Symbol 8100 Client User Guide

Version 4.0

Revised 9/19/03

Copyright © 2001 by Wavelink Corporation All rights reserved.
Wavelink Corporation

11332 NE 122nd Way
Suite 300
Kirkland, Washington 98034
Telephone: (425) 823-0111
Web site: www.wavelink.com

E-mail: info@wavelink.com

No part of this publication may be reproduced or used in any form without permission in writing from Wavelink Corporation. This includes electronic or mechanical means, such as photocopying, recording, or information storage and retrieval systems. The material in this manual is subject to change without notice.

The software is provided strictly on an "as is" basis. All software, including firmware, furnished to the user is on a licensed basis. Wavelink Corporation grants to the user a non-transferable and non-exclusive license to use each software or firmware program delivered hereunder (licensed program). Except as noted below, such license may not be assigned, sublicensed, or otherwise transferred by the user without prior written consent of Wavelink Corporation. No right to copy a licensed program in whole or in part is granted, except as permitted under copyright law. The user shall not modify, merge, or incorporate any form or portion of a licensed program with other program material, create a derivative work from a licensed program, or use a licensed program in a network without written permission from Wavelink Corporation. The user agrees to maintain Wavelink Corporation's copyright notice on the licensed programs delivered hereunder, and to include the same on any authorized copies it makes, in whole or in part. The user agrees not to decompile, disassemble, decode, or reverse engineer any licensed program delivered to the user or any portion thereof.

Wavelink Corporation reserves the right to make changes to any software or product to improve reliability, function, or design.

The information in this document is bound by the terms of the end user license agreement.

Symbol™ and Symbol 8100™ are registered trademarks of Symbol Technologies.

Table of Contents

Introduction 1
About This Document . . . 1
Document Assumptions . . . 1
Document Conventions . . . 2
About Wavelink Studio Clients . . . 2
Additional Information . . . 3

Installation 4
Requirements . . . 4
Getting Started . . . 4
Installing the Wavelink Client . . . 5
Starting the Wavelink Client . . . 7

Configuration 8
Configuring the Mobile Device . . . 8
Setting the ESS ID . . . 8
Setting the Device IP Address . . . 10
Setting the Subnet Mask . . . 12
Setting the Default Router . . . 13
Enabling DHCP . . . 14
Configuring the Wavelink Client. . . . 17
Host Connections . . . 17
Creating a Host Connection . . . 17
Editing a Host Connection . . . 19
Deleting a Host Connection . . . 20
Advanced Client Configuration . . . 20
Wavelink Client Settings . . . 20
General Settings . . . 21
Font Settings . . . 24
Scroll Settings . . . 26
Beeps Settings . . . 28
Printer Settings . . . 29
Scanner Settings . . . 31
Symbology Settings . . . 32
Advanced Symbology Options . . . 34

Connecting to a Wavelink-enabled Network 36

AutoDiscovery and the Wavelink Client 37

External Configuration of Host Connections 39
Modifying the Base Configuration File . . . 39
ExternalHostList Parameter . . . 40
ExternalHostDetail Parameter . . . 41

Creating a Host List File 42
Creating a Host Detail File 42
Running the Client to Load the Configuration 44

Index **45**

Introduction

This user documentation is a complete guide to the functions and components of the Wavelink Client for Symbol 8100 mobile devices and presents:

- An introduction to the Wavelink Client environment and conceptual information about the Wavelink client/server structure
- Detailed installation instructions
- Information on how to configure the client for your network

This introduction describes the document assumptions and conventions, provides an overview of the Wavelink Client, and offers a list of additional reference materials.

About This Document

This user documentation provides assistance to anyone integrating the Wavelink Client into a Wavelink-enabled wireless network.

NOTE If you are interested in using your CE mobile devices for terminal emulation, see the Wavelink TelnetCE User Documentation.

Document Assumptions

This document makes the following assumptions:

- You have a general understanding of your wireless network layout.
- You have read and understood the instructions provided with your Symbol 8100 mobile devices.

Document Conventions

This document uses the following typographical conventions:

Courier New

Any time you interact with an option, such as a button, or type specific information into a field, such as a file path, 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 document refers to an option, such as descriptions of elements in a dialog box, that option appears in the **Bold** text style.

Examples:

Click `Open` from the **File** menu.

The **Auto-Add** button automatically adds IP addresses to the IP address pool.

Italics

Any time this document refers to a section, that section appears in the *Italic* text style.

Example:

See *Configuration* on page 8 for more information.

About Wavelink Studio Clients

Wavelink Clients are part of the Wavelink Studio thin-client/server model. In this model, major application functions are carried out on the system hosting Wavelink servers. Wavelink Clients are responsible for communicating with the appropriate Wavelink server and displaying relevant application information to the mobile device.

A few of the benefits that Wavelink Clients offer are:

Event-driven Architecture	Wavelink Clients' unique event-driven architecture minimizes wireless traffic by sending data packets only when prompted by user actions. This architecture ensures that communication between a device and a server is as efficient as possible.
Control Over Device Features	Wavelink Clients integrate with the unique hardware requirements of Symbol 8100 mobile devices. Consequently, when you install the client, you retain full control over the device's functionality.
Client-side Menus	With Wavelink Clients, you can save commonly-used files and menus, such as barcode configuration files, directly on the device.
AutoDiscovery	Once you install a Wavelink Client, Wavelink's AutoDiscovery technology allows your mobile devices to automatically discover and access appropriate applications across a wireless network.

Additional Information

For additional information concerning Wavelink Clients and how they integrate with the Wavelink product line, see the following documentation:

- Wavelink Studio Server Documentation
- Wavelink Studio API Library Documentation
- Wavelink TelnetCE Documentation

Installation

This section describes the hardware and software requirements of the Wavelink Client, and shows how to install the client on a mobile device.

Requirements

To install and run the Wavelink Client, you need the following components:

- A host computer with a connection to the network
- A means of connecting the device to the host computer (for example, a serial cable)
- A Symbol 8100 mobile device
- Microsoft ActiveSync 3.1 or higher

Getting Started

You must acquire one of the following self-extracting zip files to install the Wavelink Client on a mobile device. The type of Symbol 8100 device determines the zip file you install.

