

3.0



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**USB Adapter**

**Manual and  
Application note**

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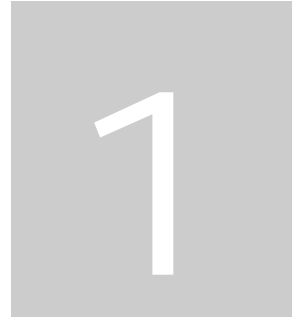


## Introduction

Bluetooth is an open specification for a cutting-edge technology that enables short-range wireless connections between desktop and laptop computers, personal digital assistants, cellular phones, printers, scanners, digital cameras and even home appliances — on a globally available band (2.4GHz) for worldwide compatibility. In a nutshell, Bluetooth unplugs your digital peripherals and makes cable clutter a thing of the past. Now you can connect your PDA or PC to Bluetooth™ enabled mobile phone with this Bluetooth™ adapter.

You can access e-mail & Internet no matter where you are with just a little help from your Bluetooth™ mobile phone.

Plus, when you are back in the office, you can hook yourself up to your office network as well as communicate with other Bluetooth™-enabled devices.



# Chapter1

## Package

- One Bluetooth adapter
- One driver and software disk
- This user manual

## Features

- Bluetooth v1.2 compliant
- USB Bluetooth adapter support full speed USB v1.1 Interface.
- Wireless communication within a radius of 32 Feet (10 Meters) for Class 2 Bluetooth devices.
- Wireless communication within a radius of 328 Feet (100 Meters) for Class 1 Bluetooth devices.
- Connect up to 7 different Bluetooth enabled devices
- Encryption and authentication to ensure safe, secure communications
- Low power consumption

## Bluetooth profile support

Generic Access Profile (**GAP**)

Serial Port Profile (**SPP**)

Service Discovery Application Profile (**SDAP**)

Generic Object Exchange Profile (**GOEP**)

Object Push Profile (**OPP**)

File Transfer Profile (**FTP**)

Dial-up Network Profile (**DUN**)

LAN Access Profile (**LAP**)

Fax Profile (**FAX**)

Synchronization Profile

Headset Profile

Personal Area Network (**PAN**)

Human Interface Device (**HID**)

BIP Basic Image Profile (**BBIP**)

## Drivers support

Windows 98SE, ME, 2000, XP

# 2

## Chapter 2

Setup for Windows 98SE/ME/2000/XP

### Installing Bluetooth software for Windows

(1) Place installation CD into PC and the setup menu should launch automatically.

If the setup menu does not launch automatically, use Windows Explorer to navigate to the appropriate CD-ROM drive and run "**bsetup**".

(2) Select "**Install Drivers and Application Software**".



(3) Please select your device from the menu.



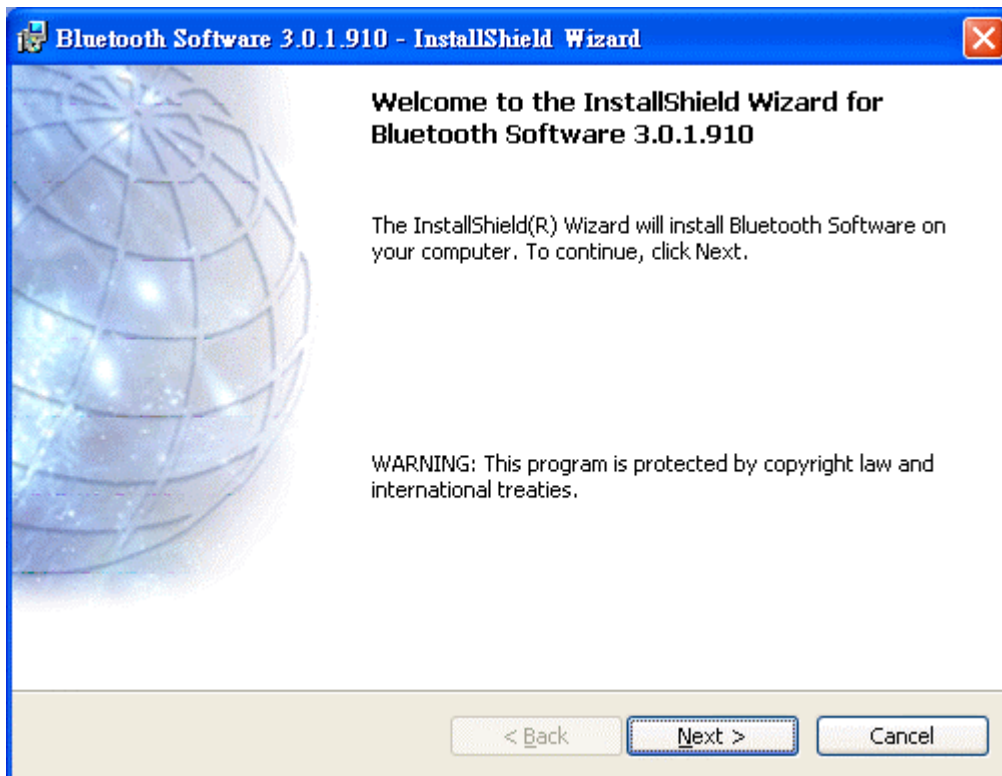
(4) Complete the following steps to install Bluetooth software:

(a) Exit all applications.

(b) InstallShield Wizard setup dialog box will automatically be displayed.

(c) Follow the instructions on screen:

(d) On the *Welcome* screen, click the “**Next**” button.

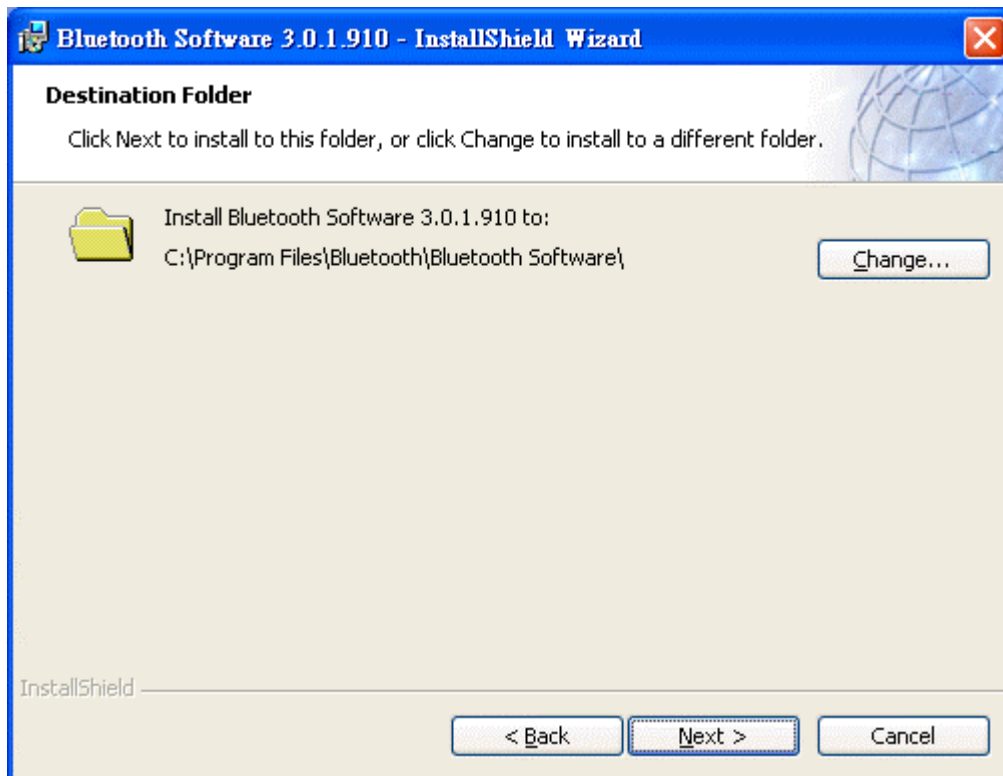




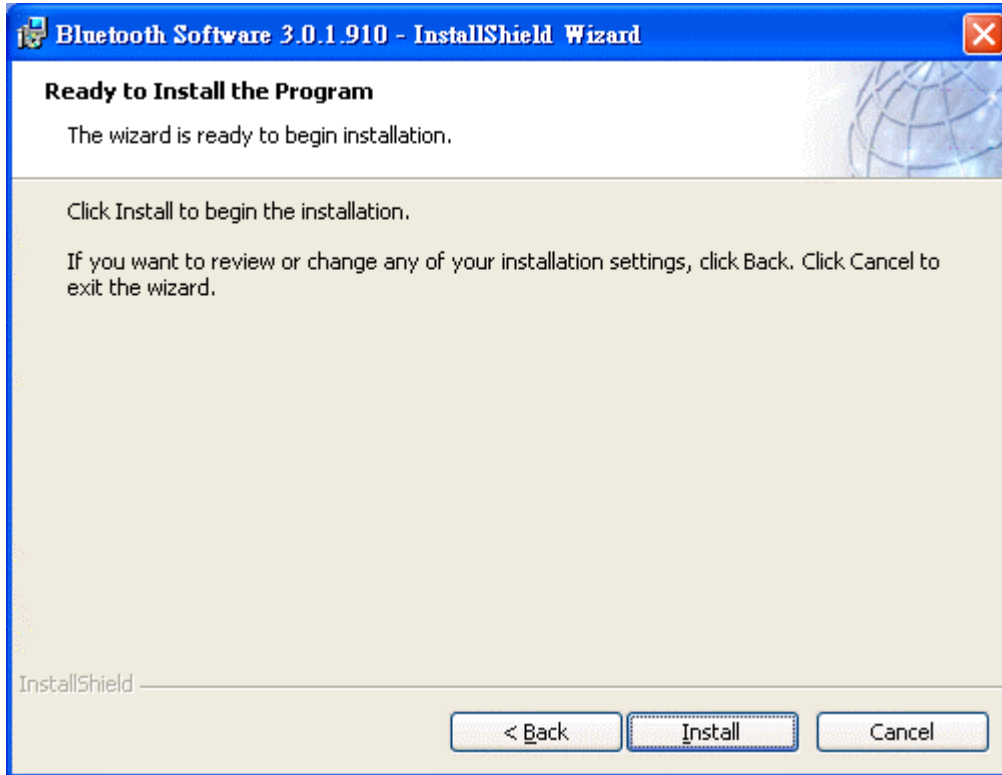
(e) When the *License Agreement* screen is displayed, read the License Agreement, then click the radio button to the left of "**I accept the terms in the license agreement**" and click the "**Next**" button.



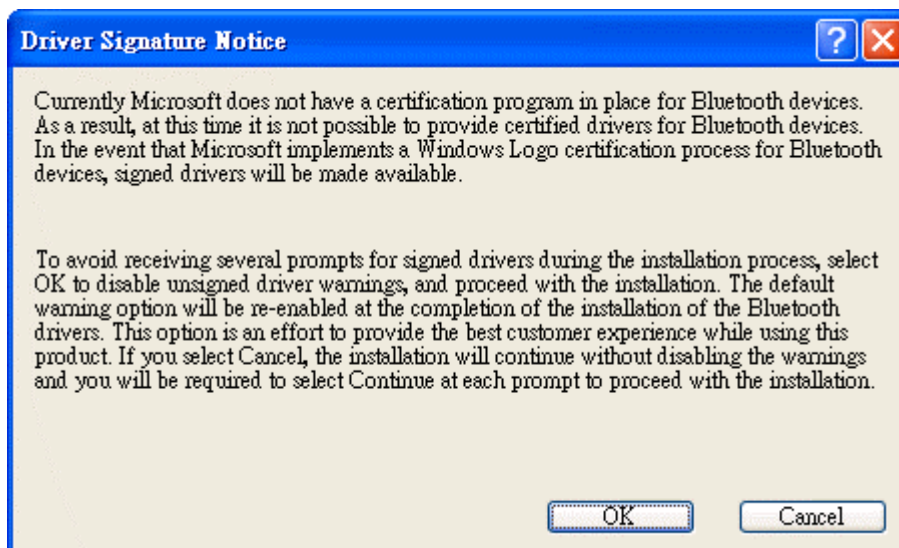
(f) You can choose the destination folder in your system, if you do not want to change the destination folder please click “**Next**”. On the *Destination Folder* screen, click the **Change** button to browse to a new destination folder for the Bluetooth software. Otherwise, click the “**Next**” button to accept the default folder.



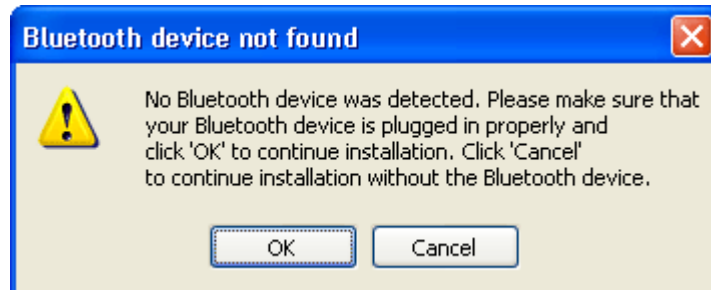
(g) The system is ready to install the Bluetooth software. If you need to review or change any settings, click the "Back" button. Click the "Cancel" button to exit the Wizard. Otherwise, click the "Install" button.



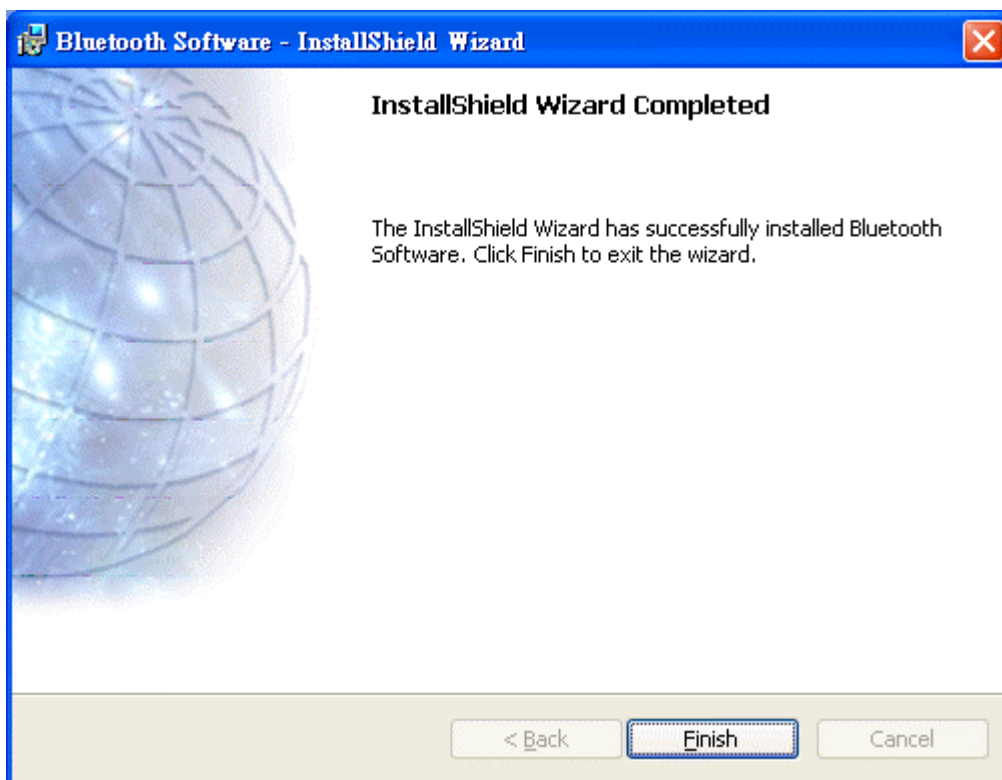
(h) For Windows 2000/XP users, system will popup a "Driver Signature Notice", please click the "OK" button.



(i) During the installation, system will try to detect your Bluetooth device, please plug in your Bluetooth device when the following message is displayed. Then click "**OK**" to continue, or you can click "**Cancel**" to continue the installation without the Bluetooth device.



(j) When the installation is completed, please click the "**Finish**" button.



**For more information of Bluetooth software Configuration & User's Guide, please refer to Chapter 3 of this application note.**

## Chapter 3

Application note for Windows 98SE/ME/2000/XP

### 3.1 Icons used for Bluetooth devices and services































Bluetooth icons provide at-a-glance feedback about a device or service's status by changing appearance.

The Bluetooth icon in the Windows system tray provides feedback about Bluetooth status.

#### **Basic Bluetooth Icon**

Bluetooth Icon Indicates Bluetooth Status		
Enabled	Disabled	Connected
		
Blue with White	Blue with Red	Blue with Green

#### **Device Icons for Windows 98SE, Me and 2K**

Device Icons for Windows 9x, Me and 2K			
Name	Normal	Connected	Paired
Audio Gateway			
Desktop			
Headset			
Laptop			
Modem			
Network Access Point			
Personal Digital Assistant			
Printer			
Telephone			
Unknown			

#### **Service Icons for Windows 98SE, Me and 2K**




























Service Icons for Windows 9x, Me and 2K			
Name	Normal	Connected	Not Available*
Audio Gateway			
Dial-up Networking			
Fax			
Headset			
Network Access			
PIM Item Transfer			
PIM Synchronization			
Public Folder			
Serial Port			

\*Services may be unavailable because they are in use or because the necessary hardware is not installed.

### Device Icons for Windows XP

Device Icons for Windows XP			
Name	Normal	Connected	Paired
Audio Gateway			
Desktop			
Headset			
Laptop			
Modem			
Network Access Point			
Personal Digital Assistant			
Printer			
Telephone			
Unknown Device			

### Service Icons for Windows XP

Service Icons for Windows XP			
Name	Normal	Connected	Not Available*
Audio Gateway			
Dial-up Networking			
Fax			
Headset			
Network Access			
PIM Item Transfer			
PIM Synchronization			
Public Folder			
Serial Port			

\*Services may be unavailable because they are in use or because the necessary hardware is not installed.

**NOTE:** Only available services are displayed in the menus

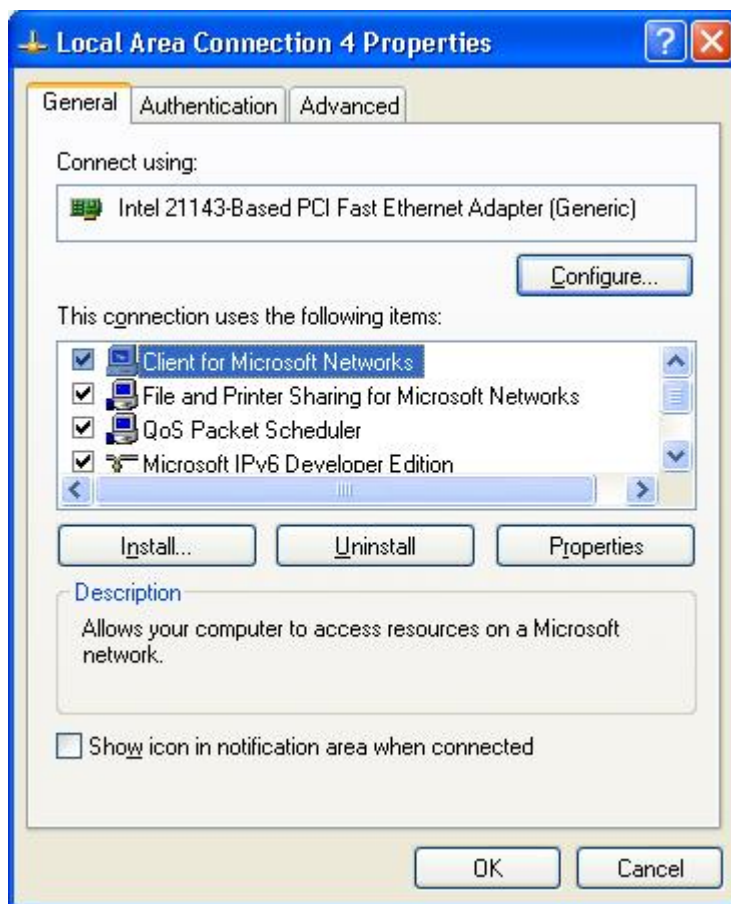
### 3.2. Network sharing setting for Windows

The Network Access service permits a Bluetooth enabled PC (client) to access the Internet via another Bluetooth enabled PC (Server) that already has an Ethernet connection.

