TN5250 or TN3270 Default: TN5250
IBMHOST Port	Default Telnet port for an IBMHOST emulator. Type: Number Default: 23

Limiting Terminal Configuration Access

You might want to disable or limit access to the terminal settings via the user interface. To disable access, set the following parameter in the configuration (.cfg) file.

```
DisableUserConfig=True
```

In lieu of disabling user access to the terminal settings, you can limit access by configuring a password as follows.

```
UserConfigPassword=abracadabra
```

When a password has been set and a user attempts to open the dialog boxes for terminal settings, a screen will appear requesting the user's password.

Creating Keyboard Maps

You can further customize your emulated application by creating a keyboard map. With keyboard maps, you can create shortcuts for frequently-used entries, or allow your users to access a keyboard command that might otherwise be unavailable through a wireless device.

Each keyboard map that you create contains the following components:

- A line that specifies if the keyboard map is for the IBMhost, VTXX, or Wavelink emulator.
- One or more key definitions. Key definitions essentially fall into two groups. Keystroke definitions describe custom actions that specific keystrokes initiate. Menu definitions describe custom actions that a user accesses through the **Keys** menu in TelnetCE.
- Any comments or remarks that pertain to the keyboard map.

TelnetCE comes with five built-in keyboard maps: `Wavelink`, `vtxx`, `ibmhost`, `5250`, and `3270`. However, you can create new keyboard maps at any time.

Creating a Keyboard Map

To create a new keyboard map:

- 1 Create a text file for the keyboard map with the extension .kbd. For example, a sample keyboard map might have the name SampleKeyboardMap.kbd.
- 2 On the first line of your text file, specify if the keyboard map is for the IBMhost, VTXX, or Wavelink emulator.

Use the following format when specifying the emulator:
emulator=<name of emulator>. For example:

```
emulator=ibmhost
```

```
emulator=vtxx
```

```
emulator=Wavelink
```

- 3 Define any keystroke definitions that you want to include in the keyboard map. The format for each keystroke definition is:

```
KEY , TYPE , DATA
```

Where KEY is the keystroke being defined, TYPE is the type of each key, and DATA is the new data associated with the key.

See the table at the end of this section for more information on which keys belong to which types.

- 4 Define any menu definitions that you want to include in the keyboard map. The format for each menu definition is:

```
ID , TYPE , DATA , MENU
```

Where ID is the number of the menu option (between 01 and 10), TYPE is CMDBUTTON, DATA is the new data associated with the menu entry, and MENU is the menu text.

Commenting a Keyboard Map File

You can add as many comments as necessary to your keyboard map files.

To add a comment to a keyboard map file, begin your comment with either the # or ; character.

Comments must be on separate lines from keyboard map definitions:

Correct:

```
#A correct comment  
F10,FUNCTION,SampleText
```

Incorrect:

```
F10,FUNCTION,SampleText #An incorrect comment
```

Linking to Other Keyboard Map Files

You can link a new keyboard map file to a pre-existing one. The new keyboard map file will then use any definitions found in the pre-existing keyboard map file. Use this option if you want to use a modified version of a keyboard map for different host connections.

To link a new keyboard map file to a pre-existing one use the following format: `chain=<name of keyboard map>`. For example:

```
chain=Wavelink  
chain=SampleKeyboardMap
```

An Example of Creating a Keyboard Map

This section contains the contents of sample keyboard map called `SampleKeyboardMap.kbd`.

```
emulator=Wavelink  
#Let's use the existing Wavelink keyboard map to save  
#us time.  
chain=Wavelink  
#Now let's define some keystroke definitions  
05,KEYBOARD,product received\r  
#When the user hits the 5 key, TelnetCE will enter  
#"product received" followed by a return.  
F10,FUNCTION,product inventory received  
#When the user hits the 5 key, TelnetCE will enter  
#"product inventory received" WITHOUT a return.
```

```
#Now let's create some menu commands
01,CMDBUTTON,good job,approve
#When the user selects the Keys menu, a new command
#called "approve" will appear in the first position.
#When the user uses this approve command, TelnetCE
#will enter "good job."
02,CMDBUTTON,redo it,reject
#When the user selects the Keys menu, a menu command
#called "reject" will appear in the second position.
#When the user uses this command, TelnetCE will enter
#"redo it."
```

Key Type Definitions

This section contains a list of the different key types available to keyboard map files.