The available files are as follows:

- `wlc_s81_ce30_all_us_n.exe` for Microsoft ActiveSync installations
- `wlc_s81_ce30_all_us_n.zip` for Symbol partition installations

NOTE If you install the client using Microsoft ActiveSync, you must re-install the client on the device after each cold boot. If you install the client on a device partition, the client remains even if you cold boot the device.

These files area available from the Wavelink Web site, www.wavelink.com.

You also must already have Microsoft ActiveSync installed on your host computer. Microsoft ActiveSync is available for download from the Microsoft Web site, www.microsoft.com.

If you decide to install the Wavelink Client on a device partition, you must have the Symbol TCM7000 utility. This utility is available from the Symbol Web site, www.symbol.com.

Installing the Wavelink Client

This section describes the installation processes for the Wavelink Client on a Symbol 8100 mobile device. This installation uses Microsoft ActiveSync to download the client to the mobile device. The ActiveSync installation process described here shows you how to install the Wavelink Client to the application partition on the mobile device. This results in an install of the client that persists through device cold boots.

To install the Wavelink Client:

1. Download the appropriate Wavelink Client from the Wavelink Web site to your host computer.

2. Extract the zip file to a directory of your choice.

   Double-click the zip file to extract it.

3. Within the extracted files, navigate to and double-click the Setup.exe file.

   A Welcome dialog box appears, introducing you to the Wavelink Client installation process.

4. Click `Next`.

   The License Agreement dialog box appears. It is recommended that you read this agreement carefully.

5. Click `Yes`.

   The User Information dialog box appears.

6. Type your name in the **Name** text box.

7. Type the name of your company in the **Company** text box.

   The Choose Destination Location dialog box appears. By default, the `Setup.exe` file installs the Wavelink Client in the following directory:

   ```
   C:\...\Microsoft ActiveSync\TelnetCE
   ```

To select a different location, click `Browse` and navigate to the desired directory.

8 Click `Next`.

The Setup Type dialog box appears.

9 Select the **Typical** option and click `Next`.

The Select Program Folder dialog box appears.

10 Select a program folder for the Wavelink Client and click `Next`.

The Setup.exe file installs the Wavelink Client. After the installation, it informs you that the files will be downloaded to the mobile device the next time it connects to your host computer.

11 Click `OK`.

The Setup Complete dialog box appears.

12 Click `Finish` to complete the installation process.

13 Place the mobile device in its docking cradle.

A message box appears (Figure 1) asking whether you want to install the client to the default application install directory.

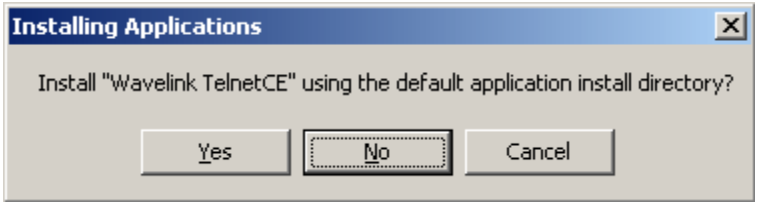


Figure 1. *The Installing Applications Dialog Box*

14 Click `No`.

NOTE If you click `Yes` in this dialog box, you can immediately install the Wavelink Client, but the client will not persist on the device after the next cold boot.

After you click `No`, the Select Destination Media dialog box appears, as shown in Figure 2.

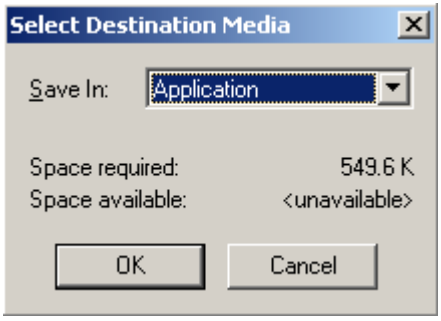


Figure 2. *The Select Destination Media Dialog Box*

15 Select `Application` from the **Save In** drop-down list.

16 Click `OK`.

Microsoft ActiveSync automatically begins to download the Wavelink Client to the device. After the download is complete, a dialog box appears, requesting that you check your mobile device to see if additional steps are necessary to install the Wavelink Client.

NOTE The Symbol 8100 device does not require any additional steps once Microsoft ActiveSync installs the Wavelink Client.

---

17 Click `OK` to complete the download process.

Starting the Wavelink Client

To start the Wavelink Client on a Symbol 8100 mobile device tap `Start` and select `TelnetCE`.

Configuration

The the Symbol 8100 mobile device contains a variety of capabilities that you can configure to meet the needs of your organization. This section includes consolidated instructions on how to use these capabilities to fully integrate the device within your wireless network.

NOTE The following sections are not exhaustive instructions on the full capabilities of Symbol 8100 mobile devices. See your hardware documentation for more information on the full capabilities of these devices.

Configuring the Mobile Device

This section focuses on how to configure a Symbol 8100 mobile device to connect with a Wavelink-enabled network.

Setting the ESS ID

You must set the ESS ID of the Symbol 8100 device to match the corresponding ESS ID of one or more Access Points on your network. Only mobile devices that share the same ESS ID with an Access Point can communicate with your network.

To set the ESS ID:

1. From the mobile device, tap `Start` and select `Settings`.

   A settings dialog box appear. This dialog box contains three tabs: Personal, System, and Connections.

2. Tap the System tab.

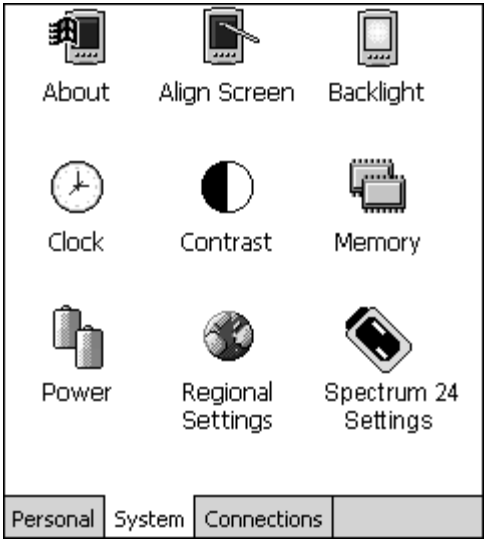


Figure 3. *The System Tab of the Settings Dialog Box*

3 Tap the Spectrum 24 Settings icon twice.

The Spectrum 24 Setup dialog box appears.

