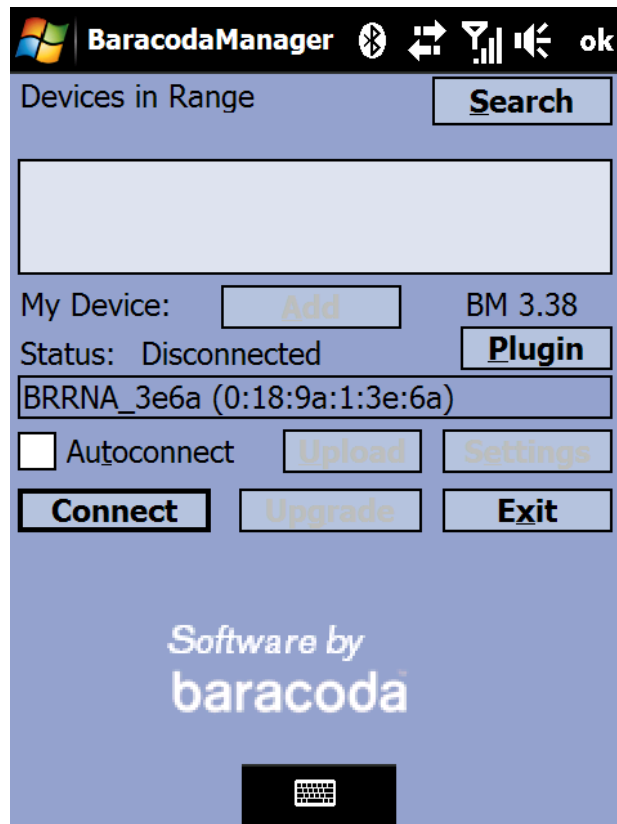


# BM and BM C&S for PDA User Guide

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# SUMMARY

<b>SUMMARY</b> .....	<b>2</b>
<b>REVISION HISTORY</b> .....	<b>3</b>
<b>INTRODUCTION</b> .....	<b>4</b>
<b>1. OVERVIEW</b> .....	<b>5</b>
1.1. LAUNCHING THE BARCODAMANAGER .....	5
1.2. MAIN WINDOW BUTTONS (CLASSIC BARCODAMANAGER) .....	7
1.3. MAIN WINDOW BUTTONS (BARCODAMANAGER CONNECT AND SCAN) .....	8
<b>2. GETTING STARTED</b> .....	<b>9</b>
2.1. CLASSIC BARCODAMANAGER .....	9
2.2. BARCODAMANAGER CONNECT AND SCAN .....	12
2.3. CONNECTION STATUS .....	15
<b>3. FUNCTIONS</b> .....	<b>16</b>
3.1. ADDING/REMOVING A BARCODE READER (CLASSIC BARCODAMANAGER) .....	16
3.2. ADDING/REMOVING A BARCODE READER (BARCODAMANAGER CONNECT AND SCAN) .....	16
3.3. DISCONNECTING A BARCODE READER .....	16
3.4. SETTING PARAMETERS OF A BARCODE READER .....	16
<b>4. BARCODE READER CONFIGURATION</b> .....	<b>17</b>
4.1. GENERAL SETTINGS TAB .....	17
4.2. SYMBOLOGY SETTINGS TAB .....	18
4.3. RFID SETTINGS TAB .....	19
4.4. TIMER SETTINGS TAB .....	20
4.5. PREFIX AND SUFFIX SETTINGS TAB .....	21
4.6. SIGNATURE CAPTURE TAB .....	22
4.7. BLUETOOTH AND SCAN ENGINE SETTINGS TAB .....	24
<b>5. UPLOADING DATA STORED IN BATCH MODE</b> .....	<b>26</b>
5.1. UPLOADING BARCODE/RFID DATA AND SIGNATURE CAPTURES .....	28
<b>6. FIRMWARE UPGRADE</b> .....	<b>29</b>
<b>7. PLUGINS</b> .....	<b>31</b>
7.1. TERMINAL PLUGIN .....	32
7.2. KEMUL PLUGIN .....	33
7.2.1. PDA KEYBOARD SETTINGS .....	34

## Revision History

Changes to the original manual are listed below.

<b>Document</b>	<b>Date</b>	<b>Description</b>
3.34	08th July 08	Initial release
3.34.1	1st August 08	Connect and Scan added
3.34.2	10th September 08	Connect and Scan supported readers dialog added
3.34.3	15th October 08	Connect and Scan code text modified
3.35	23rd December 08	Version incremented
3.36	3rd March 09	DualRunners added, RFID settings added
3.36.3	10th September 09	Version update
3.37	23rd February 10	Version update, image/signature capture added
3.38	23rd November 10	Version update

## Introduction

The **BaracodaManager for PDA** software allows the user to easily operate their barcode reader(s), including:

- Connecting automatically to the barcode reader(s) that the user wants to use
- Inserting scanned barcodes to a selected field in the client application (KEmul plugin) or displaying them (Terminal plugin)
- Setting a barcode reader(s) parameters (PIN code and others)
- Uploading barcodes saved in a barcode reader(s) memory.
- Upgrading a barcode reader(s) firmware

Requirements (classic version):

- OS: PPC 2002, PPC2003, PPC2003SE, WM5, WM6
- Broadcom/Widcomm Bluetooth stack - version 1.3.x.x or newer
- Microsoft Bluetooth stack

Requirements (Connect and Scan version):

- OS: PPC2003, PPC2003SE, WM5, WM6
- Microsoft Bluetooth stack
- Product & firmware :
  - BaracodaPencil 2: firmware v1.34 or newer
  - D-Fly: firmware v1.34 or newer
  - RoadRunners Evolution: firmware v1.34 or newer
  - DualRunners

**Note: the Connect and Scan version of the BaracodaManager works only with the following reader models: BaracodaPencil2 (firmware version 1.34 or newer), D-Fly (firmware version 1.34 or newer), Baracoda Roadrunners Evolution (firmware version 1.34 or newer), DualRunners.**

**HTC users should check the “KEmul plugin” section for instructions regarding the keyboard settings that help to avoid keyboard emulation problems.**

This document assumes that the user has already installed the **BaracodaManager for PDA** on their device. For more information about the installation, please refer to the **BaracodaManager for PDA Installation Guide**.

The **BaracodaManager for PDA** can be downloaded from the Partners download section of Baracoda website (registration is required):

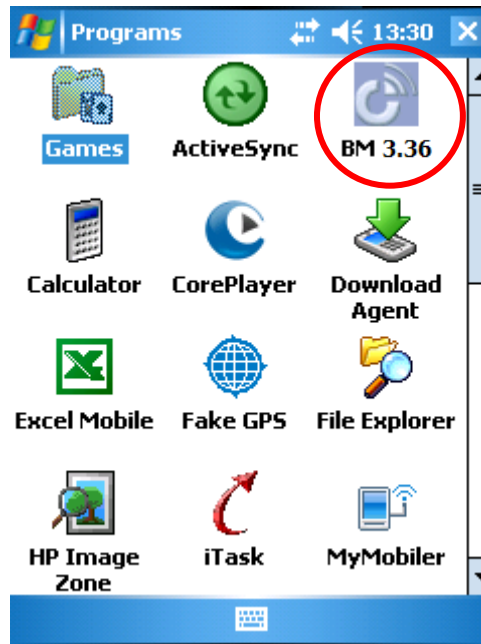
<http://www.baracoda.com>

# 1. Overview

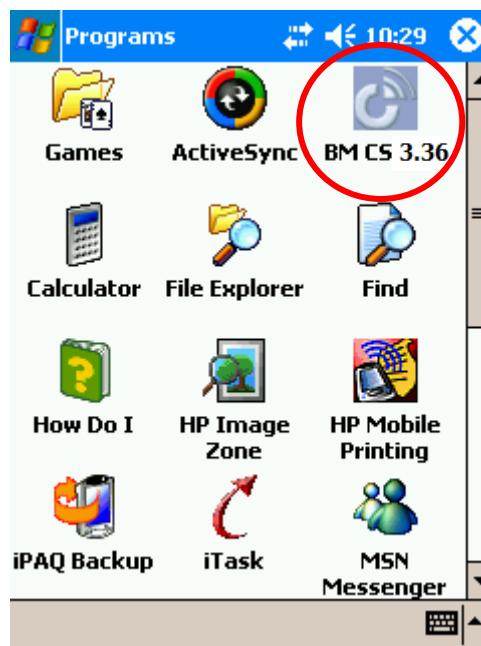
## 1.1.Launching the BaracodaManager

Once installed, the **BaracodaManager for PDA** creates a shortcut in the Programs menu:

