

Symbol Print Manager V 1.0 User Guide



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symbol[®]
The Enterprise Mobility Company™

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1 Product Overview

The Symbol Print Manager is a mobile device application that enables the user to configure printers on Symbol mobile computers. This application reduces the overhead of connecting the mobile computer to desktop PCs to configure the printers, thereby enabling users to print on various printers (Supported by Symbol mobile computers) located at various locations.

Symbol Print Manager also provides a facility to configure several printers at a time. The Symbol Print Manager stores each configuration as a Connection. For instance, if a user wants to print to a particular printer (i.e., QL320 or OneilMF2T) with a particular transport (i.e., serial, USB, Bluetooth or S24). The Symbol Print Manager allows the user to select a printer that is supported on the mobile computer and a transport. The Symbol Print Manager displays all the settings related to the printer (fonts, page size, etc.) and settings related to the transport (baud rate, port selection, Bluetooth printer selection) so that user can modify each of them.

The Symbol Print Manager stores all the settings as a connection with a user defined name and displays them on a list called **Active Connection List**. When a connection name is selected and connected, the Symbol Print Manager rewrites the registry settings for that particular printer. In this way user can create 32 connections at a time and use a particular connection when required. The Symbol Print Manager stores all the data in non-volatile memory on the mobile computer in order to avoid data loss during a hard reset (cold boot).

1.1 **Supported Mobile Devices**

The Symbol Print Manager supports the following Symbol mobile computer:

Mobile Computer	Operating System
MC50	PPC2003SE
MC1000	CE.NET 4.2
MC3000	CE.NET 4.2
MC9000	CE.NET 4.2 and PPC2003
PDT8100 X Scale	PPC2003
PDT8800	CE.NET 4.2 and PPC2003

Note: This guide describes how to use the application on a mobile computer with a touch screen. The MC1000 does not have a touch-screen. Refer to the MC1000 User Guide for instruction on navigating applications using the keypad.

1.2 **Supported Printers**

The Symbol Print Manager supports the following printers:

- O'Neil MF2t
- O'Neil MF4T
- Monarch 9460
- Zebra QL320

2 Software Installation

2.1 *Preparation*

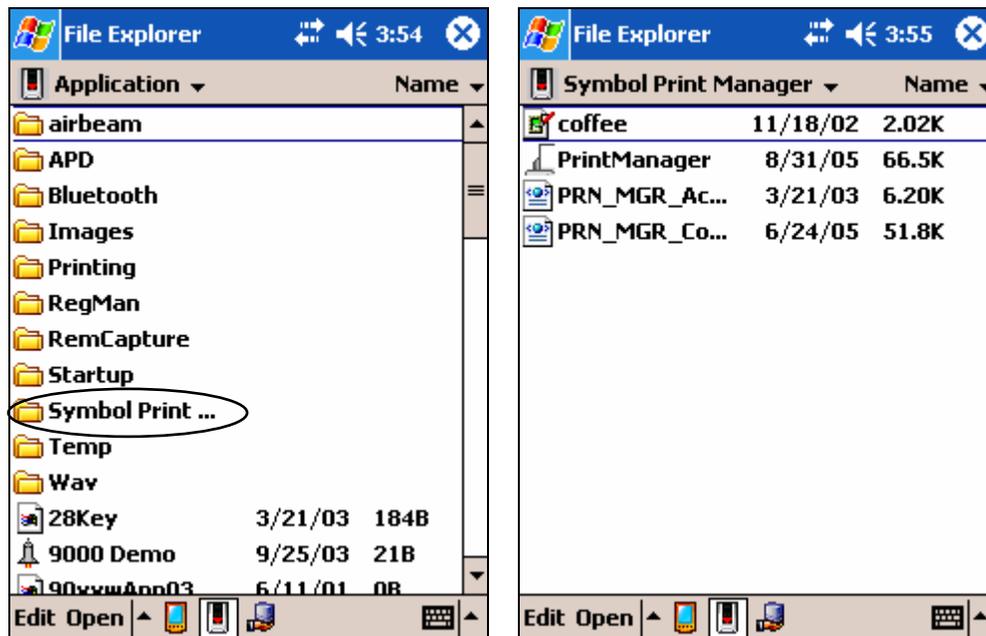
Before installing the Symbol Print Manager ensure that Symbol Printer Drivers are installed on the mobile computer. Since the Symbol Print Manger works with the Symbol Printer Drivers, it assumes that the drivers are installed on the mobile computer. It is recommended to use the latest Symbol Printer Drivers. These drivers are available on Symbol's DevZone (<http://devzone.symbol.com>).

2.2 *Symbol Print Manager Installation*

Ensure that previously installed versions of the Symbol Print Manager application in the application folder has been removed from the mobile computer. If there is an existing Symbol Print Manager application, the Symbol Print Manager automatically notifies the user. It is recommended to overwrite the previous version.

Go to Symbol DevZone (<http://devzone.symbol.com>) and download the latest Symbol Print Manager CAB file. The Symbol Printer Manager has a different CAB file for Pocket PC 2003 and Windows CE .NET 4.2 operating systems. Download the corresponding CAB file for the mobile computer.

Use ActiveSync or another synchronization software to copy the CAB file to the mobile computer. Tap the CAB file to install the Symbol Print Manager application. The CAB installs the Symbol Print Manager application in the *Application* folder along with some other required files and also creates a short cut in *Programs* folder. If any of the files are missing, re-install the application.



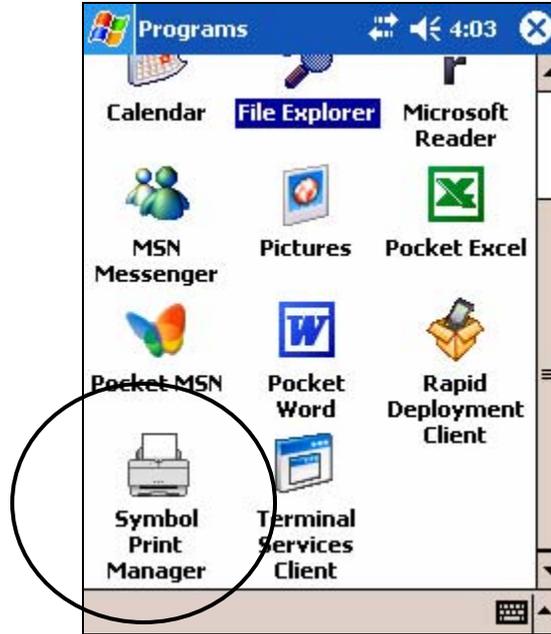


Figure 1. Symbol Print Manager Icon.

3 Using the Symbol Print Manager Application

Once the Symbol Print Manager application is installed, tap the **Print Manger** icon from programs folder. The Symbol Print Manager launches and performs initialization.

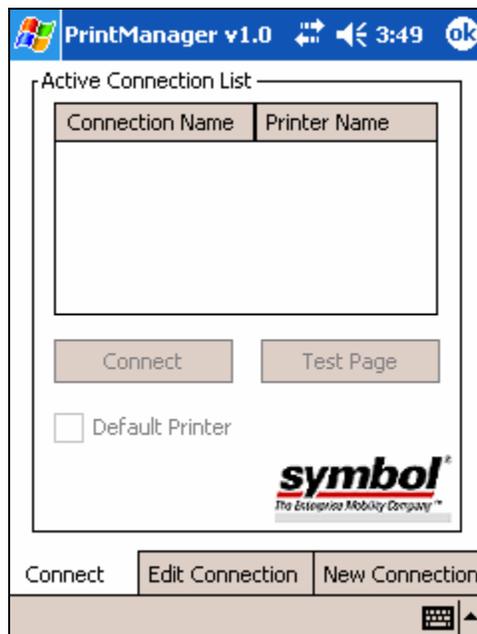


Figure 2. Print Manager Window

Tap the **New Connection** tab to create a new connection.

3.1 New Connection Window

The **New Connection** window allows the user to create a new connection. In the **Enter Connection Name** text box, enter a connection name. The connection name is limited to 16 characters.