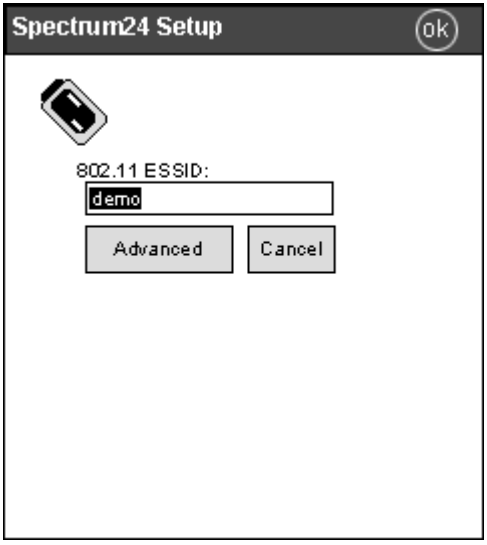


Figure 4. *The Spectrum 24 Setup Dialog Box*

4 Type the desired ESS ID in the **802.11 ESSID** text box.

5 Tap `OK`.

Setting the Device IP Address

You can manually set the IP address of the Symbol 8100 device. It is not recommended that you manually set the IP address if you use a DHCP server to assign IP addresses to network components.

To set the IP address:

1 From the mobile device, tap `Start` and select `Settings`.

A settings dialog box appear. This dialog box contains three tabs: Personal, System, and Connections.

2 Tap the Connections tab.

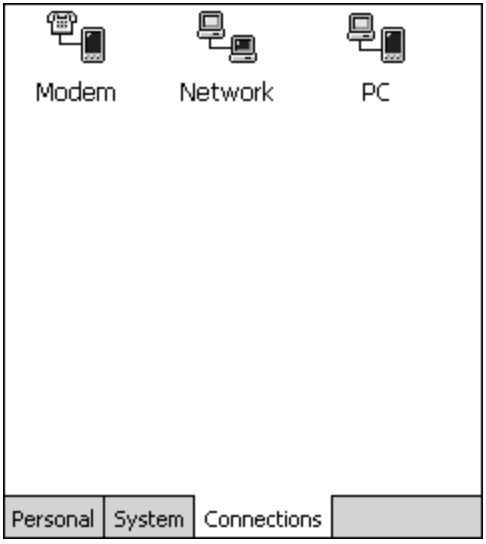


Figure 5. *The Connections Tab of the System Settings Dialog Box*

3 Tap the Network icon.

A Network Connections dialog box appears. This dialog box allows you to select the network adapter driver you want to configure.

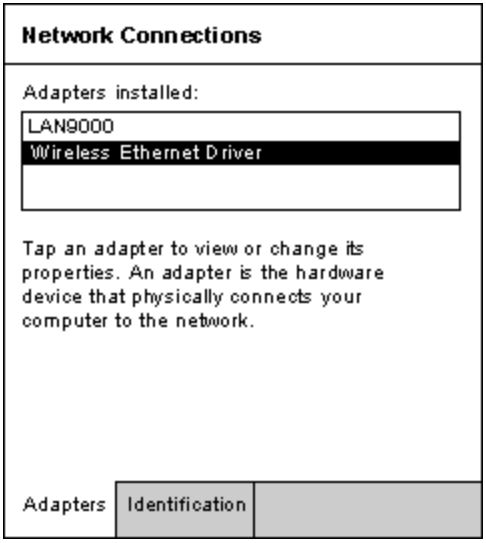


Figure 6. *The Network Connections Dialog Box*

4 Select a wireless Ethernet driver from the **Adapters Installed** list.

NOTE The specific driver you select depends on the type of drivers already installed on your mobile device.

A dialog box appears that allows you to configure different options for the adapter driver. This dialog box contains two tabs: IP Address and Name Servers.

5 Tap the IP Address tab.

A selection of IP address options appears.

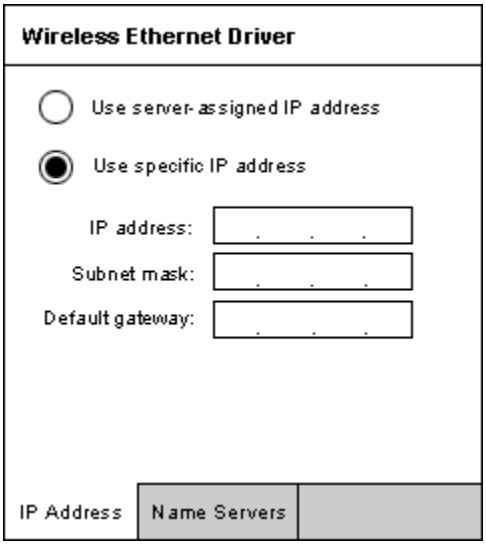


Figure 7. *The IP Address Tab*

6 Enable the **Use Specific IP Address** option.

7 Enter the IP address for the mobile device in the **IP address** text box.

8 Tap `OK`.

An Adapters dialog box appears, informing you that the new settings take effect when the adapter is next used.

9 Tap `OK`.

10 In the Network Connections dialog box, tap `OK`.

Setting the Subnet Mask

If you decide to manually set IP addresses for the Symbol 8100 device, you can also set its subnet mask.

To set the Subnet Mask:

1 From the mobile device, tap `Start` and select `Settings`.

A settings dialog box appear. This dialog box contains three tabs: Personal, System, and Connections.

2 Tap the Connections tab.

3 Tap the Network icon.

A Network Connections dialog box appears. This dialog box allows you to select the network adapter driver you want to configure.

4 Select the wireless ethernet driver from the **Adapters Installed** list.

NOTE The specific driver you select depends on the type of drivers already installed on your mobile device.

A dialog box appears that allows you to configure different options for the adapter driver. This dialog box contains two tabs: IP Address and Name Servers.

5 Tap the IP Address tab.

A selection of IP address options appears.

6 Make sure the **Use Specific IP Address** option is enabled.

7 Enter the subnet mask for the mobile device in the **Subnet Mask** text box.

8 Tap `OK`.

An Adapters dialog box appears, informing you that the new settings take effect when the adapter is next used.

9 Tap `OK`.

10 In the Network Connections dialog box, tap `OK`.

Setting the Default Router

If you decide to manually set IP addresses for the Symbol 8100 device, you can also set its default router IP address (also known as the gateway IP address).