- classic version



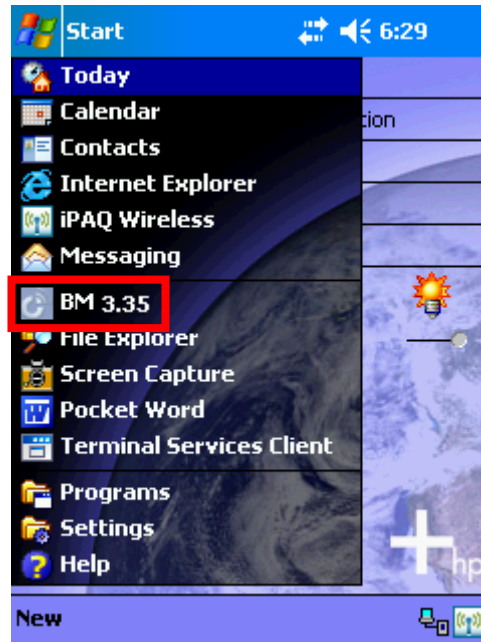
- Connect and Scan version



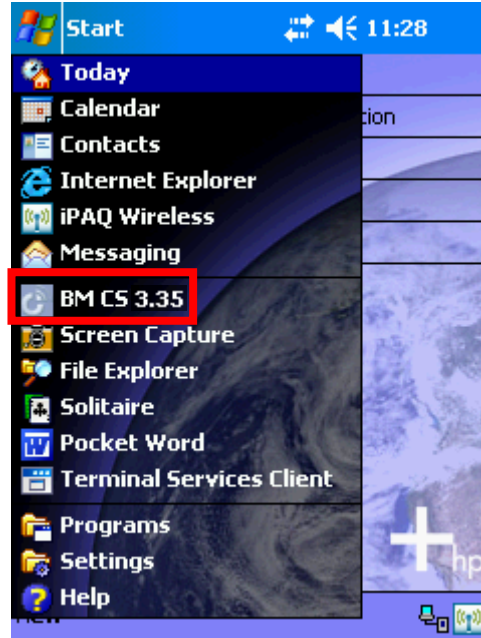
The user can click the shortcut in order to run the BaracodaManager.

If the BaracodaManager has been started at least once, the PDA will also show its icon directly on the Start menu:

- classic version

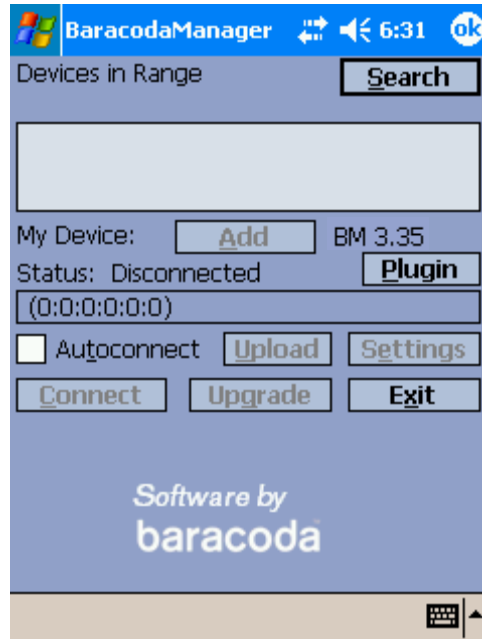


- Connect and Scan version:



## 1.2.Main window buttons (classic BaracodaManager)

When the BaracodaManager is started, the user is shown the main application window:

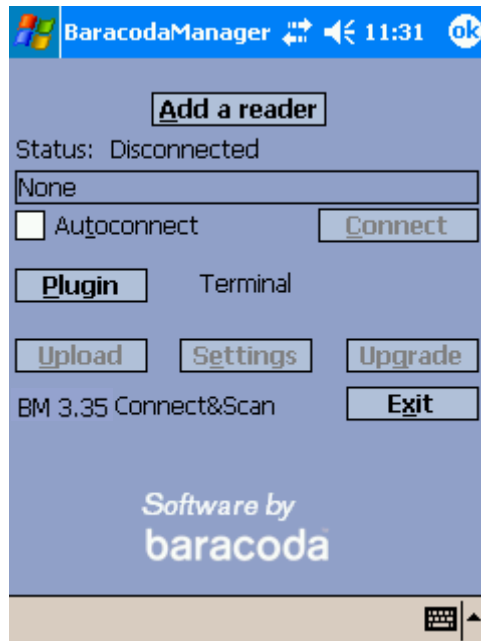


The table below shows the main functions available in the **BaracodaManager** main window (for details, see the [Functions](#) section):

Button	Corresponding action
Search	Find all discoverable barcode readers (which are within the Bluetooth radio signal range).
Add	Choose the barcode selected in the “Devices in Range” list as the default one and connect it.
Plugin	Select the plugin for the connected reader.
Settings	Set the parameters of the selected barcode reader.
Disconnect/Connect	Disconnect a barcode reader or connect a disconnected barcode reader.
Upload	Upload barcodes previously stored in the selected barcode reader’s non-volatile memory.
Upgrade	Upgrade the firmware of the connected reader.
Exit	Quit the BaracodaManager and save information on the configured barcode reader(s). The Bluetooth radio connections are closed. The barcode reader(s) switches to stand-by mode.
Autoconnect checkbox	Set the autoconnect mode for the barcode reader: the BaracodaManager automatically tries to connect to the barcode reader.

### 1.3.Main window buttons (BaracodaManager Connect and Scan)

When the BaracodaManager is started, the user is shown the main application window:



The table below shows the main functions available in the **BaracodaManager** main window (for details, see the [Functions](#) section):

Button	Corresponding action
Add a reader	Shows the connect barcode that can be used to automatically connect the reader to the BaracodaManager.
Autoconnect checkbox	Set the autoconnect mode for the barcode reader: the BaracodaManager automatically tries to connect to the barcode reader.
Disconnect/Connect	Disconnect a barcode reader or connect a disconnected barcode reader.
Plugin	Select the plugin for the connected reader.
Settings	Set the parameters of the selected barcode reader.
Upload	Upload barcodes previously stored in the selected barcode reader's non-volatile memory.
Upgrade	Upgrade the firmware of the connected reader.
Exit	Quit the BaracodaManager and save information on the configured barcode reader(s). The Bluetooth radio connections are closed. The barcode reader(s) switches to stand-by mode.

## 2. Getting started

### 2.1. Classic BaracodaManager

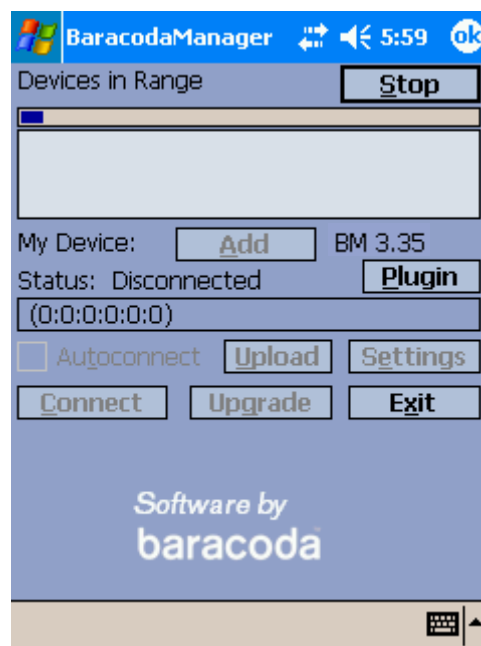
This section shows the user how to configure the classic version of **BaracodaManager** to connect and use their barcode reader(s).