As you read through this list, please the following in mind:

- All keys are not available on all devices.
- All keys are case sensitive.
- Any entry not found in this list is converted to its numeric value and used as the windows key code. For example:

```
ctl-a = 01
```

```
ctl-z = 02
```

Key	Type
0-9	KEYBOARD
A-Z	KEYBOARD
a-z	KEYBOARD
BACK	KEYBOARD
TAB	KEYBOARD
CLEAR	KEYBOARD

Table 7-3: Available Key Types for Keyboard Maps

Key	Type
RETURN	KEYBOARD
ESCAPE	KEYBOARD
SPACE	KEYBOARD
PRIOR	FUNCTION
NEXT	FUNCTION
END	FUNCTION
HOME	FUNCTION
LEFT	FUNCTION
UP	FUNCTION
RIGHT	FUNCTION
DOWN	FUNCTION
INSERT	FUNCTION
DELETE	FUNCTION
HELP	FUNCTION
NUMLOCK	FUNCTION
SCROLL	FUNCTION
MULTIPLY	FUNCTION
ADD	FUNCTION
SUBTRACT	FUNCTION
DECIMAL	FUNCTION
DIVIDE	FUNCTION
F1-F24	FUNCTION

Table 7-3: Available Key Types for Keyboard Maps

Chapter 8 Host Sessions

A successful connection to a host begins a host session. The following features of the emulator are specific to host sessions and are unavailable at other times:

- Working with Multiple Sessions
- Using Special Keys
- Sending Function Keys
- Status Messages
- Alerts
- Setting View Modes
- Setting Fonts
- Changing the Terminal Settings

Working with Multiple Sessions

Wavelink TelnetCE displays one emulator screen at a time. If you have connected to multiple hosts, you can switch between sessions selecting *[session name]* from the Sessions menu on the Wavelink TelnetCE main application screen.

The allowable number of concurrent sessions is unlimited unless a value has been entered in the Sessions field in the Standard settings dialog box.

Using Special Keys

Special Keys are control characters that represent keyboard buttons on the host keyboard. These control characters can have significance within a host application but might not be available on the user's touch screen or keyboard. Special Key commands are sent directly to the host, bypassing Wavelink TelnetCE key translation.

For example, when you send the TAB key by pressing the TAB button on your keyboard, Wavelink TelnetCE determines the correct key to send, depending

on the current emulator type. You can bypass the key translation by sending the TAB key as a special key.

To send a special key:

- 1 Initiate a host connection.
- 2 Select **Special Keys** from the **View** menu.

The Special Keys dialog box appears.

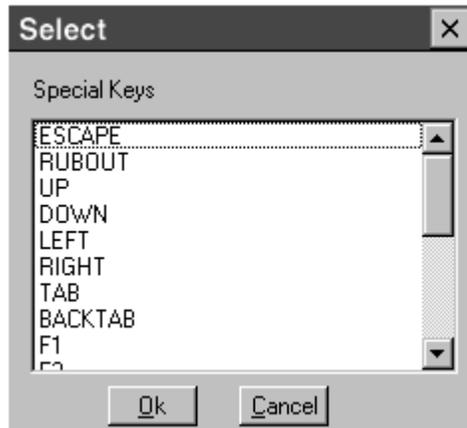


Figure 8-1. *The Special Keys Dialog Box*

- 3 Select the desired key.
- 4 Click **OK**. Wavelink TelnetCE sends the special key directly to the host.

Sending Function Keys

To send a function key to the host during a session, select the desired function key from the **Keys** menu on the Wavelink TelnetCE main screen.

Status Messages

The Wavelink TelnetCE emulator supports status messages by re-mapping the status codes to the display. When the status of the emulator changes, the new status displays in reverse video on the top line of the emulator screen for two seconds.

