



Bluetooth Win7 Suite

User Guide

80-MKG-1296 Ver. 5.2

March 27, 2012

Qualcomm Atheros Confidential and Proprietary

Not to be used, copied, reproduced in whole or in part, nor its contents revealed in any manner to others without the express written permission of Qualcomm Atheros, Inc.

QUALCOMM is a registered trademark of QUALCOMM Incorporated. ATHEROS is a registered trademark of Qualcomm Atheros, Inc. All other registered and unregistered trademarks are the property of Qualcomm Incorporated, Qualcomm Atheros, Inc. or their respective owners and used with permission. Registered marks owned by Qualcomm Incorporated and Qualcomm Atheros, Inc. are registered in the United States of America and may be registered in other countries.

This technical data may be subject to U.S. and international export, re-export, or transfer ("export") laws. Diversion contrary to U.S. and international law is strictly prohibited.

**Qualcomm Atheros, Inc.
1700 Technology Drive
San Jose, CA 95110-1383
U.S.A.**

**Copyright © 2012 QUALCOMM ATHEROS Incorporated.
All rights reserved.**

Revision history

Version	Date	Description
1.0	September, 2009	Initial release
2.0	March, 2010	Updated the book, made minor changes in various chapters. Made major changes in chapter 4. Changed company logo.
2.1	April, 2010	Changed screen shots and descriptions in chapter 4 due to changes in the Graphical User's Interface.
3.0	June, 2010	Changed screen shots and descriptions in chapter 4 due to changes in the Graphical User's Interface.
4.0	December, 2010	Updated entire chapter 4 with new graphics and new features for phone and Video.
5.0	June, 2011	Added new information about LE in chapter 4 and changed the screen shots for LE.
5.1	March, 2012	Updated the section "Bluetooth Operations" on page 34 with new screen shots.
5.2	April, 2012	Updated figure 4.26

Contents

Preface	4
1 Introduction	6
1.1 Setup Requirements	6
2 Getting Started	9
2.1 Installing Qualcomm Atheros <i>Bluetooth</i> Windows 7 Suite	9
2.1.1 Downloading from Qualcomm Atheros Support site	9
2.1.2 Installing from the CD	10
2.2 Verifying the Driver Installation	14
2.3 Launching Qualcomm Atheros <i>Bluetooth</i> Windows 7 Suite	15
2.4 Uninstalling the Qualcomm Atheros <i>Bluetooth</i> Windows 7 Suite	16
3 Adding Bluetooth and LE Devices	18
3.1 Adding Bluetooth Devices	18
3.1.1 Discovering Bluetooth Devices	18
3.1.2 Pairing with a Bluetooth Device	19
3.2 Displaying Added Bluetooth Devices	21
4 Managing Bluetooth Devices	23
4.1 Managing Bluetooth Devices	23
4.1.1 Bluetooth Settings	28
4.1.2 Bluetooth Operations	34
4.1.3 Audio Services	37
4.1.4 File Operations	37
4.1.5 Advanced Phone Operations	38
4.1.6 Video Services	40
4.1.7 Sync Operations	41
4.1.8 Authorization Options	42
4.2 Managing Bluetooth LE Devices	42
4.2.1 Proximity	42
4.2.2 Find Me	43
4.3 The Right-Click Option	43
Index	45

Preface

This document describes the installation, configuration, and usage of the Qualcomm Atheros *Bluetooth*™ Windows 7 Suite. The Qualcomm Atheros *Bluetooth* Windows 7 Suite is a PC-based software package that provides the upper-layer *Bluetooth* stack functionality in support of the Qualcomm Atheros *Bluetooth* solution. The Qualcomm Atheros *Bluetooth* Windows 7 Suite requires a *Bluetooth* device to be connected via USB to the PC for proper operation.

The Qualcomm Atheros *Bluetooth* Windows 7 Suite, through its simple Graphical User Interface, allows you to quickly find, connect, and communicate with other *Bluetooth* devices.

This document is intended for ODMs (Original Design Manufacturers) and OEMs (Original Equipment Manufacturers) that are evaluating or developing BT solutions based on Qualcomm Atheros' *Bluetooth* solution.

About this Document

The document consists of the following chapters:

- | | |
|-----------|---|
| Chapter 1 | Introduction —provides an introduction to the Qualcomm Atheros <i>Bluetooth</i> Windows 7 Suite. |
| Chapter 2 | Getting Started —explains the basic features of Qualcomm Atheros <i>Bluetooth</i> Windows 7 Suite and provides step-by-steps procedures for installing the <i>Bluetooth</i> drivers and Qualcomm Atheros <i>Bluetooth</i> Windows 7 Suite Application. |
| Chapter 3 | Adding Bluetooth and LE Devices —describes how to discover, configure, pair, and add <i>Bluetooth</i> devices to your system using the Qualcomm Atheros <i>Bluetooth</i> Windows 7 Suite. |
| Chapter 4 | Managing Bluetooth Devices —an overview of the <i>Bluetooth</i> features that this suite provides, such as sending and receiving files. |

Reference Documentation

The following documents provides additional reference material related to this product:

- *Windows Help and Support documentation*

Qualcomm Atheros Confidential

1

1 Introduction

This chapter provides an overview of the Qualcomm Atheros *Bluetooth* Windows 7 Suite. This software tool finds and links *Bluetooth* devices and facilitates the communication between these devices.

The Qualcomm Atheros *Bluetooth* Windows 7 Suite is a *Bluetooth* communication application that aids in easy management and interaction with wireless personal area networks (WPAN) and remote *Bluetooth* devices. Among others, these devices include mobile phones, headsets, pointing devices, modems, and access points. The Qualcomm Atheros *Bluetooth* Windows 7 Suite can do the following:

- Find and connect to remote devices, as well as see the services they can provide
- Browse folders and files on remote devices, and exchange files with them
- Use wireless dial-up networking and serial-based functions

The Qualcomm Atheros *Bluetooth* Windows 7 Suite is used in conjunction with an Qualcomm Atheros *Bluetooth* USB device. This device is provided as a HCI USB Adapter that plugs into a PC USB port.

The Qualcomm Atheros *Bluetooth* Windows 7 Suite's main screen provides easy-to-use controls for the application and its user-friendly graphical user interface (GUI) works with various *Bluetooth* devices such as:

- Palm-sized PCs/PDAs
- Laptops
- Cellular phones
- Human interface devices such as a mouse and keyboard
- Desktop workstations
- Headsets
- Printers
- Fax machines

1.1 Setup Requirements

1. PC running Windows 7
2. Qualcomm Atheros *Bluetooth* USB Device
3. *Bluetooth* mouse
4. *Bluetooth* cellular phone
5. *Bluetooth* headset

6. *Bluetooth* printer
7. Fax machine
8. Any other *Bluetooth* devices

NOTE Microsoft Windows 7 Home Premium edition is used for the installation of *Bluetooth* hardware and software.