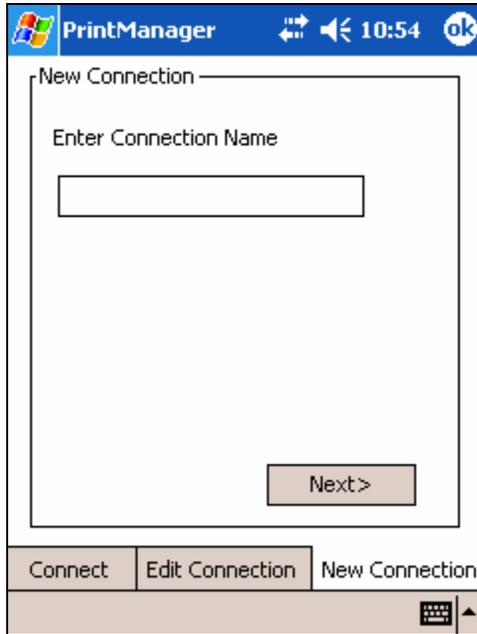
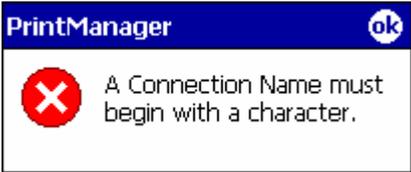
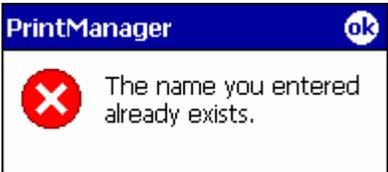
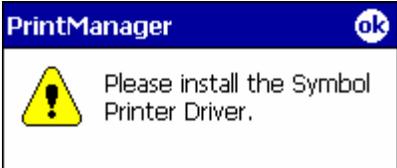
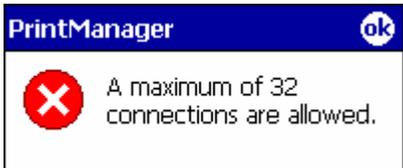


Figure 3. New Connection Window

Tap **Next**. The **Printer Wizard** window appears. See the Printer Wizard window section for more information.

3.1.1 Error and User Messages

Error	User Message
<p>This error message appears when the user entered a connection name that begins with a numerical or a special character and taps the Next button. The connection name must start with an alpha character.</p>	
<p>This error message appears when the user entered a connection name that already exists in the connection list and tap the Next button.</p>	

Error	User Message
<p>This error message appears when there the user enters a connection name with blank spaces and taps the Next button.</p>	
<p>This error message appears when the Symbol Printer Drivers are not installed. Install Symbol Printer Drivers and launch the Symbol Print Manager application again.</p>	
<p>This error message appears when the 32 connections are already in the list and a new one is trying to be created. The user can either go to the edit window and remove a connection or not create any more connections.</p>	
<p>This error message appears when the user has not entered any connection name and selects Next. The user cannot proceed without entering a valid connection name.</p>	
<p>This error message appears when the user has entered a valid name and selects Next. It indicates that there are no printers installed. The user should install the Symbol Printer Drivers again.</p>	
<p>This error message appears when the user enters a connection name which has characters other than integers and alphabets and tap the on NEXT button.</p>	

3.2 Printer Wizard Window

After clicking **Next** in the *New Connection* window, the **Printer Wizard** window appears.

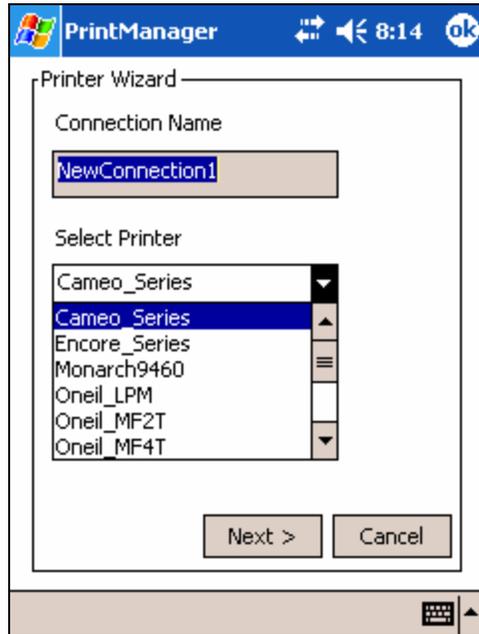


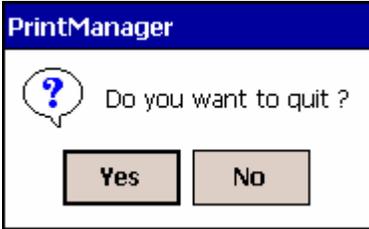
Figure 4. Printer Wizard Window

The **Connection Name** text box displays the connection name that was assigned in the **New Connection** window. The user cannot modify the connection name.

In the **Select Printer** drop-down list box, select a printer.

Tap **Next**. The Printer Settings window appears. For more details on printer settings window refer to the printer settings section.

3.2.1 Error and User Messages

Error	User Message
<p>This error message appears when the user wants to quit the set-up wizard. Tap Yes to exit the wizard. Tap No to return to the same window.</p>	
<p>This error message appears indicating that there was a problem with the installation files for the Symbol Print Manager. In order to avoid this verifies that all the installation files are present. If not then delete and reinstall Print Manager application again.</p>	

3.3 Printer Settings Window

Printer Settings window consists of parameters that are related to the selected printer. All the parameter values that are initially displayed are default values. The user can change the values according to the printer requirements.

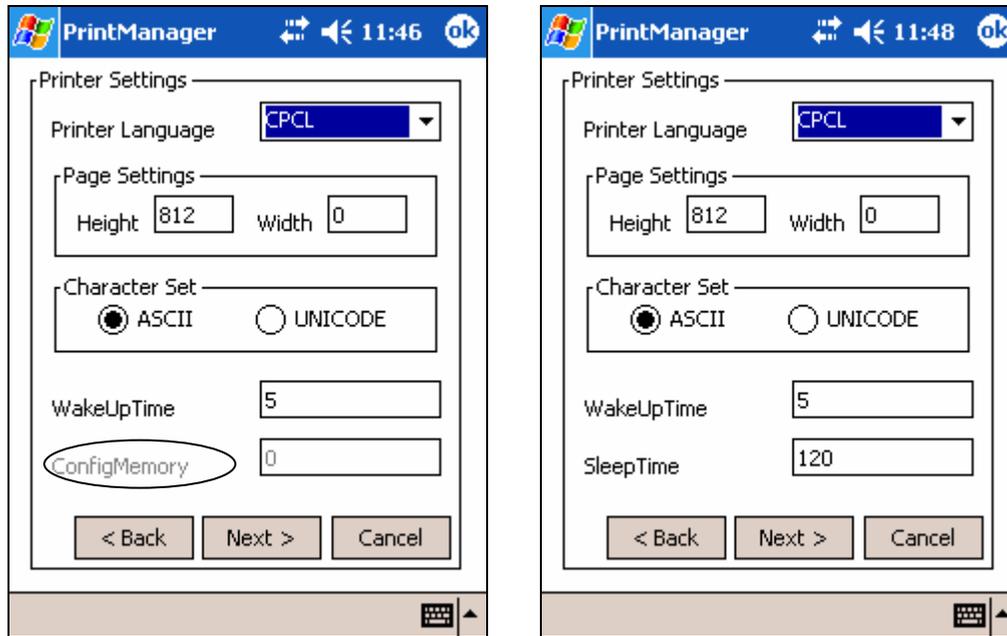


Figure 5. Printer Settings Window Before and After Selection of Language

The **Printer Language** list box lists all the various languages supported by the selected printer. Depending on the language selection the parameters change. For instance, when the user selects **CPCL**, the **ConfigMemory** field that was disabled changes into **Sleep Time** as show in **Figure 6**.

The **Page Settings** group box has two page parameters; height and width. Only positive integers are valid. It is the responsibly of the user to make sure that the appropriate values are entered.

The **Character Set** group box enables the user to select whether to send **ASCII** or **UNICODE** values to the printer. This is reserved for future use.

Wakeup Time text box allows the user to change the wake up time for the printer (in seconds). Only positive integers are valid.

NOTE: Perform a self-test on the printer before editing the parameter values.

Depending on the printer or language selected the last field may change. All the possible values are shown in the table below. If a printer is selected which does not use this control it is disabled. All these scenarios are shown in the Figures 7 through 9.