NOTE IBMHOST emulators display the current host status at all times, except after the emulator returns to the READY state.

Alerts

When Wavelink TelnetCE receives a program alert, it automatically displays the alert within the Alerts dialog box.

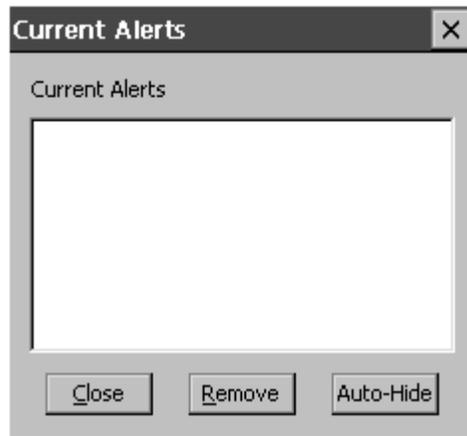


Figure 8-2. *The Alerts Dialog Box*

To remove an alert that appears in the **Current Alerts** field, select it and click Remove.

To close the Alerts dialog box, click Close.

You can prevent the program from automatically displaying alerts by clicking Auto-Hide. To cancel the auto-hide feature, you must click Auto-Hide a second time from within the Alerts dialog box.

NOTE If you want to view the current program alerts when the auto-hide feature is activated, you must select Alerts from the View menu.

Setting View Modes

You can switch between the three available view modes at any time.

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

The view modes are:

Fixed	Display remains fixed over a specified portion of the host screen.
Follow Cursor	Display "attaches" to the cursor on the host screen and follows it around.
Watermark	Display in which the cursor remains fixed near the center of the emulator screen. The host screen moves in the background.

To enable a view mode, select **Mode > [view mode]** from the **View** menu in the Wavelink TelnetCE main screen.

See *Scroll Options* on page 28 for more information about configuring view mode options.

NOTE Changes you make to the view mode after selecting **Mode > [view mode]** from the View menu remain in effect during the current session only and will not affect your terminal settings.

Setting Fonts

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

To control how fonts are displayed on the emulator screen during a session, select the **Font** command from the **View** menu. The **Font** dialog box appears.

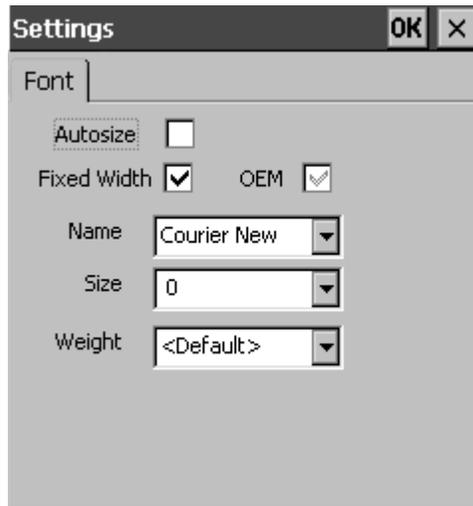


Figure 8-3. *The Font Dialog Box*

You can configure the following options on this screen.

- | | |
|--------------------|---|
| Autosize | When you select the Autosize check box, Wavelink TelnetCE automatically selects the best available font size to fit the emulator screen. You can restore the default value to this field by selecting a grayed-out check mark. |
| Fixed Width | Select the Fixed Width check box to restrict the types of fonts available for display to fixed-width fonts. |
| OEM | Select the OEM check box to restrict the types of fonts available for display to OEM fonts. |
| Name | To select a specific font, select one from the Name list. |
| Size | To select a specific font size, select one from the Size list. |
| Weight | To choose a specific font weight, select one from the Weight list. |

NOTE Changes you make to the font after selecting the `Font` command from the View menu remain in effect during the current session only and will not affect your terminal settings.

Changing the Terminal Settings

You can view and edit the terminal settings for the current host session by selecting `Current Config` from the View menu. This feature is especially useful if you are uncertain which of your terminal settings are in effect.