Qualcomm Atheros Confidential

Qualcomm Atheros Confidential

2 Getting Started

This chapter describes how to install, uninstall, and launch the Qualcomm Atheros *Bluetooth* Windows 7 Suite.

NOTE It is assumed that Qualcomm Atheros *Bluetooth* Windows 7 Suite is not present on your system.

The following major topics are covered in this chapter:

- “Installing Qualcomm Atheros Bluetooth Windows 7 Suite”
- “Verifying the Driver Installation”
- “Launching Qualcomm Atheros Bluetooth Windows 7 Suite”
- “Uninstalling the Qualcomm Atheros Bluetooth Windows 7 Suite”

2.1 Installing Qualcomm Atheros *Bluetooth* Windows 7 Suite

The user can get Qualcomm Atheros *Bluetooth* Windows 7 Suite either through a password-protected download from the Qualcomm Atheros site, or a product CD. If the Qualcomm Atheros *Bluetooth* Windows 7 Suite already exists on the hardware platform, uninstallation is not necessary before installing the new version as the application supports upgrade features.

If it is necessary to uninstall Qualcomm Atheros *Bluetooth* Windows 7 Suite, refer to “Uninstalling the Qualcomm Atheros Bluetooth Windows 7 Suite” on page 16.

Software installation is a three-step process and it is important to perform these steps before using the Qualcomm Atheros *Bluetooth* Windows 7 Suite:

1. Install the Qualcomm Atheros *Bluetooth* Windows 7 Suite.
2. Install the radio (profile) drivers.

All of these steps are explained in the installation process.

NOTE If Skype is installed on the computer and Skype is logged in, the Skype configuration option will be prompted. Otherwise, no Skype screens are displayed.

2.1.1 Downloading from Qualcomm Atheros Support site

1. Got to the Qualcomm Atheros Support web site:
2. Login to the web site using your user name and password provided by Qualcomm Atheros Support.

3. Go to the Qualcomm Atheros *Bluetooth* Windows 7 Suite download section of the Qualcomm Atheros web site.
4. Download the Qualcomm Atheros *Bluetooth* Windows 7 Suite, extract the files, and save them to the computer's desktop.
5. Install the Qualcomm Atheros *Bluetooth* Windows 7 Suite by double-clicking on the Qualcomm Atheros *Bluetooth* Windows 7 Suite executable file.

Follow the installation wizard as described in “Installing from the CD” on page 10.

2.1.2 Installing from the CD

1. Insert the CD containing the Qualcomm Atheros *Bluetooth* Windows 7 Suite into the CD drive.
2. Double Click on the ***Bluetooth Suite*** executable file and follow the instructions.

The InstallShield wizard starts to prepare the package for installation.

3. Select the desired language when prompted as shown in [Figure 2-1](#).

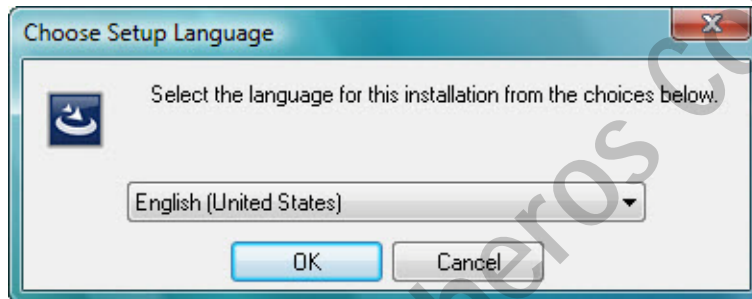


Figure 2-1 Choose Setup Language

The *Bluetooth* win7 Suite -InstallShield Wizard appears as shown in [Figure 2-2](#).

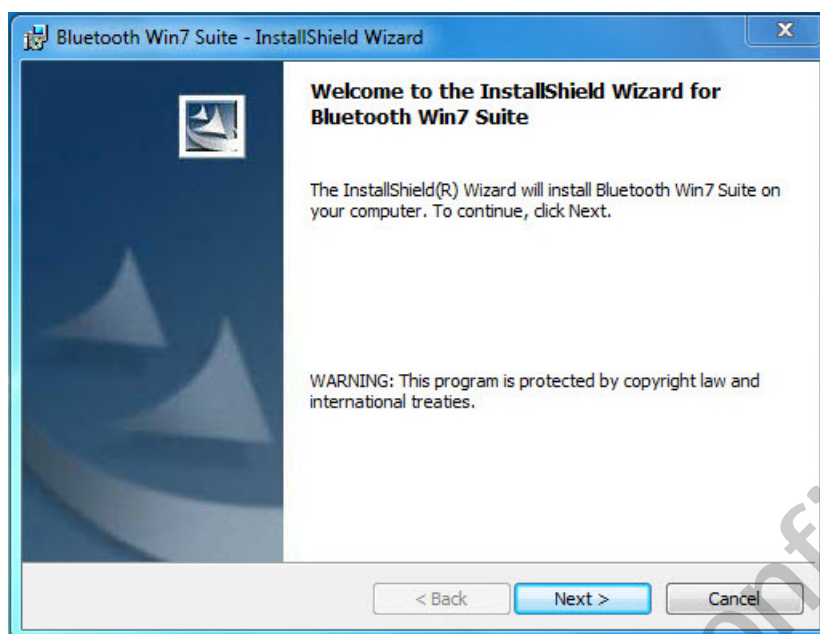


Figure 2-2 InstallShield Wizard Welcome Screen

4. Click **Next** to continue.

The Destination Folder screen appears as shown in [Figure 5](#).

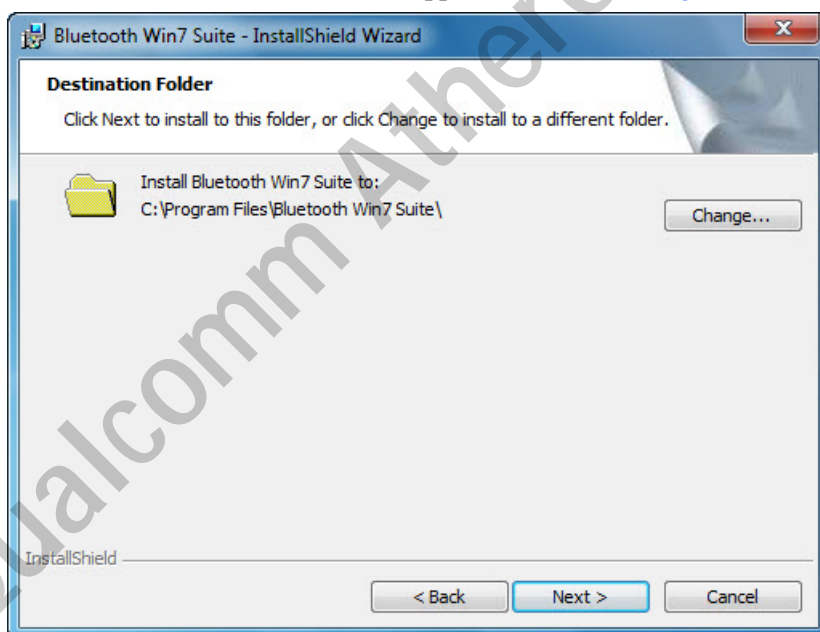


Figure 2-3 InstallShield Wizard Choosing Destination Folder

5. Click **Next**.

Select **Change** to install the application in different location.