Table 1. Printer Controls

Printer Name / Language	Parameter Name	Parameter Value	Value type
CPCL (language)	Sleep Time	120 default	Any positive integer
Monarch 9460 or 9490	ConfigMemory	1 or 0	One or zero only
Veyee printer	ScaleBitmap	1 or 0	One or zero only
Default (Disabled)	ConfigMemory	0	None

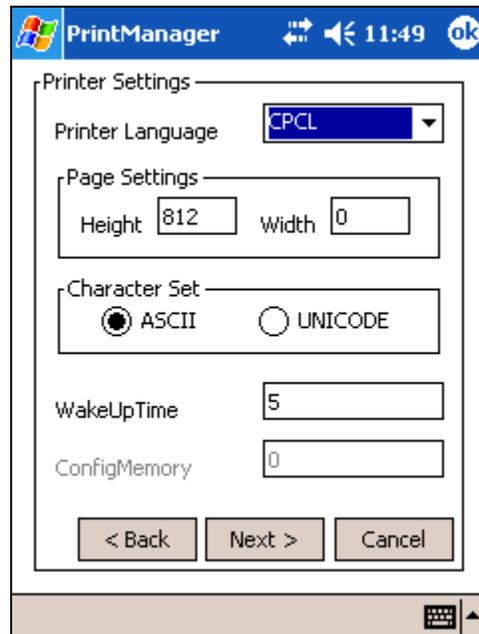


Figure 6. Printer Language Default

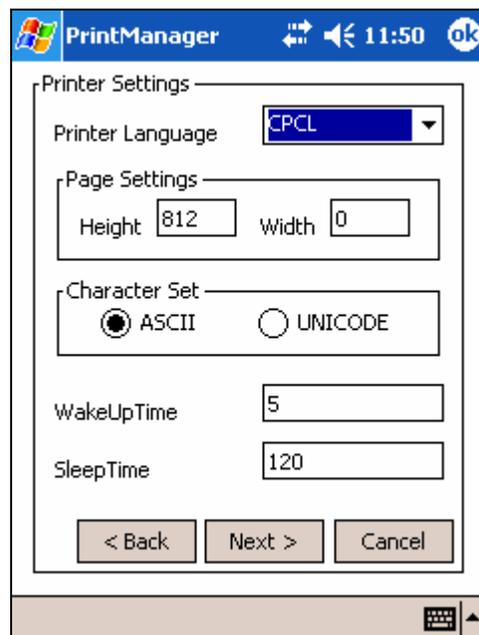


Figure 7. CPCL Printer Language

NOTE: In order to view the changes depending on the language selection we recommend user select the language even if the supported language is listed and is highlighted.

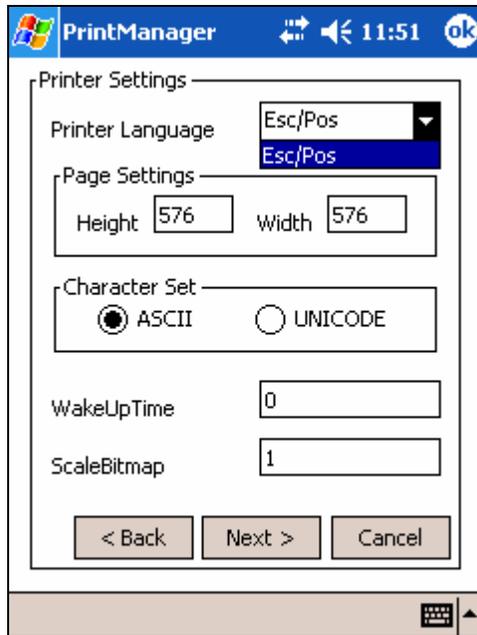


Figure 8. ESC/POS Printer Language

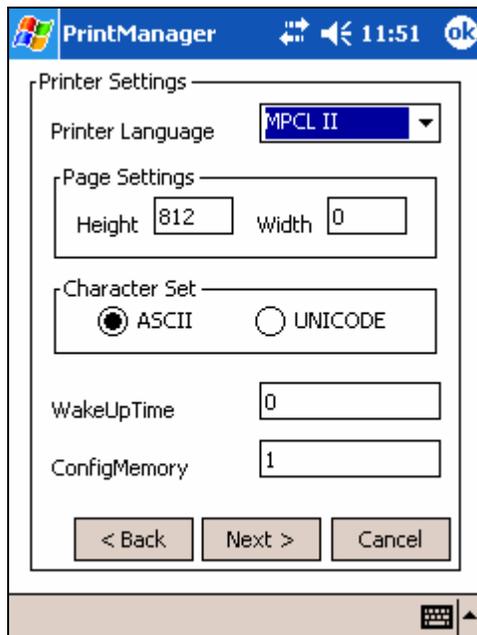


Figure 9. MPCL II Printer Language

Tap **Next**. The **Font Settings** window appears.

3.4 Font Settings Window

The **Font Settings** window lists all the fonts that are supported by the selected printer. The user selects the font and change the font height and width. Tap **Apply** to update the changes. Refer to the printer's user manual to determine the range between which the values are valid.

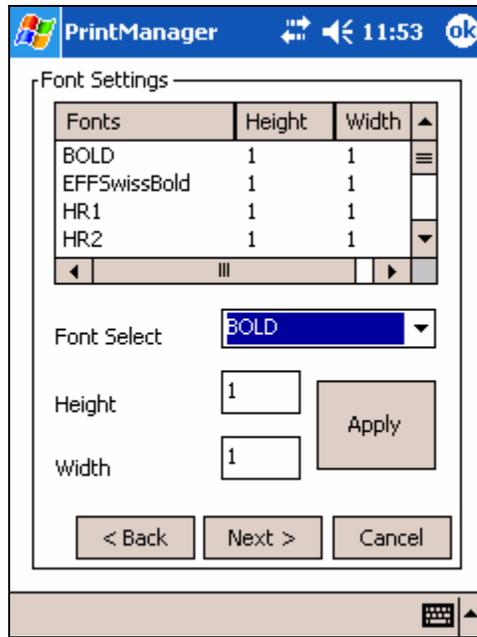


Figure 10. Font Settings Window

To change the font width and height:

1. Select a font from the **Font Select** drop-down list.

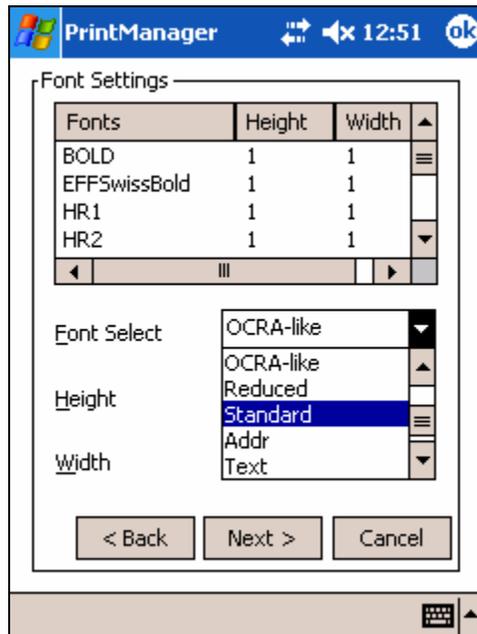


Figure 11. Font Settings Window

2. In the **Height** and **Width** text boxes enter the required values. The values used are random values. Refer to the printer's user manual for the exact range of the supported values.