NOTE This option is not available on all devices. See *Mobile Device Requirements* on page 5 for more information on the options available for your devices.

If you edit these values, the changes take effect when you click `OK`.

Changes you make by editing these values remain in effect during the current session only. See *Chapter 5, Terminal Settings* on page 21 for instructions on saving your terminal settings,.

Chapter 9 Menu commands

The commands available from the Wavelink TelnetCE main application screen are accessed through the following menus.

- Term Menu
- App Menu
- View Menu
- Sessions Menu
- Keys Menu

Term Menu

The following options appear under the **Term** menu:

Connect	Select this option to configure host connections and initiate host connections. See <i>Configuring a Host Connection and Connecting to a Host</i> for more information.
Disconnect	Select this option to end the host connection currently displayed on the emulator screen.
Configure	Select this option to configure terminal settings.
Authorization	Select this option to authorize Wavelink TelnetCE. See <i>Authorizing TelnetCE</i> on page 14 for more information.
About	Select this option to open the About TelnetCE dialog box containing the authorization status of the Wavelink TelnetCE emulator(s). If you have installed any Wavelink TelnetCE extensions, they will also appear here under additional tabbed dialog boxes.

NOTE The About TelnetCE dialog box can be accessed through the Help menu on H/PC's and HPC Pro's).

Exit Select this option to exit Wavelink TelnetCE.

App Menu

This menu displays the Wavelink Menubar widget, if present. The App menu lights up if a menubar is available.

View Menu

The following options appear under the **View** menu.

- Font** Select this option to change the name, style, and size of the screen font for the current session. For more information, see Setting Fonts.
- Special Keys** Select this option to send a special key to the host during a session. See Using Special Keys for more information.
- Mode** Select this option to change the view mode of the current session. See Setting View Modes and Scroll Options for more information.
- Current Config** Select this option to display the host configuration settings for the current session. See Changing the Terminal Settings for more information.
- Alerts** Select this option to display the program alerts. See Alerts for more information.

Sessions Menu

The following option appears under the **Sessions** menu.

[session name]	Displays the the selected session in the Wavelink TelnetCE main application window. This command is meaningful only when multiple sessions are running concurrently.
-----------------------	--

Keys Menu

The following option appears under the **Keys** menu.

[function key]	Sends the selected function key to the host.
-----------------------	--

Chapter 10 Troubleshooting

This section contains a list of the error messages displayed by Wavelink TelnetCE and provides recommendations for resolving the problem that resulted in the error message. The two types of error messages are:

- *General Error Messages*
- *Authorization Error Messages*

General Error Messages

General error messages can appear at any time, but are more likely to appear when you attempt to initiate a host connection or during a host session.

An invalid emulator has been specified

Contact Support@Wavelink.com for help obtaining a current authorization for the desired emulator.

You have reached the maximum number of connections allocated to your terminal

If you have other active sessions, close one of them and reconnect. As an alternative, you can increase the maximum number of allowable connections by adjusting terminal settings.

- 1 Select `Configure > Standard` from the Term menu.
- 2 In the Sessions field of the Standard tab, enter the new maximum number of connections.
- 3 Click OK and reconnect.

You must use a valid license to connect to hosts

Contact Support@Wavelink.com for help in obtaining a current Authorization.

You need to create a host entry prior to connecting

- 1 Configure a host. See *Configuring a Host Connection* on page 17 for more information.
- 2 Reconnect to the created host by clicking Connect in the Connecting to Hosts dialog box.

Network Out of Range

You have moved beyond the range of your wireless network.

NOTE This error only occurs when you attempt to send data from outside the range of your wireless network. It will not immediately appear when you initially leave the range of your wireless network.

Host has closed the connection

You have been disconnected by the host system as the result of a host system error. The most common causes for the error are:

- Inactivity timeouts
- Log off commands

A communication error such as a disabled network connection may also cause this message to appear.

Please make a selection

Wavelink TelnetCE displays this error message when you try to connect before selecting a host. In the Connecting to Hosts dialog box, select a host in the **Select Host** field and click **Connect**.