The **Ready to Install the Program** screen appears as shown in [Figure 2-4](#).

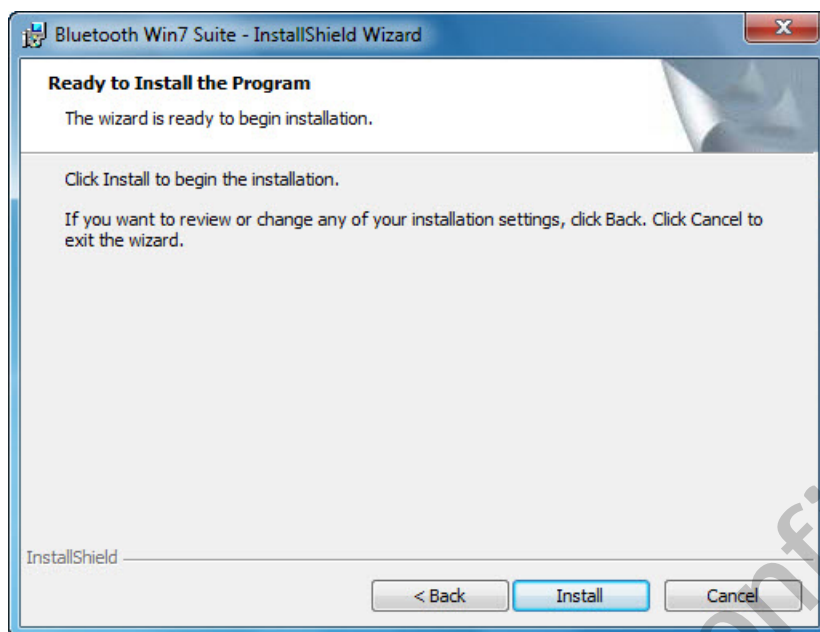


Figure 2-4 Qualcomm Atheros Bluetooth Windows 7 Suite - Ready to Install Screen

6. Click Install.

The **Installing Qualcomm Atheros Bluetooth Windows 7 Suite** screen appears as shown in [Figure 2-5](#).

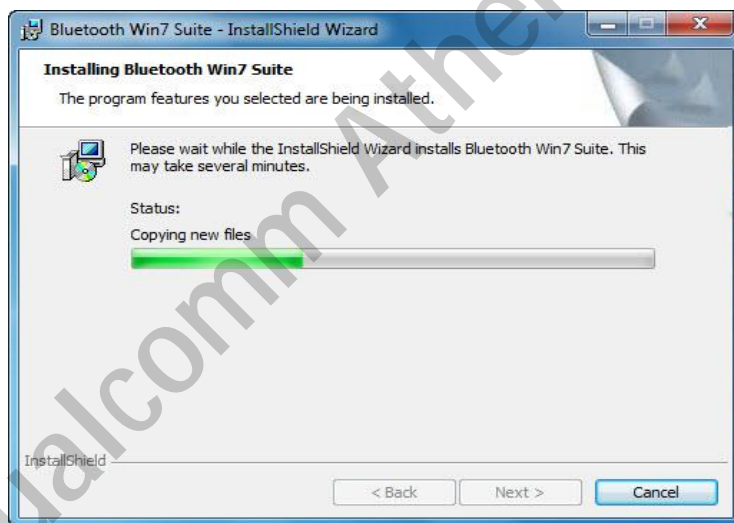


Figure 2-5 Qualcomm Atheros Bluetooth Windows 7 Suite - Installation Screen

7. Click **Next**.

If Skype is installed then a security warning message appears indicating that the installation wishes to access Skype. Users may allow or deny access based on personal preference. Either choice will not affect the installation process. See [Figure 2-6](#).

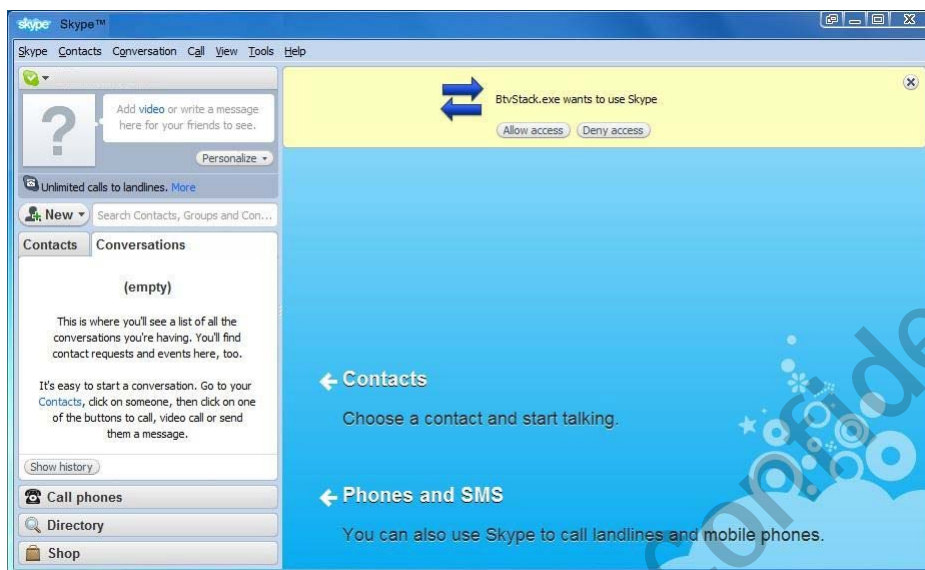


Figure 2-6 Skype Access Warning

8. Click the Allow access or Deny access button on the top of the screen.

The InstallShield Wizard Complete screen appears as shown in [Figure 2-7](#).