#### Windows network sharing setting

##### PC to PC (Windows 2000 or Windows XP)

1. To enable Internet Connection Sharing on the server PC.
2. Click on **Start menu** → **Network Connections** and find your Local Area Connection (LAN) that is connected to the Internet.
3. Right click the active LAN connection to open the "**Properties**" dialog box.

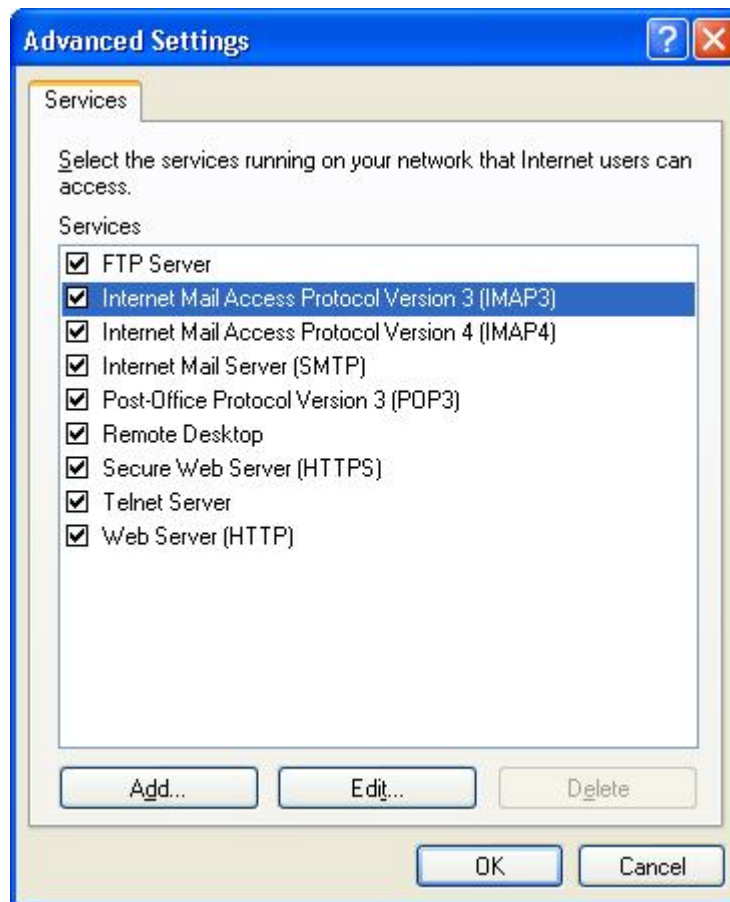




4. Click on "**Advanced**" tab and select the "**Internet Connection Sharing**" checkbox to enable Internet sharing.

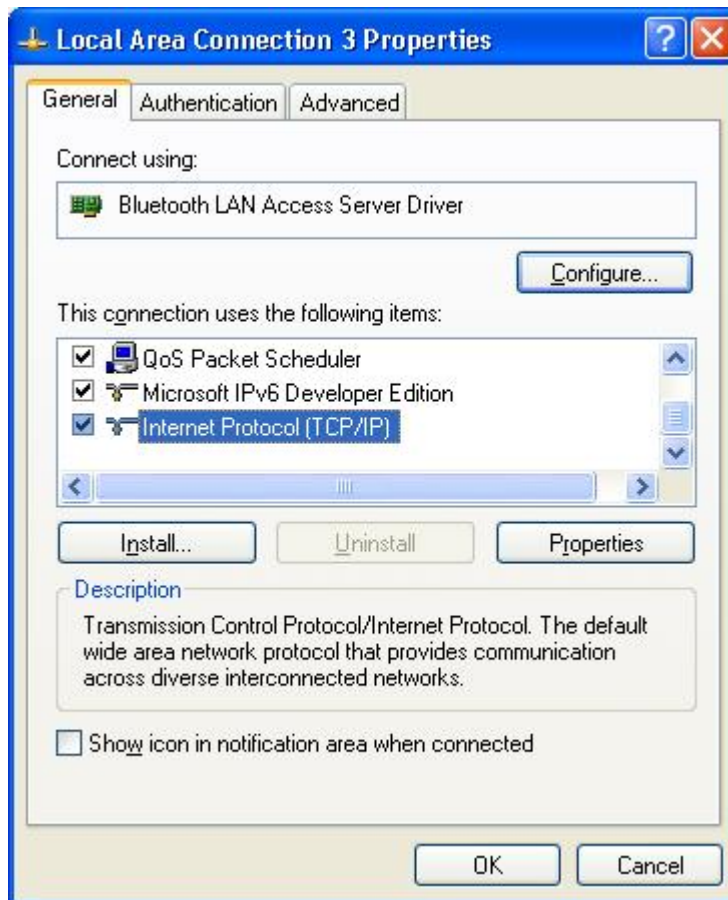


5. Click on "**Settings...**" button and select the services you wish to provide other Bluetooth devices. Click "**OK**" to save the changes.

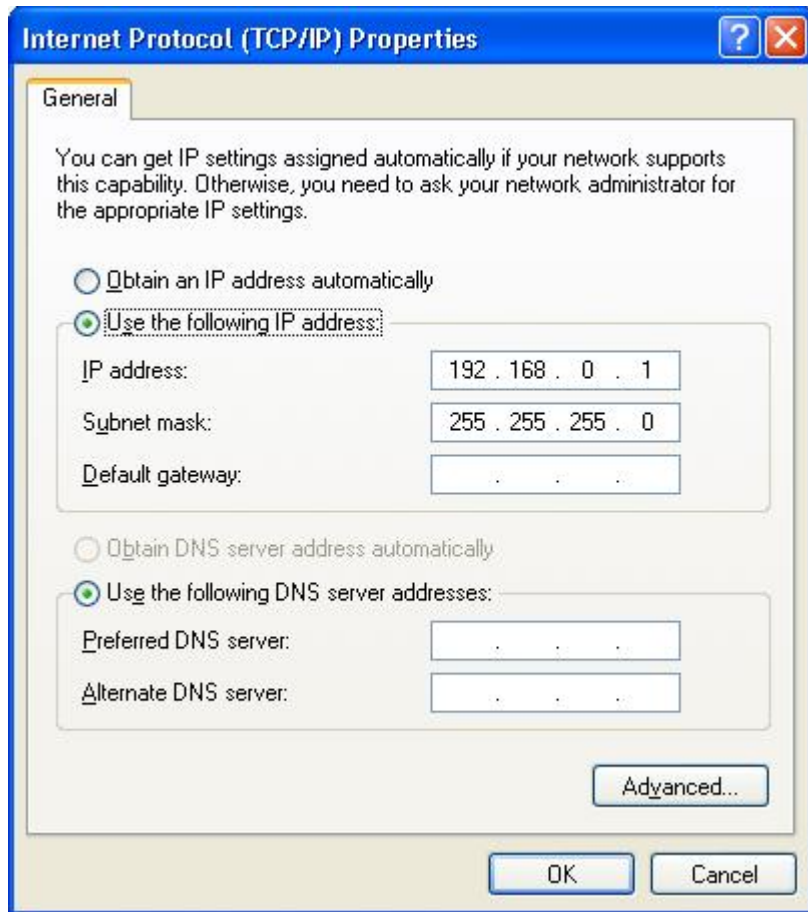


6. Go back to the "**Network Connections**" window, right click the "**Bluetooth LAN Access Server Driver**" and select "**Properties**".

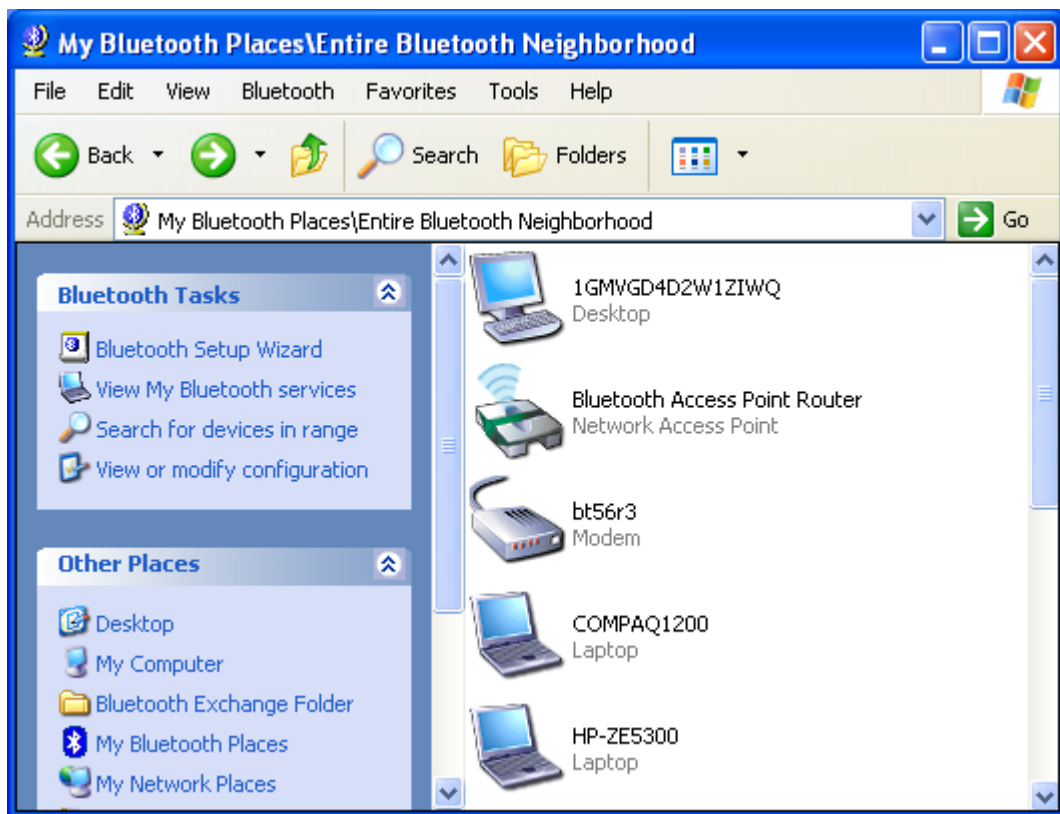
7. Under "General" tab, click on "Internet Protocol (TCP/IP)" and "Properties".



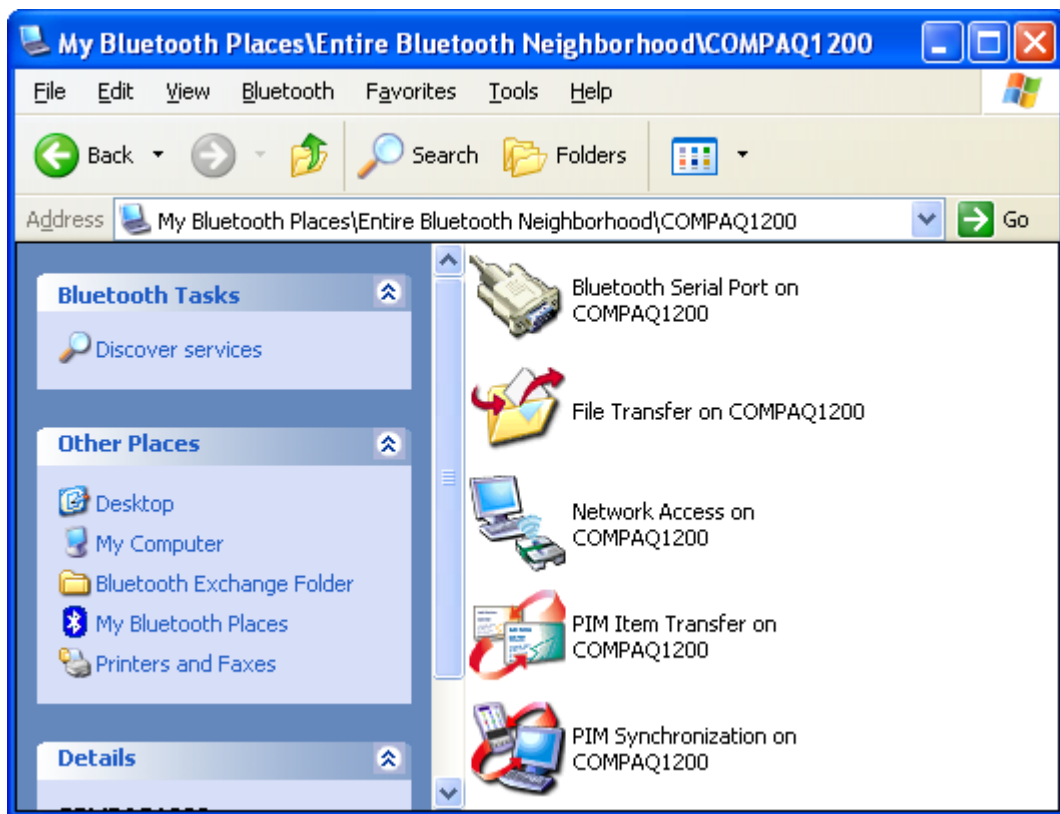
- Under "**General**" tab, assign a virtual IP as shown in the picture below. Then click "**OK**" to save the changes.



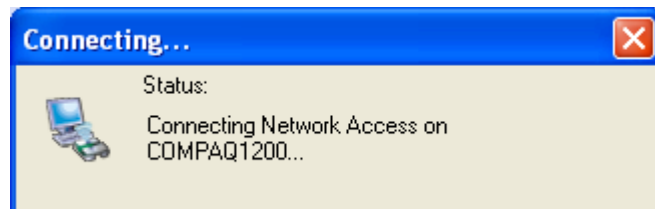
- This allows the server PC to act as a DHCP server towards the client PCs.  
**NOTE: For Win98SE and WinMe, please download and install WinRoute (or similar program) on the Server PC to allow DHCP service.**
- On the client PC, launch the Bluetooth software stack by clicking the "**My Bluetooth Places**" icon located on the desktop.
- Click the "**Search for devices in range**" icon to search for other Bluetooth devices nearby.



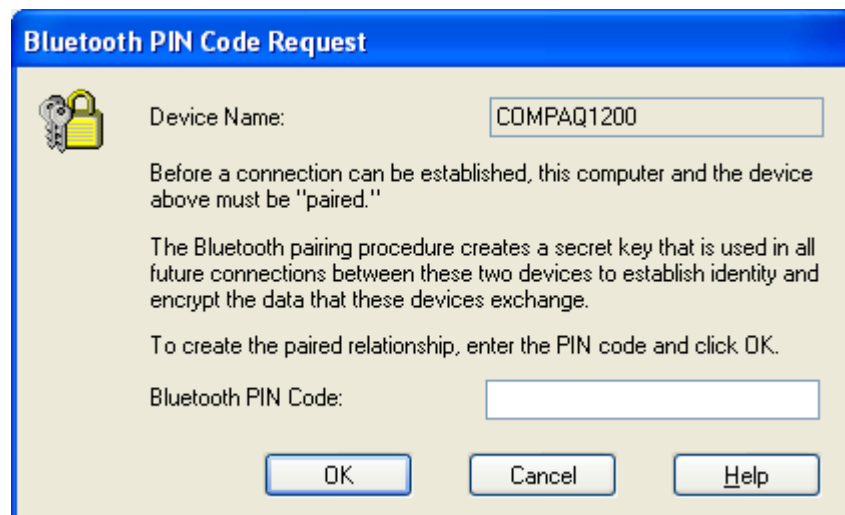
12. After searching is completed, locate the computer name of the Server PC and double click it to discover the Bluetooth services it has to offer. (i.e. Bluetooth Serial Port, Desktop, Personal Digital Assistant, Network Access Point, etc.).



13. Click on the "Server PC" icon to connect to the shared Internet server PC.



14. Click OK without entering any username or password. If one is already present, click OK anyway and it will still connect.

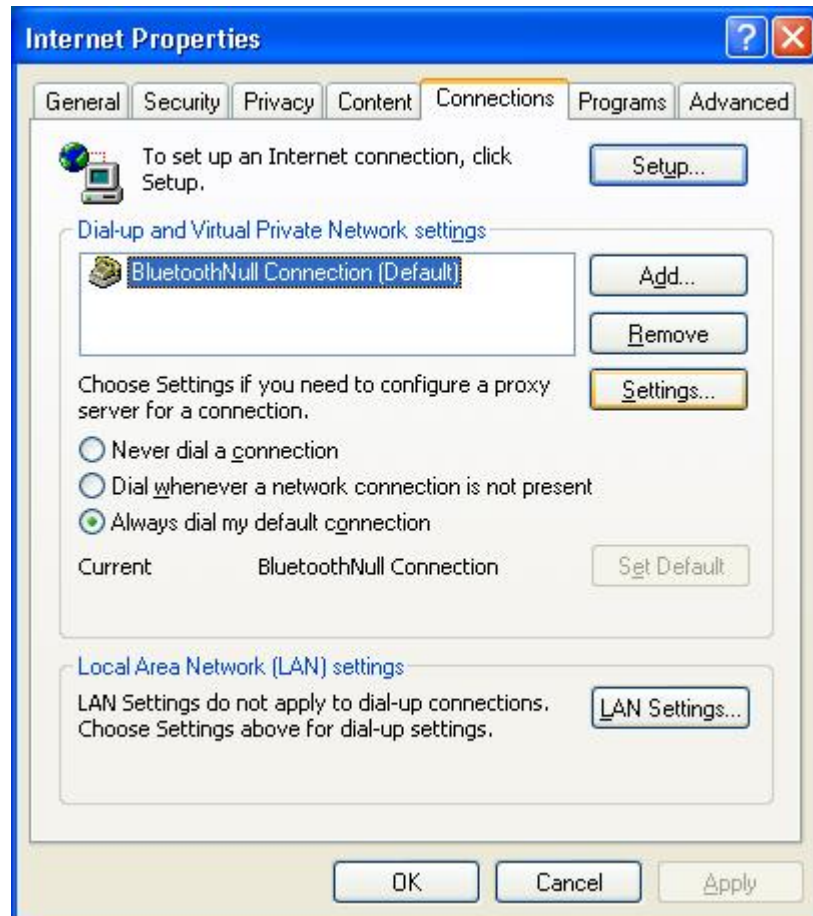


15. Now you can access the Internet via Bluetooth.

**Note:** *If your PC accesses the Internet via a proxy server, remember to configure the proxy setting of your browser program in the client PC. Consult your MIS personnel if you're not sure what to set.*

## Proxy setup

1. To set up proxy, right click "**Internet Explorer**", select "**Properties**", select "**Connections**" tab. Select "**BluetoothNull Connection**" and click on "**Settings...**".