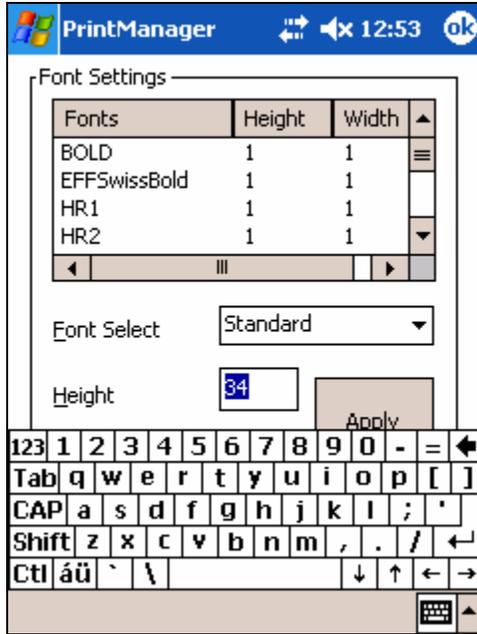


Figure 12. Editing Height and Width Values

3. Tap **Apply** to update the changes. Tap **Yes** to save the changes.

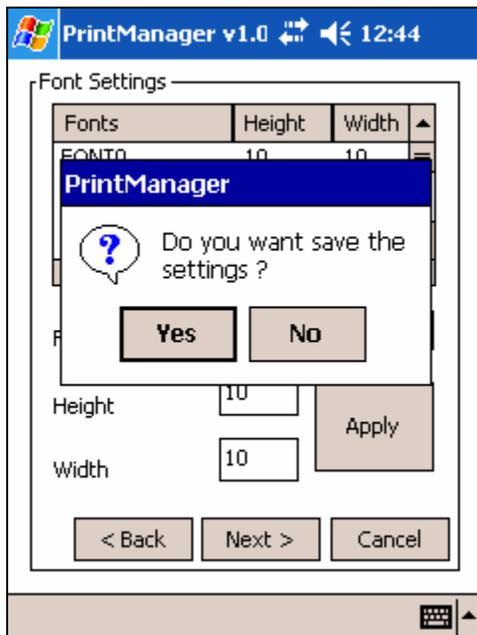


Figure 13. Confirm Dialog Box

4. Verify that the changes are updated in the font list.

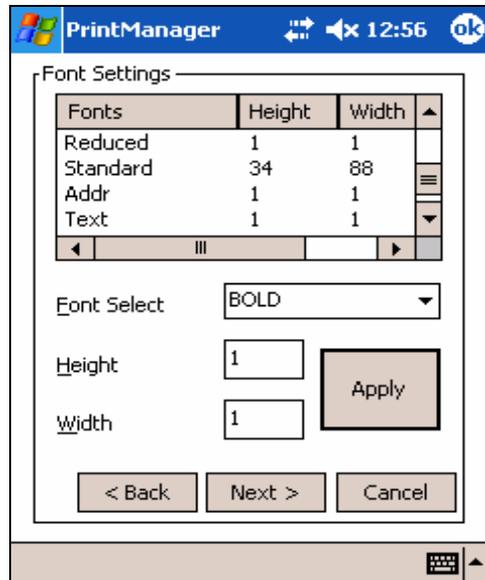


Figure 14. Font Settings Window with Updated Values

5. Tap **Next** . The **Transport Wizard** window appears.

3.5 Transport Wizard Window

The **Transport Wizard** window lists all the transports that the printer and the mobile computer support. For example, if a printer that can print via Bluetooth, serial and S24 but the mobile computer can only support Bluetooth and serial, the drop-down list displays only Bluetooth and serial.

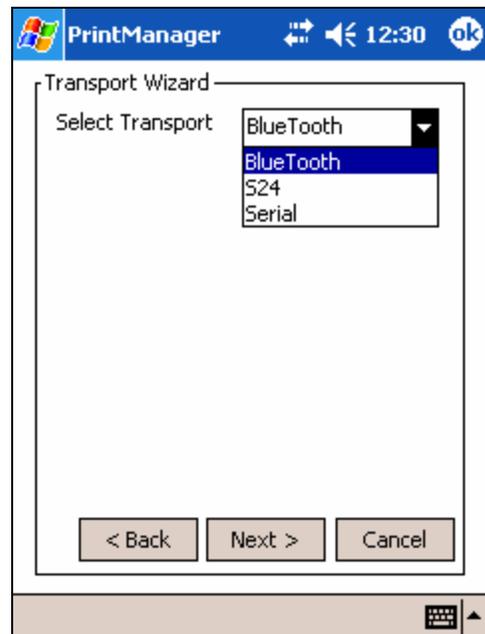


Figure 15. Transport Wizard Window

The Symbol Print Manager application supports the following transport methods:

[Serial](#)

[S24](#)

[IrDA](#)

[Bluetooth](#)

[USB](#).

Tap **Next**. The **Serial Settings** window appears.

3.6 Serial Settings Window

The **Serial Settings** window displays all the various parameters that are specific to the Serial transport. Users can change these parameters depending on the printer's requirements.

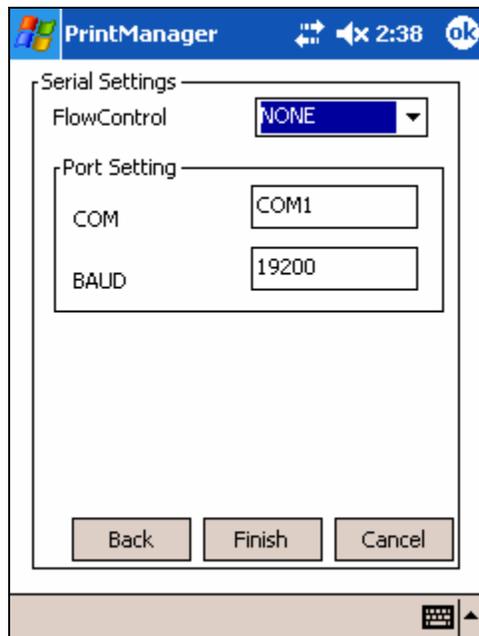


Figure 16. Serial Settings Window

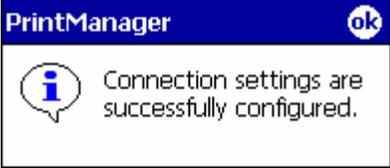
COM - Allows the user to change the COM port.

Baud Rate - Allows the user to change the communication baud rate. Value must be a positive integer.

Tap **Finish** to save the settings. The new connection name and the printer on which the connection is made are listed in the **Active Connection List** in the **Connect** window.

3.6.1 Error and User Messages

Error	User Message
<p>This error message appears when the user has left the Baud Rate or COM field empty. This baud field expects the user to input a positive integer value and the COM field expects the user to enter a valid COM port name.</p>	

Error	User Message
<p>This message appears when the user has tapped Finish. This message implies that all the configuration information was success fully saved and is ready to use.</p>	

3.7 S24 Connection Settings Window

The **S24 Connection Settings** window displays all the parameters that are specific to the S24 transport. The user enters the Device IP address of the printer and the Device port (Communication port from which data to be sent). Symbol Print Manager application assumes that both the mobile computer and the S24 printer are configured to the same Access Point while using infrastructure mode or both the printer and the mobile computer are communicating in Ad Hoc mode.

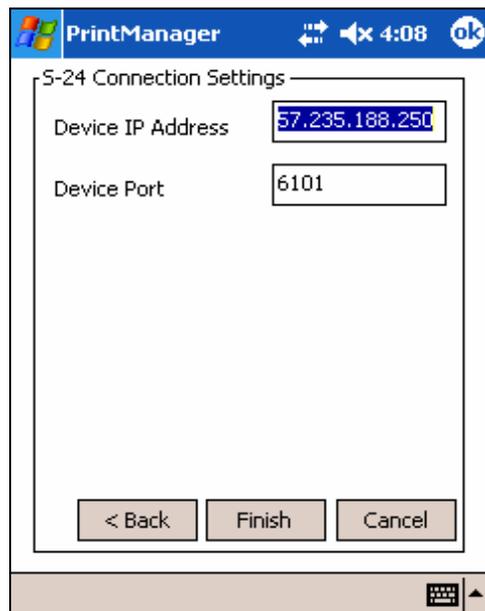
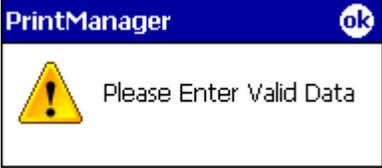
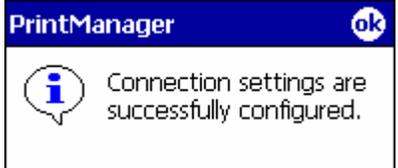


Figure 17. S24 Connection Settings Window

Tap **Finish** to save the settings. The new connection name and the printer on which the connection is made are listed in the **Active Connection List** in the **Connect** window.

3.7.1 Error and User Messages

Error	User Message
<p>This message appears if the Device IP Address field or Device port field are empty or user has entered an invalid IP address.</p>	
<p>This error message appears when the user has left empty the Device Port field or entered text. The Device port field expects the user to enter a positive integer value.</p>	
<p>This message appears when the user tapped Finish. This message indicates that all the configuration information was successfully saved and is ready to use.</p>	

3.8 IrDA Settings Window

The **IrDA Settings** window has only one parameter setting, Device Port (Communication Port from which data to be sent).