A Host Type must be specified

Select an emulator in the **Host Type** field of the Edit Connection dialog box. See *Configuring a Host Connection* on page 17 for more information.

A connection to the host could not be made

If this message appears:

- 1 Verify that the correct host address has been entered in the **Host** field in the Connecting to Hosts dialog box.
- 2 Verify that the correct emulation type and Telnet port have been entered in the **Type** and **Port** fields in the Connecting to Hosts dialog box.

If the Host, Type, and Port values are correct, the most likely cause of the problem is a disabled host or your network connection.

NOTE If you experience a long delay before this message appears, the most likely cause of the problem is a disabled host.

Authorization Error Messages

Wavelink TelnetCE might display an authorization error message when you open or attempt to authorize the software. To resolve the problem, contact Support@Wavelink.com to obtain a current Wavelink TelnetCE license. The authorization error messages are as follows.

- "An invalid emulator has been specified."
- "Your authorization date expired on xx-xx-xxxx."
- "Duplicate licenses have been found."
- "IBMHOST is not authorized."
- "Serial Number is already in use!"
- "You must use a valid license to connect to hosts."
- "VTXX is not authorized."

Chapter 11 Extensions

Special hardware support and customized resources can be seamlessly integrated into the base emulator product as Wavelink TelnetCE extensions. To view the extensions currently installed on your copy of Wavelink TelnetCE, select About from the **Term** menu.

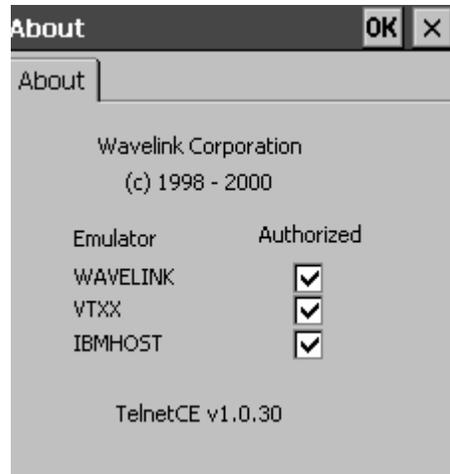


Figure 11-1. *The About TelnetCE Dialog Box*

In addition to the About tab showing licensed emulators, Wavelink TelnetCE displays tabs for each currently installed extension. Extensions that provide the following types of support are available for use with Wavelink TelnetCE.

- Alternate input devices
- Scanner integration
- Printer integration
- Device Control
- Authentication
- Resources (such as the EBCDIC character sets)

The extensions included with your copy of Wavelink TelnetCE may vary depending on the version you installed. If any extensions are included, you

can choose to install or not install them during a custom installation. For more information about obtaining additional extensions, contact support@Wavelink.com.

EBCDIC Character Sets

EBCDIC Character sets have been implemented through the Wavelink TelnetCE extensibility interface. You can configure the current character set as an IBMHOST emulator setting.

EBCDIC-AT-DE

Reference: [RFC1345,KXS2]

MIBenum: 2064

Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9, April 1987

Alias: csIBMEBCDICATDE

EBCDIC-AT-DE-A

Reference: [RFC1345,KXS2]

MIBenum: 2065

Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9, April 1987

Alias: csEBCDICATDEA

EBCDIC-CA-FR

Reference: [RFC1345,KXS2]

MIBenum: 2066

Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9, April 1987

Alias: csEBCDICCAFR

EBCDIC-DK-NO	Reference: [RFC1345,KXS2] MIBenum: 2067 Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9, April 1987 Alias: csEBCDICDKNO
EBCDIC-DK-NO-A	Reference: [RFC1345,KXS2] MIBenum: 2068 Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9, April 1987 Alias: csEBCDICDKNOA
EBCDIC-FI-SE	Reference: [RFC1345,KXS2] MIBenum: 2069 Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9, April 1987 Alias: csEBCDICFISE
EBCDIC-FI-SE-A	Reference: [RFC1345,KXS2] MIBenum: 2070 Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9, April 1987 Alias: csEBCDICFISEA
EBCDIC-FR	Reference: [RFC1345,KXS2] MIBenum: 2071 Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9, April 1987 Alias: csEBCDICFR