To configure the barcode reader:

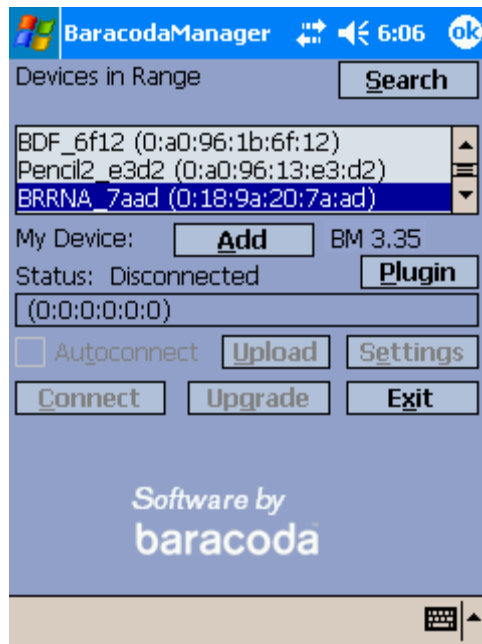
1. Turn on the barcode reader and the PDA on which the **BaracodaManager** has been installed.
2. Start the **BaracodaManager** using its shortcut. The **BaracodaManager** window appears:
  - the "Devices in Range" section of the window lists the barcode reader(s) the Baracoda Manager finds within Bluetooth radio range
  - the BaracodaManager displays a progress bar just below the above list while it searches for discoverable barcode readers

Note: if the user has already run the **BaracodaManager** and configured their barcode reader, they should go to step 9 below.

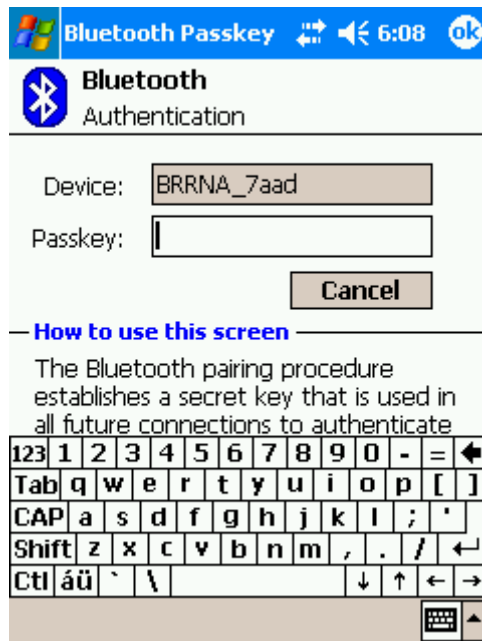
The screenshot below shows the main BaracodaManager window while the application is searching for Baracoda Bluetooth readers:



Once the active readers have been found, they are shown in the “Devices in Range” list:



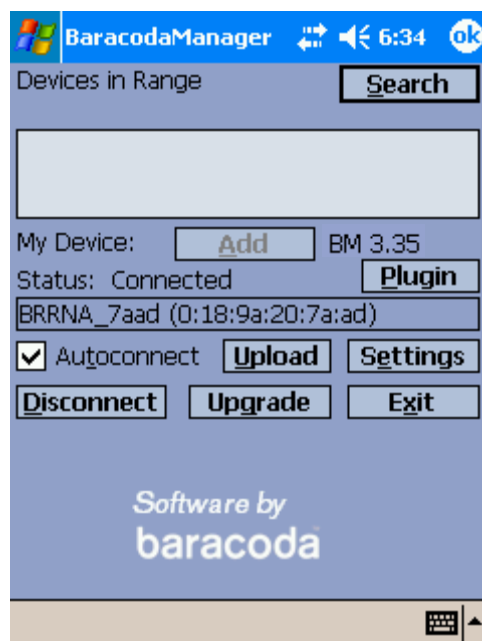
3. Select a barcode reader (in the “Devices in Range” list) by clicking on it, then click on the “Add” button. A Bluetooth PIN window appears:



4. Enter the barcode reader PIN/Passkey code (by default: "0000" – see [Functions](#) section to change the code).



5. The **BaracodaManager** is now configured with the user's barcode reader and the **BaracodaManager** main window displays:
  - the Autoconnect box is checked. The BaracodaManager will try to automatically connect to the barcode reader at the beginning of the next session.
  - the barcode reader name and Bluetooth address.
  - the connection status of the barcode reader. The Status field switches from Disconnected to Connecting, then to Connected showing the user that the barcode reader is ready to use.



6. To change the plugin to be used for the barcode reader:
  - Click the Plugin button. A dialog window appears.
  - Select a plugin.

7. When the user ends the first session of the **BaracodaManager**, they should click Exit to save the barcode reader Bluetooth address for future sessions. The **BaracodaManager** will reconnect to the barcode reader when it is restarted, even if the user ends sessions of the **BaracodaManager** by switching off the computer instead of clicking the Exit button.
8. When the user starts the **BaracodaManager** again:
  - the **BaracodaManager** tries to reconnect the barcode reader which were previously configured (paired) and for which the Autoconnect mode is set (checkbox situated left of the Upload button is checked).
  - as soon as the Search button is clicked, the **BaracodaManager** searches for all discoverable barcode readers which are in the Bluetooth radio range and are in listening mode. This is true when there are no configured readers yet.
9. Repeat steps 2 to 5, to add any newly discovered barcode reader(s) to “My Paired Devices”.

Notes:

If the user switches off a barcode reader (with the reset switch or through time-out) and they switch it on again, the **BaracodaManager** reconnects to the barcode reader. In the situation where the “Real time” mode and “No data loss mode” options are enabled (see [Functions](#) section: Setting parameters), if the user takes the barcode reader out of range (more than 15-70 meters from the computer, depending on the Bluetooth emission power) and the connection is lost, the barcode reader will store any scanned barcode(s). When the user brings the reader back within range, the **BaracodaManager** reconnects automatically and the stored barcodes are then uploaded.

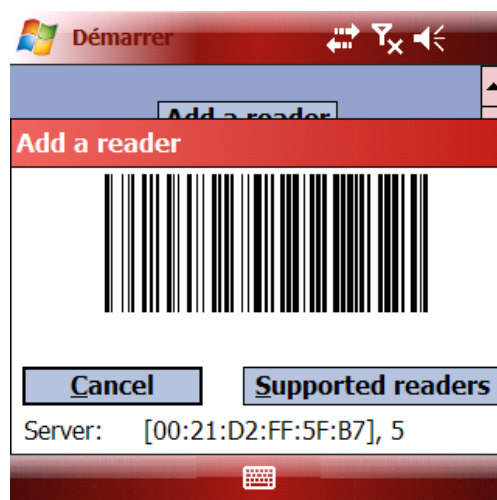
## 2.2.BaracodaManager Connect and Scan

This section shows the user how to configure the Connect and Scan version of **BaracodaManager** to connect and use their barcode reader(s).

To configure the barcode reader:

1. Turn on the barcode reader and the PDA on which the **BaracodaManager** has been installed.
2. Start the **BaracodaManager** using its shortcut. The **BaracodaManager** window appears:
  - the user should click the “Add a reader” button

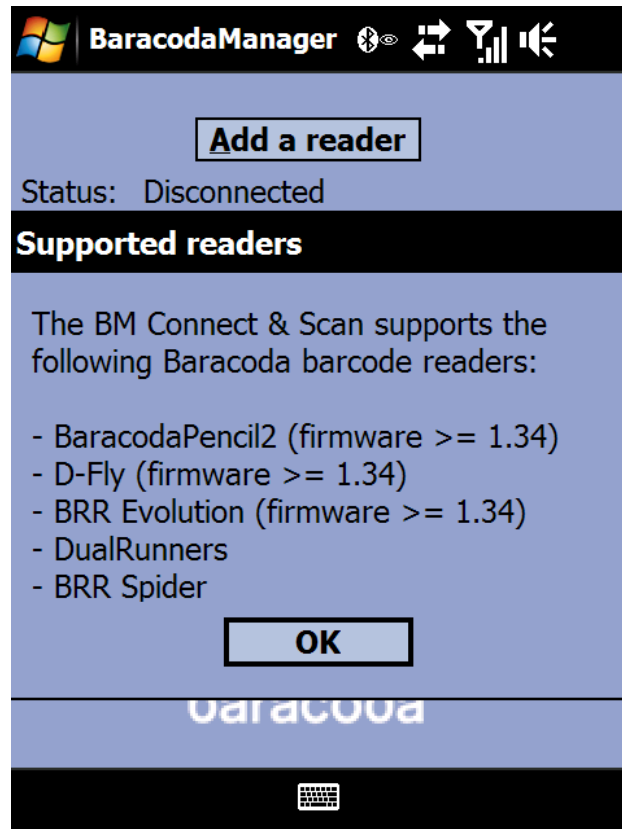
Note: if the user has already run the **BaracodaManager** and configured their barcode reader, they should go to step 8 below.