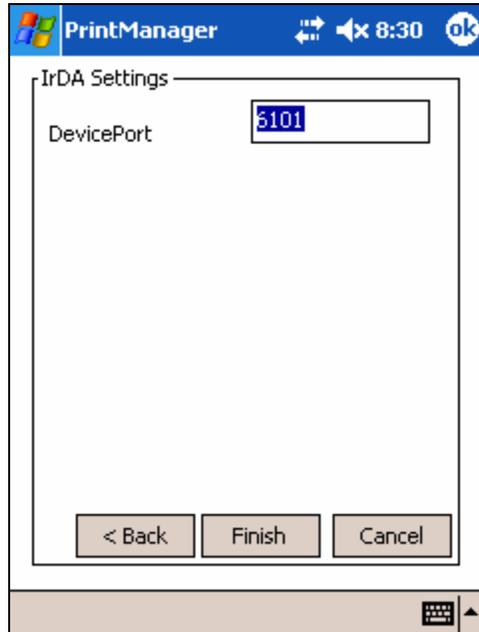
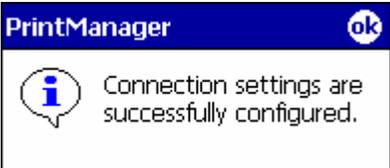


Figure 18. IrDA Connection Settings Window

Enter the communication port value and tap **Finish** to save the settings. The new connection name and the printer on which the connection is made are listed in the **Active Connection List** in the **Connect** window.

3.8.1 Error and User Messages

Error	User Message
<p>This error message appears when the user has left empty the Device Port field or entered text. The Device Port field expects the user to enter a positive integer value.</p>	
<p>This user message appears when the user tapped Finish. This message indicates that all the configuration information was successfully saved and is ready to use.</p>	

3.9 USB Connection settings Window

When **USB** is selected as the transport there are no user configurable parameters.

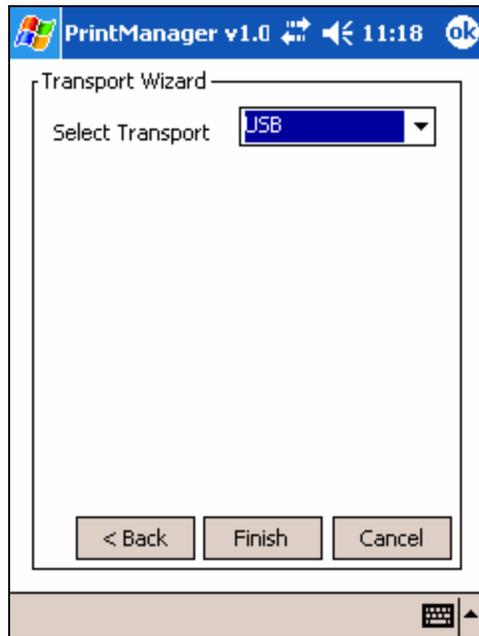


Figure 19. USB Transport

Tap **Finish** to save the settings. The new connection name and the printer on which the connection is made are listed in the **Active Connection List** in the **Connect** window. 3.9.1 Error and User Messages

Error	User Message
<p>This user message appears when the user tapped Finish. This message indicates that all the configuration information was successfully saved and is ready to use.</p>	

3.10 Bluetooth Connection Settings Window

The **Bluetooth Connection Settings** window allows the use to search for the all the Bluetooth devices in the area. This window also allow user to configure some of the parameters according to the printer's requirement.

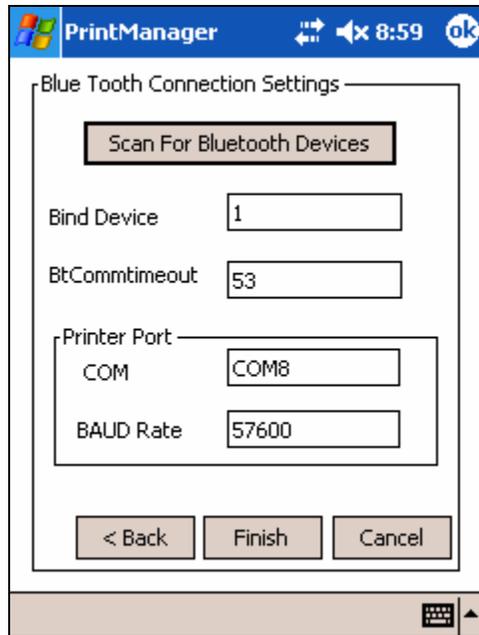


Figure 20. Bluetooth Settings Window

Bind Device - this parameter can have either **one or zero**. If set to one the values are stored for printing next time (device is bound to the printer after printing), if set to zero the values are deleted and the user has to connect the connection once again in order to print again (device is unbound after printing).

BtCommTimeout - this parameter is used for timeout configuration. It is always in **milliseconds**. This field expects a **positive integer**.

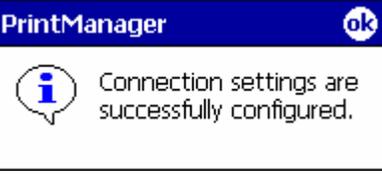
COM - this edit box allows the user to change the COM port name. It is recommended not to change this value.

Baud Rate - this text box allows the user to change the communication baud rate. It expects a **positive integer**.

Tap **Scan For Bluetooth Devices** to search for Bluetooth devices. For more details about this window please refer to the section Bluetooth Scan window.

Tap Finish to save all the settings in a file if the user has scanned for a Bluetooth device in the other case it will pop up a message **Please Scan for Bluetooth Devices**. The new connection name and the printer on which the connection is made are listed in the **Active Connection List** in the Connect window.

3.10.1 Error and User Messages

Error	User Message
<p>This error message appears when the user taps Finish with leaving COM or Baud Rate fields empty. The Bluetooth Connection wizard does not allow the user to finish until user enters valid data.</p>	
<p>This error message appears when the user has left empty the Bind Device or BtCommtimeout fields or entered text. The BtCommtimeout field expects the user to enter a positive integer value and the Bind Device field expects the user to enter 1 or 0.</p>	
<p>This message appears when the user tapped Finish. This message indicates that all the configuration information was success full saved and is ready to use.</p>	

3.10.2 Bluetooth Scan Window

The **Bluetooth Scan** window allows user to scan for Bluetooth devices in the area.

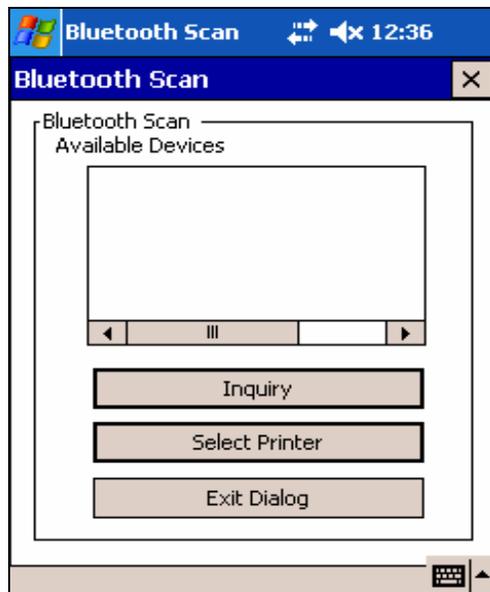


Figure 21. Bluetooth Scan Window

1. Tap **Inquiry** to start the search. Once the search has started the **Inquiry** button change to **Stop** and the window titles changes to **Inquiry Running....**



Figure 22. Searching for Bluetooth Devices

2. The search is carried out in two phases. In the first phase, only the **MAC address** is shown and then **service discovery protocol (SDP) analysis** on the MAC address reveals the name of the device and the channel on which to communicate to the device.