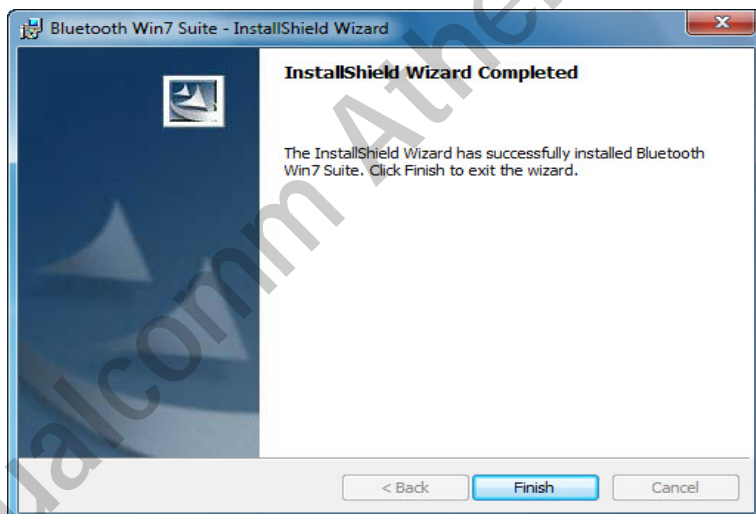


Figure 2-7 Finishing InstallShield Wizard

9. Click **Finish** to complete the installation. The system prompts to restart as shown in Figure 2-8.

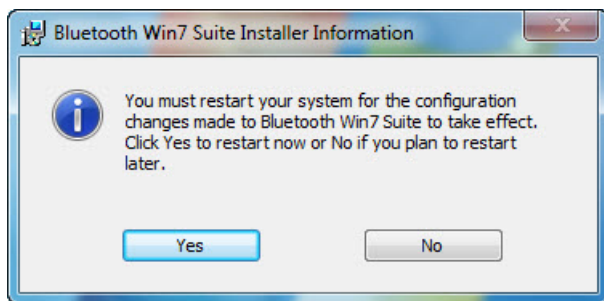


Figure 2-8 Restarting Your Computer

10. Click **Yes** to complete the installation process and reboot your computer.

2.2 Verifying the Driver Installation

To verify whether the driver is installed properly or not follow the below procedure.

1. Insert the Qualcomm Atheros *Bluetooth* USB dongle into one of the USB ports of the system. The system starts to install the device driver software.
2. From the Start menu, open the **Control Panel** and click the **Hardware and Sound** section. Under Devices and Printers, click the Device Manager link which will open up that window. In **Bluetooth Radios**, make sure the driver is installed (**Bluetooth USB Adapter**) and therefore listed here. Double click on this icon to view its properties. See Figure 2-10.

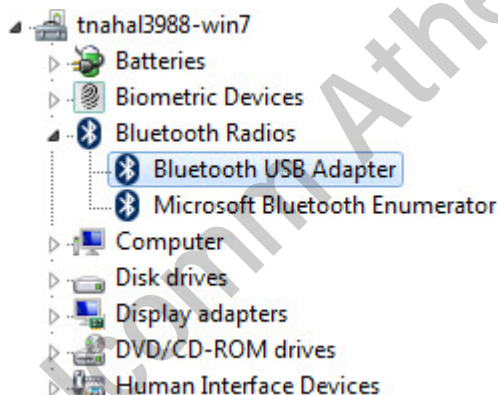
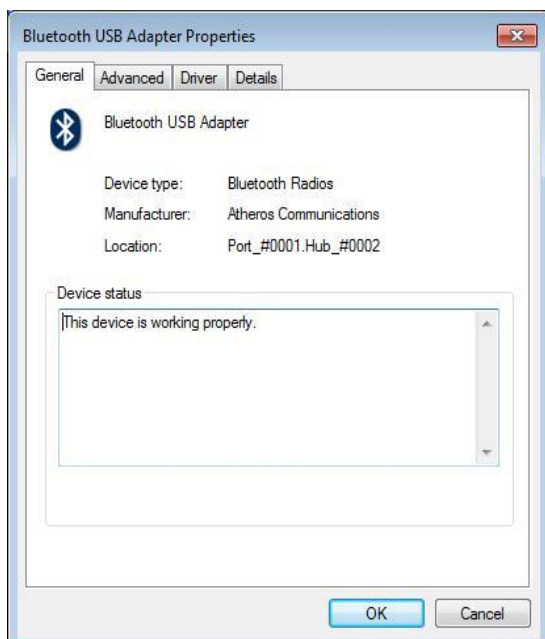
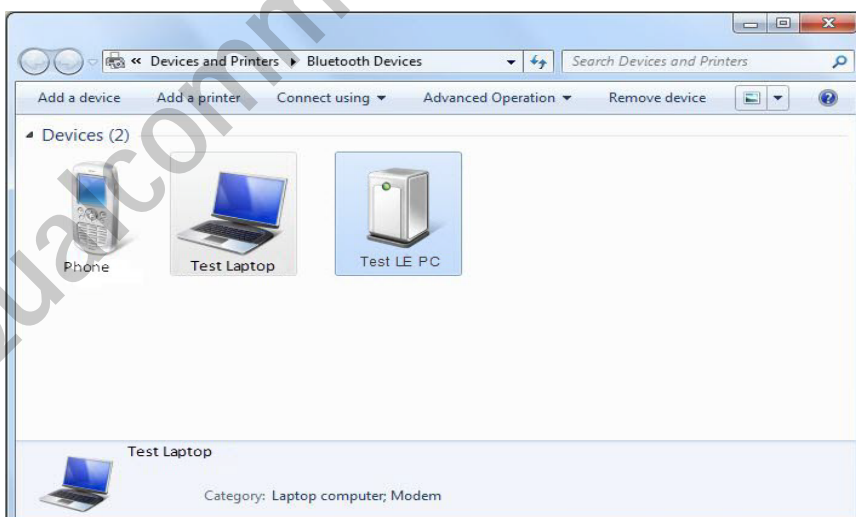


Figure 2-9 Checking the Newly Installed *Bluetooth* Driver**Figure 2-10 *Bluetooth* USB Adapter Properties window**

3. Exit the **Control Panel**.

2.3 Launching Qualcomm Atheros *Bluetooth* Windows 7 Suite

From the Start menu, click **All Programs** > **Bluetooth Suite** > **Bluetooth Devices** which will open a window, like the one seen in [Figure 2-11](#).

**Figure 2-11 *Bluetooth* Devices window**

From this window, users can add a *Bluetooth* enabled device or configure a paired device by double-clicking its icon.

Refer to the following chapters for the following:

- [Chapter 3](#) on how to add *Bluetooth* devices.
- [Chapter 4](#) on sending and receiving files.

2.4 Uninstalling the Qualcomm Atheros *Bluetooth* Windows 7 Suite

Use the following procedure to uninstall the Qualcomm Atheros *Bluetooth* Windows 7 Suite.

1. Choose **Start > All Programs > Bluetooth Suite > Uninstall Bluetooth Suite** as shown in [Figure 2-12](#).



Figure 2-12 Uninstalling Existing *Bluetooth* Suite from the Start menu

A **Preparing to Remove** screen is prompted, followed by a confirmation prompt as shown in [Figure 2-13](#).

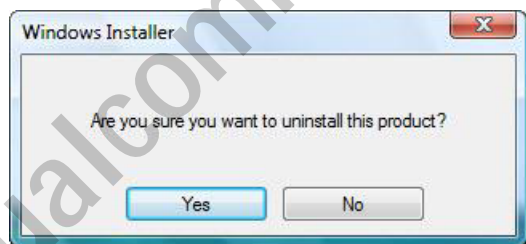


Figure 2-13 Confirming *Bluetooth* Suite uninstallation

Click **Yes**.