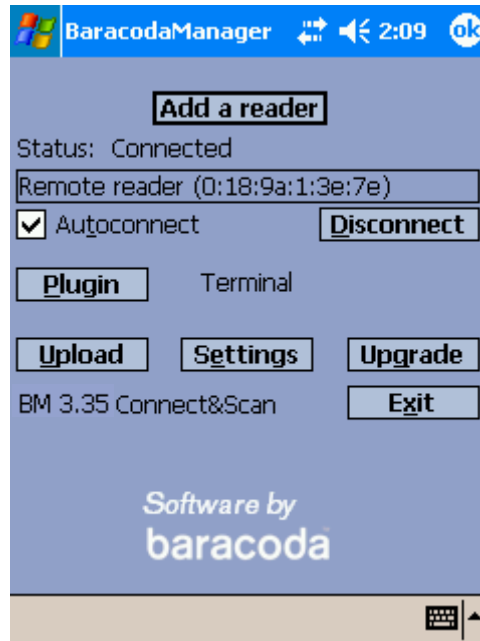
- As soon as the button has been clicked, the **BaracodaManager** shows a window with a connect barcode that can be scanned in order for the reader to connect to the program. Below the user can see the information about the BM service MAC address and channel number information. Now the user should scan the connect barcode in order to connect the reader. The reader will connect to the **BaracodaManager**.

**Note: if it is impossible to scan the connect barcode directly from the PDA screen (because of the scan engine properties – laser, contact), the user can copy the file *BMConnectBc.bmp* from the root directory of the PDA. This file contains the barcode shown on the window and can be printed.**

Before scanning the connect barcode, the user can verify the reader models supported by the Connect and Scan version by clicking the Supported readers button:



4. The **BaracodaManager** is now configured with the user's barcode reader and the **BaracodaManager** main window displays:
  - the Autoconnect box is checked. The BaracodaManager will try to automatically connect to the barcode reader at the beginning of the next session.
  - the barcode reader Bluetooth address (name is set to "Remote reader" by default, but it will be refreshed to the real Bluetooth name as soon as the Settings window has been opened).
  - the connection status of the barcode reader. The Status field switches from Disconnected to Connecting, then to Connected showing the user that the barcode reader is ready to use.



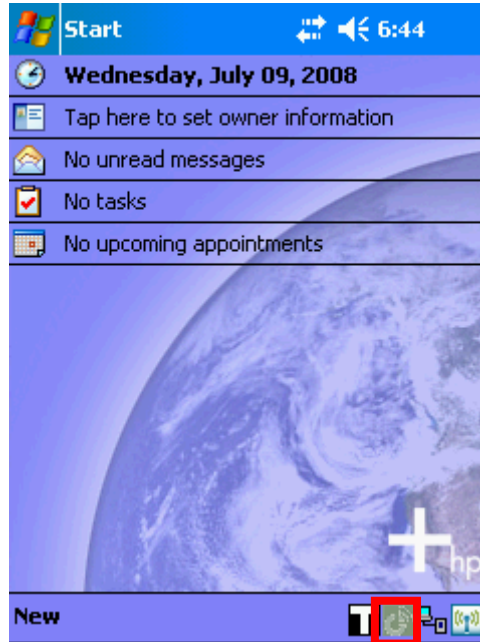
5. To change the plugin to be used for the barcode reader:
  - Click the Plugin button. A dialog window appears.
  - Select a plugin.
6. When the user ends the first session of the **BaracodaManager**, they should click Exit to save the barcode reader Bluetooth address for future sessions. The **BaracodaManager** will reconnect to the barcode reader when it is restarted, even if the user ends sessions of the **BaracodaManager** by switching off the computer instead of clicking the Exit button.
7. When the user starts the **BaracodaManager** again:
  - the **BaracodaManager** tries to reconnect the barcode reader which were previously configured (paired) and for which the Autoconnect mode is set (checkbox situated left of the Upload button is checked).
  - as soon as the Add a new reader button is clicked and the connect barcode is scanned, the **BaracodaManager** connects to the new barcode reader.
8. Repeat steps 2 to 4, to add any new barcode reader(s) to the BaracodaManager.

Notes:

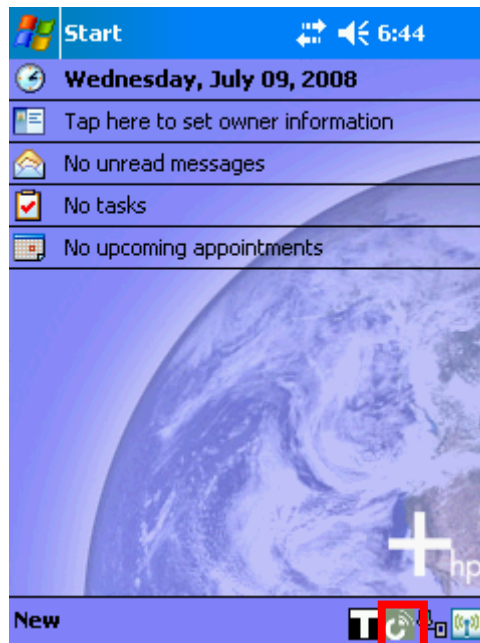
If the user switches off a barcode reader (with the reset switch or through time-out) and they switch it on again, the **BaracodaManager** reconnects to the barcode reader. In the situation where the "Real time" mode and "No data loss mode" options are enabled (see [Functions](#) section: Setting parameters), if the user takes the barcode reader out of range (more than 15-70 meters from the computer, depending on the Bluetooth emission power) and the connection is lost, the barcode reader will store any scanned barcode(s). When the user brings the reader back within range, the **BaracodaManager** reconnects automatically and the stored barcodes are then uploaded.

### 2.3.Connection status

When the **BaracodaManager** connects to a barcode reader, its main window is hidden and the current plugin window is activated. The inside color of the **BaracodaManager** icon at the bottom of the screen is gray:



As soon as the reader is disconnected (because of timeout or when it is taken out of Bluetooth range), the inside color of the **BaracodaManager** icon at the bottom of the screen becomes white:



### 3. Functions

#### 3.1. Adding/removing a barcode reader (classic BaracodaManager)

The first time the user runs the **BaracodaManager**, as soon as the Search button is clicked, the **BaracodaManager** searches for all Bluetooth barcode readers which are discoverable (in listening mode and within Bluetooth radio range). The “Devices in Range” section of the **BaracodaManager** window displays the readers found.

To work with a barcode reader, the user should select the reader (in the “Devices in Range” section of the window) and click the “Add” button.

The main window displays information about the barcode reader:

- Autoconnect status (set by default)
- Name: device name
- Bluetooth device address (BdAddr)
- Connection status: Connected, Disconnected, Connecting

If the **BaracodaManager** does not find the user’s barcode reader, they should make sure that their Bluetooth device is in listening mode and click on the Search button to restart the search.

#### 3.2. Adding/removing a barcode reader (BaracodaManager Connect and Scan)

Every time the connect barcode is scanned, the **BaracodaManager** will disconnect the current reader and connect the new barcode reader.

The main window displays information about the barcode reader:

- Autoconnect status (set by default)
- Name: device name (initially Remote reader)
- Bluetooth device address (BdAddr)
- Connection status: Connected, Disconnected, Connecting

If the user cancels the “Add new reader” operation, the current barcode reader will be reconnected.

#### 3.3. Disconnecting a barcode reader

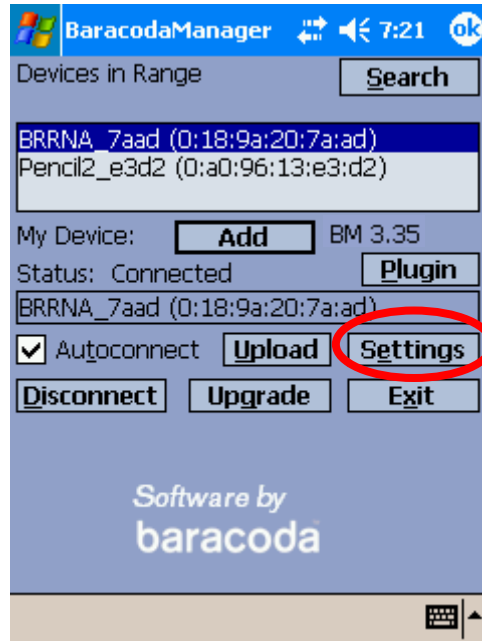
To close the Bluetooth radio connection between the **BaracodaManager** and the selected barcode reader, click the Disconnect button. The barcode reader returns to discoverable (listening) mode. The Autoconnect mode is deactivated.

#### 3.4. Setting parameters of a barcode reader

To set the parameters of a barcode reader, click the Settings button. A Settings window related to your barcode reader appears.