2. Select the "**Proxy server**" checkbox and enter the proxy address of you company and Port number. Then click "**OK**" to save the changes.

**BluetoothNull Connection Settings**

**Automatic configuration**  
Automatic configuration may override manual settings. To ensure the use of manual settings, disable automatic configuration.

Automatically detect settings

Use automatic configuration script

Address:

**Proxy server**

Use a proxy server for this connection (These settings will not apply to other connections).

Address:  Port:

Bypass proxy server for local addresses

**Dial-up settings**

User name:

Password:

Domain:

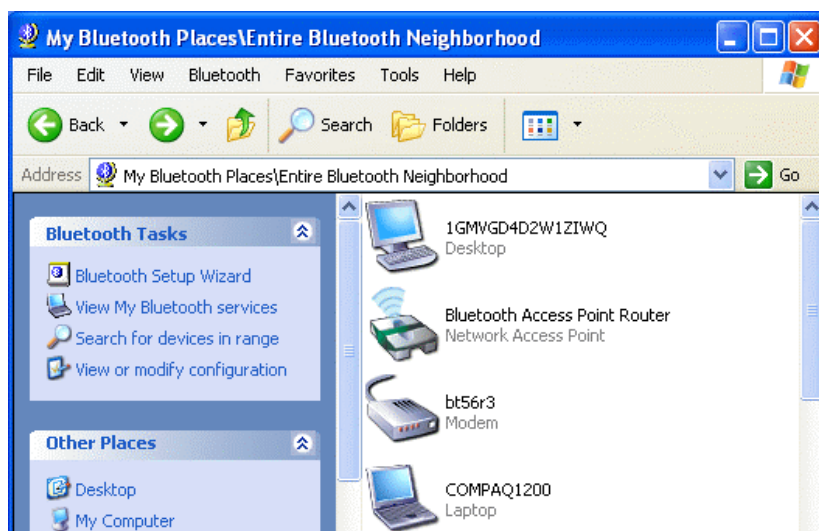
### 3.3. File transfer setting for Windows

The File Transfer service allows one Bluetooth device to perform file operations on the default File Transfer directory (and the folders and files it contains) of another Bluetooth device.

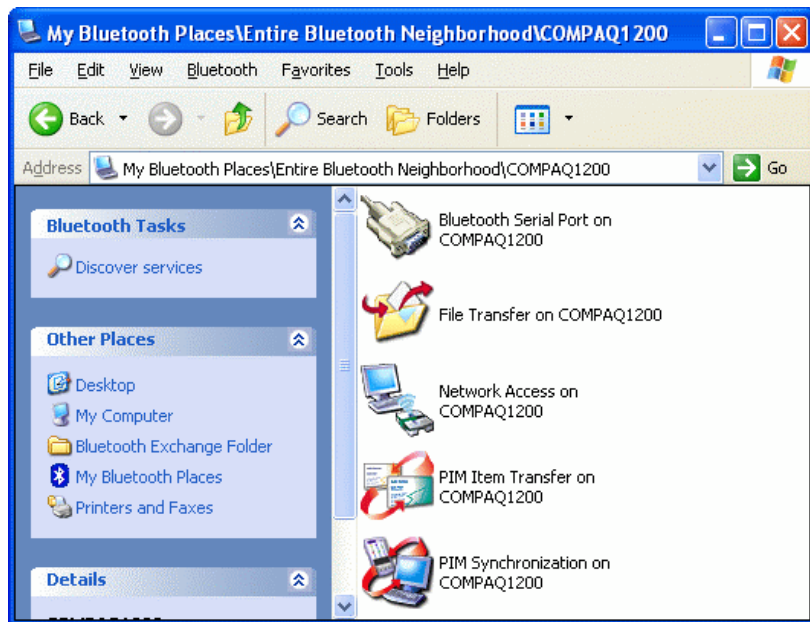
#### File transfer setting for Windows

##### PC to PC

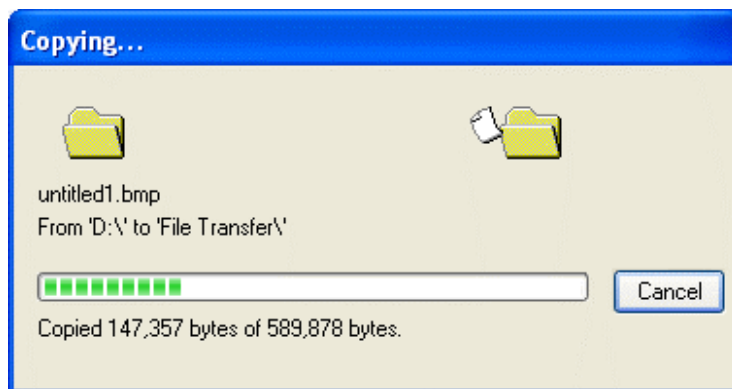
1. After successful USB adapter setup on two PCs, launch the Bluetooth software stack on both PCs by clicking the "**My Bluetooth Places**" icon located on the desktop.
2. On one PC only, double click on "**Entire Bluetooth Neighborhood**" icon to search for other Bluetooth devices nearby.



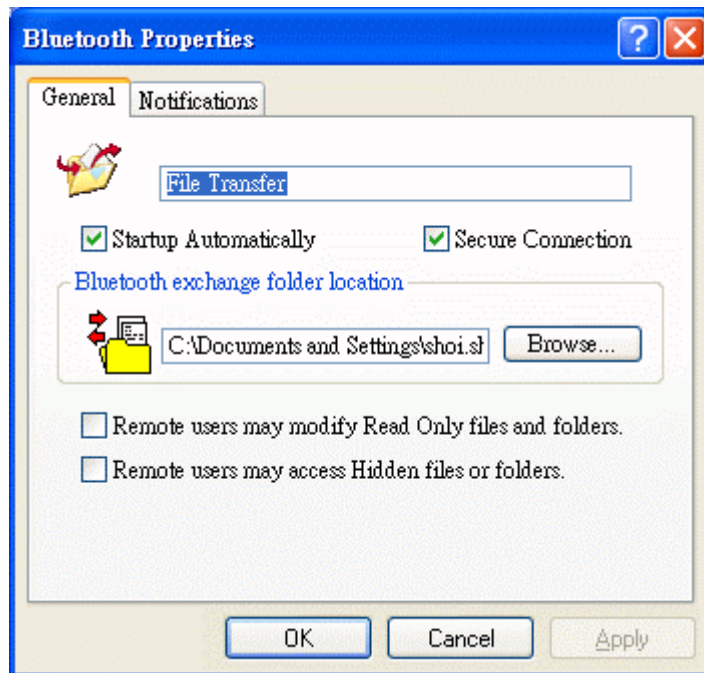
3. After searching is completed, locate the name of PC that you wish to transfer the file to and double click it to discover the Bluetooth services it has to offer (i.e. Bluetooth Serial Port, Dial-up Networking, File Transfer, Network Access, etc.).



4. Double click the **"Public Folder"** icon to open the Bluetooth shared folder on the other PC.
5. Locate the file you want to transfer to that PC and drag it into the **"Public Folder"** window.
6. At this time, a window will pop up to indicate that a file transfer connection is being established, and then file transfer will begin.



7. The file will be opened once the transfer is completed, if the **"Start Automatically"** checkbox is selected.



### 3.4. Dial-up networking setting for Windows

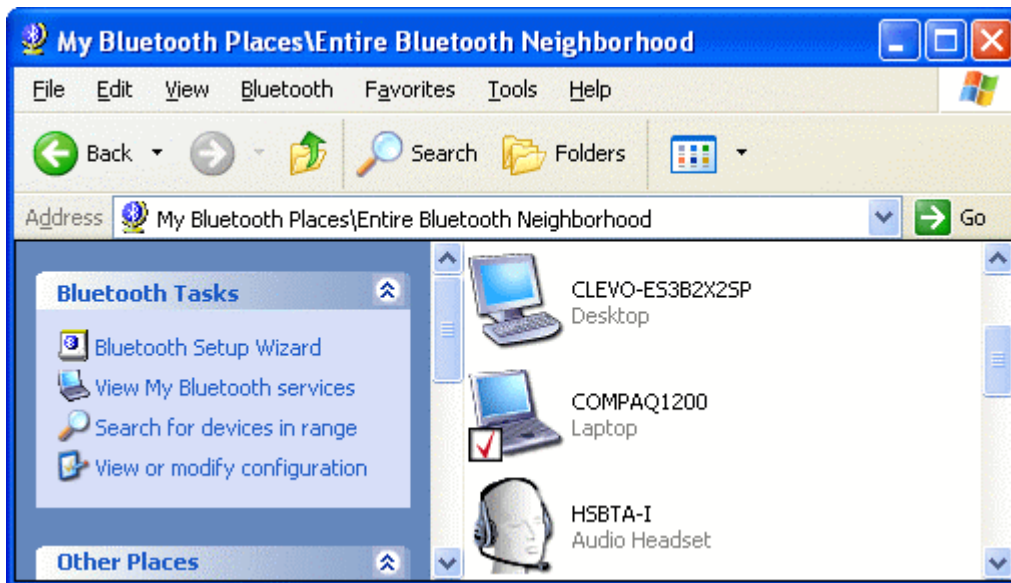
The Dial-up Networking service permits a Bluetooth client to use a modem that is physically connected to a different Bluetooth device (the server). After the Bluetooth wireless connection is established the client can use the server's modem as if it were a local device on the client.

To establish a Dial-up Networking session:

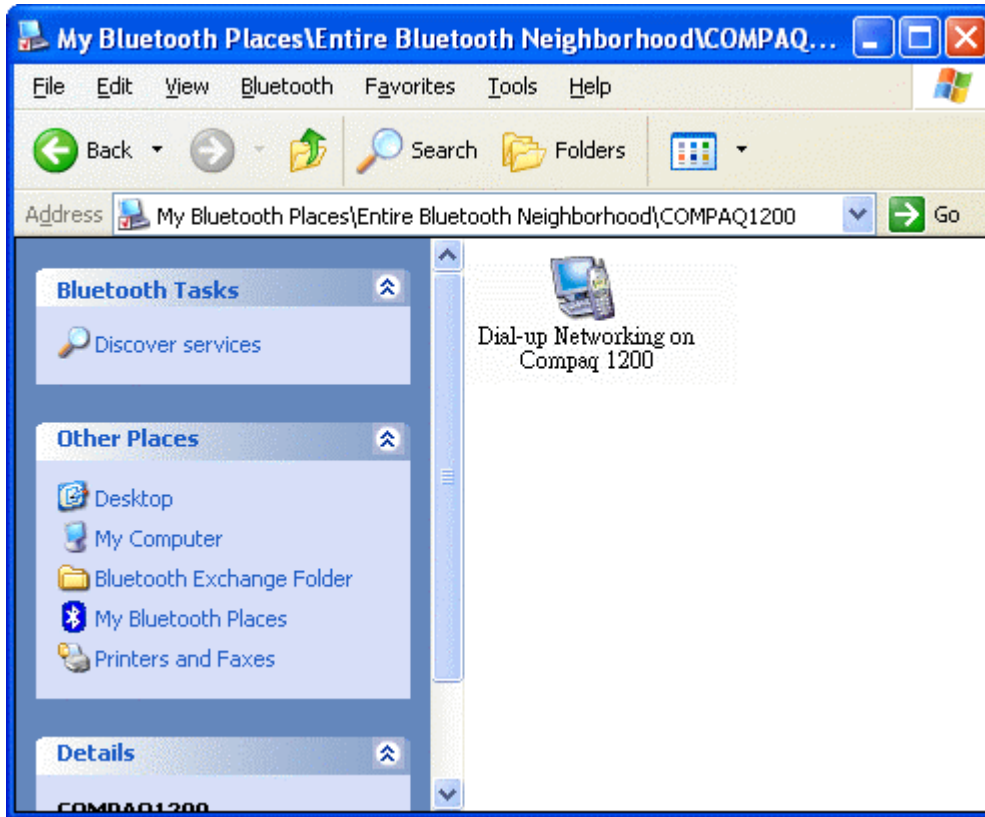
Dial-up networking setting for Windows

Connections are initiated from the client:

1. On the client, in the Folders pane of "**My Bluetooth Places**", select "**Entire Bluetooth Neighborhood**".
2. In the right pane of "**Entire Bluetooth Neighborhood**", right-click anywhere *except on a device name* and select "**Refresh**" from the pop-up menu.
3. In the Folders pane of "**My Bluetooth Places**", right-click the server that will provide the Dial-up Networking Service and select Discover Available Services from the pop-up menu to update the available services list. The available services will be displayed in the right pane of "**My Bluetooth Places**".

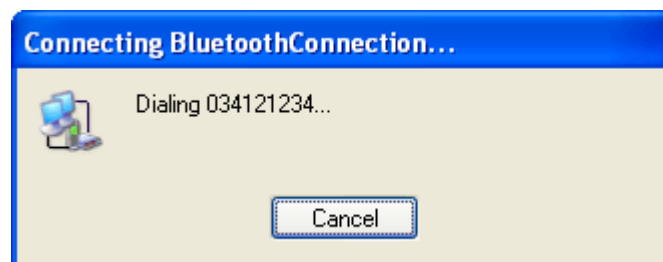
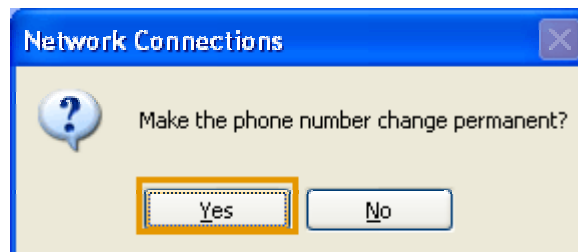


4. In the right pane of "My Bluetooth Places", double-click "Dial-up Networking".



5. In the "Connect To" dialog box, type in your user name, password, and the phone number to be dialed, and then click the "Dial" button.
6. Select the "Save password" checkbox and the dialog box will not appear for subsequent connections to the same phone number. You can now open a web browser and connect to the Internet.

**Note:** When using the GPRS Dial up function, you do not have to type in the user name or password.



To close a Dial-up Networking connection

1. On the client, in the Folders pane of **"My Bluetooth Places"**, select (highlight) the device that is providing the Dial-up Networking service.
2. In the right pane of **"My Bluetooth Places"**, right-click **"Dial-up Networking"** and then select **"Disconnect Dial-up Networking"** from the pop-up menu.

### 3.5. FAX setting

The Fax service allows a Bluetooth client to wirelessly send a fax using a device that is physically attached to a Bluetooth server.

FAX setting for Windows

To send a Fax

Connections are initiated from the client:

1. On the client, in the Folders pane of "**My Bluetooth Places**", select "**Entire Bluetooth Neighborhood**".
2. In the right pane of "**Entire Bluetooth Neighborhood**", right-click anywhere except on a device name and select Refresh from the pop-up menu.
3. In the Folders pane of "**My Bluetooth Places**", right-click the server that will provide the Fax service and select "**Discover Available Services**" from the pop-up menu to update the available services list. The available services will be displayed in the right pane of "**My Bluetooth Places**".
4. In the right pane of "**My Bluetooth Places**", double-click Fax. After the Fax connection is established, open or create the document to be faxed and use the "**Print**" or "**Send to Fax Recipient**" option available in most applications. The Fax connection closes automatically when the transmission is completed.



## 3.6. PIM Item Transfer setting

### Overview

The Bluetooth PIM Item Transfer application allows this computer to send and receive Personal Information Manager items to-and-from a remote Bluetooth device. Item transfer can be accomplished several ways:

To send, receive or exchange business cards:

1. From Windows Explorer, My Bluetooth Places, right-click the PIM Item Transfer service on a remote device and select the appropriate option.

or In the Windows system tray, right-click the Bluetooth icon, select Quick Connect Business Card Exchange, select a device from the list, select the appropriate option from the shortcut menu, and then click OK.

2. From Windows Explorer, My Bluetooth Places, highlight the PIM Item Transfer service on a remote device, and then, from the Bluetooth menu on the Windows menu bar, select the appropriate action.

In addition to the business card options listed above, you can also send Notes (\*.vnt), Email (\*.vmg) and Calendar (\*.vcs) items from this menu.

3. From within a supported Personal Information Manager, select one or more items and then, from the PIM's File menu, select Send to Bluetooth.

Whether sent items are accepted by the remote device is determined by how the remote device's PIM Item Transfer service is configured.

### Close a PIM Item Transfer Connection

This application closes the open connection automatically when its task is complete.

### Configure PIM Item Transfer

The Bluetooth Configuration Panel > Client Applications > PIM Item Transfer > General tab provides options to configure:

- Click the application name to change it, highlight the existing name and enter the new name.
- Enable or disable secure connection. To enable secure connection, place a checkmark in the box.
- How your business card is handled when it is requested by a remote device. The Send My Business Card options are:

**Choose a business card as needed**-each time a remote device requests your business card you must select a card from your PIM. If you ignore the request the remote device will receive a timeout notice.

**Always send the same business card**-when this option is selected a dialog appears that allows you to set a default business card, which will be sent automatically when requests are received.

Where to store received business cards. The Received Business Cards options are:

Microsoft Outlook

Outlook Express

Lotus Notes

**NOTE: The selected Received Business Cards option does not influence the settings on other PIM-related property pages.**

**For example, even if the PIM Item Transfer *service* business card option on this computer is configured to "Do Not Accept", the PIM Item Transfer *application* will still accept business cards that the application has specifically requested via its "Receive" or "Exchange" functions.**

Email attachments. The only option is include or do not include attachments with email that is sent or received on this computer using this service.

## 3.7. PIM Synchronization setting

### Overview

The PIM Synchronization Application is used to synchronize the Personal Information Manager (PIM) database of this computer with the PIM database of a remote Bluetooth device.

The supported PIMs are:

- Microsoft Outlook
- Microsoft Outlook Express
- Lotus Notes

**The supported data types are:**

- Business cards
- Calendar items
- Email (with or without attachments)
- Notes

### Configure PIM Synchronization

The Bluetooth Configuration Panel > Client Applications > PIM Synchronization > General tab provides options to configure:

- The application name- to change it, highlight the existing name and enter the new name.
- Enable or disable secure connection. To enable secure connection, place a checkmark in the box.
- The PIM items to be synchronized and the PIM on this computer with which those items should be synced.

**NOTE:** *If synchronization is enabled for a specific item type, but is not enabled for that item type on the remote device, synchronization WILL NOT take place for that item.*

The data item types which can be synchronized are:

- Business cards
- Calendar items
- Email (with or without attachments-see below)
- Notes

Possible synchronization options for each of these data item types include:

**Do Not Synchronize**-this item type will not be synchronized

**Synchronize Microsoft Outlook**-this item type will be synced with its matching entry in Microsoft Outlook, regardless of the PIM that contains this entry on the remote device. If a matching Outlook entry does not exist, it will be created

**Synchronize Outlook-Express**-this item type will be synced with its matching entry in Express, regardless of the PIM that contains this entry on the remote device. If a matching Express entry does not exist, it will be created

**Synchronize Lotus Notes**-this item type will be synced with its matching entry in Lotus Notes, regardless of the PIM that contains this entry on the remote device. If a matching Notes entry does not exist, it will be created.