After a few minutes, the application is automatically uninstalled without any further user input.

Qualcomm Atheros Confidential 3

3 Adding *Bluetooth* and LE Devices

This chapter describes how to add *Bluetooth* devices and *Bluetooth* enabled LE devices to a system using the Qualcomm Atheros *Bluetooth* Windows 7 Suite.

3.1 Adding *Bluetooth* Devices

This section describes how to add commonly used *Bluetooth* devices. For the pairing information of a particular device, refer to the documentation that came with the device or refer to the manufacturer's web site.

Before adding any new *Bluetooth* devices a communication link known as pairing must be first configured. After successful pairing the *Bluetooth* device is added and is ready for exchanging messages or information between your system. The following steps describes pairing *Bluetooth* devices which are within range.

3.1.1 Discovering *Bluetooth* Devices

1. Plug in the *Bluetooth* adapter into one of the USB ports of the computer running Qualcomm Atheros *Bluetooth* Windows 7 Suite.

If a *Bluetooth* adapter is already built in or attached to the computer, ignore this step.

2. Right or left click on the *Bluetooth* icon in the Task bar.

This displays the main *Bluetooth* menu as shown in [Figure 3-1](#).

3.1.2 Pairing with a *Bluetooth* Device

Users can pair with any discovered *Bluetooth* device.

1. From the Start menu, click **All Programs > Bluetooth Suite > Bluetooth Devices** which will open a window shown in [Figure 3-1](#).

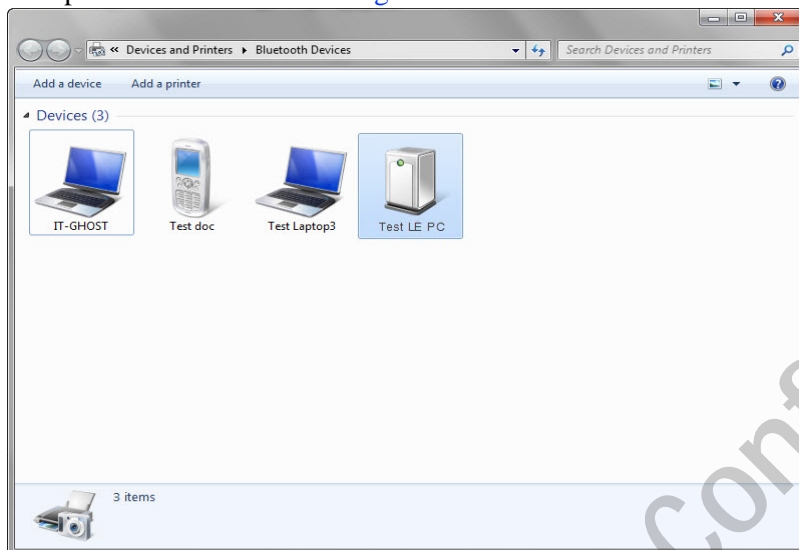


Figure 3-1 *Bluetooth* Devices window

2. Click **Add a Device**.

Displays all the available *Bluetooth* and LE devices within the range as shown in [Figure 3-2](#).

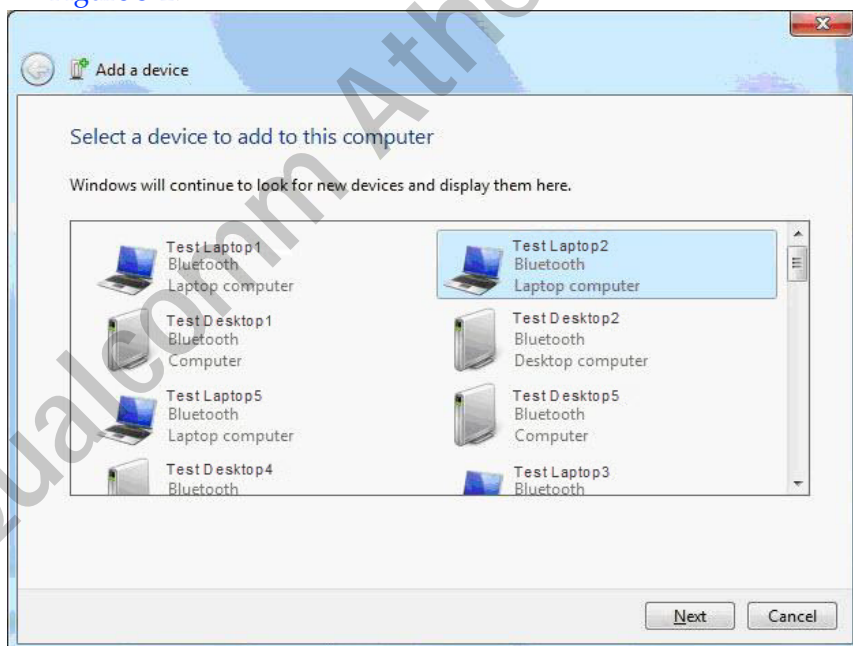


Figure 3-2 Adding *Bluetooth* Devices

NOTE Add only those *Bluetooth* devices that you trust.

3. Select the device to add and click **Next**.
4. A 6 – 8 digit pairing code is generated automatically for the remote device. Ensure that this code matches the code displayed on the device being used. The remote device must agree to this pairing. Once both devices agreed, the *Bluetooth* connection is then established. See [Figure 3-3](#) for details.

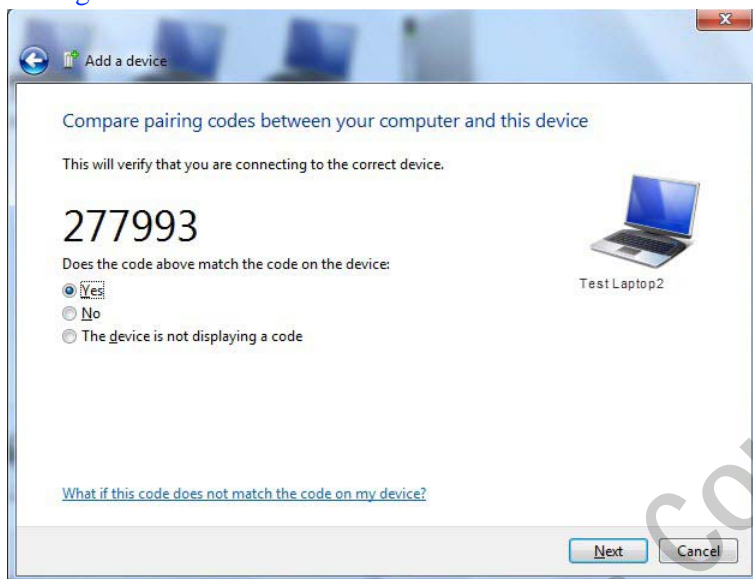


Figure 3-3 Selecting a Pairing Option

5. After entering the pairing code on the local computer, click **Next**.
6. Click **Close**. See [Figure 3-4](#).



Figure 3-4 Adding of Device Successful

3.2 Displaying Added *Bluetooth* Devices

From the main *Bluetooth* menu, choose ***Bluetooth Devices***. It displays the added *Bluetooth* devices. See [Figure 3-5](#).