## 4. Barcode reader configuration

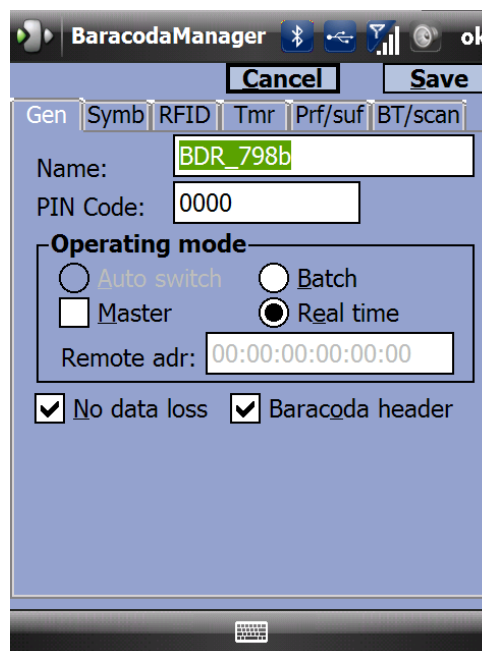
Apart from reading data (barcodes or RFID tags) coming from the connected Baracoda barcode readers, the **BaracodaManager for PDA** can also help the user to configure their barcode reader. This can be done by first connecting a reader and then clicking the Settings button on the main window:



In response to this action, the BaracodaManager opens a tabbed settings window. The “Save” and “Cancel” buttons are situated at the top of the window.

### 4.1. General settings tab

The first tab, named “Gen” (general settings) is shown on the following screenshot:



The Name text field can be used to modify the Bluetooth name of the reader. Please note that most Bluetooth stack do not refresh the name shown during inquiries until the reader is unpaired/re-paired with the PDA. The next text field can be used to change the PIN code of the reader (“0000” by default). When this value is modified, the user will be asked to enter the new PIN code at the next connection.

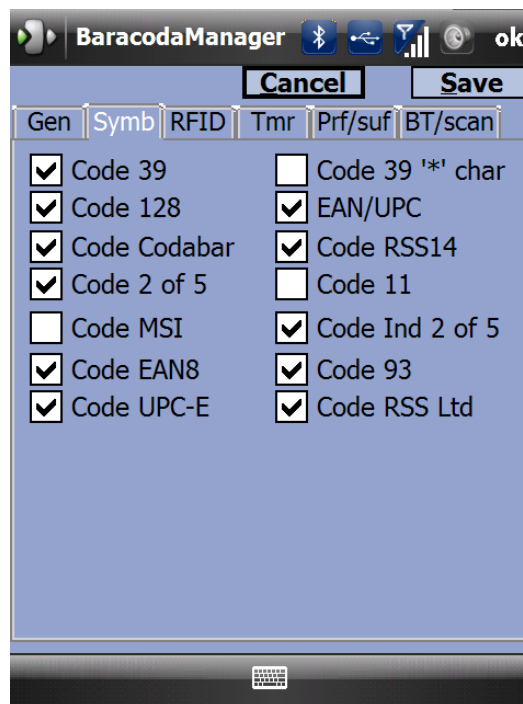
The operating mode of the currently connected barcode reader can be changed to real time or batch. Some readers allow the Master mode, too. In this case, the destination Bluetooth address can be set using the “Remote adr” field.

The “Baracoda header checkbox” should be used by advanced users only. When it is unchecked, the Baracoda header is removed from all packets sent by the barcode reader. This settings will block the standard barcode parser and no data will be read by the **BaracodaManager** afterwards.

It is recommended to set all barcode readers into no data loss mode. As mentioned in the introduction, if the user takes a barcode reader with no data loss mode enabled out of range (more than 15-70 meters from the computer, depending on the Bluetooth emission power) and the connection is lost, the barcode reader will store any scanned barcode(s). When the user brings the reader back within range, the **BaracodaManager** reconnects automatically and the stored barcodes are then uploaded. When no data loss mode is not activated, the data read while the barcode reader is not connected will be lost.

## 4.2.Symbology settings tab

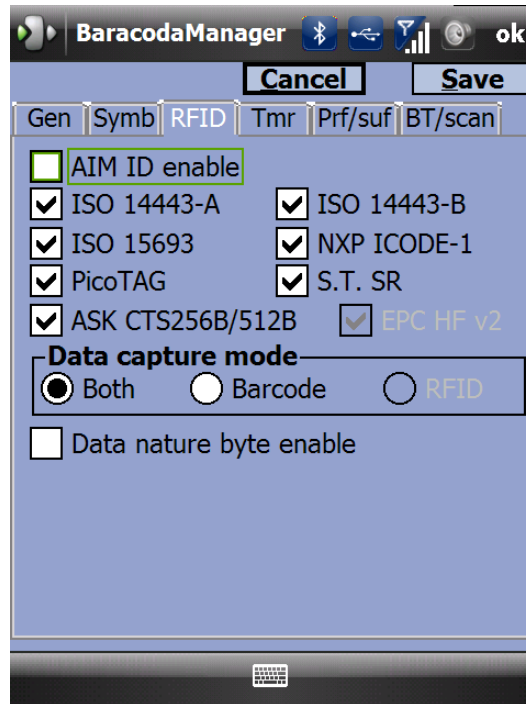
The second Settings window tab allows the user to configure the available barcode symbologies. Please note that this tab is not available for some reader models (BCM2604, BRR-2D, BRR-FE, BRR-FS, BDR-FE, BDR-FS).



All checkboxes (with the exception of “Code 39 ‘\*’ char”) correspond to a symbology. If a checkbox is unchecked, the corresponding barcode symbology is blocked and will not be decoded. On the other hand, when a checkbox is checked, the corresponding symbology is active. The “Code 39 ‘\*’ char” checkbox can be used to set the ‘\*’ character when a Standard Code 39 barcode is read.

### 4.3.RFID settings tab

The RFID settings tab is available only for readers that can read RFID tags, that is the TagRunners and DualRunners:

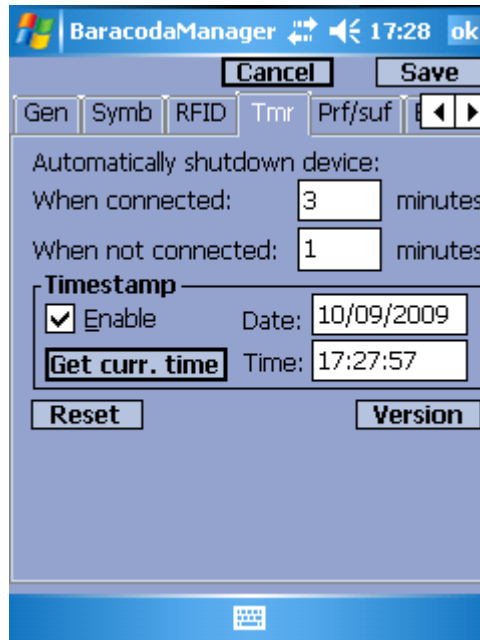


The “AIM ID enable” checkbox can be used to force the reader to send a prefix corresponding to the RFID protocol of every read RFID tag. The other checkboxes allow the user to enable/disable decoding the corresponding RFID protocols.

Finally, the last group of settings on the RFID settings tab is available only for the DualRunners reader. The three radio buttons can be used to modify the data capture mode if the reader (if the user selects the “Barcode” option, the reader will only read barcodes and not RFID tags, etc.). The “Data nature byte” checkbox allows the user to set a byte before any send piece of data (“0” for a barcode, “1” for an RFID tag ID). In result, it will be possible to distinguish the nature of the received data.

## 4.4.Timer settings tab

The next Settings window tab, “Tmr” (timer settings) can be used to set the timers, timestamp options. The user can also reset the barcode reader to default values and verify the firmware version of the reader on this tab:

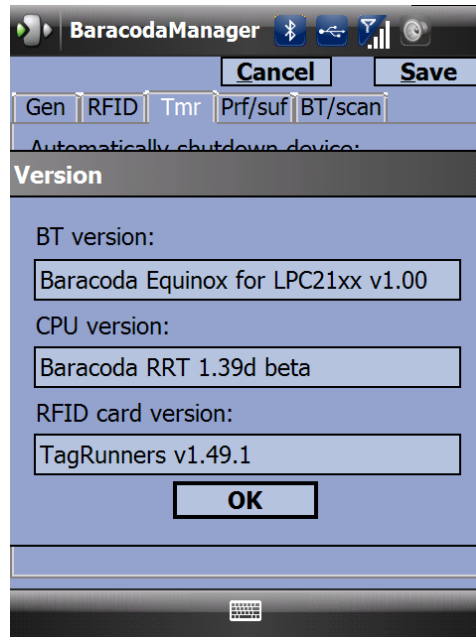


The first text field manages the value of the so called “connected timer”. When the reader is connected and no operation/data exchange has been done for the amount of time equal to this timer’s value, the reader will turn itself off. The other timer (“disconnected timer”) is similar, but its value decides when the reader will turn itself off when it is not connected to the **BaracodaManager** and no operation/data exchange has been done for the amount of time equal to this timer’s value.