EBCDIC-IT

Reference: [RFC1345,KXS2]

MIBenum: 2072

Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9,
April 1987

Alias: csEBCDICIT

EBCDIC-PT

Reference: [RFC1345,KXS2]

MIBenum: 2073

Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9,
April 1987 Alias: csEBCDICPT

EBCDIC-ES

Reference: [RFC1345,KXS2]

MIBenum: 2074

Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9,
April 1987

Alias: csEBCDICES

EBCDIC-ES-A

Reference: [RFC1345,KXS2]

MIBenum: 2075

Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9,
April 1987

Alias: csEBCDICESA

EBCDIC-ES-S

Reference: [RFC1345,KXS2]

MIBenum: 2076

Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9,
April 1987

Alias: csEBCDICESS

EBCDIC-UK

Reference: [RFC1345,KXS2]

MIBenum: 2077

Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9,
April 1987

Alias: csEBCDICUK

EBCDIC-US

Reference: [RFC1345,KXS2]

MIBenum: 2078

Source: IBM 3270 Char Set Ref Ch 10, GA27-2837-9,
April 1987

Alias: csEBCDICUS

IBM037

Reference: [RFC1345,KXS2]

MIBenum: 2028

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: cp037

Alias: ebcdic-cp-us

Alias: ebcdic-cp-ca

Alias: ebcdic-cp-wt

Alias: ebcdic-cp-nl

Alias: csIBM037

IBM038

Reference: [RFC1345,KXS2]

MIBenum: 2029

Source: IBM 3174 Character Set Ref, GA27-3831-02, March 1990

Alias: EBCDIC-INT

Alias: cp038

Alias: csIBM038

IBM274

Reference: [RFC1345,KXS2]

MIBenum: 2031

Source: IBM 3174 Character Set Ref, GA27-3831-02, March 1990

Alias: EBCDIC-BE

Alias: CP274

Alias: csIBM274

IBM275

Reference: [RFC1345,KXS2]

MIBenum: 2032

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: EBCDIC-BR

Alias: cp275

Alias: csIBM275

IBM277

Reference: [RFC1345,KXS2]

MIBenum: 2033

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: EBCDIC-CP-DK

Alias: EBCDIC-CP-NO

Alias: csIBM277

IBM278

Reference: [RFC1345,KXS2]

MIBenum: 2034

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: CP278

Alias: ebcdic-cp-fi

Alias: ebcdic-cp-se

Alias: csIBM278

IBM280

Reference: [RFC1345,KXS2]

MIBenum: 2035

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: CP280

Alias: ebcdic-cp-it

Alias: csIBM280

IBM281

Reference: [RFC1345,KXS2]

MIBenum: 2036

Source: IBM 3174 Character Set Ref, GA27-3831-02,
March 1990

Alias: EBCDIC-JP-E

Alias: cp281

Alias: csIBM281

IBM284

Reference: [RFC1345,KXS2]

MIBenum: 2037

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: CP284

Alias: ebcdic-cp-es

Alias: csIBM284

IBM285

Reference: [RFC1345,KXS2]

MIBenum: 2038

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: CP285

Alias: ebcdic-cp-gb

Alias: csIBM285

IBM290

Reference: [RFC1345,KXS2]

MIBenum: 2039

Source: IBM 3174 Character Set Ref, GA27-3831-02, March 1990

Alias: cp290

Alias: EBCDIC-JP-kana

Alias: csIBM290

IBM297

Reference: [RFC1345,KXS2]

MIBenum: 2040

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: cp297

Alias: ebcdic-cp-fr

Alias: csIBM297

IBM420

Reference: [RFC1345,KXS2]

MIBenum: 2041

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990, IBM NLS RM p 11-11

Alias: cp420

Alias: ebcdic-cp-ar1

Alias: csIBM420

IBM423

Reference: [RFC1345,KXS2]