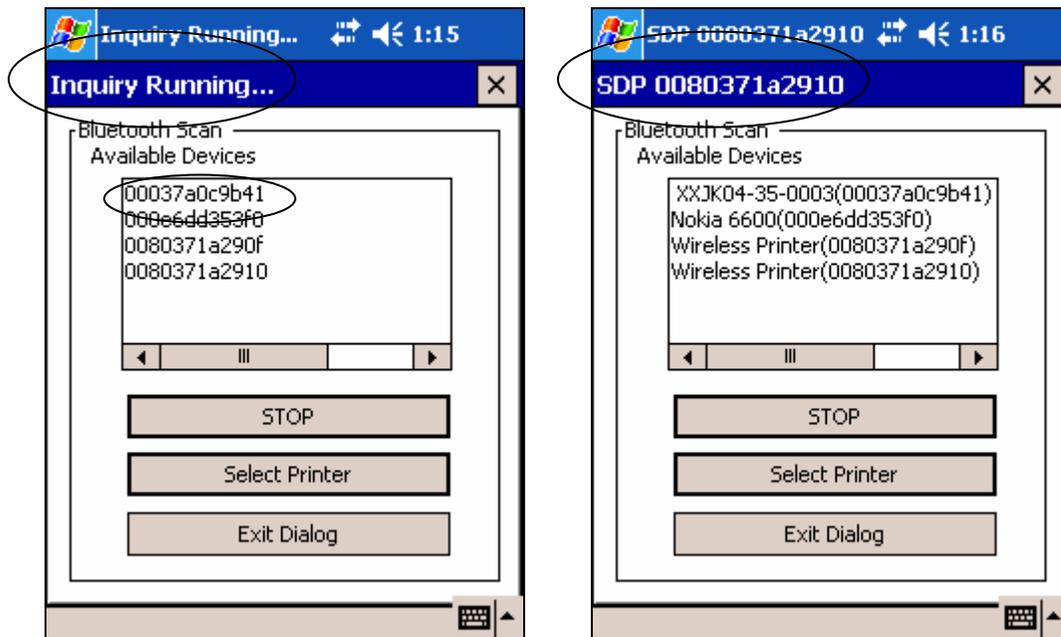


Figure 23. Available Devices

The window on the left shows all the Mac address of all the available devices and the window on right shows the SDP being performed on Mac address to reveal the device name and channel for communication.

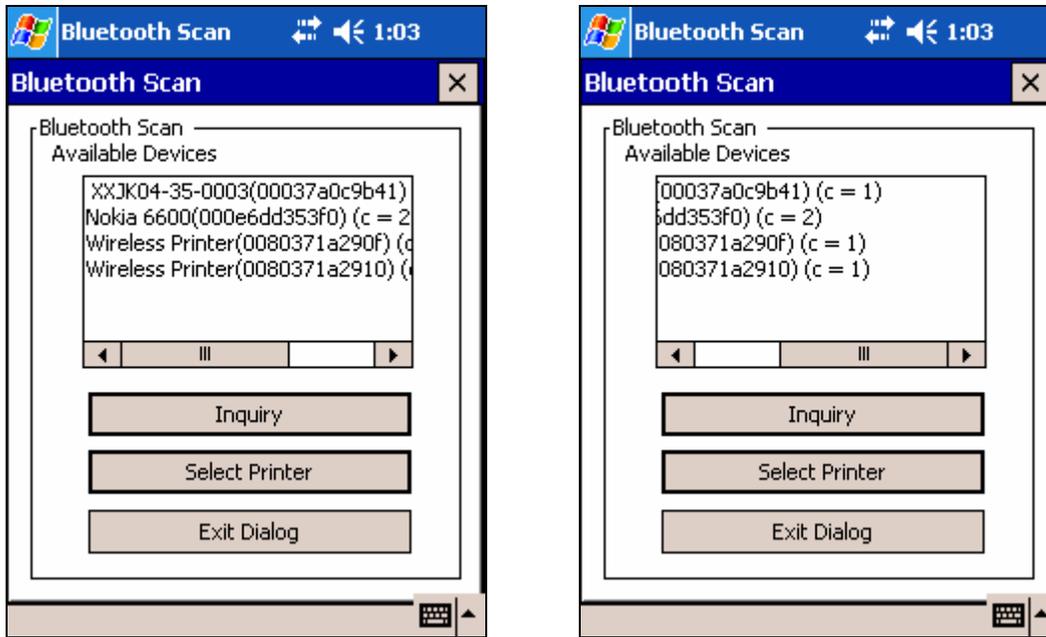


Figure 24. Available Devices

The window on left shows the printer name and on right shows the channel.

It is recommended that the user wait until the name and channel displays and the window caption changes to **Bluetooth Scan**.

The user can choose to stop the inquiry by tapping **Stop** at any time during the search process. If **Stop** is tapped the window caption changes to **Stopping...** and then returns to the original window.

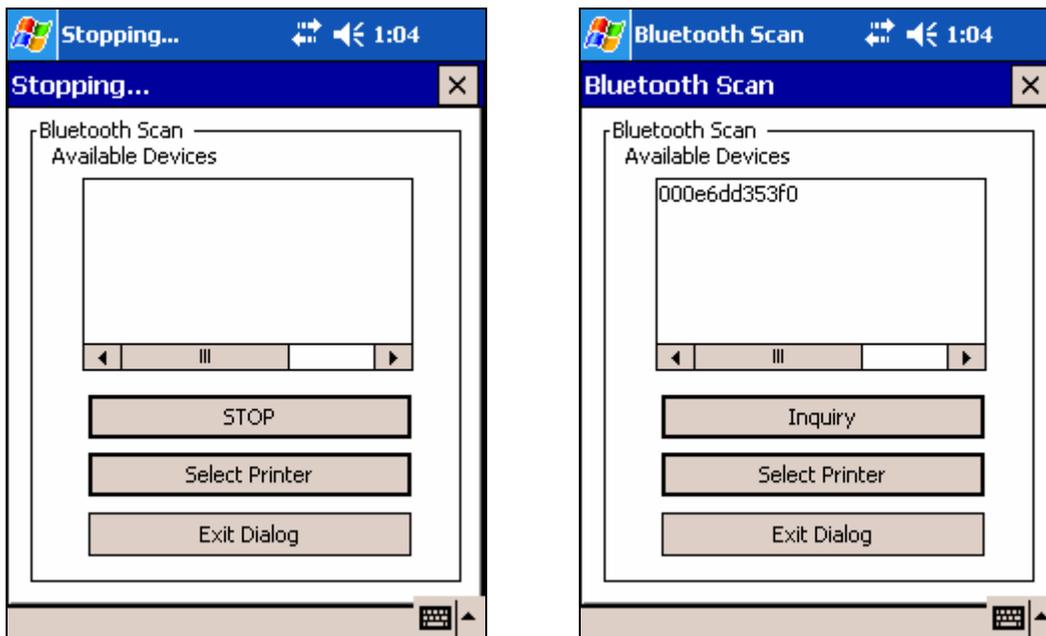


Figure 25. Stopping Bluetooth Scan

Once the Bluetooth scan is completed, select a printer from the list box and tap **Select Printer**.

If the user has clicked the **Select Printer** button without the scan finished the caption of the window changes to **Stopping Search...**. If the channel information is missing a dialog box requesting the Bluetooth channel appears and waits for the user to enter the channel number. The Channel Number is a number from 0 to 31. Tap **Exit Dialog** to return to the **Bluetooth Connection Settings** window.



Figure 26. Stopping a Bluetooth Search

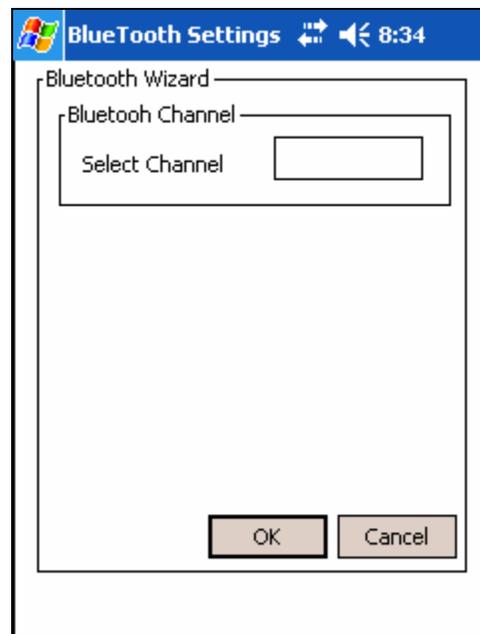


Figure 27. Channel Selection Window

Tap **Finish** to save all the settings in a file. The new connection name and the printer on which the connection is made are listed in the **Active Connection List** in the **Connect** window.

NOTE: Once a connection was created ensure that the printer is switched on and operational.

4 Symbol Print Manager Connect Window

The **Connect** window allows user to create a new connection, edit an existing connection and to connect a connection. It also provides the facility to set a connection as a default.