To set the default router:

1 From the mobile device, tap `Start` and select `Settings`.

A settings dialog box appear. This dialog box contains three tabs: Personal, System, and Connections.

2 Tap the Connections tab.

3 Tap the Network icon.

A Network Connections dialog box appears. This dialog box allows you to select the network adapter driver you want to configure.

4 Select the wireless ethernet driver from the **Adapters Installed** list.

NOTE The specific driver you select depends on the type of drivers already installed on your mobile device.

A dialog box appears that allows you to configure different options for the adapter driver. This dialog box contains two tabs: IP Address and Name Servers.

5 Tap the IP Address tab.

A selection of IP address options appears.

6 Make sure the **Use Specific IP Address** option is enabled.

7 Enter the default router for the mobile device in the **Default Gateway** text box.

8 Tap `OK`.

An Adapters dialog box appears, informing you that the new settings take effect when the adapter is next used.

9 Tap `OK`.

10 In the Network Connections dialog box, tap `OK`.

Enabling DHCP

If you use a DHCP server to assign IP addresses to network components, you can configure the Symbol 8100 device to receive its IP address from your DHCP server.

To enable DHCP:

1 From the mobile device, tap `Start` and select `Settings`.

A settings dialog box appear. This dialog box contains three tabs: Personal, System, and Connections.

2 Tap the Connections tab.

3 Tap the Network icon.

A Network Connections dialog box appears. This dialog box allows you to select the network adapter driver you want to configure.

4 Select the wireless ethernet driver from the **Adapters Installed** list.

NOTE The specific driver you select depends on the type of drivers already installed on your mobile device.

A dialog box appears that allows you to configure different options for the adapter driver. This dialog box contains two tabs: IP Address and Name Servers.

5 Tap the IP Address tab.

A selection of IP address options appears.

6 Enable the **Use Server-Assigned IP Address** option.

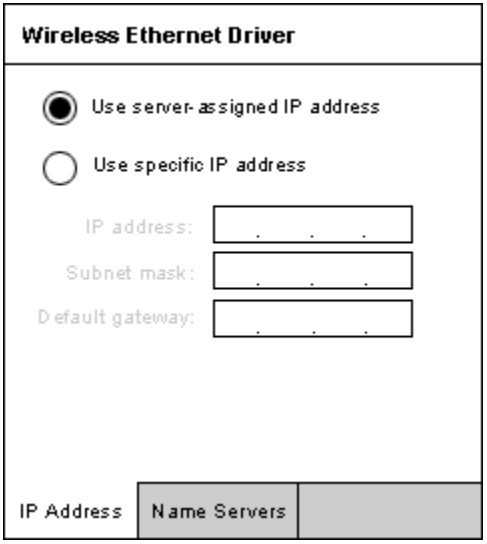


Figure 8. *The IP Address Tab*

7 Tap the Name Servers tab.

A selection of DHCP options appears.

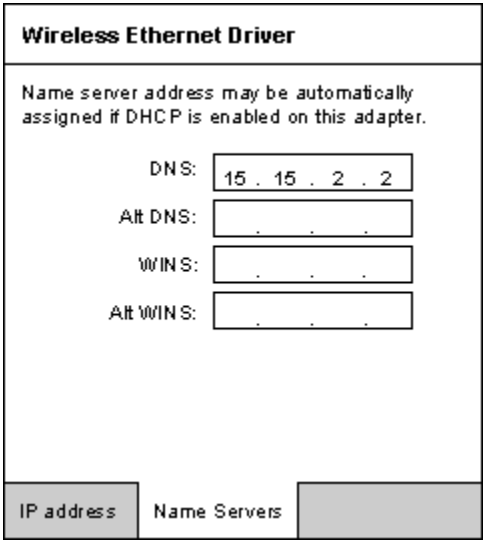


Figure 9. *The Name Servers Tab*

8 Enter the IP address of your DHCP server in the **DNS** text box.

9 Tap `OK`.

An Adapters dialog box appears, informing you that the new settings take effect when the adapter is next used.

10 Tap `OK`.

11 In the Network Connections dialog box, tap `OK`.

Configuring the Wavelink Client

This section describes how to configure the Wavelink Client for the Symbol 8100 device.

NOTE In the following sections, the term "host" is used to refer to the server components of Wavelink Studio.

Host Connections

Before you can connect the Symbol 8100 device to your network, you must create a host connection. This connection provides the IP address and port number of the host system to which you want the device to connect.

Creating a Host Connection

You can create as many host connections as your network demands. Each connection can connect to a specific application on your network, allowing you to have multiple applications available to your mobile device users.

To create a host connection:

1 Launch the Wavelink Client.

The Wavelink startup screen appears.

2 Select `Connect` from the **Term** menu.

The Connecting to Host dialog box appears.

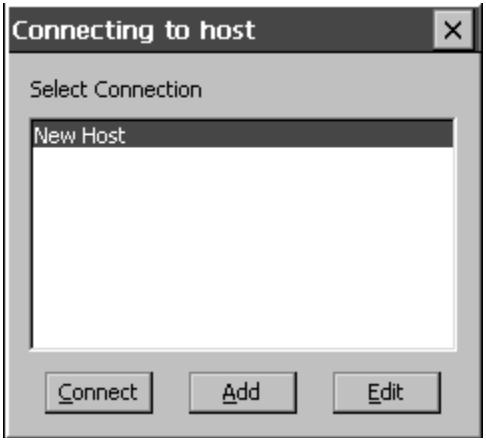


Figure 10. *The Connecting to Host Dialog Box*

NOTE If the **Select Connection** list is empty, a message box 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.

---

3 Tap `Add`.

The Edit Connection dialog box appears.

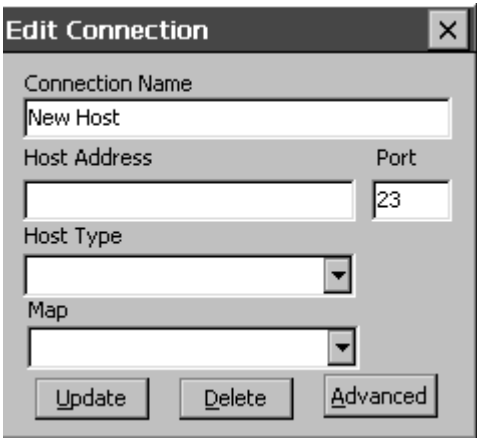


Figure 11. *The Edit Connection Dialog Box*

4 In the **Connection Name** text box, type the name for the host connection.

This value appears in the **Select Connection** field after you create the host connection.