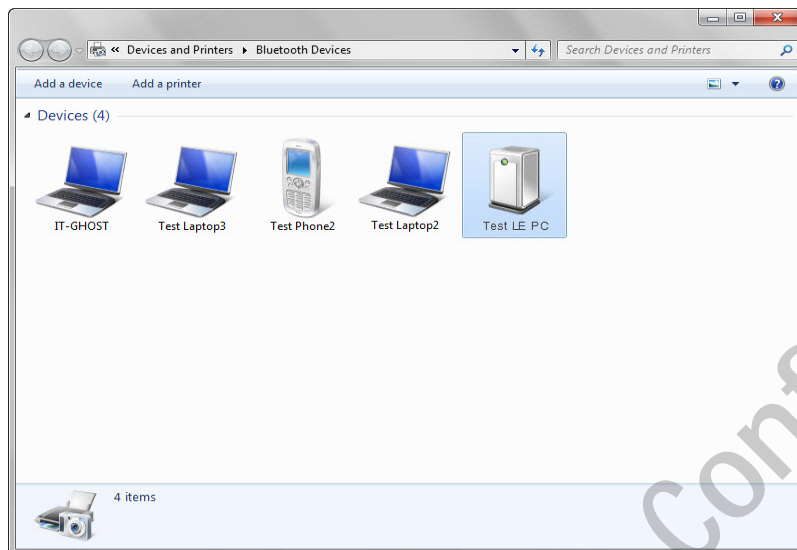


Figure 3-5 Added *Bluetooth* Devices

NOTE Follow the same procedure to add and pair with a *Bluetooth* enabled LE device.

Qualcomm Atheros Confidential 4

4 Managing *Bluetooth* Devices

This chapter describes how to configure and manage *Bluetooth* and LE devices using the Qualcomm Atheros *Bluetooth* Windows 7 Suite.

NOTE It is assumed that Qualcomm Atheros *Bluetooth* Windows 7 Suite is already installed on the local system.

The following main topics are covered in this chapter:

- Managing *Bluetooth* Devices
- *Bluetooth* Options
- Audio Services
- Video Services
- File Operations
- Advanced Phone Operations
- Sync Operations
- Authorizations
- The Right-Click Option

4.1 Managing *Bluetooth* Devices

The Qualcomm Atheros *Bluetooth* Windows 7 Suite adds and configures various *Bluetooth* devices in order to perform various functions between *Bluetooth* enabled devices. These devices can be phones, modems, audio devices, printers, imaging systems, Fax machines, and computers (workstations, servers, PDAs, etc.).

1. To begin configuration of the Qualcomm Atheros *Bluetooth* Windows 7 Suite, from the Start menu, click **All Programs > Bluetooth Suite > Bluetooth Devices** which will display a window as shown in [Figure 4-1](#). This window displays the devices that have previously been paired with the local computer through the *Bluetooth* protocol.

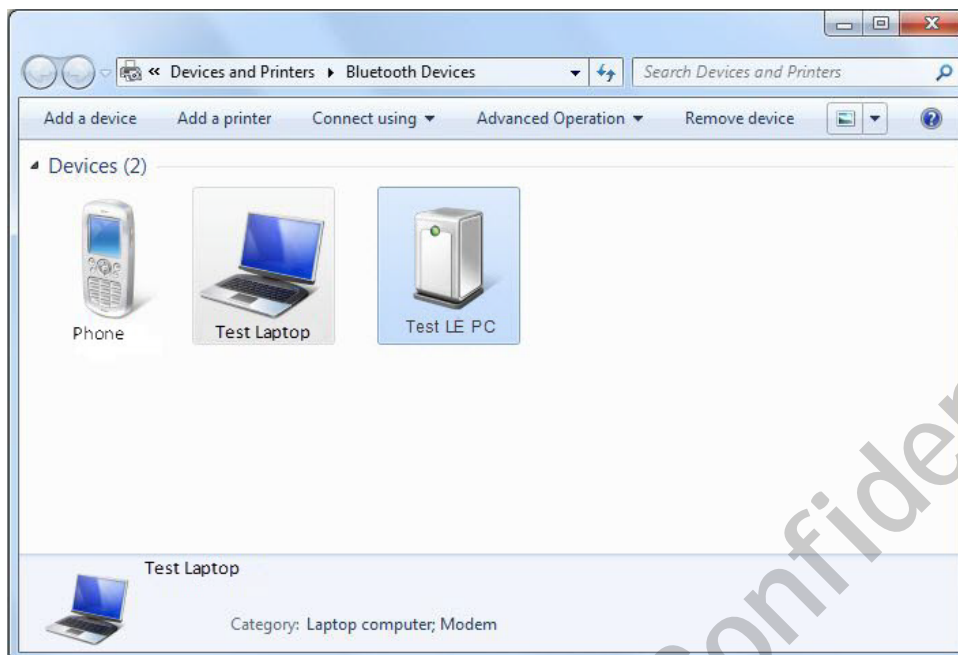


Figure 4-1 Bluetooth Devices window

Selecting a device will extend the bar at the top of this window. The choices are **Add a device**, **Add a printer**, **Connect using**, **Advanced operation** and **Remove device**, as shown in [Figure 4-2](#).

NOTE The choices may vary depending on the device selected.

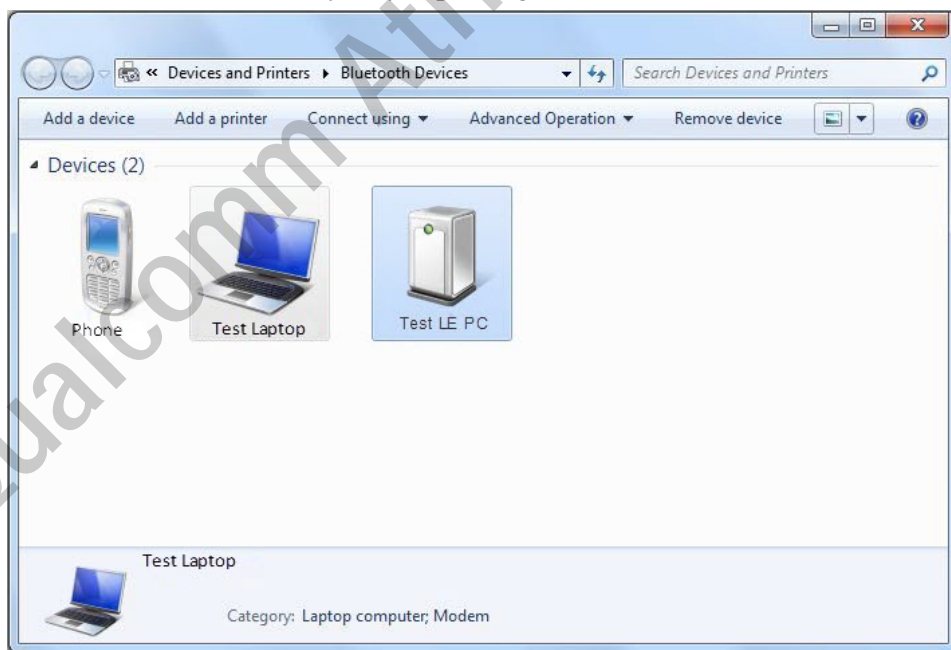


Figure 4-2 Bluetooth Devices - Device Selection

Add a device — Click this button to add a device to *Bluetooth* paired devices of the local computer. This will open a new configuration window as seen in “Adding Bluetooth and LE Devices” on page 18.