**NOTE: All choices are not available for all items. For example, Notes items can only be synchronized in Microsoft Outlook, therefore Lotus Notes and Outlook Express do not appear as options in the "Notes" item shortcut menu.**

**Personal Information Managers that are not installed on this computer do not appear as options in the shortcut menus.**

Email attachments. The only option is include or do not include attachments with email that is sent or received on this computer using this service.

## 3.8. Serial port setting

The Bluetooth Serial Port service allows two Bluetooth devices to establish a wireless connection through virtual communications ports and then use that connection as if it were a hardwired serial cable between the devices.

To establish a Bluetooth serial port connection:

**Connections are initiated from the client:**

1. On the client, in the Folders pane of **"My Bluetooth Places"**, select **"Entire Bluetooth Neighborhood"**.
2. In the right pane of **"Entire Bluetooth Neighborhood"**, right-click anywhere *except on a device name* and select **"Refresh"** from the pop-up menu.
3. In the Folders pane of **"My Bluetooth Places"**, right-click the server you want to establish a connection with and select **"Discover Available Services"** from the popup menu to update the available services list. The available services will be displayed in the right pane of **"My Bluetooth Places"**.
4. In the right pane of **"My Bluetooth Places"**, double-click **"Bluetooth Serial Port"**. A dialog box appears that contains the communications port number assigned to this connection by the client. The application that will use this connection must be configured to send data to this port.

Depending on the security configuration, the dialog box that provides communications port information may not appear until after Authentication and Authorization have been accomplished.

The application on the server must be configured to use the correct communications port.

**To determine the communications port being used by the service:**

\* On the server, in the Folders pane of **"My Bluetooth Places"**, right-click **"My Device"** and select **"Properties"** from the pop-up menu

\* In the **"Bluetooth Configuration Panel"**, select the **"Local Services"** tab.

\* Double-click the **"Bluetooth Serial Port"** service to display its **"Service Properties"** dialog box. The **"Service Properties"** dialog box shows the communications port the connection is using.

**To close a Bluetooth serial port connection**

**Connections are normally closed from the client:**

\* On the client, in the Folders pane of **"My Bluetooth Places"**, select (highlight) the device that is providing the **"Bluetooth Serial Port"** service.

\* In the right pane of **"My Bluetooth Places"**, right-click **"Bluetooth Serial Port"** and then select **"Disconnect Bluetooth Serial Port"** from the pop-up menu. Though not recommended, connections can also be closed from the server:

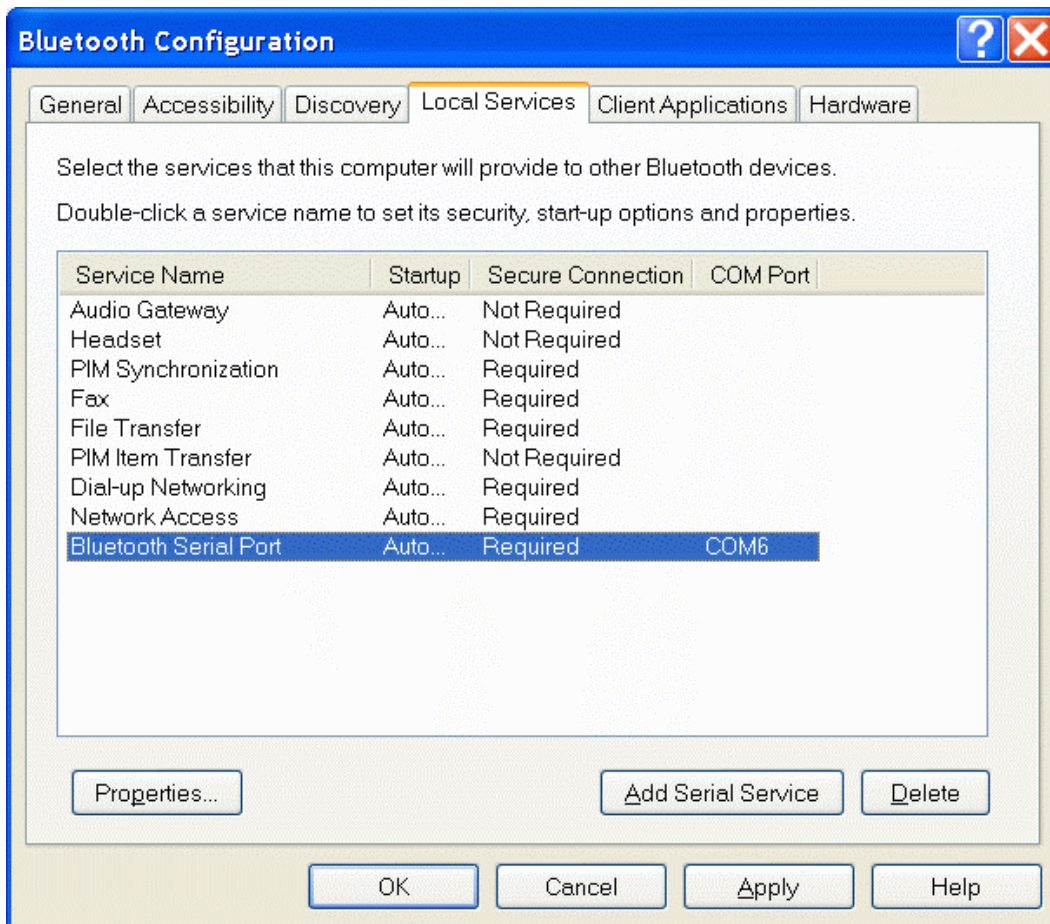
\* On the server, in the Folders pane of **"My Bluetooth Places"**, select (highlight) **"My Device"**.

\* In the right pane of **"My Bluetooth Places"**, right-click **"Bluetooth Serial Port"** and then select Stop to close the service. The service must be re-started before it will be available to remote devices (right-click Bluetooth Serial Port and select Start from the pop-up menu).

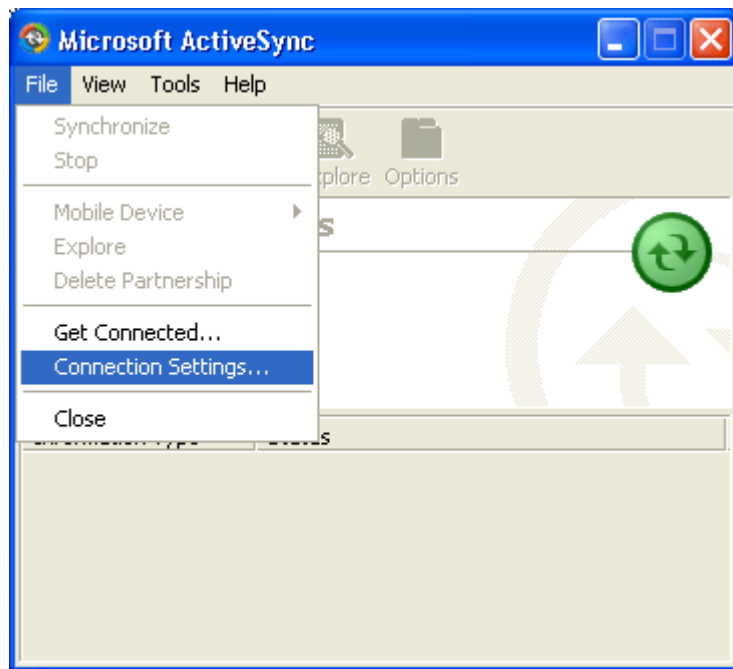
### 3.9. ActiveSync setting

#### ActiveSync setting for Windows

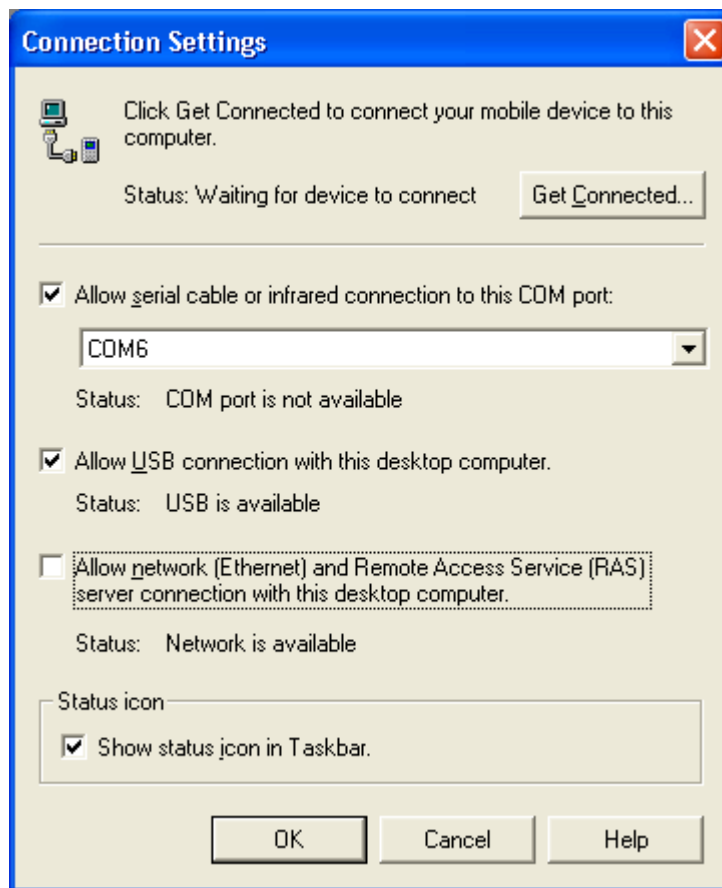
1. Right-click on **Bluetooth Configuration** icon from the toolbar in the desktop window. Select **Setup** and then open **Configuration** window.
2. Select **Local Service** tab from the Bluetooth Configuration window. In the **Service Properties** window, please learn by heart the current COM port this computer uses, for example: COM 6, in order to identify this value with the configuration of Microsoft ActiveSync later.



3. In the *Microsoft ActiveSync* window, select **Connection Settings...** from drop-down list of File menu.



4. Choose the same COM port. (in this case, it is COM 6 that Bluetooth Serial port uses shown in the Step 2.)

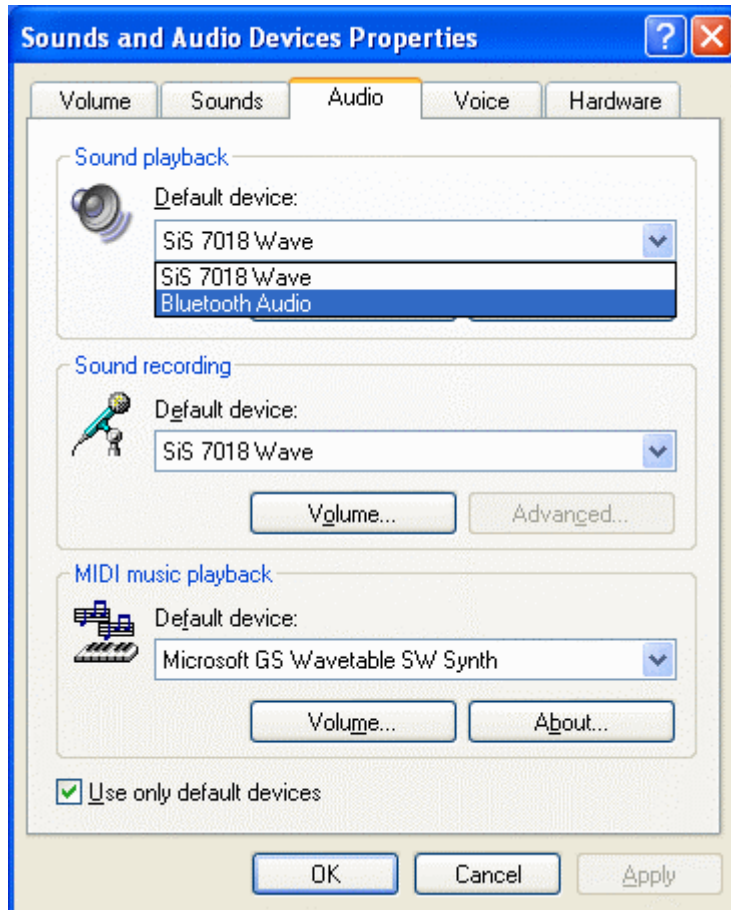


5. Please refer to the PDA ActiveSync Setting to complete the Bluetooth ActiveSync Configuration Process



### 3.10. Audio Gateway setting for windows

The Audio Gateway Application allows a remote Bluetooth device to use this computer's microphone and speakers as the remote device's audio input and output devices.

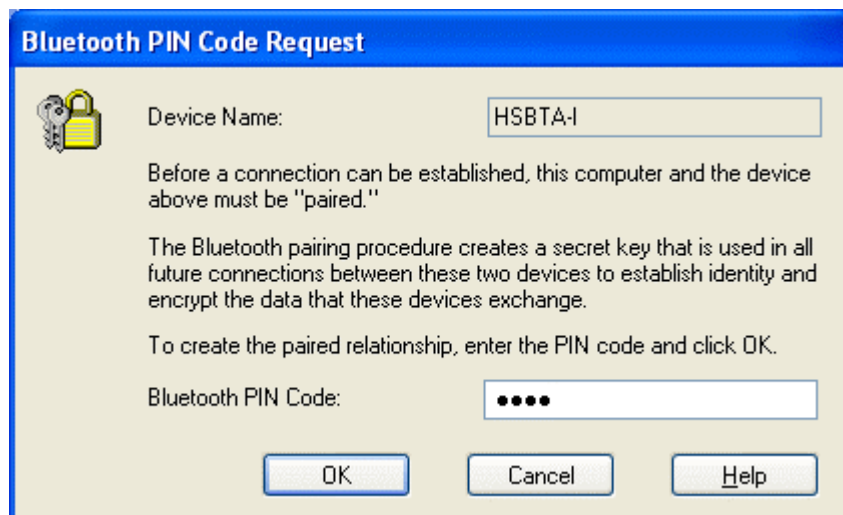


\*Remember please switch your Audio device to "**Bluetooth Audio**" from control panel. Open a connection to the Audio Gateway service that is provided by another Bluetooth device using one of these techniques:

- Windows system tray, Bluetooth icon
- From Bluetooth Explorer
- Using the Bluetooth Setup Wizard



From Bluetooth Explorer to connection your headset device.



Key in headset pair key or PIN code. (Refer to the Headset's user's manual for reference)

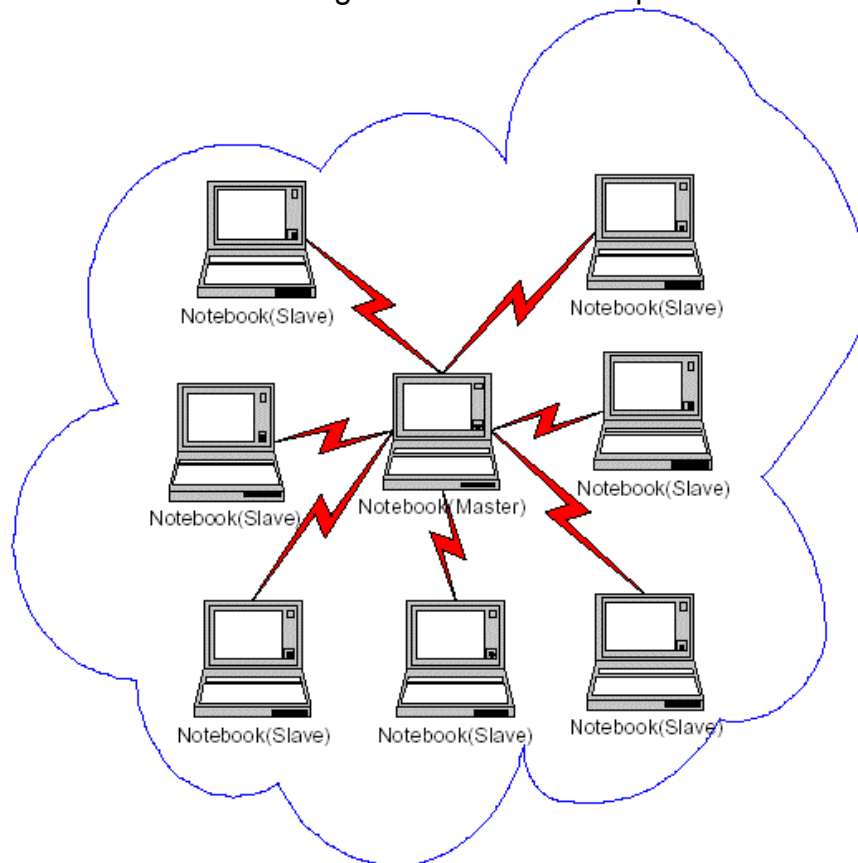
**Close an audio gateway connection:**

If the connection was established via the Bluetooth icon in the Windows system tray; click the Bluetooth icon, select Quick Connect, Audio Gateway and then select the device that is providing the service (active connections have a checkmark in front of them). Or No matter how the connection was created, In My Bluetooth Places, right-click the service name and select Disconnect. **Configure The Bluetooth Configuration Panel > Client Applications > Audio Gateway > General** tab provides options to configure:

- The application name-- to change it, highlight the existing name and enter the new name.
- Enable or disable secure connection. To enable secure connection, place a checkmark in the box.

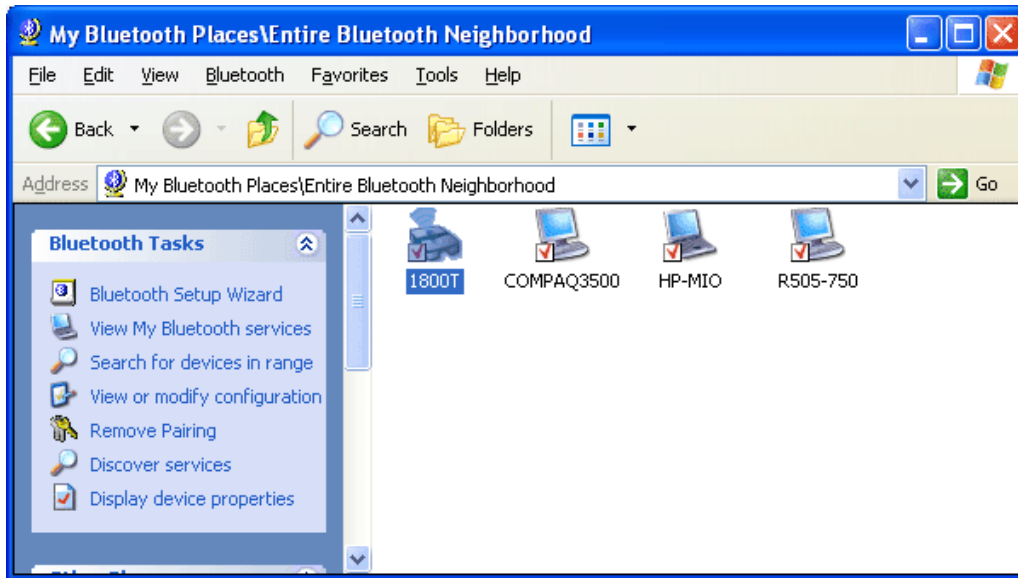
### 3.11. Personal area network setting for windows

The Personal Area Networking (PAN) chapter will show you how two or more Bluetooth enabled devices can form an ad-hoc network and how the same mechanism can be used to access a remote network through a network access point.