5 In the **Host Address** text box, type the address of the host to which you want the device to connect.

This value can be a name that resolves into an IP address or the "dotted quad" IP address—for example, 128.255.1.64.

6 In the **Port** text box, type the port number to which you want the device to connect.

7 Select `Wavelink` from the **Host Type** list.

8 Tap `Update` to confirm the settings.

The Wavelink Client 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`.

Editing a Host Connection

If the parameters defining a host connection change, you can edit the host connection directly on the mobile device to ensure that your users retain access to the applications they need.

To edit a configured host connection:

1 Launch the Wavelink Client.

The Wavelink startup screen appears.

2 Select `Connect` from the **Term** menu.

The Connecting to Host dialog box appears.

3 Select the host connection you want to edit in the **Select Connection** field.

4 Tap `Edit`.

5 Edit the host connection values.

6 Tap `Update` to update the host connection.

Deleting a Host Connection

If a host connection is no longer required for a user, you can delete the host connection from the mobile device.

To delete a host connection:

1 Launch the Wavelink Client.

The Wavelink startup screen appears.

2 Select `Connect` from the **Term** menu.

The Connecting to Host dialog box appears.

3 Select the host connection you want to delete in the **Select Connection** field.

4 Tap `Delete`.

5 Edit the host connection values.

Advanced Client Configuration

The Wavelink Client for the Symbol 8100 device allows you to set advanced configuration settings. These settings include how fonts, sounds, and other options are used on the mobile device.

Wavelink Client Settings

The Wavelink Client settings control the number of rows and columns displayed on the device.

To access the Wavelink Client settings:

1 Launch the Wavelink Client.

The Wavelink startup screen appears.

2 Select `Connect` from the **Term** menu.

The Connecting to Host dialog box appears.

3 Select the host connection you want to edit in the **Select Connection** field.

4 Tap `Edit`.

The Edit Connection dialog box appears.

5 Tap `Advanced`.

The Settings dialog box appears.

6 Tap the Wavelink tab.

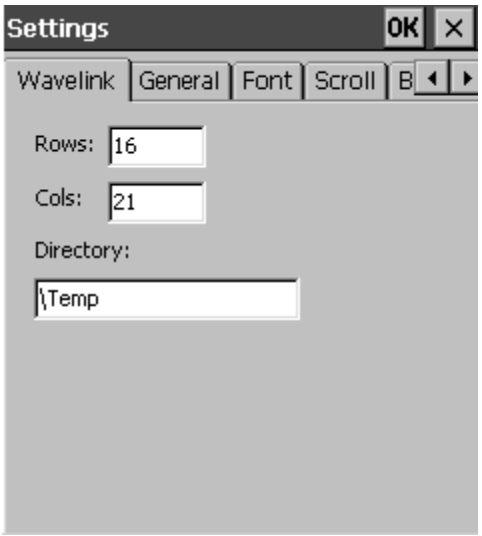


Figure 12. *The Wavelink Settings Tab*

You can configure the following options in the Wavelink tab:

Rows	Type the number of rows on the mobile device display. The default value is 16.
Columns	Type the number of columns on the mobile device display. The default value is 21.
Dir	Type the complete path where Wavelink temporary files will be stored. The default is \Temp.

General Settings

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

To access the General tab:

1. Launch the Wavelink Client.

   The Wavelink startup screen appears.

2. Select `Connect` from the **Term** menu.

   The Connecting to Host dialog box appears.

3. Select the host connection you want to edit in the **Select Connection** field.

4. Tap `Edit`.

   The Edit Connection dialog box appears.

5. Tap `Advanced`.

   The Settings dialog box appears.

6. Tap the General tab.

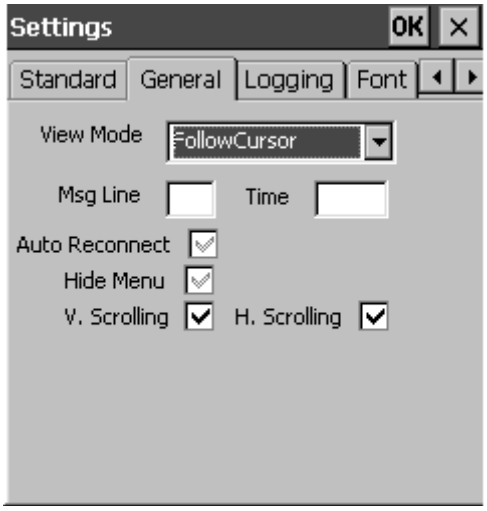


Figure 13. *The General Tab*

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 screen.

Select the **Follow Cursor** option if you want the display to "attach" to the cursor on the screen and follow it around.

Select the **Watermark** option if you want the cursor to remain fixed in the center of the screen. The screen moves in the background.

NOTE To adjust specific parameters for each view mode, see *Connecting to a Wavelink-enabled Network* on page 36 for more information.

Msg Line Specifies the line from the screen that the Wavelink Client reads to display as the message line on the screen. The row number must be from 0-24. The default row is 0. The client 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 client displays the message line.

Auto Reconnect Select this check box if you want the client 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 a session. Choosing this option is recommended should you want more screen space available for the application.

V. Scrolling Select this check box to allow your users to navigate the application with the vertical scrollbar.

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

Font Settings

The Font tab contains options that allow you to control how fonts appear on the mobile device.

To access the Font tab:

1. Launch the Wavelink Client.

   The Wavelink startup screen appears.

2. Select `Connect` from the **Term** menu.

   The Connecting to Host dialog box appears.

3. Select the host connection you want to edit in the **Select Connection** field.

4. Tap `Edit`.

   The Edit Connection dialog box appears.

5. Tap `Advanced`.

   The Settings dialog box appears.