Some reader models support timestamping every read barcode/RFID tag ID. When the timestamp option is activated (with the “Enable” checkbox), the barcode data will be prefixed with a timestamp. The current timestamp value can be synchronized with the PDA hardware clock by clicking the “Get curr. time” button. Please note that the BaracodaManager supports only the military time format (24h) and that the date format is day/month/year.

The “Reset” button allows the user to reset the currently connected barcode reader’s configuration to default values. The user will be asked to enter the PIN code at the next connection.

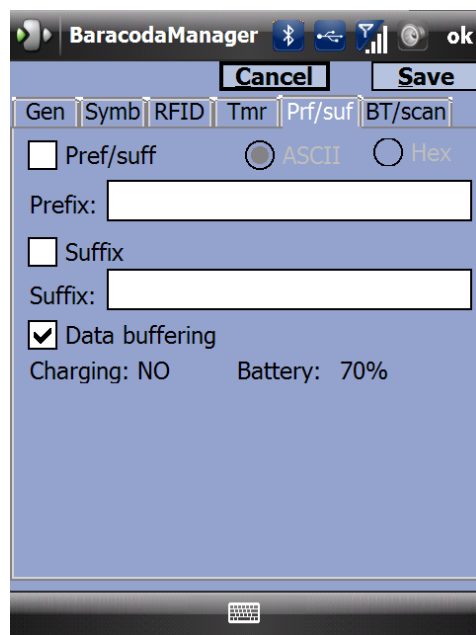
The last control on this tab window, the “Version” button, can be used to verify the current firmware version of the connected reader (this can be helpful to get the best support information):



The upper text field shows the version of the Bluetooth firmware and the lower one the version of the CPU firmware. The RFID card version is available only for the TagRunners and DualRunners reader models.

#### 4.5. Prefix and suffix settings tab

The “Prf/Suf” (prefix/suffix settings) tab shows the prefix and suffix settings. It can also be used to enable/disable barcode buffering and verify the current charging status of the connected barcode reader:



The two checkboxes that can be seen at the top of the window can be used to enable or disable a prefix or suffix. The prefix is inserted at the beginning of the barcode/RFID data sent by the reader to the PDA and the

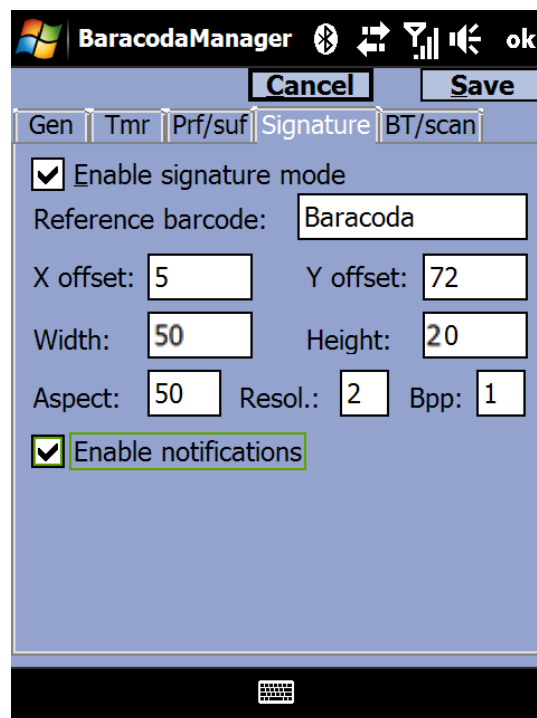
suffix is appended to this data. The ASCII/Hex radio buttons help select the format of the data entered into the text fields. When the Hex radio button is active, the user will be able to enter non-readable characters in hexadecimal format. The user can switch between the two formats at any time.

When the barcode reader is in no data loss mode, it stores all barcodes scanned when it is disconnected in an internal buffer. When the barcode is reconnected, those barcodes are sent to the **BaracodaManager** and the user experiences no data loss. In some situations, the user would like to block the data buffering when the reader is disconnected. This can be done by unselecting the “Barcode buffering” checkbox. As soon as this operation is done, the reader will block the scan engine when it is not connected to the **BaracodaManager**. To enable the buffering of barcodes, the user should select the “Barcode buffering” checkbox.

The two static fields at the bottom of the window show the charging status of the barcode reader (Charging: YES or NO) and the current battery level.

## 4.6. Signature capture tab

The RoadRunners –FE/FS and DualRunners –FE/FS can capture signatures since firmware version 1.48. The Signature settings window allows the user to set the necessary parameters.



The “Enable signature mode” checkbox is used to activate/deactivate the signature mode. If this mode is active, when the reader scans the barcode whose text is the same as the “Reference barcode” field, then the reader will try to capture a signature. The signature area can be set with the following parameters:

- X offset is the horizontal offset between the middle of the barcode and the middle of the signature area (in narrow bar width units)
- Y offset is the vertical offset between the middle of the barcode and the middle of the signature area (in narrow bar width units)

- Width is the width of the signature area to scan (in mm)
- Height is the height of the signature area to scan (in mm)
- Aspect is the ratio between the barcode height and the narrow element width
- Resolution is the number of pixels that the reader outputs per each minimum bar width
- Bpp is the number of bits per pixel in the signature image

Currently, the only output capture image format is JPEG.

The “Enable notifications” checkbox can be used to enable/disable notifications when reader captures a signature in real time. By default, the notifications are on, but they can be disabled.

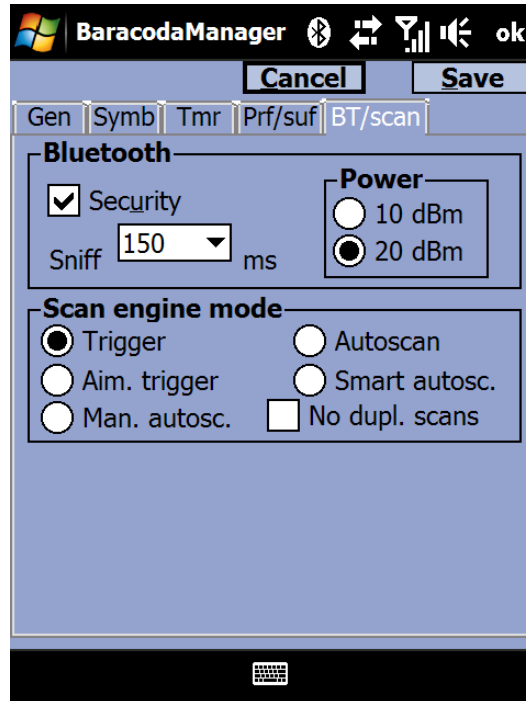
If the reader captures a signature in real time, the BaracodaManager will create a file in the root directory of the mobile terminal. The filename can be one of the following:

- **BaracodaPicture\_YYMMDDHHMMSS.jpg** – (where YYMMDDHHMMSS is the timestamp generated by the mobile terminal) if the reader timestamp is not active.
- **BaracodaPicture\_YYMMDDHHMMSS\_YYMMDDHHMMSS.jpg** – (where the first timestamp is generated by the mobile terminal and the second one by the reader) if the reader timestamp is active.

For details regarding uploading signatures captured in batch mode, please refer to [section 5.1](#).

## 4.7. Bluetooth and scan engine settings tab

The last configuration tab window “BT/scan” (Bluetooth and scan engine settings) is presented on the screenshot below:



The Bluetooth settings allow the user to change the Bluetooth emission power between Class 1 (20 dBm) and Class 2 (10 dBm). The user can also disable security (so that the PIN code is not necessary) and the sniff period. Increasing the sniff period can save battery life but on the other hand the scanner will respond more slowly to commands. The effect of this setting will not be important for barcode data exchange, but the settings window will take longer to open when the sniff period is increased.