MIBenum: 2042

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: cp423

Alias: ebcdic-cp-gr

Alias: csIBM423

IBM424

Reference: [RFC1345,KXS2]

MIBenum: 2043

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: cp424

Alias: ebcdic-cp-he

Alias: csIBM424

IBM500

Reference: [RFC1345,KXS2]

MIBenum: 2044

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: CP500

Alias: ebcdic-cp-be

Alias: ebcdic-cp-ch

Alias: csIBM500

IBM870

Reference: [RFC1345,KXS2]

MIBenum: 2055

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: CP870

Alias: ebcdic-cp-roece

Alias: ebcdic-cp-yu

Alias: csIBM870

IBM871

Reference: [RFC1345,KXS2]

MIBenum: 2056

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: CP871

Alias: ebcdic-cp-is

Alias: csIBM871

IBM880

Reference: [RFC1345,KXS2]

MIBenum: 2057

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: cp880

Alias: EBCDIC-Cyrillic

Alias: csIBM880

IBM905

Reference: [RFC1345,KXS2]

MIBenum: 2061

Source: IBM 3174 Character Set Ref, GA27-3831-02,
March 1990

Alias: CP905

Alias: ebcdic-cp-tr

Alias: csIBM905

IBM918

Reference: [RFC1345,KXS2]

MIBenum: 2062

Source: IBM NLS RM Vol2 SE09-8002-01, March 1990

Alias: CP918

Alias: ebcdic-cp-ar2

Alias: csIBM918

Index

A

alerts 75
audio messages 30

B

Base Configuration File 49

C

character sets 86
Connection Settings 46
connections 17
Custom Configuration 49

D

debugging information 25
Descriptions of Configuration Parameters 57

E

Emulator Settings 36
error messages 82
Escape Sequences 57
extensions 85
external configuration
 terminal settings 50
External Configuration File Parameters 59
External Configuration Files 52
External Configuration of Host
 Connections 53
External Configuration of Terminal
 Settings 50
External Host Detail File 54
External Host List File 53
ExternalConfigEmulator Parameter 51
ExternalConfigHost Parameter 51
ExternalHostDetail Parameter 54

F

Fixed mode 30
Follow Cursor mode 29
fonts 27, 77
function keys 74

H

Host Connections

 configuring 17
 connecting 20
 disconnecting 20
 editing 19
host connections 17
host sessions 73
 alerts 75
 changing terminal settings 78
 function keys 74
 multiple hosts 73
 setting fonts 77
 setting view modes 76
 special keys 73
 status messages 74

I

IBMHOST 36
 settings 36
 status messages 74
IBMHOST Configuration Parameters 66
installation 7
IP address 18

K

Keyboard Maps 68
 commenting 69
 creating 68
 examples 70
 key type definitions 71
 linking 70

L

Limiting Terminal Configuration Access 68
logging 25

M

manual
 typographical conventions 2
menu commands 79
 Keys menu 81
 Sessions menu 81
 Term menu 79
monochrome display 23

P

port 18

R

requirements 5

S

scanner options 32
sessions 73
special keys 73, 74
Standard Settings 21
starting WaveLink TelnetCE 16
symbolologies 33

T

TelnetCE.cfg Only Parameters 57
Terminal Settings 21
 5250 options 38
 beeps options 30
 changing in mid-session 78
 Connection Settings 46
 default 47
 Emulator Settings 36
 external configuration 50
 font options 26
 general options 23
 IBMHOST settings 36
 logging options 25
 scanner options 32
 scroll options 28
 standard options 22
 Standard Settings 21
 symbology options 33
 VTXX settings 39
 WaveLink settings 44
TN5250 options 38
troubleshooting 82
 authorization error messages 84
 general error messages 82
typographical conventions 2

U

Using Configuration File Parameters 56

V

view mode 23

view modes 28, 76

VTXX 39

 settings 39

VTXX Configuration Parameters 63

W

WaveLink 44

 Emulator settings 44

WaveLink TelnetCE 16

 installation 7

 requirements 5

 starting 16