6. Tap the Font tab.

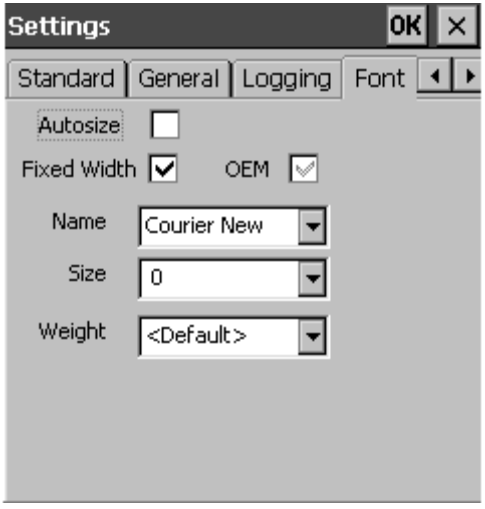


Figure 14. *The Font Tab*

You can configure the following options on this screen.

Autosize — When you enable the **Autosize** option, the Wavelink Client automatically selects the best available font size to fit the 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 Settings

The Wavelink Client includes several scroll modes that determine how screens appear on the device

To access the Scroll tab

1 Launch the Wavelink Client.

The Wavelink startup screen appears.

2 Select `Connect` from the **Term** menu.

The Connecting to Host dialog box appears.

3 Select the host connection you want to edit in the **Select Connection** field.

4 Tap `Edit`.

The Edit Connection dialog box appears.

5 Tap `Advanced`.

The Settings dialog box appears.

6 Tap the Scroll tab.

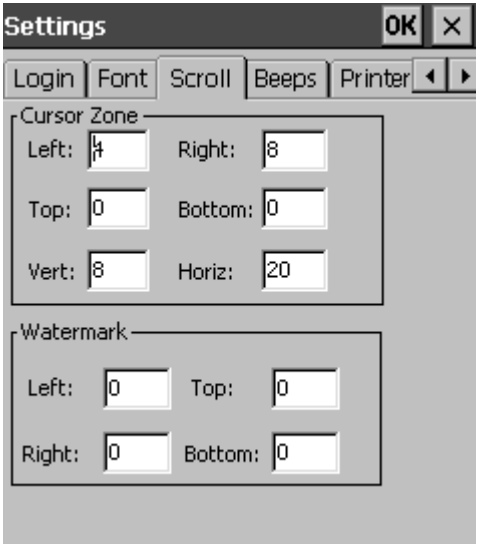


Figure 15. *The Scroll Tab*

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 screen.

Left, Right — Determine the left and right border of the cursor zone inside the 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, the Wavelink Client re-adjusts the display, centering the cursor on the 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 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, the Wavelink Client re-adjusts the display, centering the cursor on the screen. The default value is 0 for the top and bottom border.

Vertical, Horizontal — Determine the number of rows or columns the 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 fixed location in the center of the screen. The Watermark fields determine the position for the cursor on the screen.

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

NOTE You can switch between view modes during host sessions by selecting `Mode`, followed by `[view mode]` from the **View** menu on the Wavelink Client startup screen.

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

Beeps Settings

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

To access the Beeps tab:

1. Launch the Wavelink Client.

   The Wavelink startup screen appears.

2. Select `Connect` from the **Term** menu.

   The Connecting to Host dialog box appears.

3. Select the host connection you want to edit in the **Select Connection** field.

4. Tap `Edit`.

   The Edit Connection dialog box appears.

5. Tap `Advanced`.

   The Settings dialog box appears.

6. Tap the Beeps tab.

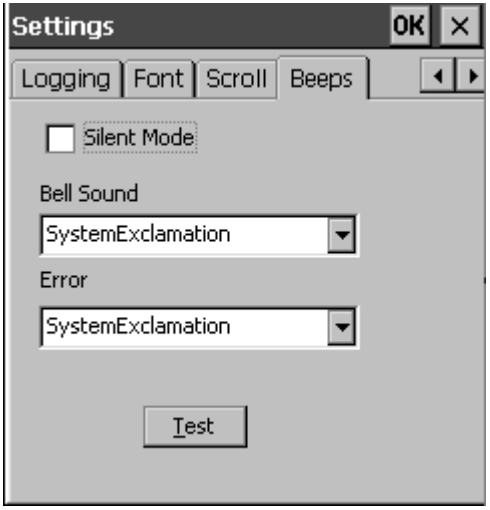


Figure 16. *The Beeps Tab*

To configure the mobile device 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.

Tap `Test` to try out new settings before you save them to the device.

Printer Settings

The Printer tab controls options related to the Intermec 700 Series printing capabilities.

To access the Printer tab:

1. From the mobile device, tap `Start` and select `TelnetCE`.

   The Wavelink startup screen appears.

2. Select `Connect` from the **Term** menu.

   The Connecting to Host dialog box appears.

3. Select the host connection you want to edit in the **Select Connection** field.

4. Tap `Edit`.

The Edit Connection dialog box appears.

5 Tap `Advanced`.

The Settings dialog box appears.

6 Tap the Printer tab.

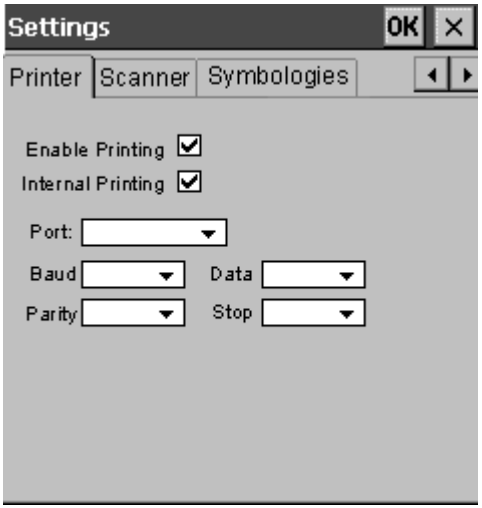


Figure 17. *The Printer Tab*

You can configure the following options on this screen:

Enable Printing	Enable this checkbox to allow the mobile device to print.
Internal Printing	Enable this checkbox to allow the mobile device to print to a file on the device.
Port	Select a port the mobile device uses to connect to a printer.
Baud	Select a baud rate the mobile device uses to send print data.
Parity	Select a parity the mobile device uses to send print data.

Data	Select the number of data bits the mobile device uses to send print data.
Stop	Select the number of stop bits the mobile device uses to send print data.

Scanner Settings

The Scanner tab controls options related to the scanner on the Symbol 8100 device.