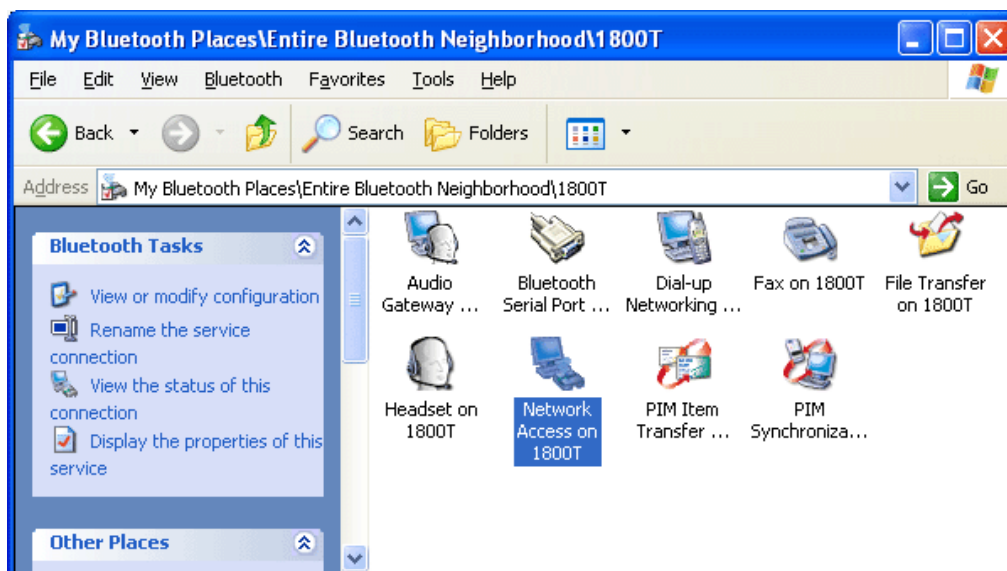


## How to setup an Ad-hoc Network

1. On the client, in the Folders pane of "My Bluetooth Places", select "Entire Bluetooth Neighborhood".
2. In the right pane of "Entire Bluetooth Neighborhood", right-click anywhere *except on a device name* and select Refresh from the pop-up menu.

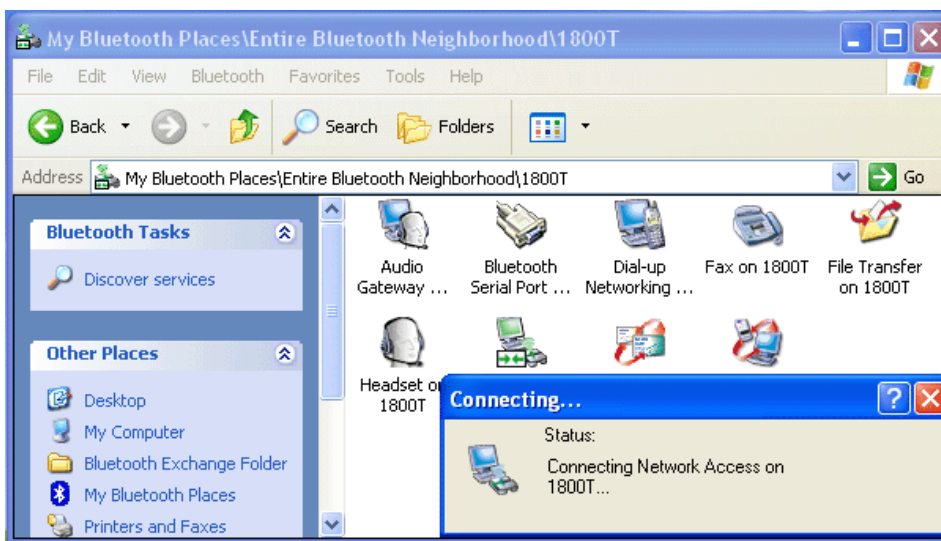


3. In the right pane of "My Bluetooth Places", right-click the server that will provide the Networking Access Service and select Discover Available Services from the pop-up menu to update the available services list. The available services will be displayed in the right pane of "My Bluetooth Places".

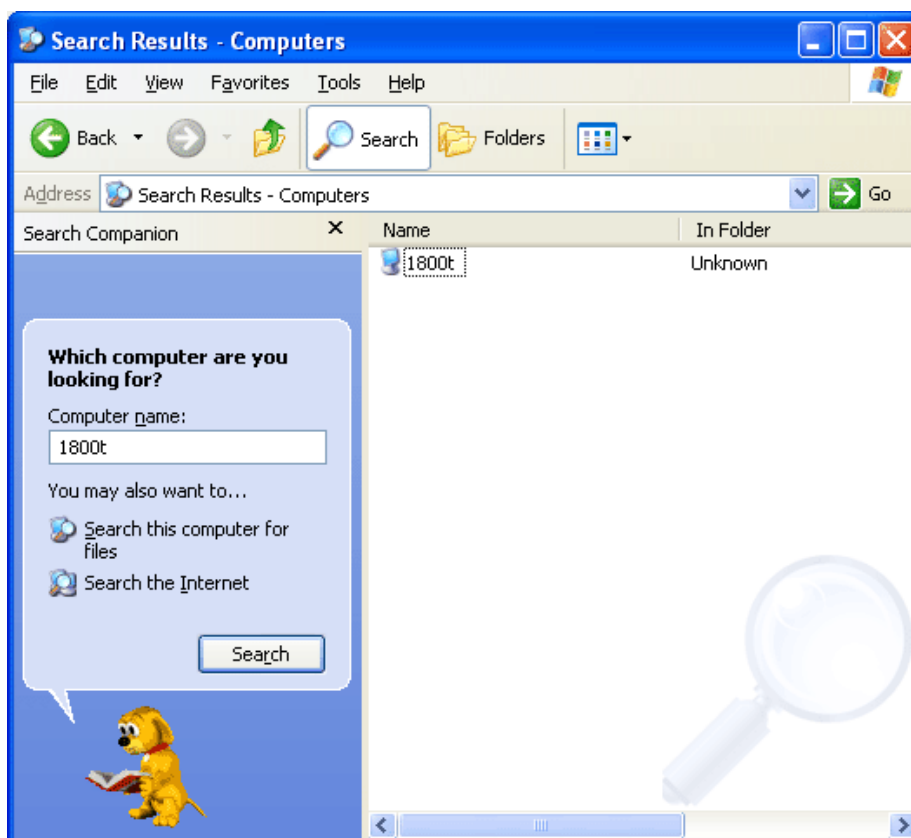


Double click Network Access to establish a PAN network.

If the system pops up a **"Bluetooth PIN Code Request"** window please key in the same passkey or PIN code between the two devices.

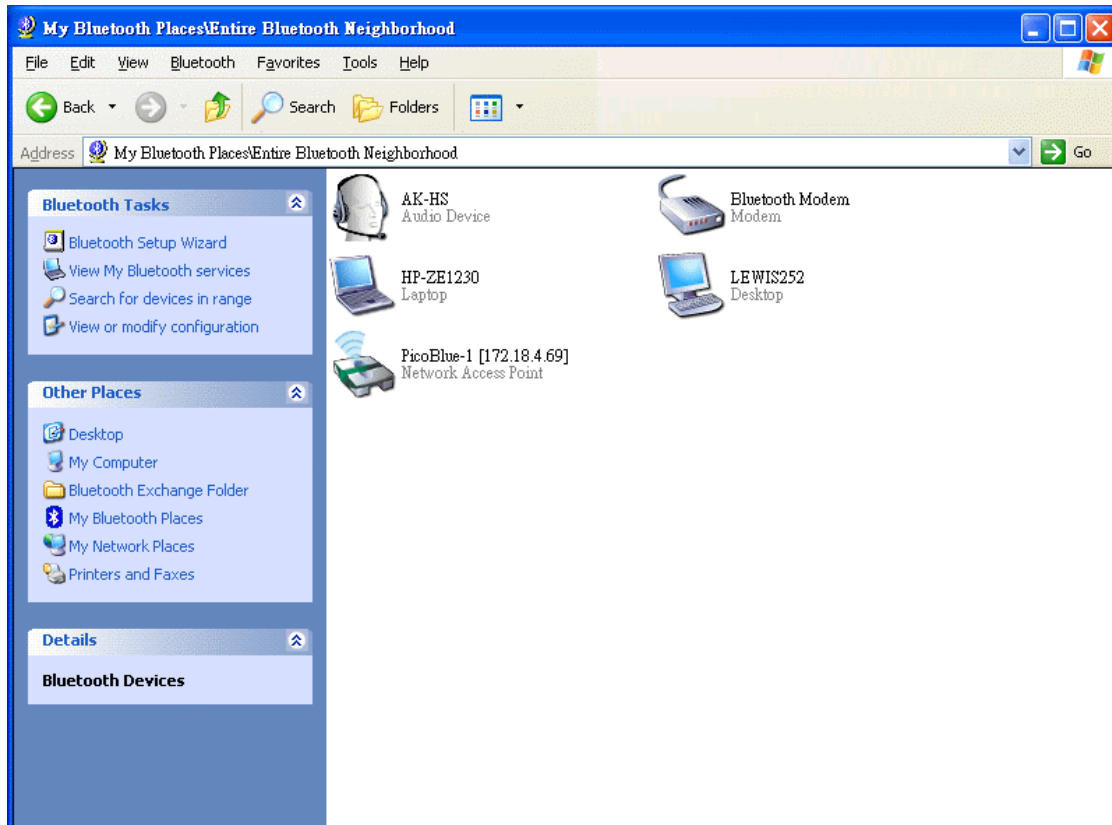


Once connected, you can check your Bluetooth PAN network neighborhood from the file explorer or by the **"Search Computers"** function.

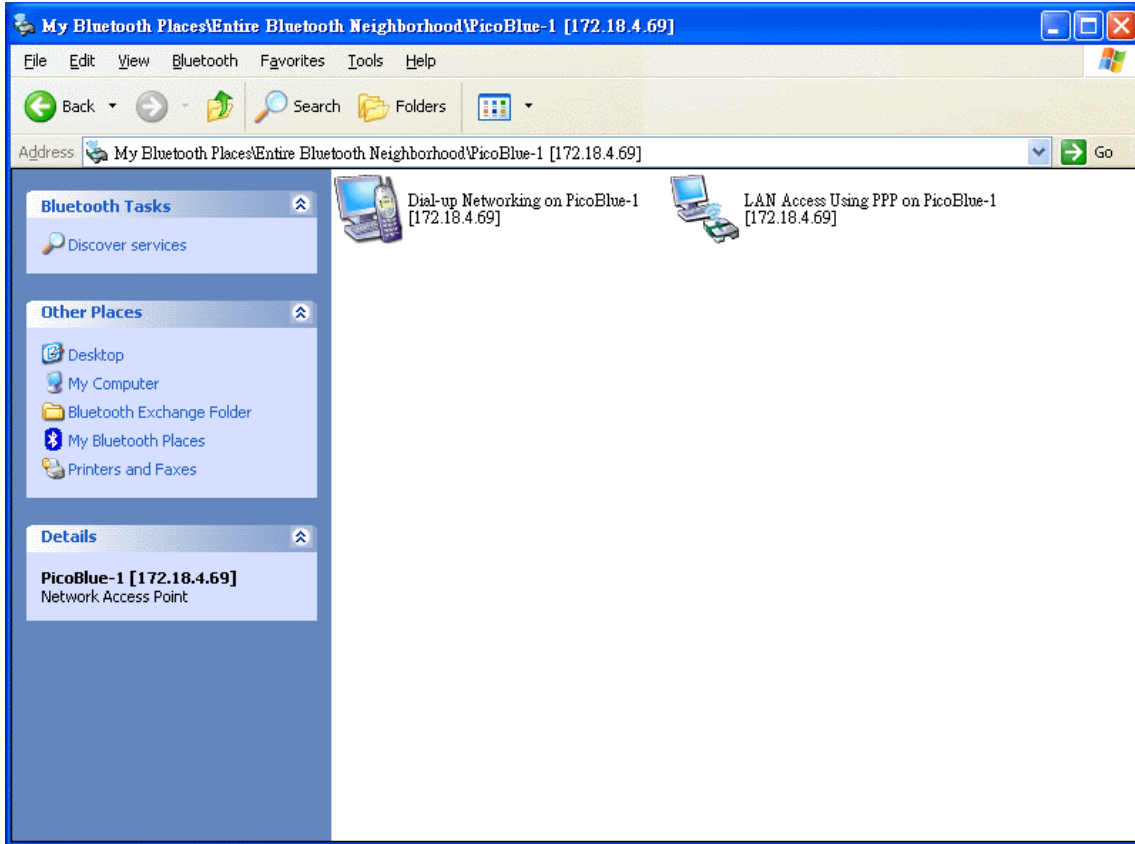


## How to setup with Bluetooth Network Access Point

The Bluetooth Software makes it easy to join an existing personal network, hosted by another Bluetooth device (PocketPC, desktop, etc.) From the **My Bluetooth Places**, choose **Entire Bluetooth Neighborhood**, and select the Bluetooth device that you want to establish a PAN connection and double click the device icon.



It will list out all the available services of this device, please select the LAN Access.



Right click the LAN Access and select "**Connect to Network Access Point**", your PC will initially connect to the Network Access Point.

After enter the Bluetooth PIN Code, a connection will then be established between your PC and the host over the personal network.



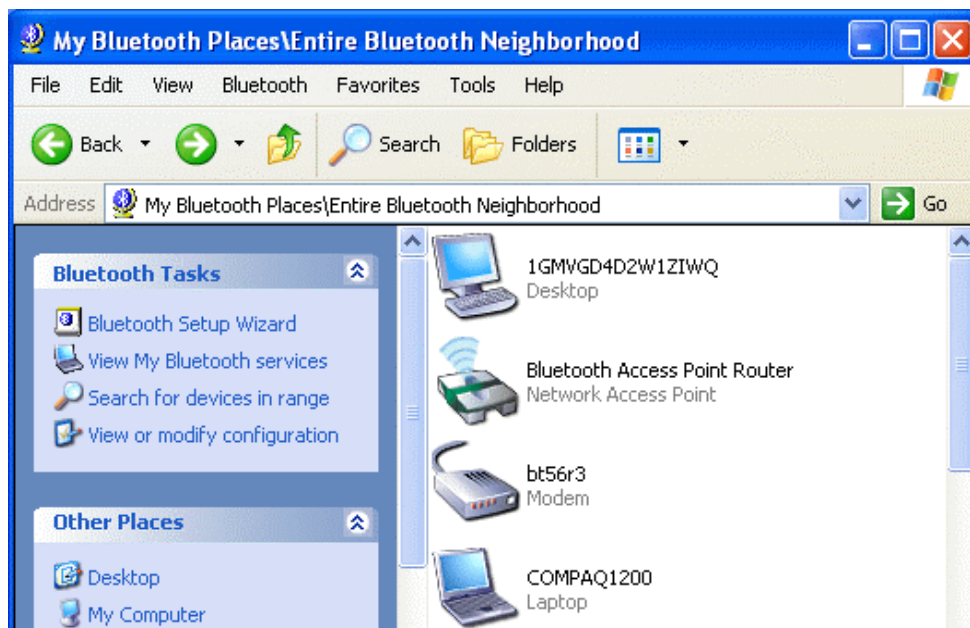
# 4

## Chapter 4

### Advanced features

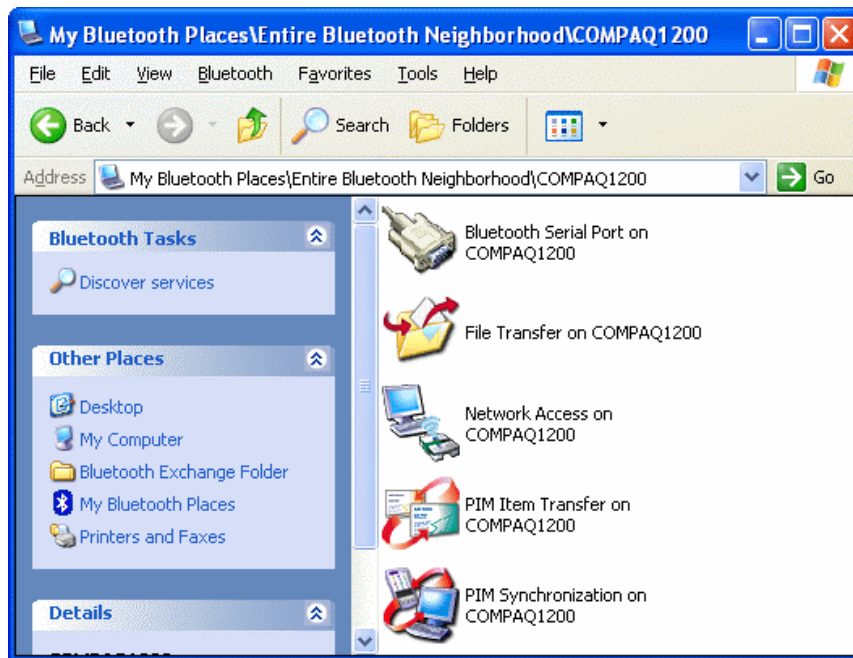
#### 4.1. How to set up HyperTerminal for Bluetooth transfer

1. Install Bluetooth Software on two separate notebooks or desktop PCs (referred to as server and client in the following document).
2. With Bluetooth adapter inserted, do a "Search for devices" on client to find near by Bluetooth devices.