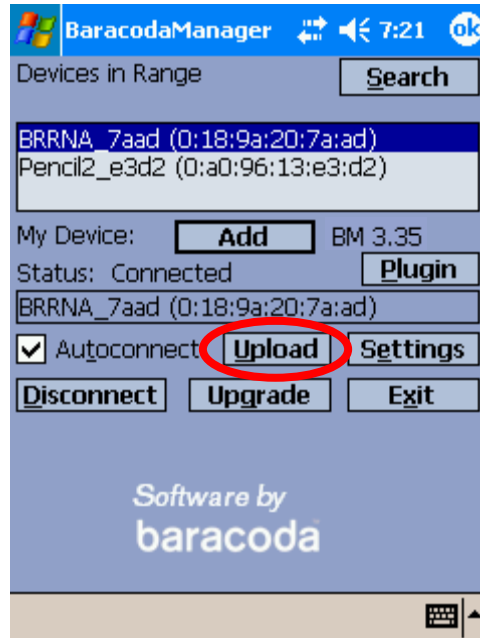
The last group of settings regards the scan engine mode. For most readers, this mode can be set to:

- Trigger (standard mode; barcodes are decoded as soon as the barcode reader button is pressed)
- Aiming trigger: the first trigger button press turns the beam on (letting the user point it to the correct barcode); the second trigger press activates decoding of the barcode.
- Autoscan (the scan engine is turned on all the time). This mode is useful in situations where the reader is still and the barcodes to be decoded enter and leave the decoding area (a production line, for example).
- Smart autoscan (when the button is first pressed turns the scan engine on; the second press will trigger barcode decoding). This mode is useful when the barcodes to be decoded are close to each other. The user will turn the scan engine on with a button press and then position the beam over the correct barcode. When the reader is ready to decode the barcode, the user will press the reader button a second time to launch decoding.
- Manual autoscan: when the trigger button is pressed, it will put the reader into autoscan mode; the second trigger press will deactivate autoscan (the trigger will need to be pressed until the beam is turned off)

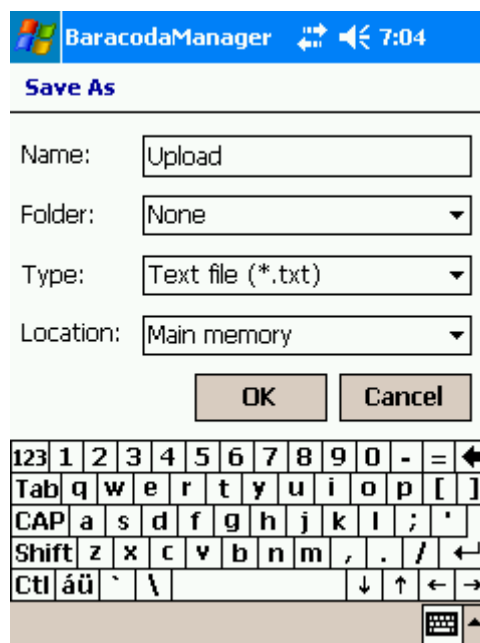
Finally, the “No duplicate scans” checkbox can be used to prevent the user from reading the same barcode/RFID tag ID twice in a row. When such an attempt is made, the reader will make a “wrong scan” beep.

## 5. Uploading data stored in batch mode

This feature is supported by all readers with the exception of the BL1000, BCM2604 and D-Fly reader models. The user should connect their reader with the **BaracodaManager** and click the Upload button to upload the stored data:



At the beginning of the upload operation a modal popup window (asking the user to choose a file name where the data will be stored) is shown:



When the user has specified the file name, the BaracodaManager shows another popup window:



When all data has been uploaded, the user will be shown a confirmation popup:



Note: The BaracodaPencil2 (version 1.20 and newer), Roadrunners Evolution, TagRunners, DualRunners readers emit an acknowledgement beep when the upload has completed.

Note: In the case of the BaracodaPencil2 (version 1.20 and newer), BRR Evolution and DualRunners readers, the upload operation can be launched by scanning the corresponding barcode from their programming guide. The reader should be connected to the BaracodaManager before this is done.

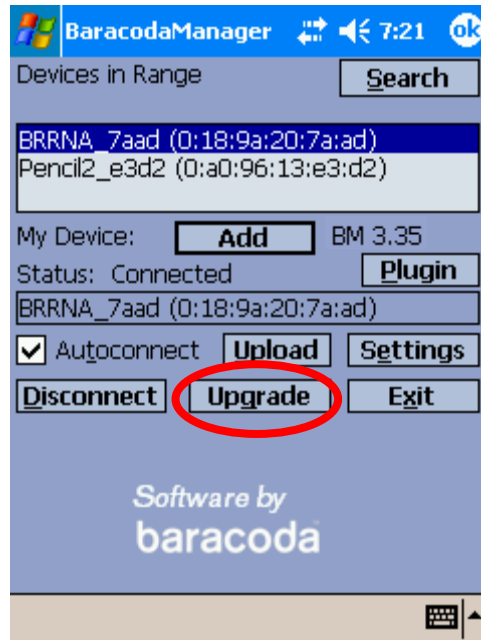
## 5.1. Uploading barcode/RFID data and signature captures

When the active reader is a RoadRunners Evolution –FE/FS or DualRunners –FE/FS (with firmware version 1.48 or newer), data stored in batch mode can include signature captures. In this case, several upload files will be created:

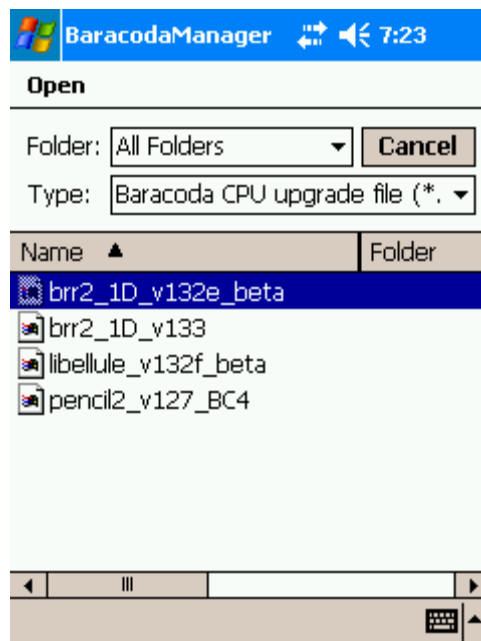
- **XXXXXX.txt** (where **XXXXXX** is the filename chosen by the user with the popup) – one file with barcodes and RFID tag IDs.
- **XXXXXX\_YYMMDDHHMMSSmmm.jpg** – one file per every signature capture (where **YYMMDDHHMMSSmmm** is the timestamp generated by the mobile terminal) if the reader timestamp is not active. As on most mobile devices the milliseconds value will be always equal to zero, a multiply of 10 will be added to the **mmm** value to avoid captures being overwritten.
- **XXXXXX\_YYMMDDHHMMSSmmm\_YYMMDDHHMMSS.jpg** – one file per every signature capture (where the first timestamp is generated by the mobile terminal and the second one by the reader) if the reader timestamp is active. On most mobile devices the milliseconds **mmm** value will be always equal to zero.

## 6. Firmware upgrade

This function is supported by all Baracoda readers with the exception of the 2604 series and the BCM 2604. In order to upgrade their reader, the user should connect a barcode reader and click the Upgrade button.