To access the Scanner tab:

1. Launch the Wavelink Client.

   The Wavelink startup screen appears.

2. Select `Connect` from the **Term** menu.

   The Connecting to Host dialog box appears.

3. Select the host connection you want to edit in the **Select Connection** field.

4. Tap `Edit`.

   The Edit Connection dialog box appears.

5. Tap `Advanced`.

   The Settings dialog box appears.

6. Tap the Scanner tab.

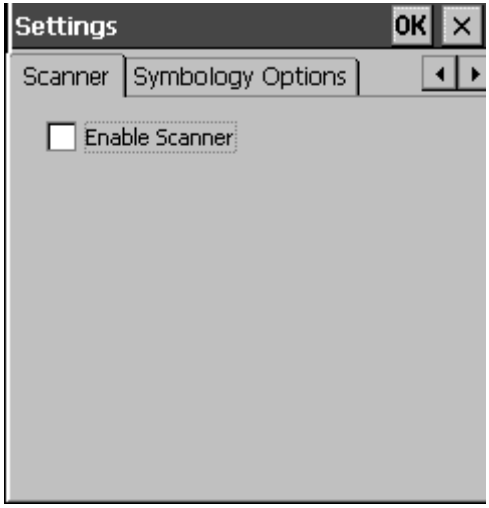


Figure 18. *The Scanner Dialog Box*

To activate the scanner, enable the **Enable Scanner** checkbox.

Symbology Settings

The Symbology tab controls options related to the symbologies used with Symbol 8100 devices.

To access the Scanner tab:

1 Launch the Wavelink Client.

The Wavelink startup screen appears.

2 Select `Connect` from the **Term** menu.

The Connecting to Host dialog box appears.

3 Select the host connection you want to edit in the **Select Connection** field.

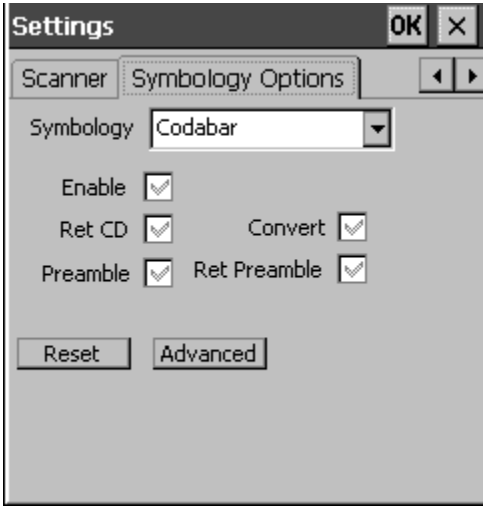
4 Tap `Edit`.

The Edit Connection dialog box appears.

5 Tap `Advanced`.

The Settings dialog box appears.

6 Tap the Symbologies tab.



You can configure the following options from this screen:

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 Wavelink Client 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 device.

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.

Ret Preamble Select this check box to return the preamble (first) character along with the scanned data.

Reset This option resets all settings for the currently selected symbology to their default values.

Advanced Click `Advanced` to configure advanced symbology options.

Advanced Symbology Options

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

Figure 18-1. *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 the Wavelink Client 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 `Reset` to reset all settings for the currently selected symbology to their default values.

Basic Click `Basic` to configure basic symbology options.

Connecting to a Wavelink-enabled Network

After you configure the Wavelink Client on a mobile device, you can use the device to connect to a Wavelink-enabled network.

To connect to a Wavelink-enabled network:

1 Launch the Wavelink Client.

The Wavelink startup screen appears.

2 Select `Connect` from the **Term** menu.

The Connecting to Host dialog box appears.

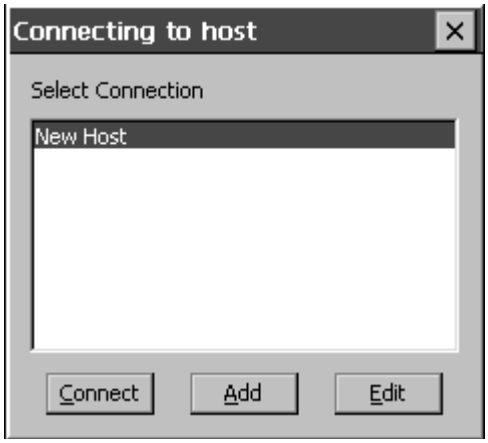


Figure 18-2. *The Connecting to Host Dialog Box*

3 Select the desired host from the **Select Host** list.

4 Tap `Connect`.

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

You can disconnect from a host by selecting `Disconnect` from the **Term** menu. This option is grayed out if there are no active host sessions.

AutoDiscovery and the Wavelink Client

The Wavelink Client for Symbol 8100 mobile devices is fully compatible with Wavelink Studio 4.0's AutoDiscovery technology. This technology allows a mobile device user to connect to applications without having to manually enter an IP address and port number of a server on the network.

To activate AutoDiscovery on the Wavelink Client:

1. Launch the Wavelink Client.

   The Wavelink startup screen appears.

2. Select `Connect` from the **Term** menu.

   The Connecting to Host dialog box appears.

3. Select a host connection from the **Select Host** list.

4. Tap `Edit`.

   The Edit Connection dialog box appears.

5. Enter an asterisk (*) in the **Host Address** text box.

6. Erase any data in the **Port** text box.

7. Tap `Update`.

To connect to a Wavelink-enabled network using AutoDiscovery:

1. Activate AutoDiscovery on the Wavelink Client.

2. Select `Connect` from the **Term** menu.

   The Connecting to Host dialog box appears.

3. Select a host connection from the **Select Host** list.

   This host connection must be configured for AutoDiscovery.

4. Tap `Connect`.

   The Wavelink Client automatically connects to the network and displays a list of available applications that do not require a password.

5. If you want to access applications that require a password, tap `Login`.

A new dialog box appears, asking you to enter a username and password.

6 Enter a correct username and password

7 Tap OK.

The Wavelink Client updates the list of available applications to include those applications that match the authorization level of your password.

External Configuration of Host Connections

The Wavelink Studio Client allows you to create external files that define host connections. External host connection configuration files can reside on the mobile device or in a remote location. To create one or more of these files within the Studio Client, you must complete the following tasks:

1 Modify the base configuration file (WLClient.cfg)

2 Create the host list file

3 Create the host detail file(s)

4 Run the client to load the configuration

NOTE To perform these tasks, you must have an ActiveSync connection with the mobile device and the Wavelink Studio Client must be installed on the mobile device.