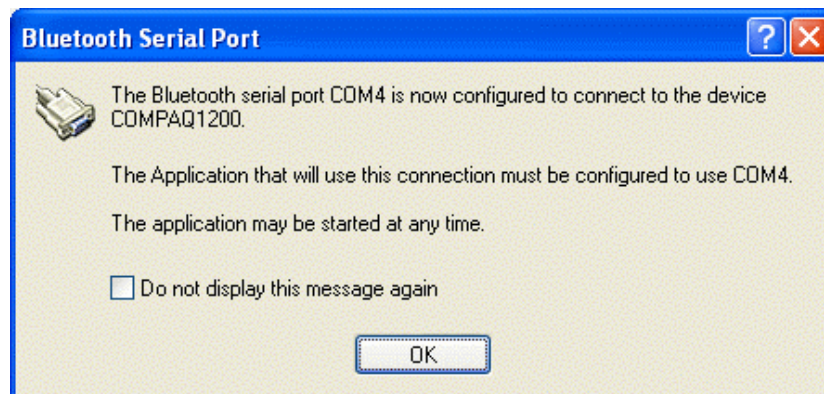


3. Double click on the Bluetooth device you wish to connect to (e.g. COMPAQ1200, the server).

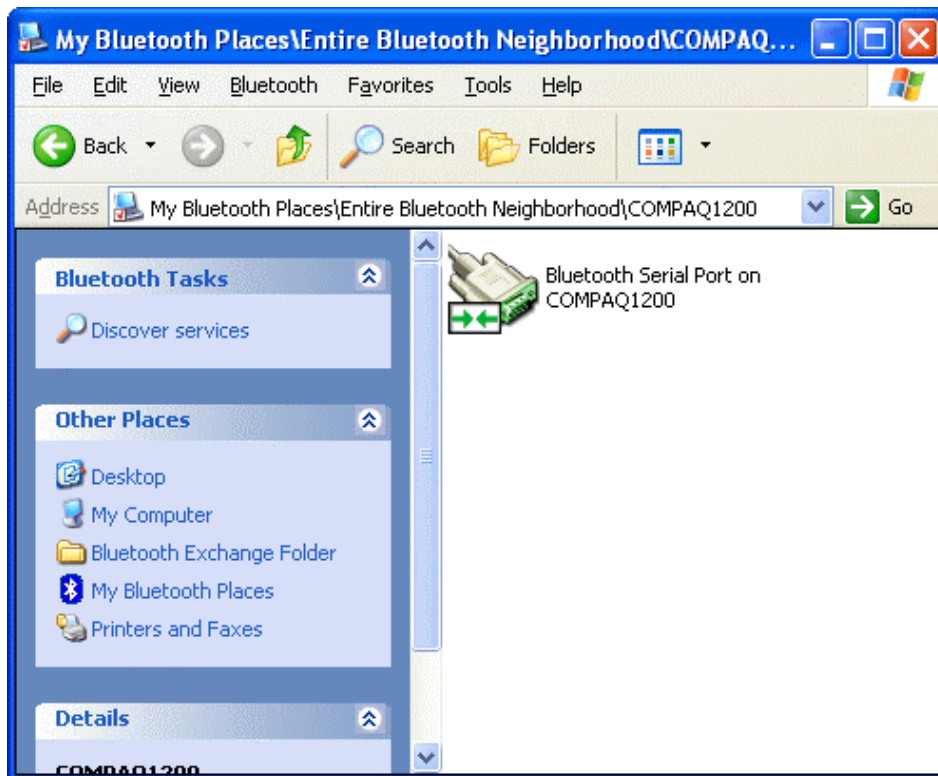




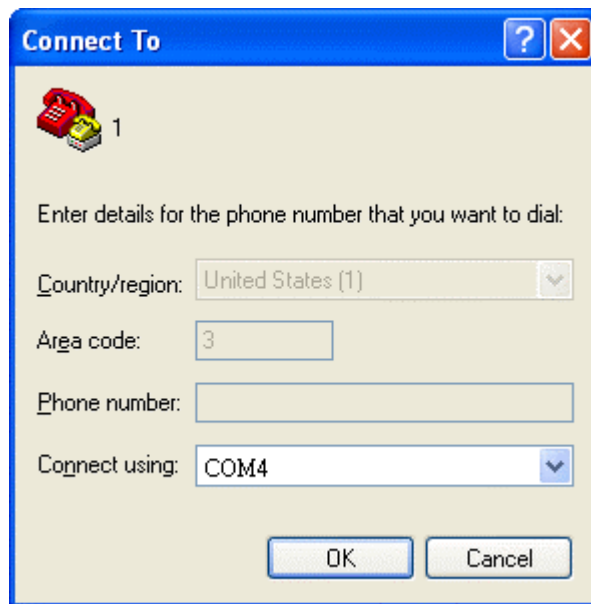
4. Double click on "Bluetooth Serial Port"; take a note of the COM port used by this connection (e.g. COM4).



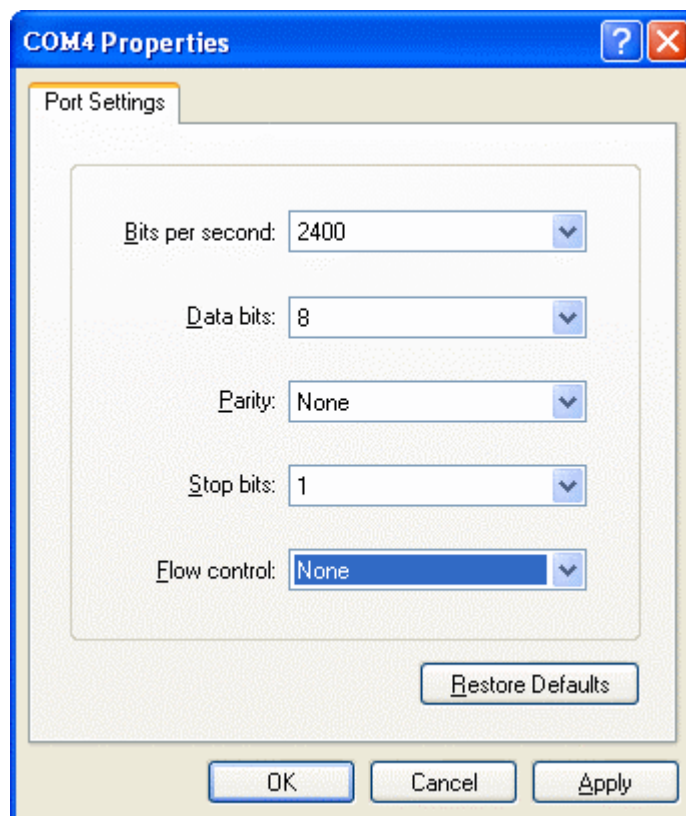
5. The Bluetooth Serial connection should now be established.



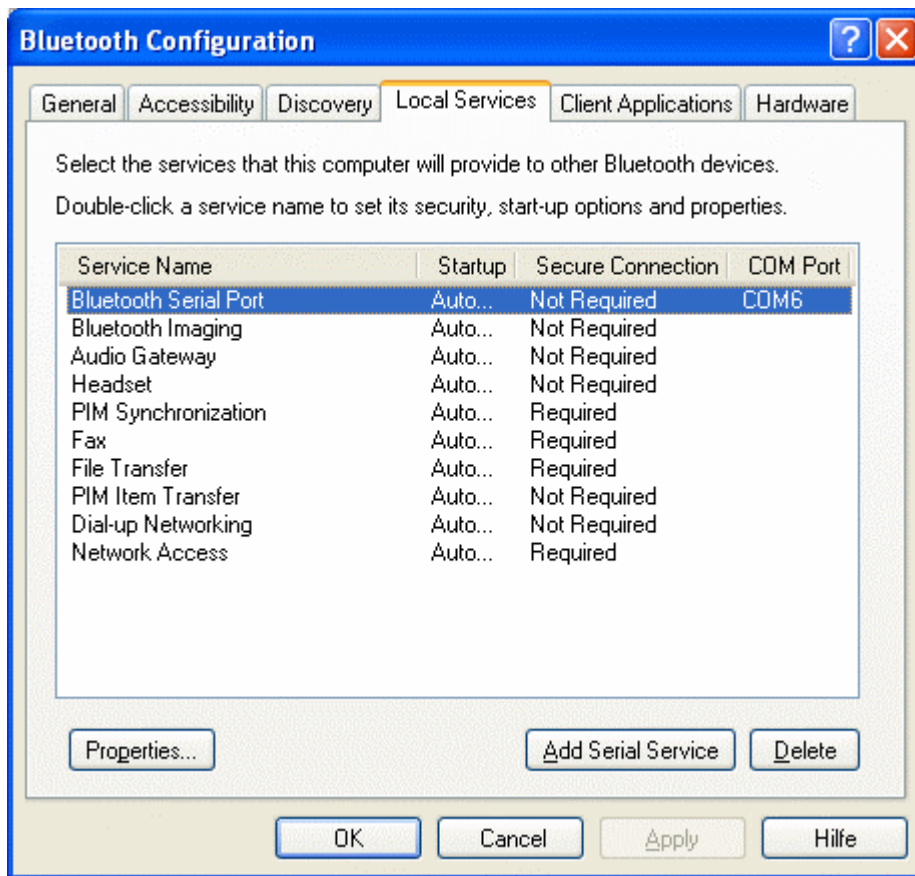
6. On the **client** side, open HyperTerminal. Choose the COM port used by the Serial connection in step 4.



7. Set the baud rate and other settings as required.



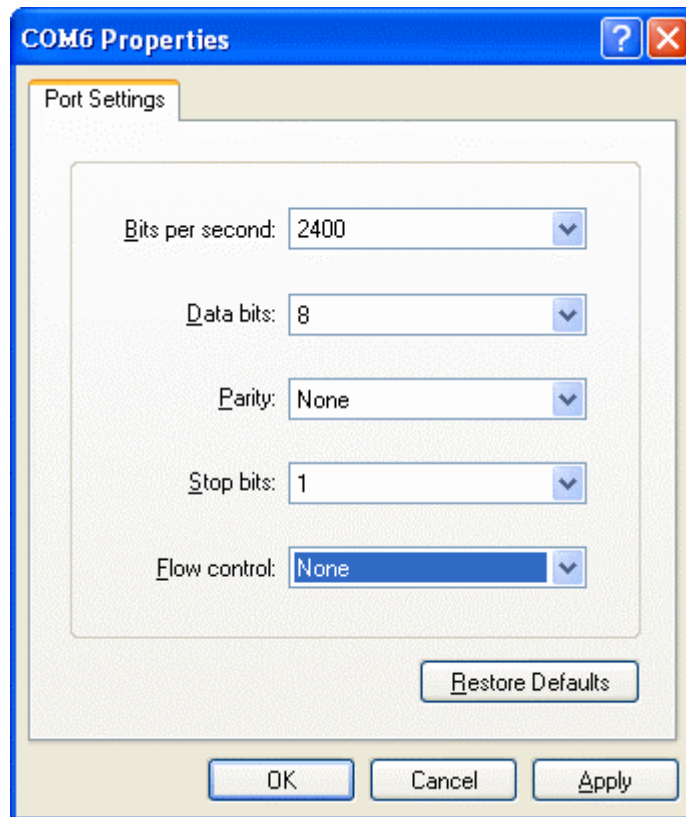
- On the **server** side, check the local COM port used by the system in the Bluetooth Configuration window (e.g. COM6).



- Open HyperTerminal, choose the COM port used by the system in step 8.



10. Set the baud rate and other settings as required.



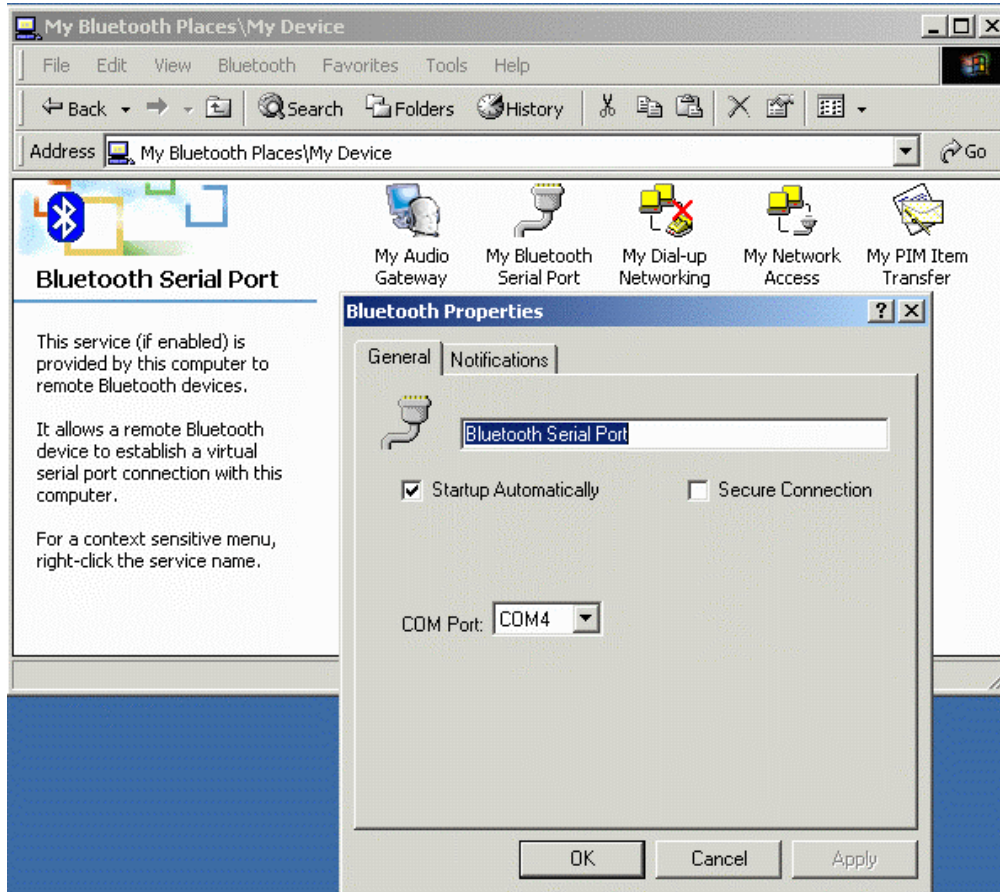
11. The HyperTerminal connection should now be established. Type something on the client side and the same thing will appear on the server.
12. To transfer files, select "Send File" from the menu bar of the client system, and select the file you wish to transfer.
13. The received file should be placed on the C: drive of the server system (default location).

## 4.2. How to HotSync with Palm Bluetooth SDIO and Tungsten T

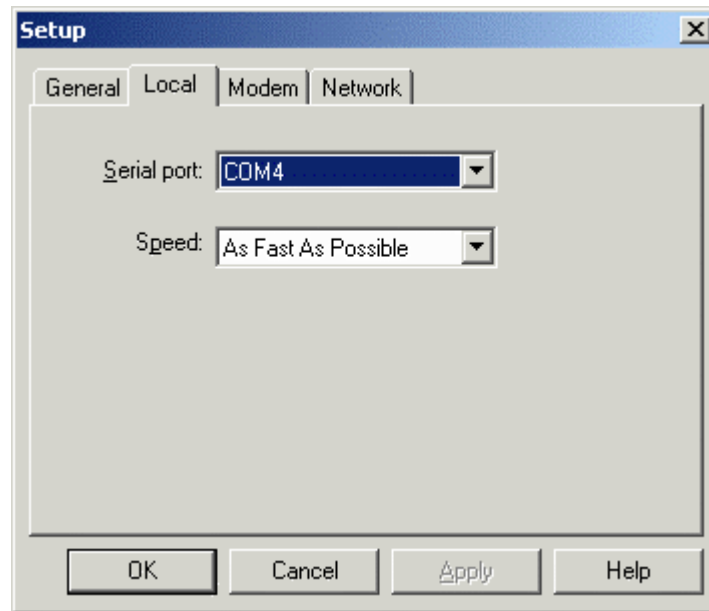
Please make sure you have installed Bluetooth software and Palm Desktop on your notebook or desktop PC before proceeding to the setup instructions below.

1. From the Palm main panel, tap the HotSync icon.
2. Tap HotSync and select "Connection Setup" from the menu bar.
3. Tap "New".
4. Give the new connection a name, e.g. BTConnection.
5. Change "Connect to:" to "PC".
6. Change "Via:" to "Bluetooth".
7. The "Device:" option will pop up, tap to find the Bluetooth system you wish to HotSync with.
8. Select the Bluetooth system you wish to HotSync with and tap OK.
9. Tap "Yes" when prompted with "Do you want to add \*\*\* to your trusted device list?".
10. Key in the same passkey on Palm and your notebook or desktop PC to complete the pairing process.
11. Tap "OK" and "Done" to return to the HotSync panel.
12. Tap the dropdown menu to select the Bluetooth connection you have just created. E.g. BTConnection.

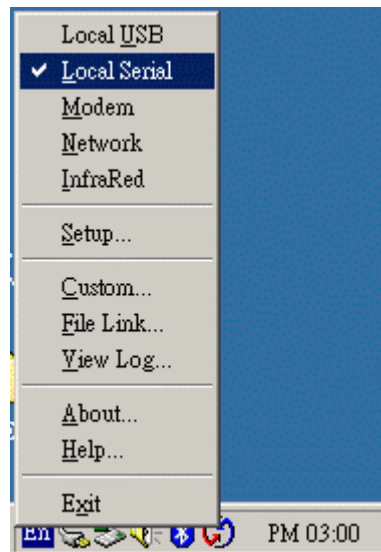
13. From the notebook, find out the local COM port used by "Bluetooth Serial Port", e.g. COM4. (My Bluetooth Places->My Device, right click My Bluetooth Serial Port and select Properties)



14. Change the COM port setting in Palm HotSync to match the COM port found in step 11, e.g. COM4.



15. Change the connection type to "Local Serial" in the HotSync Manager.



16. Tap the HotSync silk button on Palm, and the HotSync process should begin in a few seconds.



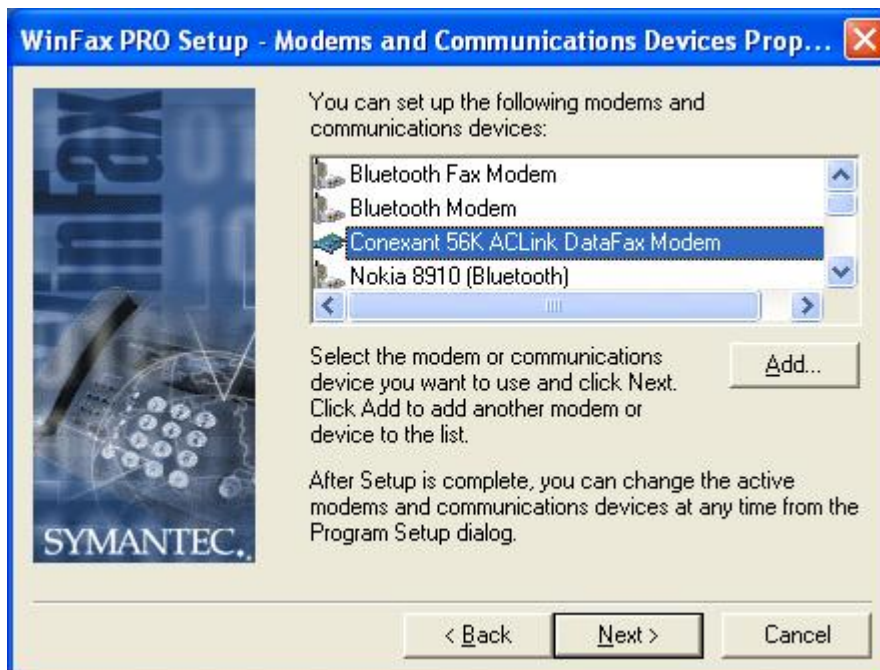
### 4.3. How to dial-up from Palm Tungsten T to my PC's modem to surf the Internet

1. Enable Bluetooth on your PC and make sure you can dial up to the ISP with your modem.
2. On your Palm, in the main panel, tap "Prefs", select "Communication", and select "Network".
3. Tap "New" button.
4. Key in a new name for "Service:", e.g. pcmodem.
5. Key in the "User Name:".
6. Key in the "Password:".
7. Tap on "Connection" and select "Edit Connections..." to create a new connection setup.
8. Tap "New" button.
9. Key in a new name for "Name:", e.g. btmodem.
10. Tap on "Connect to:" and select "Modem".
11. Tap on "Via:" and select "Bluetooth".
12. Tap on "Device:", wait for your PC to be found.
13. Select your PC and tap "OK".
14. Palm will ask you to add your PC to the trusted device list, tap "Yes".
15. Key in a numeric passkey, e.g. 1, and tap "OK".
16. Type in the same passkey on your PC, now the pairing process is complete.
17. Make sure "Dialing:" is set at "Touch Tone".
18. Tap the "OK" button and "Done" to return to the Network page.
19. Tap on "Connection:" and select the connection setup you've just created.
20. Tap on "Phone:" and enter the phone number of your ISP.
21. Tap the "Connect" button and the modem on your PC should start dialing.
22. Once connected, launch a web browser and you should be surfing the Internet.