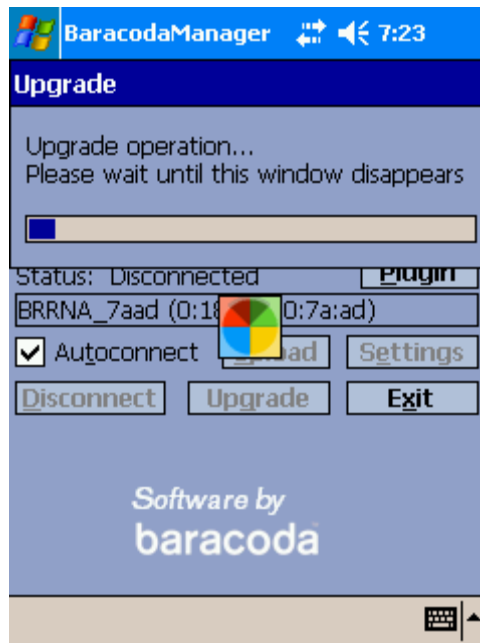


As soon as the button has been clicked, an open-file dialog window is shown. The user should browse for the upgrade file:



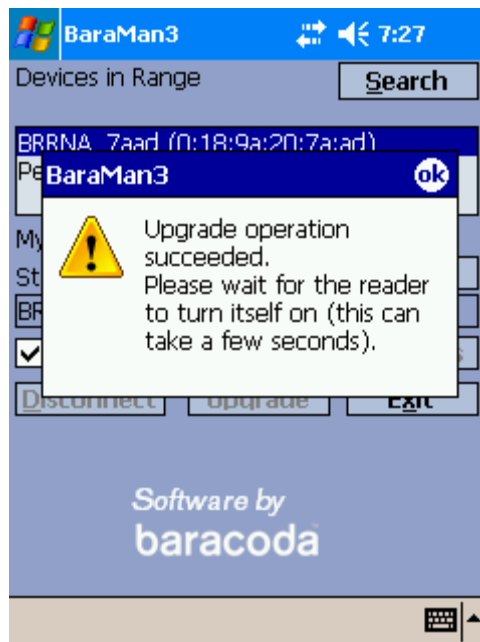
Current upgrade files can be found in the partners section of the [www.baracoda.com](http://www.baracoda.com) website (registration is necessary). Any additional notes/instructions can be found in those files.

When the upgrade file has been specified, the **BaracodaManager** activates a topmost window showing the progress of the upgrade operation:



The user should not try to close this window or click any **BaracodaManager** buttons or other GUI controls as long as the above dialog is visible.

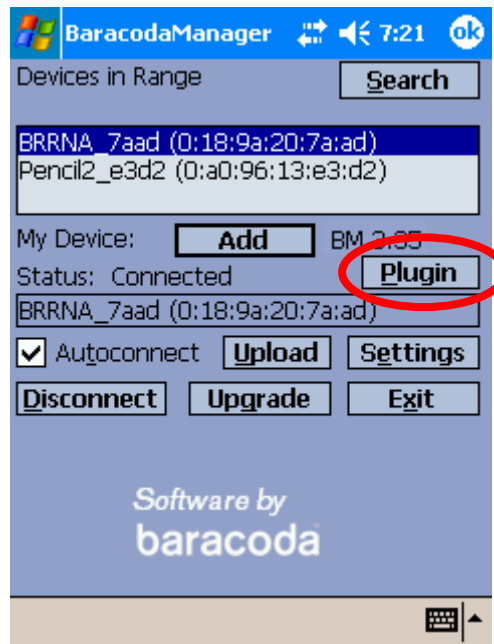
When the upgrade operation has been completed, the user is shown the following popup:



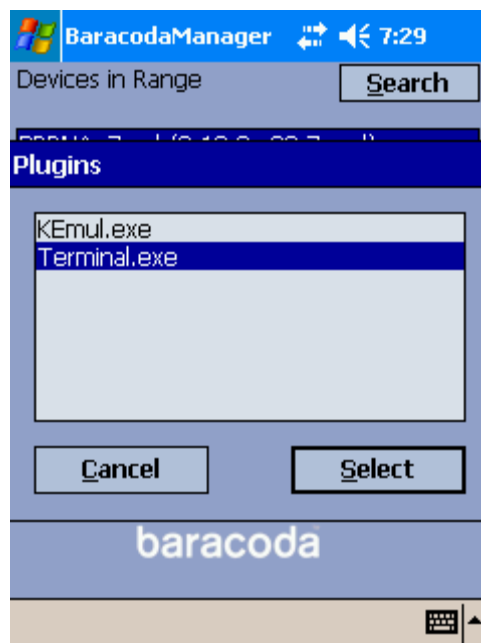
Most readers (Pencil2, D-Fly, Roadrunners Evolution, TagRunners, DualRunners) turn themselves on automatically when they are ready to be used. The Roadrunners and Pencil need to be turned on (they turn themselves off when the upgrade operation is over).

## 7. Plugins

Plugins can be selected by clicking the Plugin button on the **BaracodaManager** main window:

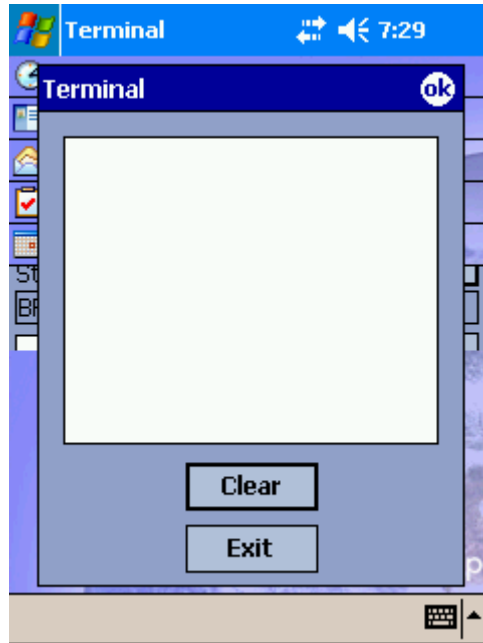


As soon as the button has been clicked, the BaracodaManager shows a dialog window allowing the user to select the plugin to use with the connected barcode reader:



## 7.1. Terminal plugin

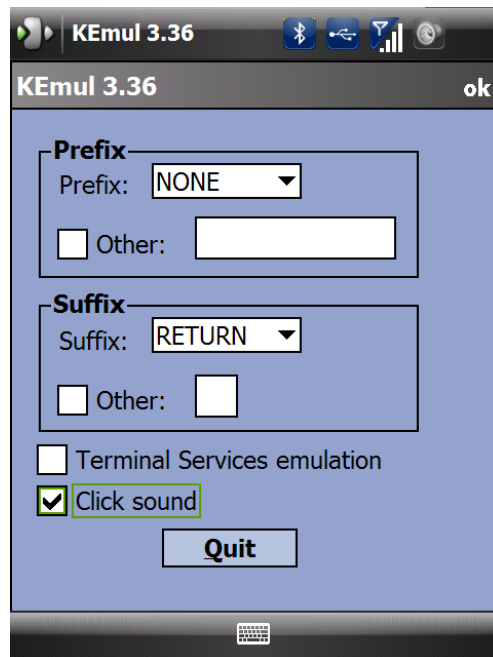
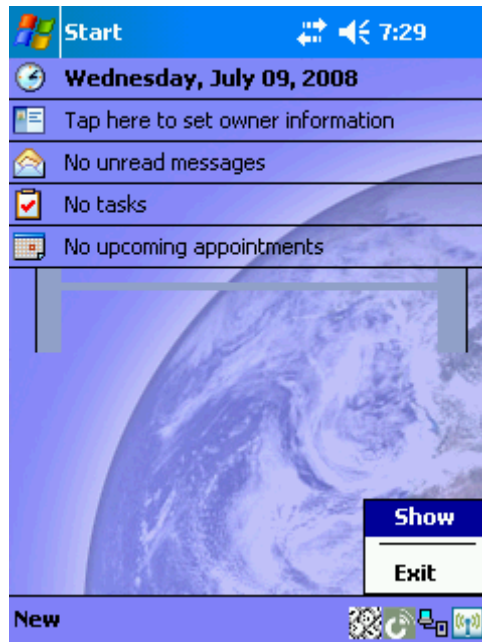
The Terminal function allows the user to display scanned barcode(s) when the reader is connected in Real Time mode.



## 7.2.KEmul plugin

The KEmul function is to emulate keyboard strokes corresponding to scanned barcodes. With the KEmul the user can send the barcode scanned by the barcode reader to the selected field of their application. For example, they can store the barcodes in a Pocket Excel or Pocket Word file.

By clicking on the KEmul icon at the bottom of the PDA screen and selecting Show, the user can configure a predefined prefix and/or suffix for data coming from the reader(s):



By default, no prefix is added to received barcodes and the suffix is set to the standard "Return" key.

In order to use the KEmul via a Terminal Services session, the user must select the “Terminal Services emulation” checkbox. Currently only the following characters can be emulated remotely:

- A-Z
- a-z
- 0-9
- Space, Return, Tab, Backspace
- ;, , = [ ] / \ ' `

### 7.2.1. PDA keyboard settings

Some PDAs (for example those manufactured by HTC) offer additional custom keyboards in addition to the one that is provided by Windows Mobile. They are shown in the red color on the screenshot below (the standard Windows Mobile keyboard is shown in the green color):



The user should not select one of the custom keyboards, but the standard Windows Mobile keyboard shown below. Otherwise the keyboard emulation will not work correctly (for example only one character will be emulated).



← OK, correct keyboard