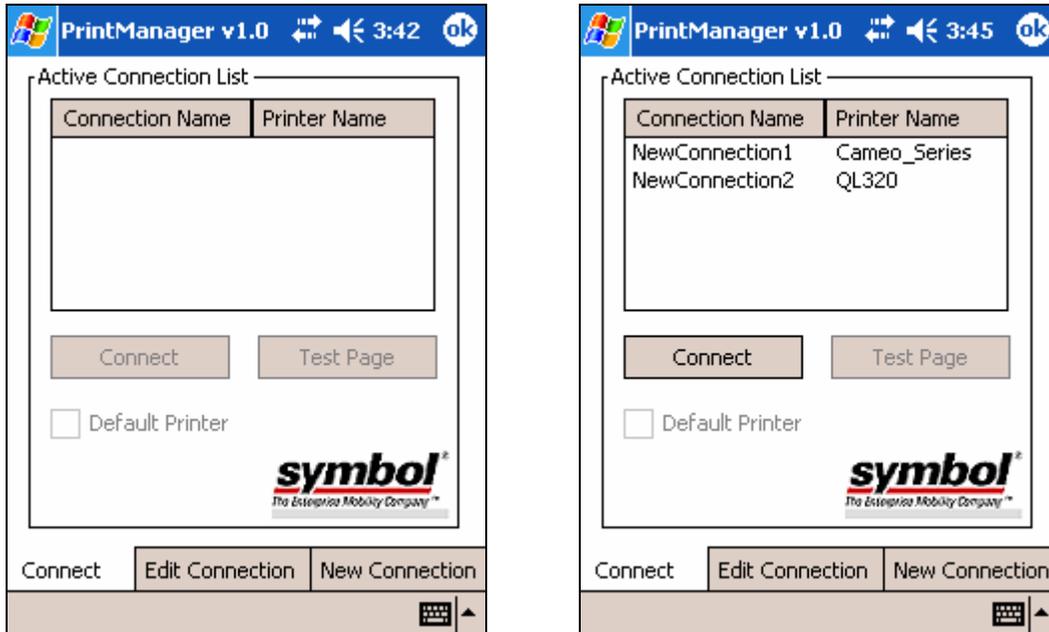


Figure 28. Symbol Print Manager Connection Window

The **New Connection** window is a property page with options to edit and to create a new connection. The connect property page mainly consist of a list box called as **Active Connection List**, two buttons connect and **Test page** and a check box named **Default Printer**.

The **Active Connection List** has two columns; **Connection Name** and **Printer Name**. Connection names are user defined names for a particular connection and printer names are names of the printer on which the corresponding connection is made.

For example, the right window in the above figure, **NewConnection1** is the user defined connection name, which was made with the **QL320** printer. It indicates that user has configured the QL320 printer settings as per the printer requirements and named it as NewConnection1. Similarly, **NewConnection2** with Oneil_MF2T and **NewConnectio3** with **RW420**. The user can create up to 32 connections on various printers at a time.

Tap **Connect** is to rewrite the registry with the user-defined settings (explain what this means or the outcome of this action).

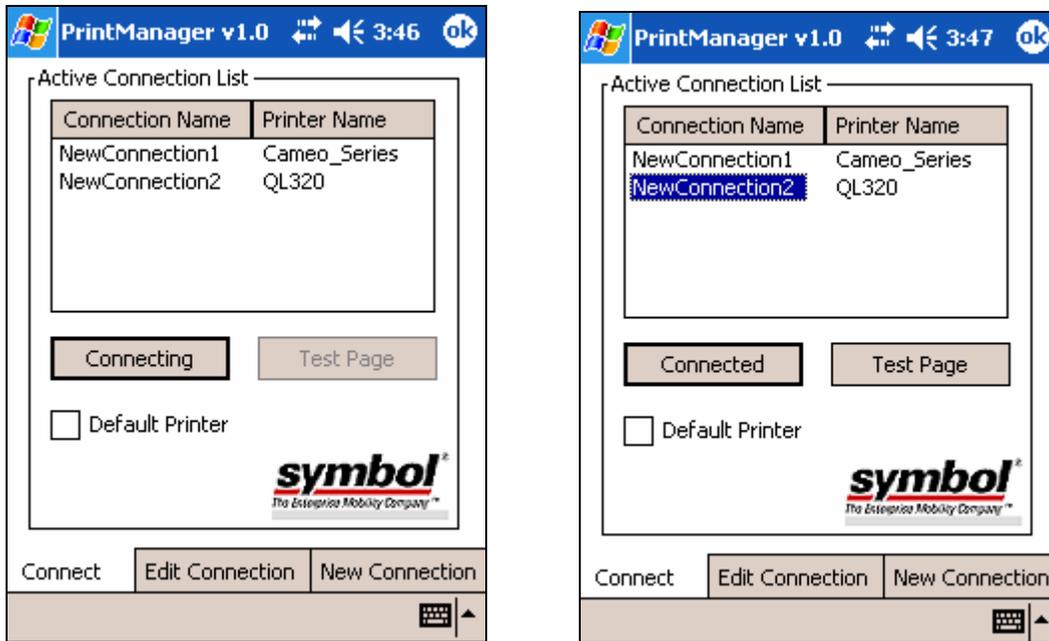


Figure 29. Connect Window

Tap **Test Page** to print a sample label or test page with all the supported features (Bar code, polyline, text, or bitmap) to the printer.

Tap **Edit Connection** tab to edit a connection property page. See Edit Connection section for further information.

Tap **New Connection** tab to create a new connection. See New Connection section for further information.

Default Printer check box allows user to set a connection as a default connection. The Symbol Printer Drivers provide a facility to set a particular printer as a default printer which allows it to print to that printer in case where the print API are called without specifying the printer name. By using this default connection the user can change default printer used by the Symbol Printer Driver to a particular printer. On selecting a connection and checking the check box Print Manger requests the user to confirm the changes. If the user selects **Yes** then only the changes are saved.

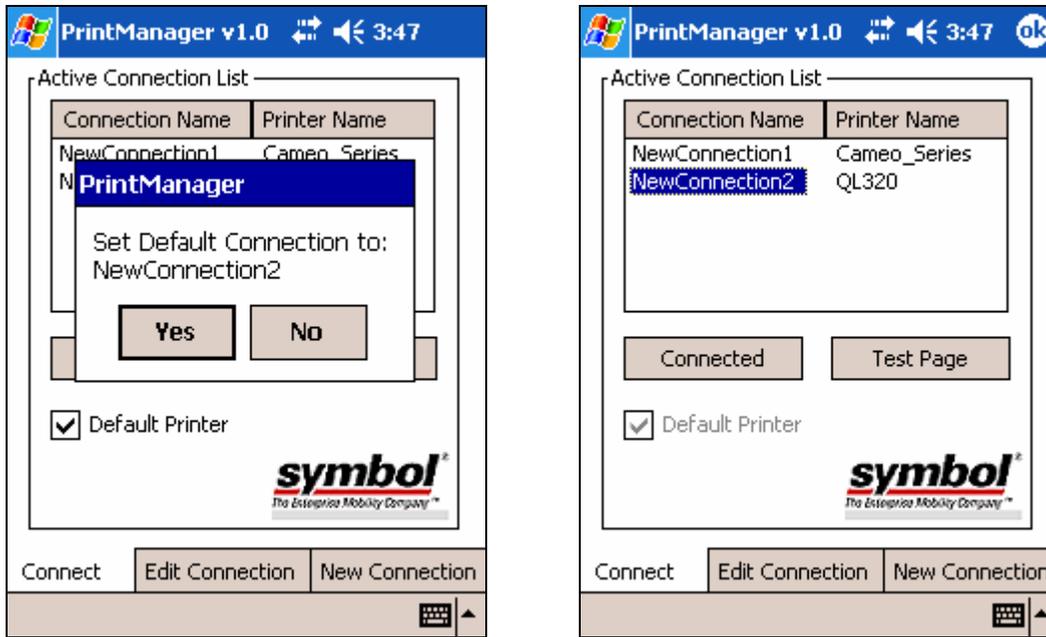


Figure 30. Selecting a Default Printer

If the selection is moved away from the default printer the check box is unchecked allowing the user to change the default printer if needed. This figure below shows the status of the checkbox when a connection other than default connection is selected.