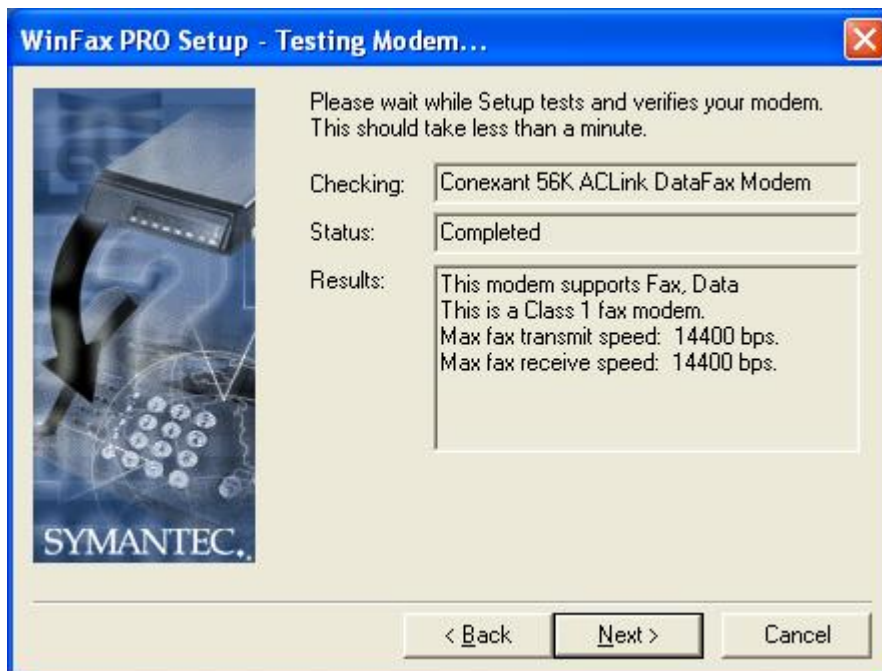
#### 4.4. Sending FAX via mobile phone with WinFax Pro

**NOTE:** Please make sure you have subscribed to the FAX sending/receiving feature with your mobile service provider.

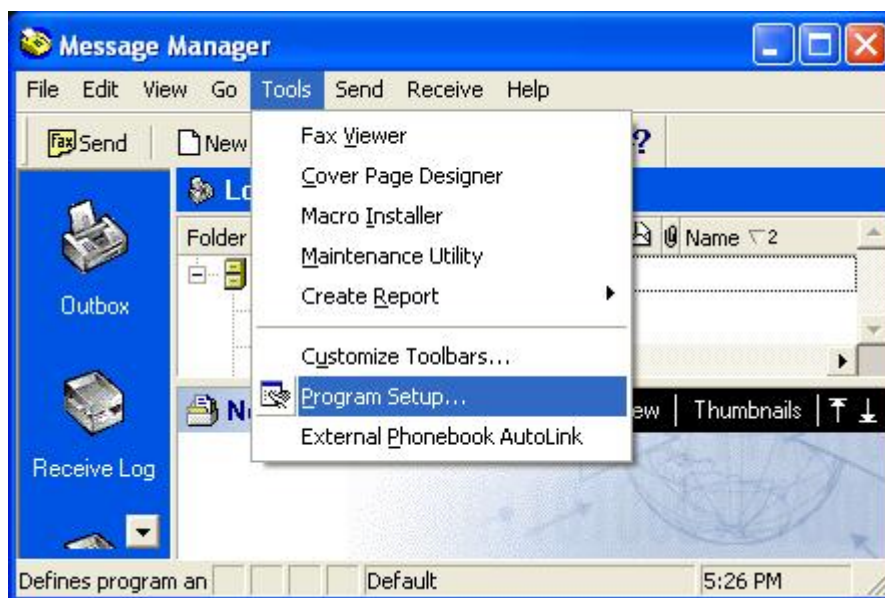
1. Please install WinFax Pro according to WinFax Pro's installation instructions.
2. Before installing WinFax Pro, Please make sure that your computer is connected with a physical Fax Modem.
3. After installing WinFax Pro, the following window will pop up, choose your physical modem at this stage. **Do NOT choose "Bluetooth Fax Modem"**.



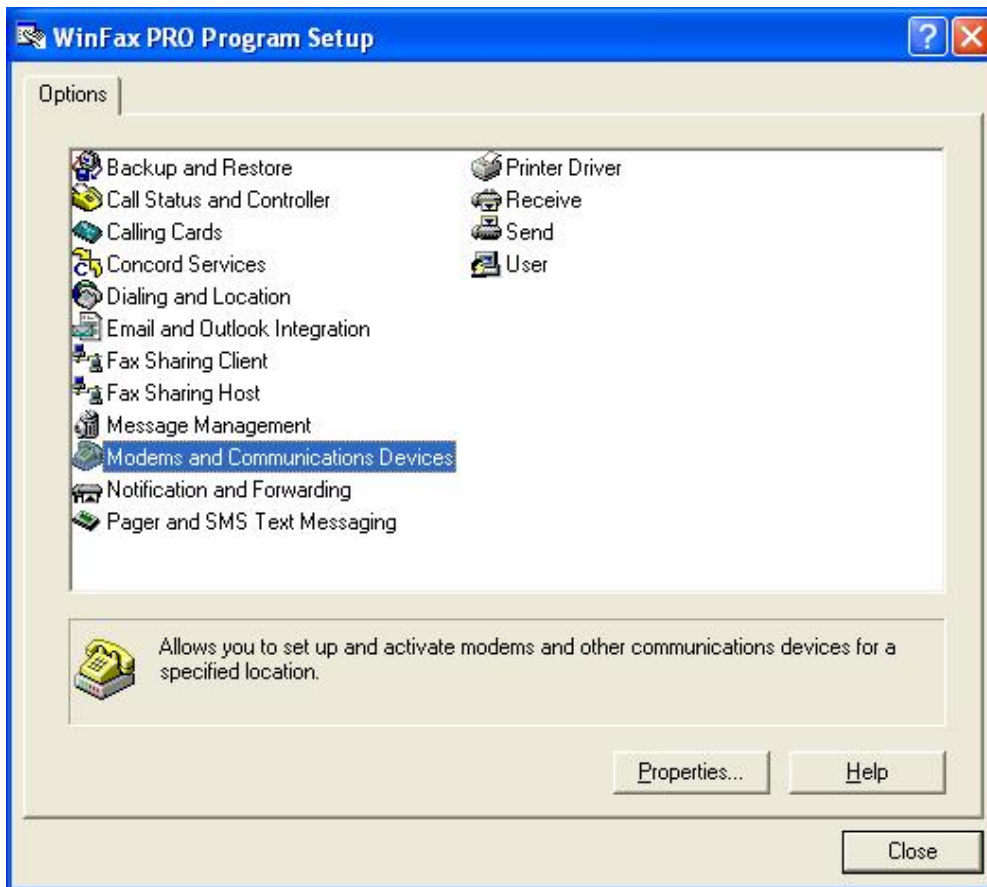
4. WinFax Pro will start testing the Fax Modem, once it's completed, click Next to continue.



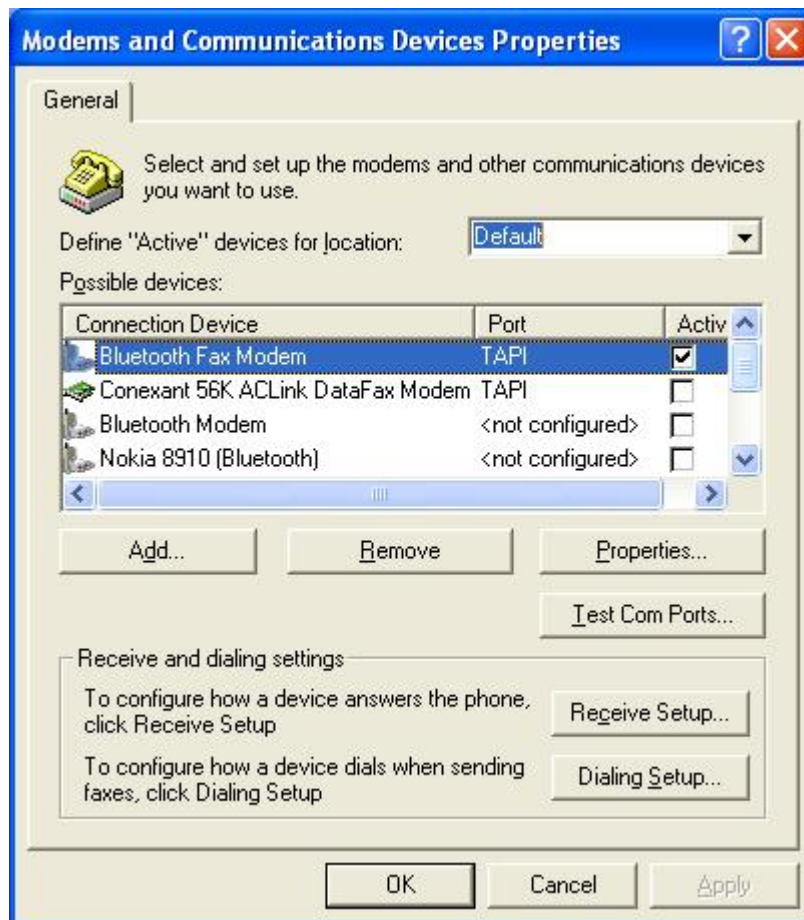
5. After installation, launch WinFax Pro. Click on **Tools**→**Program Setup**.



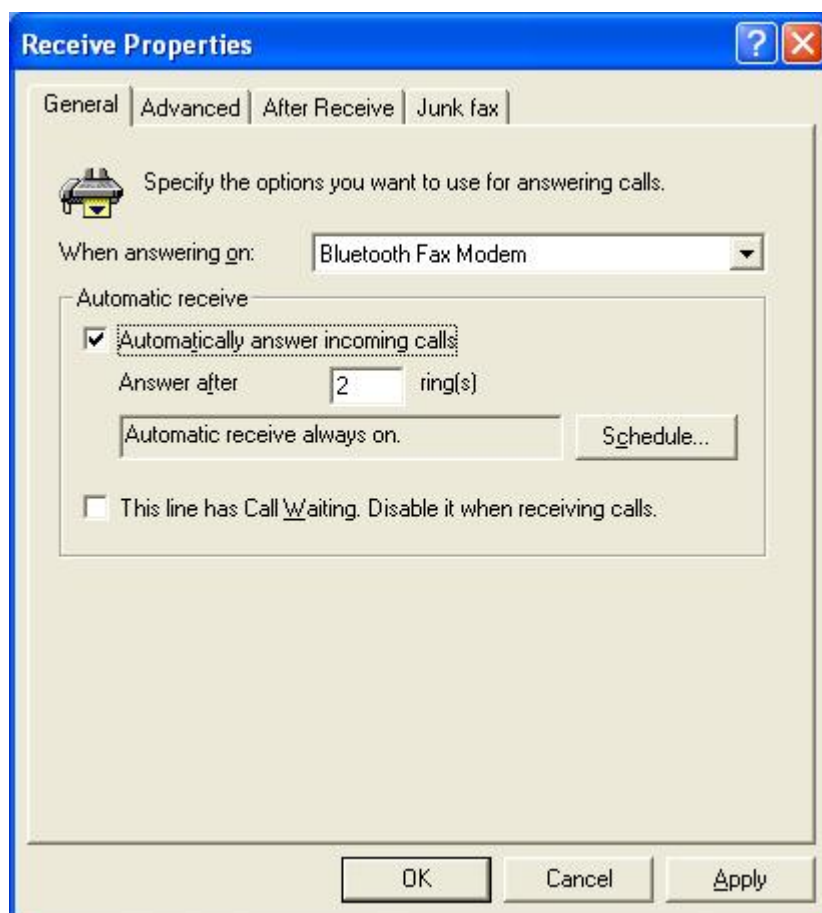
6. Double click "Modems and Communications Devices".



7. Tick the checkbox next to Bluetooth Fax Modem. Uncheck the checkbox next to your physical modem.



8. Click the "Receive Setup" button, tick the "Automatically answer incoming calls" checkbox. Click "OK" to complete the process.

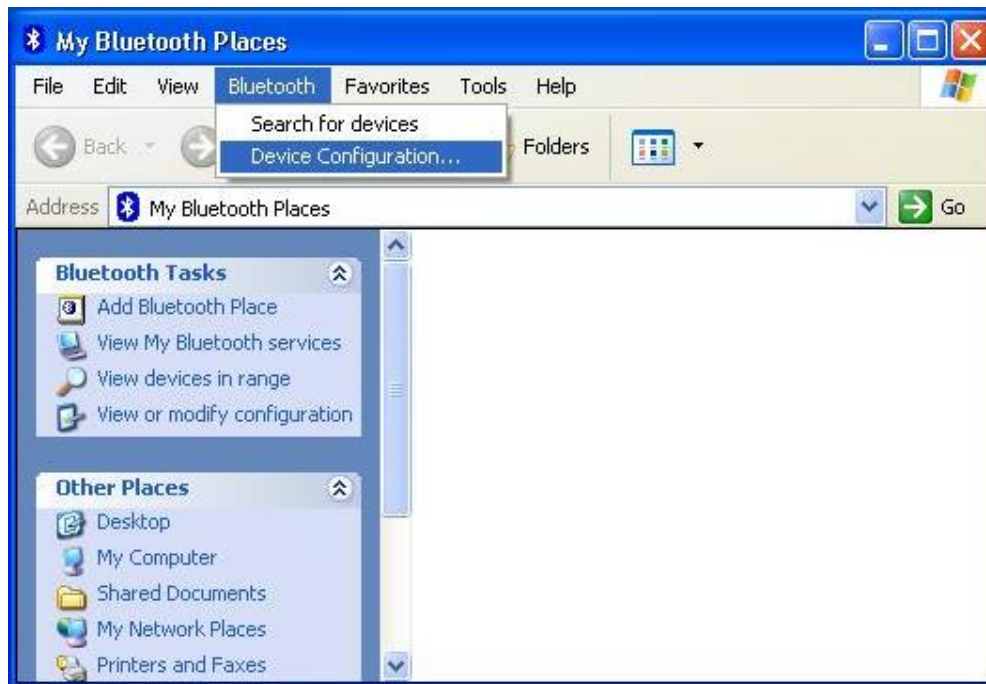


9. Now create a new fax and click the "Send" button when done. You can now send faxes via your mobile phone.

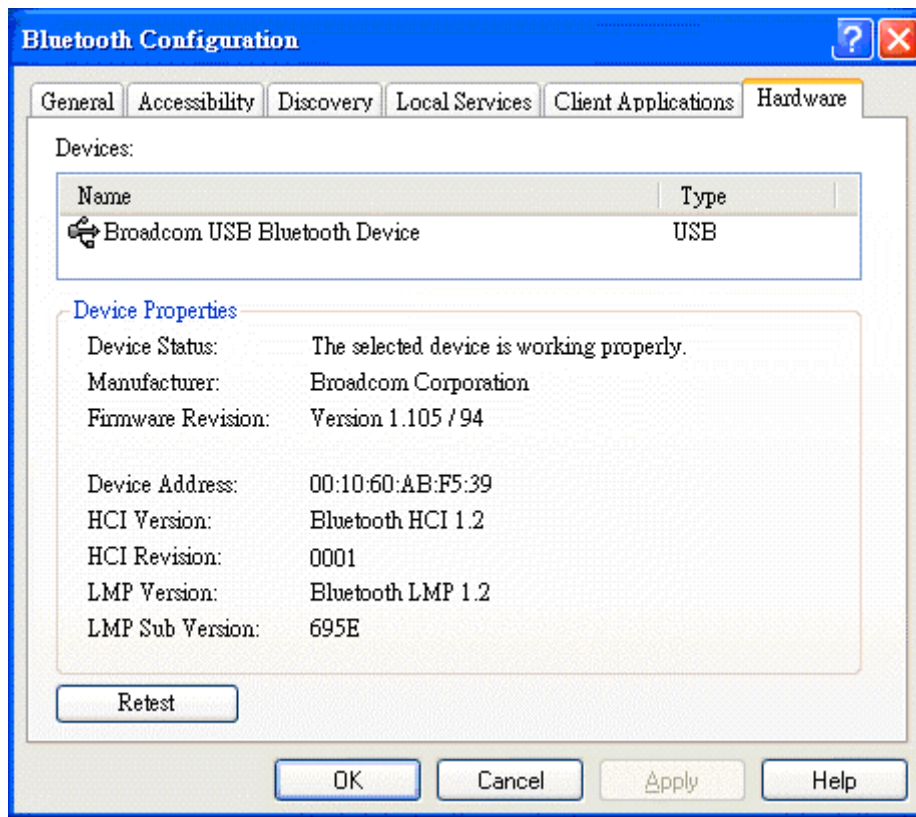
# Troubleshooting

**Q1:** Why couldn't my Bluetooth device find any nearby Bluetooth devices?

**A1:** (1) Please check that your Bluetooth device is enabled by opening the Bluetooth Configuration window.

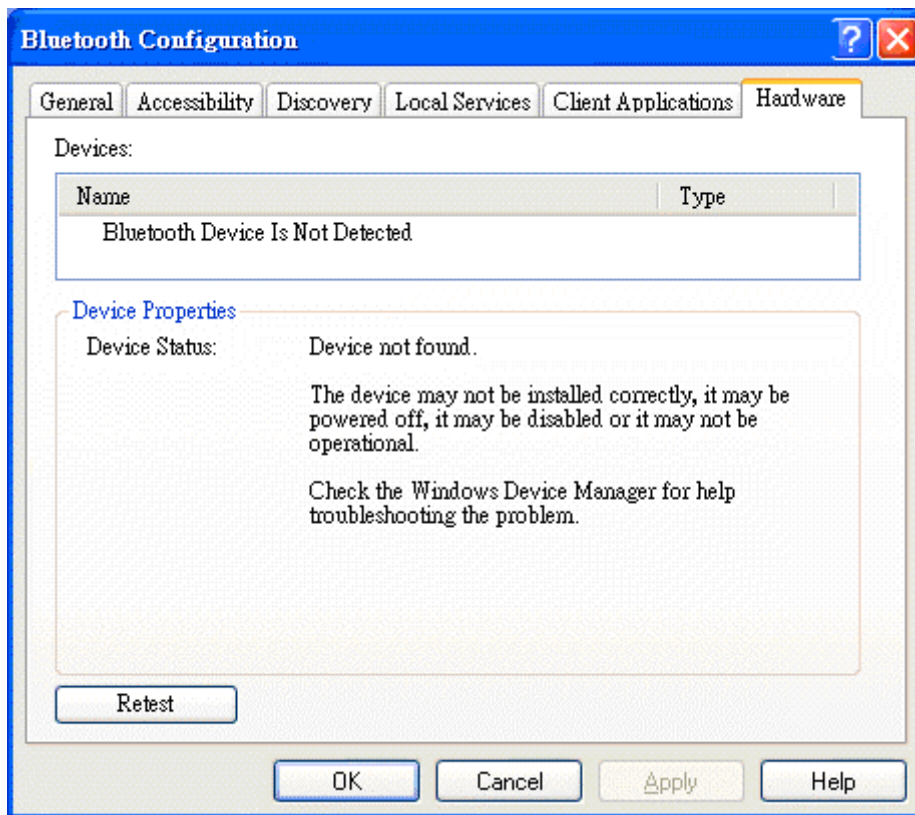


(2) If the Bluetooth device is enabled, you will see something of the following nature.