NOTE The information in this document applies to Wavelink Studio Clients that run on the Windows CE operating system.

Modifying the Base Configuration File

The Studio Client uses a base configuration file, `WLClient.cfg`, to control the external configuration of host connections. This base configuration file is a standard text-based file that must reside in the same Windows CE directory as the the client executable, which is the Studio Client install directory.

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

This file contains the following default parameters:

```
ExternalConfigEmulator=\%s.cfg
WavelinkDeviceID=8400
AllowExit=1
InitialFullScreen=1
HideFullScreen=0
EnableVScroll=0
```

```
EnableHScroll=0
```

If the external host configuration files are to reside in the client install directory, append the following parameters to the file:

```
ExternalHostList=hosts.txt
ExternalHostDetail=%s.cfg
```

The ExternalHostList parameter defines the URL or directory for the external host list file. This file contains a list of named host connections.

The ExternalHostDetail parameter defines the URL or directory for the External Host Detail file or files. These files contain information about the specific host, such as the IP address.

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

Based on the preceding example, the WLClient.cfg file now looks like this:

```
ExternalConfigEmulator=\%s.cfg
WavelinkDeviceID=8400
AllowExit=1
InitialFullScreen=1
HideFullScreen=0
EnableVScroll=0
EnableHScroll=0
ExternalHostList=hosts.txt
ExternalHostDetail=%s.cfg
```

ExternalHostList Parameter

The ExternalHostList parameter allows you to define the name and location of the host list. If this files 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 in 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/WLClient/HostList.txt
```

See *Creating a Host List File* on page 42 for information about creating the host list file.

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.cfg
```

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

```
ExternalHostDetail=http://yourhost.com/WLClient/
GetHost.asp?Host=%s.cfg
```

The `%s` notation represents a variable that contains the name of the host detail file. For example, if a mobile device uses the `SampleConnection1` host detail file, the Studio Client uses the preceding ExternalHostDetail parameter to locate any local file named `SampleConnection1.cfg`.

NOTE In these examples, the file extension for a host detail file is `.cfg`; however, this extension is optional. You can assign any extension you want to this parameter, as long as it matches that 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.

See *Creating a Host Detail File* on page 42 for more information about creating the host detail file.

Creating a Host List File

The host list file is a standard text-based file that contains a list of named host connections. An example of a host list file is as follows:

```
#Lines beginning with a # or ; are comments
SampleConnection1=SampleConnection1
SampleConnection2=SampleConnection2
```

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.

The host names on the right are user defined and do not adhere to any naming convention. For this value, use the name of the host detail file that represents the name of the connection. In the preceding example, the Studio Client will display `SampleConnection1` and `SampleConnection2` in the *Connecting to Host* dialog box, along with any host connections manually added on the mobile device.

NOTE 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.

Save the file, name it, and place it as specified by the ExternalHostList parameter.

Creating a 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, and must match the extension defined in the ExternalHostDetail parameter (for example, .cfg). For example, if an external host list file contains the entry

```
SampleConnection1=SampleConnection1
```

Then the name of the host detail list must be `SampleConnection1.cfg` if the ExternalHostDetail parameter is defined as in the example shown previously.

An example of two host detail files are as follows:

```
# file named SampleConnection1.cfg
# this is just a comment line
Type=WAVELINK
Description=TestSuite
Host=206.151.24.170
Keymap=WAVELINK
Port=2000

# file named SampleConnection2.cfg
# this is just a comment line
Type=WAVELINK
Description=ITTracking
Host=206.151.24.170
Keymap=WAVELINK
Port=3000
```

NOTE The '#' is used to denote comment lines; these lines are not read by the Client.

A parameters that must be included in each host detail file are as follows:.

Type The Type field contains the terminal emulation type to be used when connecting to the host. This field must have the value `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. This field must have the value `WAVELINK`.

Port The Port field contains the host port to be used.

Save the file and place it into the location specified by the ExternalHostDetail parameter.

Running the Client to Load the Configuration

Once you have modified the `WLClient.cfg` file and created the other required configuration files, you can load the configuration.

To load the configuration:

1. Copy the host list file and all host detail files to the location specified in the ExternalHostList and ExternalHostDetail parameters, respectively.
2. Run the Studio Client.
3. In the Studio Client, select `Connect` from the **Term** menu.

   The new hosts appear in the dialog box.

NOTE These hosts will appear with an (E) prefix, meaning they are not editable.

Once the mobile device user selects a host connection, the Studio Client will load the corresponding host detail file.

Index

A

ActiveSync installation 5
advanced client configuration 20
  advanced symbology options 34
  beeps settings 28
  font settings 24
  general settings 21
  printer settings 29
  scanner settings 31
  scroll settings 26
  symbology settings 32
  Wavelink settings 20
advanced symbology options 34
audio messages 28
AutoDiscovery 37

B

base configuration 39
base configuration file 39
base configuration file, modifying the 39
beeps settings 28

C

client to load the configuration, running the 44
configuration file, modifying 39
configuration, running the client to load the 44
configuring 8
  advanced settings 20
  default router 13
  device IP address 10
  DHCP 14
  ESS ID 8
  for Windows CE 3.0 8
  host connections 17, 39
  subnet mask 12
connecting to network 36
creating
  host detail file 42
  host list file 42

D

default router 13
  setting 13
DHCP 14
  setting 14

E

ESS ID 8
  setting 8
external configuration 39
externalhostdetail parameter 41
externalhostlist parameter 40

F

fixed mode 28
follow cursor mode 27
font settings 24

G

gateway IP address 13
general settings 21

H

host connections 17
  creating 17
  deleting 20
  editing 19
host connections, external configuration 39
host detail file, creating 42
host list file, creating 42

I

installing
  getting started 4
  requirements 4
installing the Wavelink Client 5
IP address 19
  setting for mobile device 10

L

load the configuration, running the client to 44

P

printer settings 29

R

running the client to load the configuration 44

S

scanner settings 31
scroll settings 26
subnet mask 12
  setting 12
symbology settings 32

V

view mode 21

W

Wavelink Client
  AutoDiscovery 37
  settings 20
  starting 7
Wavelink Studio
  overview 2