Add a printer — Click this button to add a printer through the Windows configuration for adding printers.

Connect using — Provides three choices for the connection to the remote device, either through a Direct Connection, through an Access Point or through an Ad Hoc Network.

Advanced Operation — The Advanced Operation tab allows for multiple operations over the *Bluetooth* connection, such as:

Connect to Operation Window - Choosing this option will open *Bluetooth* Settings window as seen in [Figure 4-3](#) to configure the *Bluetooth* settings for the remote device.

Connect to audio device - Connect to audio device - Choose this option to play audio on the remote device, originating from the local computer, as shown in “Audio Services” on page 37.

Connect to Stereo Audio source device - Choosing this option open stereo audio on the local computer, originating from the remote device, using the A2DP protocol for enhanced quality, as seen in “Audio Services” on page 37.

Connect to Hands Free Audio Gateway - Choose this option to allow the local computer to receive an audio stream from a remote device, as seen in “Audio Services” on page 37. This choice is used more for telephone connections than music audio, as the quality will not be as good.

Advanced Phone Operations: Choose this option to use the advanced features of the connected remote phone. For more information, see “Advanced Phone Operations” on page 38.

Video Services: Choose this option to stream the video from the local computer to a remote computer. For more information, see “Video Services” on page 40.

Browse FTP folder - Choose this option to browse the FTP folder on the remote device.

Send file - Choosing this option will open a Windows browser window to find a file to be sent to the remote device using the *Bluetooth* protocol.

Remove Device — Clicking this button will remove the selected device from the *Bluetooth* PAN network of the local computer.

To manage any linked *Bluetooth* device, double-click the icon, which will reveal the window seen in [Figure 4-3](#).

NOTE The features are displayed according to the device selected i.e. if the device is a *Bluetooth* phone [Figure 4-3](#) is displayed and [Figure 4-4](#) for a remote computer.

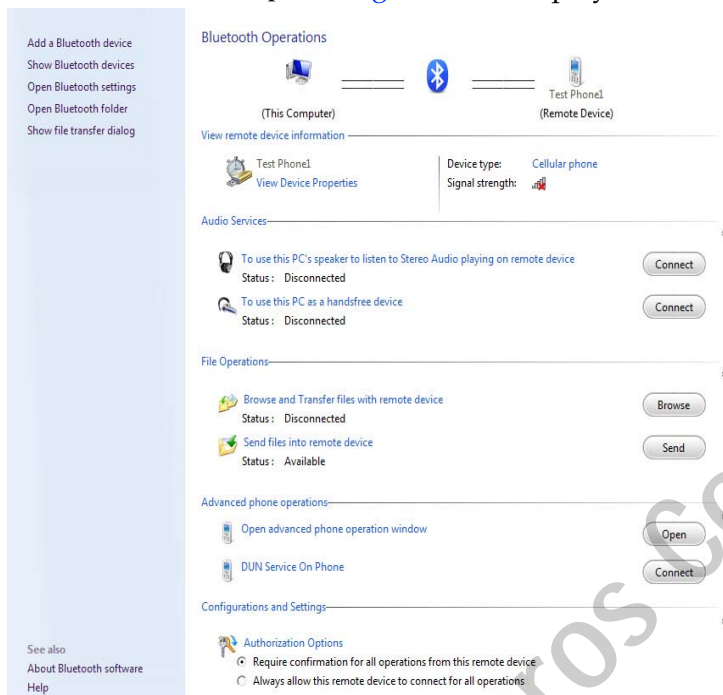


Figure 4-3 Bluetooth Operations Window (for Remote Phone)

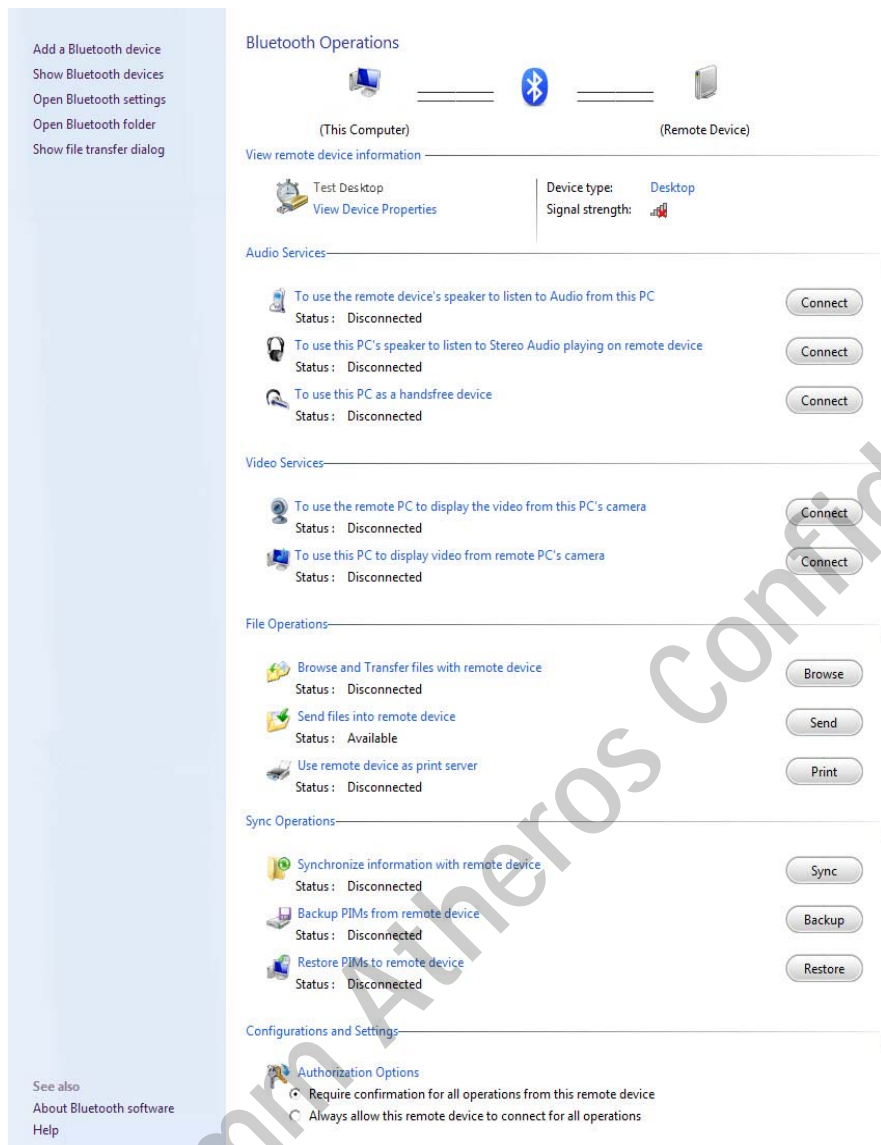


Figure 4-4 Bluetooth Operations Window (for Remote Computer)

The *Bluetooth Operations* window can be considered as a central command point. The user can manage the connected *Bluetooth* device from here.