(3) Otherwise, for USB Bluetooth adapter, please unplug then plug in the USB Bluetooth adapter to enable the device.



**Q2:** Why can't I transfer files from Nokia 7650 to my PC?

**A2:** If you are having trouble sending files from Nokia 7650 to your notebook or PC, follow the steps below:

(1) Execute "regedit" from the Run command (Start->Run)

(2) Locate the key:

HKEY\_CURRENT\_USER\Software\Widcomm\BTConfig\Services\0004, and locate the entry "Accept other".

(3) Set this key to 0x0000001.

If the "Accept other" key does not exist, simply create it with type DWORD and fill in the value.

Save and exit Regedit. Reboot if necessary, now you should be able to send files from Nokia 7650 to your notebook or PC.

**Q3:** How come some devices within the connection range may not show up in the list of devices found?

**A3:** Your device is configured to report only specific types or classes of devices (Bluetooth Configuration Panel > Discovery tab, on your device). The unlisted device is configured to be non-discoverable (Bluetooth Configuration Panel > Accessibility tab, on the un-listed device).

**Q4:** Cannot connect to a paired device.

**A4:** Paired devices are always displayed in My Bluetooth Places, even if the remote device is out of range or not powered up.

Verify that the remote member of the pair is within radio range, and powered up, and then attempt the connection again.

**Q5:** Cannot discover services on an un-paired remote device

**A5:** The remote device may not be powered up or may be out of range.

- Verify that the remote device is powered up.
- Verify that the remote device is in Connectable mode (Bluetooth Configuration Panel > Accessibility tab).
- Perform a Search for Devices to verify that the device is within range.

**Q6:** Dial-up networking service does not start.

**A6:** The Dial-up Networking service will not start unless a properly configured modem is attached to the server.

- Verify that the modem is usable as a local device on the computer to which it is attached. In the Bluetooth Configuration Panel → Local Services tab → double-click the Dial-up Networking service → Click the down arrow in the Modem field and select the modem that will be used to dial out, click the **OK** button to close the Bluetooth Configuration Panel.

**Q7:** Determine the Bluetooth device address (BDA) of my hardware device.

**A7:** In the Bluetooth Configuration Panel, on the Hardware tab, in the Devices section, select the device you want to determine the address of. In the Device Properties section of the dialog box, the fourth entry, Device Address, is the BDA of the selected Bluetooth device.

**Q8:** Determine the version of the host controller interface (HCI)

**A8:** In the Bluetooth configuration panel, on the hardware tab, in the device properties Section, the fifth entry provides Bluetooth specification compliance information for the host controller interface.

The sixth entry contains the specification revision information for the host controller Interface, if appropriate.

**Q9:** Determine the version of the link manager protocol (IMP)

**A9:** In the Bluetooth configuration panel, on the hardware tab, in the device properties section, the seventh entry provides link manager protocol version number information.

The eighth entry contains the link manager protocol sub-version number information, if appropriate.

**Q10:** How to find information about the Bluetooth hardware attached to my computer?

**A10:** In the Bluetooth configuration panel, select the hardware tab.

**Q11:** Internet connection sharing does not work

**A11:** This occurs because Internet connection sharing was enabled when Bluetooth was installed (this is a Microsoft windows behavior and is considered proper operation). To resolve the “problem”:

1. Disable sharing for the Ethernet adapter:

- (a) Windows control panel > network and dial-up connections
- (b) Right-click “local area connection,” select properties, and then select the Sharing tab.
- (c) Clear (uncheck) the box for “enable internet connection sharing for this “Connection” and click ok.

2. Re-enable sharing for the Ethernet adapter; repeat step 1.c.), and select (check) the sharing box.

If offered an option to select an adapter, select “Bluetooth network adapter” (this option will not appear unless more than one adapter is available.) If asked to reboot the computer, do so.

**Q12:** Test a network access connection.

**A12:** If the client is hardwired to the LAN, unplug the hardwired connection to ensure that the Test checks the wireless connection rather than the hardwired connection.

If the server has access to the Internet, open a browser on the client and connect to the World Wide Web.

You may also ping the server from the dos prompt.

**Q13:** Unknown port message when using a Bluetooth serial port.

**A13:** The “unknown port” error message usually means an attempt was made to connect a port that was in use. Additional Bluetooth serial ports can be added if they are required.

**Q14:** Bluetooth headset doesn’t always function under Win98.

**A14:** Windows 98 cannot convert audio files with the extension m3u (e.g., myfile.m3u) into the pulse code modulation (pcm) audio format used by Bluetooth headsets; this is a limitation of windows 98.

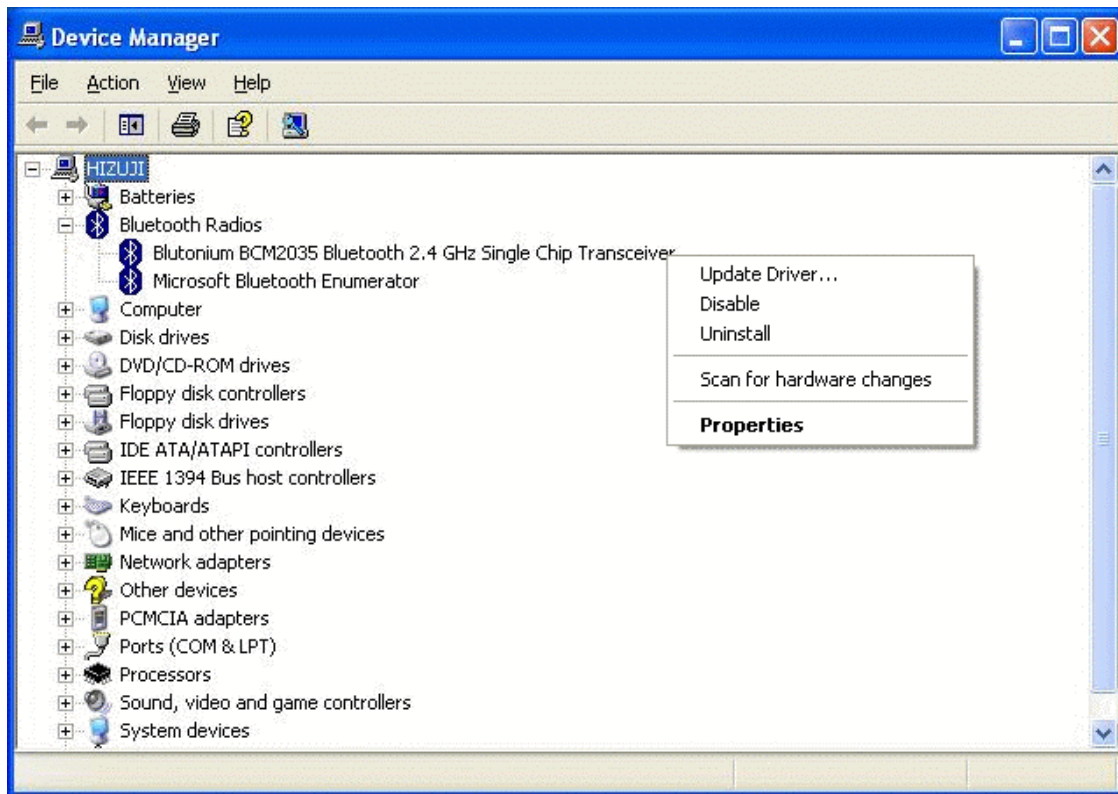
Other versions of windows (2000, me and XP) can translate m3u audio files into the pcm format.

Possible solutions are:

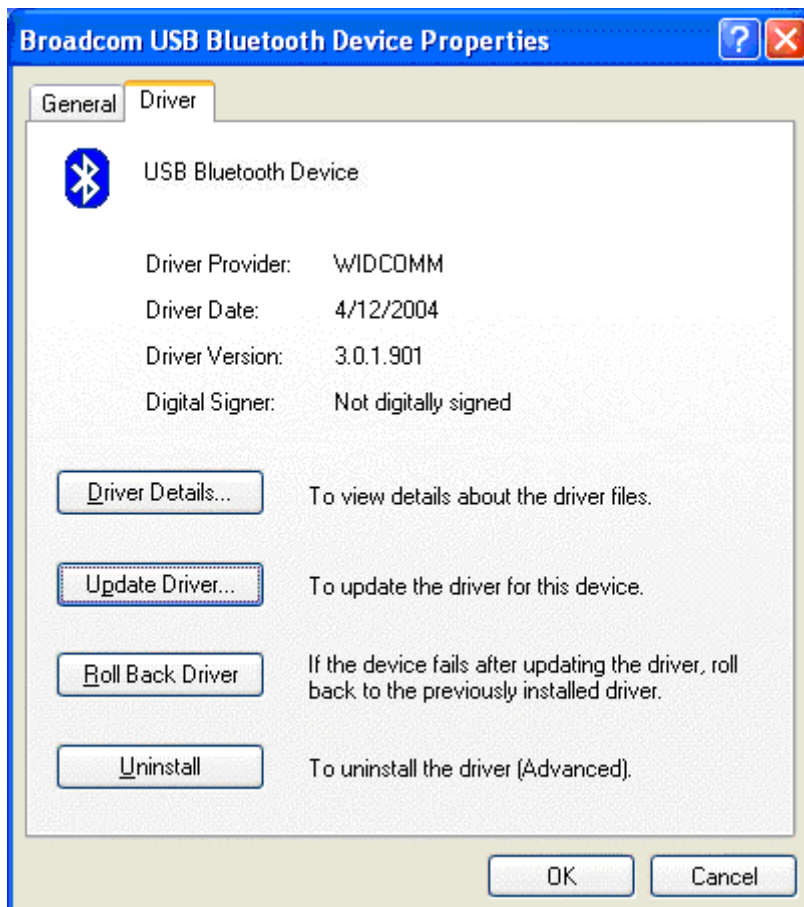
- Upgrade to a newer version of Windows
- Use an m3u-to-mp3 conversion utility to convert the file(s) into a format that is supported by Windows 98. (Conversion utilities are available as freeware or shareware on the Internet.)

**Q15:** How to shift the Buletooth driver to the original one in Windows XP sp2. Please follow below instrcutiions:

**A15:** (1)Click on Start→ Control Panel→ Performance and Maintenance→ System, choose Hardware and then Device Manager on System Properties. After open the Device Manager, right click your Buletooth Device, select “Properties”.



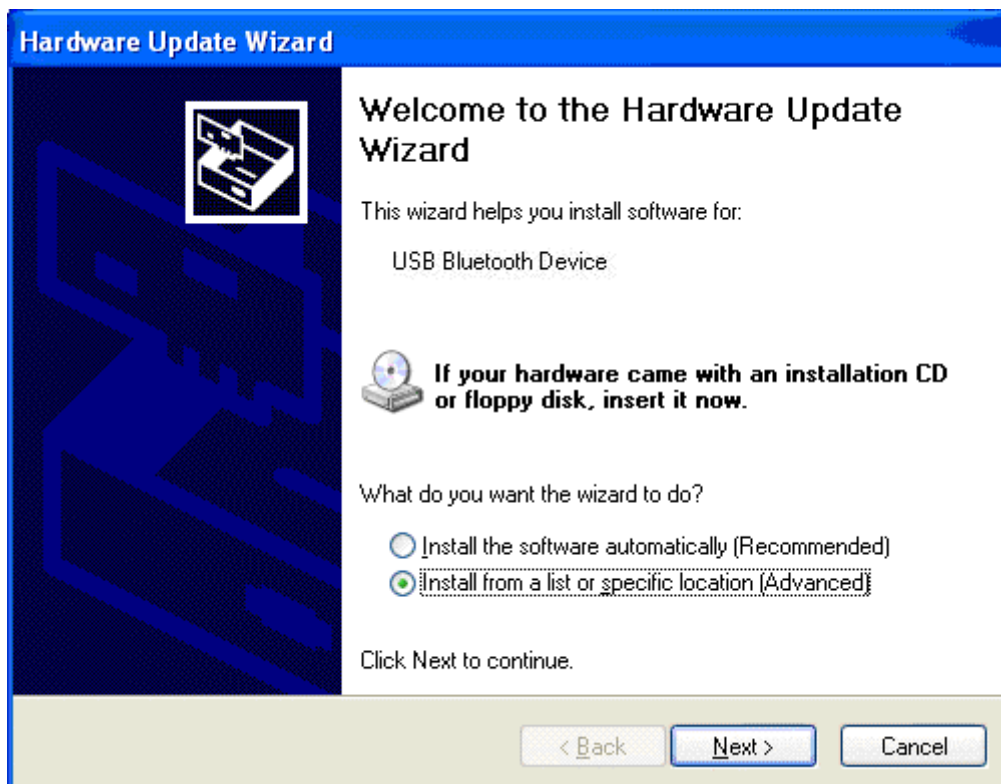
(2) Select "Driver" on Broadcom USB Bluetooth Device Properties, then click "Update Driver".



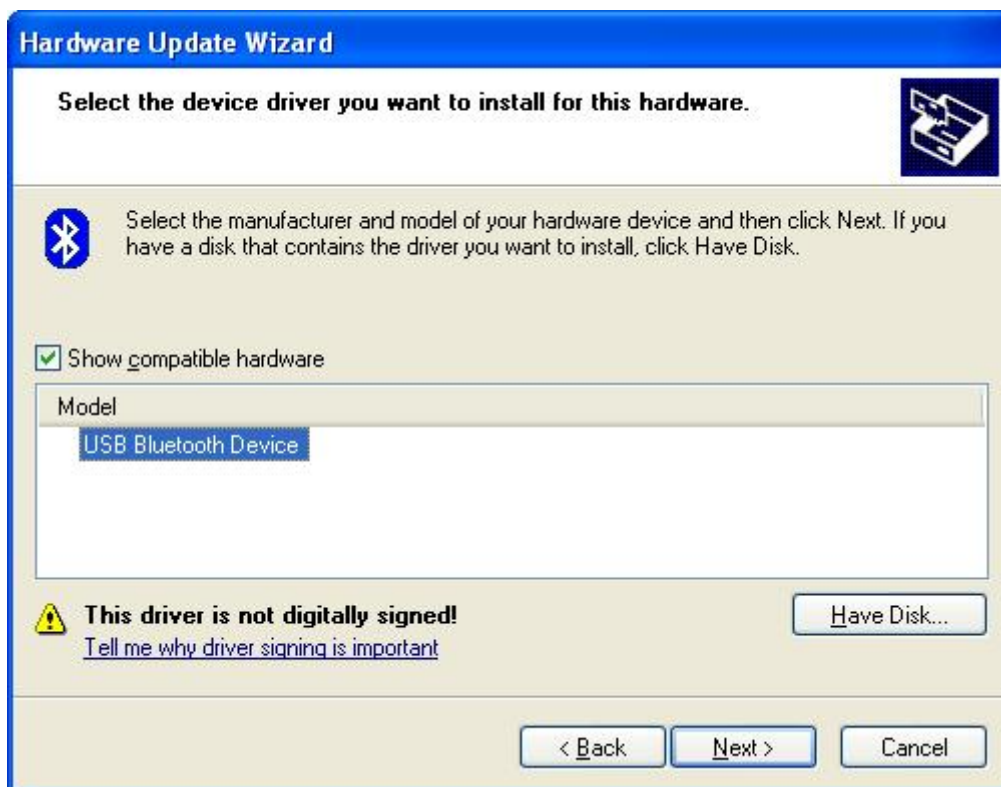
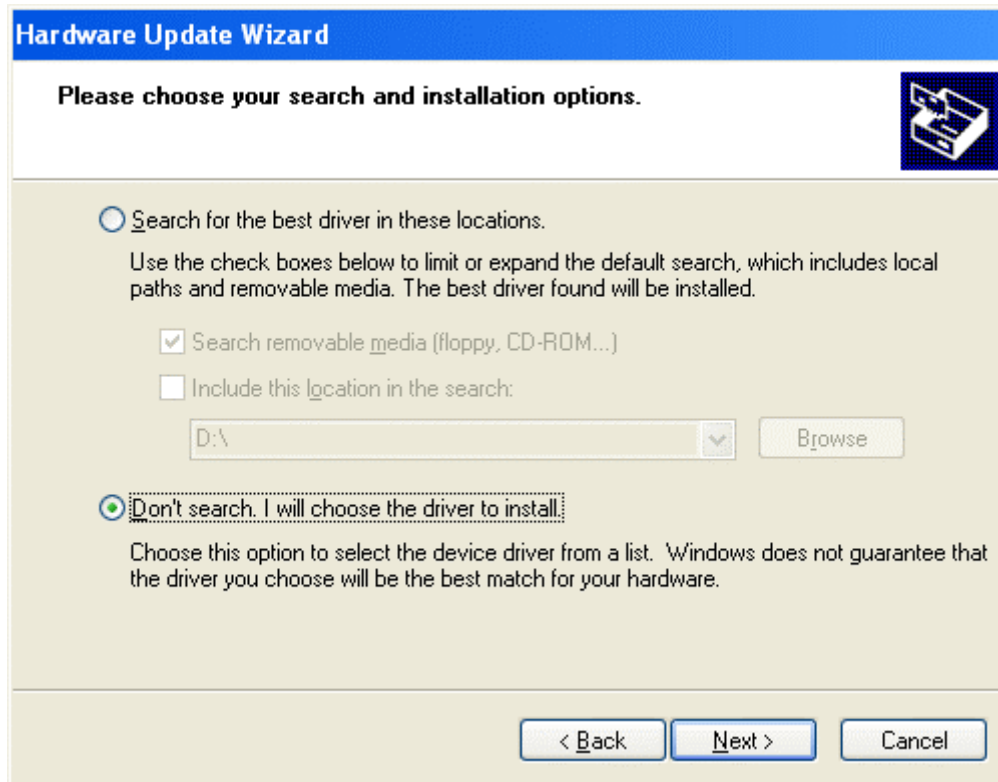
(3) Choose “No, not this time”



(4) Choose “install from a list or specific location”.



(5) Choose “Don’t search. I will choose the driver to install”



(6) Click “Finish button to accomplish driver shift.



**Notice:** This product is recommended for indoor use only.

# Federal Communication Commission Interference Statement

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

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

## **IMPORTANT NOTE:**

### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting.



# Industry Canada Statement

Operation is subject to the following two conditions:

- 1) this device may not cause interference and
- 2) this device must accept any interference, including interference that may cause undesired operation of the device

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding.

Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.