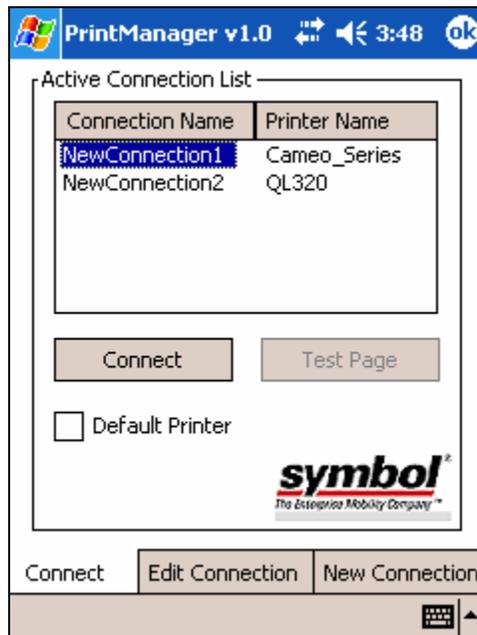


Figure 31. Non-Default Printer Selected

5 Edit Connection Window

The **Edit Connection** window allows the user to edit a previously created connection setting.

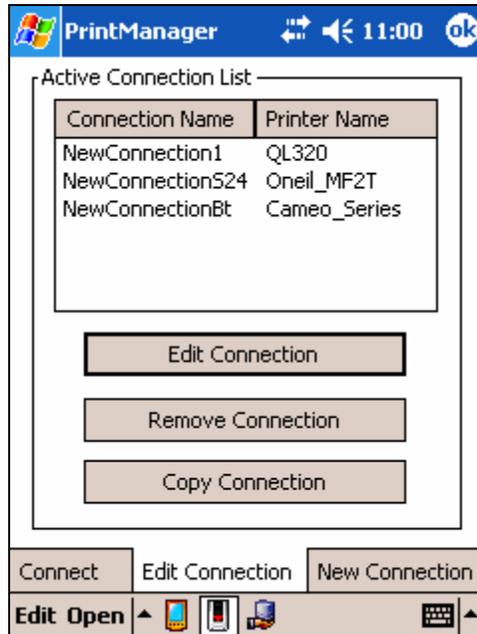


Figure 32. Edit Connection Window

Select a Connection Name and tap Edit Connection . The **Printer Wizard** window appears allowing the user to change the settings. The Symbol Print Manager does not allow the user to change the printer language and the transport while editing the connection. The user can change the printer settings in **Printer Settings** window, font settings in **Font Settings** window and transport settings on which the connection was made. While editing a connection with Bluetooth transport, the Symbol Print Manager allows the user to scan for a new device or use the same device, which is already configured.

5.1 Remove Connection

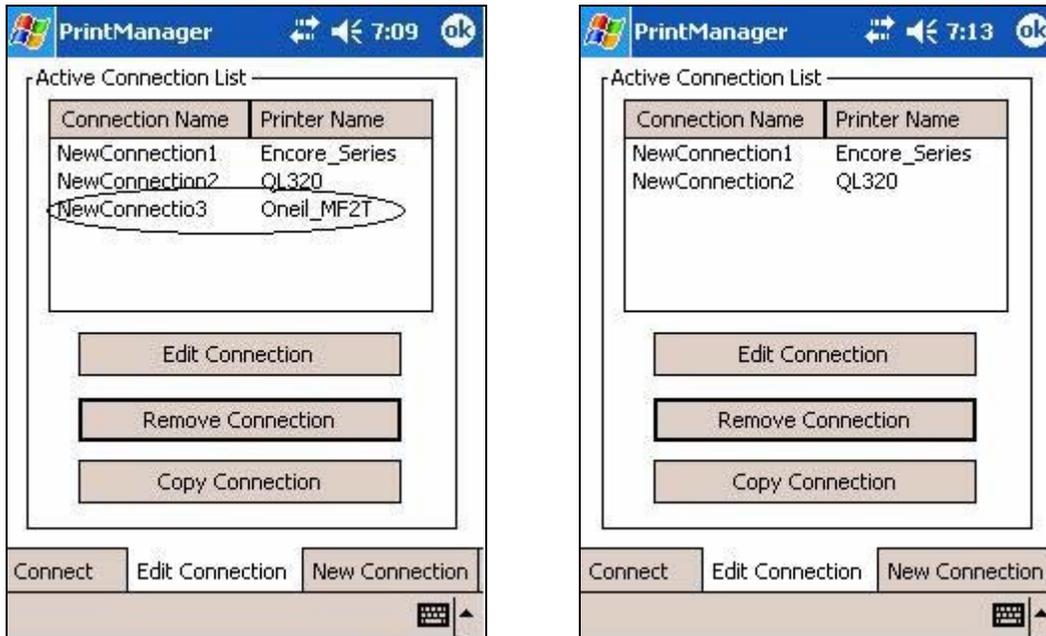


Figure 33. Edit Connection Window Remove Connection

To remove a connection, select a connection from the **Active Connection List** and tap **Remove Connection**. The selection is removed from the list. It does not reset or delete registry entries that are made by this connection. The registry entries are overwritten again when the user makes a new connection on the same printer and connects it from connect window.

5.2 Copy Connection

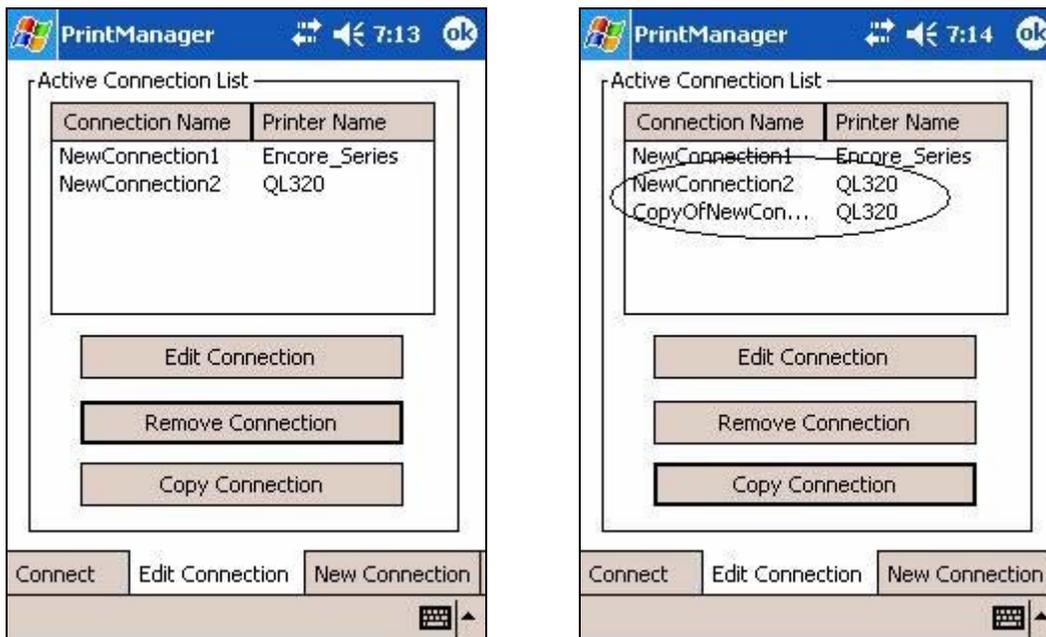


Figure 34. Edit Connection Window Copy Connection

To copy a connection, select a connection from the **Active Connection List** and tap **Copy Connection**. A copy of the connection is made and displayed in the **Active Connection List**. Copy connection actually makes a copy connection in the storage file. Any changes that are made to the original connection are not reflected in the new connection. For instance if user has created a connection, **NewConnection2**, and user has made a copy of it, copy connection creates another connection with the name **CopyOfNewConnection2**. Any modification made to **NewConnection2** is not reflected in **CopyOfNewConnection2**. The connection name cannot be more than 16 characters in length. If it exceeds 16 characters the last characters are truncated. For example, **NewConnection1** is the connection name and if the user makes a copy of it the name is **CopyOfNewConnect**.

5.2.1 Error and User Messages

Error	User Message
<p>This error message appears if the user selected any one of the three buttons Edit Connection, Remove Connection or Copy Connection without selecting a connection.</p>	
<p>This message appears once the user has selected a connection and selected Remove Connection and confirms that the connection is successfully removed.</p>	
<p>This message appears once the user has selected a connection and selected Copy Connection. This message confirms that the connection is successfully copied.</p>	