The left-hand blue pane of the [Figure 4-4](#) allows configuration of the Qualcomm Atheros *Bluetooth Windows 7 Suite* program which includes:

- **Add a Bluetooth device** — Click this link to add a device which will open the window seen in “Adding Bluetooth Devices” on page 19.
- **Show Bluetooth devices** — Click this link to open see paired *Bluetooth* Devices window as shown in [Figure 4-1](#).
- **Open Bluetooth settings** — Click this link to open the following window to configure *Bluetooth* settings.

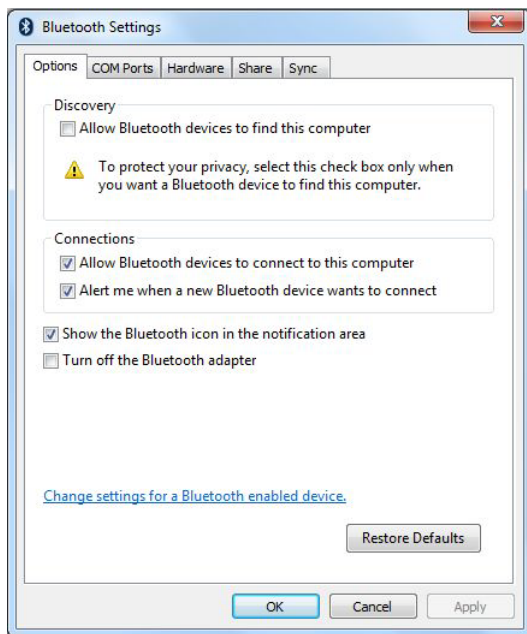


Figure 4-5 Bluetooth Settings - Options

4.1.1 Bluetooth Settings

The first window to appear is the Options window. Here users may configure four options, which are:

- **Allow Bluetooth devices to find this computer** - Users must click the check box of this option if the Windows 7 computer is to be discoverable for remote devices. If not, remote devices will not be able to discover and ultimately connect to the computer. Users are recommended not to leave this option checked as it may allow other unwanted devices to connect to this computer through *Bluetooth*.
- **Allow Bluetooth devices to connect to this computer** - This option must be checked in order for remote devices to connect to the Windows 7 computer. Although devices may be paired with this computer, if this box is not checked, no information will be shared between the two paired (or unpaired) devices.
- **Alert me when a new Bluetooth device wants to connect** - Users may check this box if they wish to be notified by a pop-up message when a new remote device is attempting to connect with the Windows 7 computer.
- **Show the Bluetooth icon in the notification area** - Users can have this box checked to display the *Bluetooth* icon in the lower right-hand taskbar of Windows 7 when *Bluetooth* is enabled.
- **Turn off the Bluetooth adapter** - Click the check box to disable the *Bluetooth* adapter. This will render the local computer undiscoverable.

Once changes have been made, users must click the **Apply** button for these changes to take effect.

4.1.1.1 COM Ports

Click the **COM Ports** tab at the top of the *Bluetooth* settings window to display the following window.

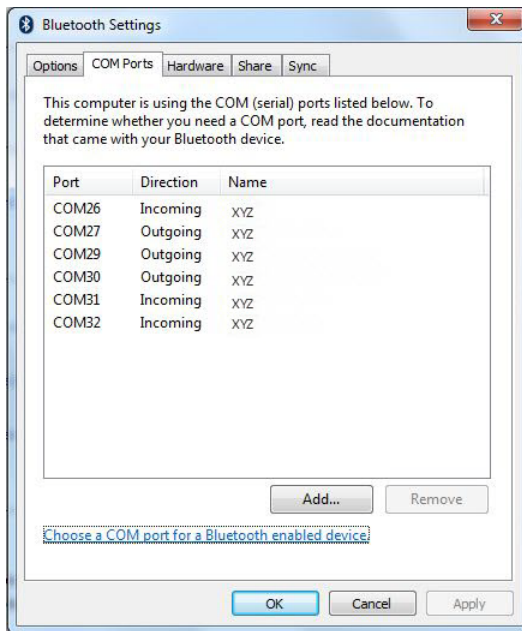


Figure 4-6 Bluetooth Settings - COM Ports

When using the Add *Bluetooth* Device Wizard to add a *Bluetooth* enabled device to the Windows 7 computer, an incoming COM port is created, which permits the remote device to connect to a program on the Windows 7 computer, and an outgoing COM port, which permits a program on the Windows 7 computer to connect to the remote device. Usually, only one of these COM ports is needed.

To decide which COM port to use, check the information that came with the program or the *Bluetooth* enabled device, or go to the manufacturer's website.

If users are still unsure of which COM port to use, try each COM port, one at a time, and use the one that successfully allows the program and the remote device to communicate.

To select a COM port: Click on **COM Ports** tab. This displays both incoming and outgoing serial ports. **Click Add** to add a port. (Remove a port by highlighting it clicking the **Remove** button.)

Choosing the **Add** option displays **Add COM Port** screen that allows specification of whether the selected port will be incoming or outgoing. See [Figure 4-7](#).

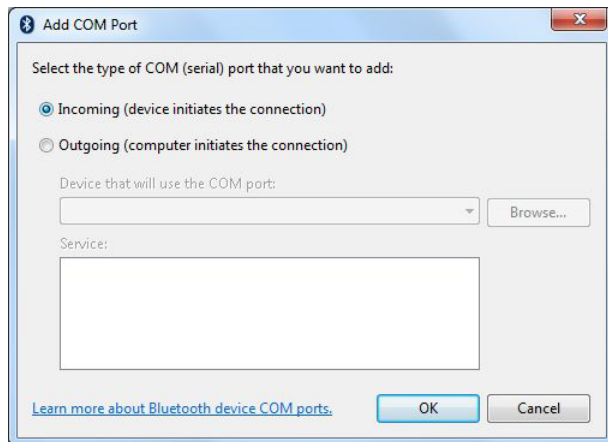


Figure 4-7 Bluetooth Settings - COM Ports -Add

When selecting the **Incoming** option, the device initiates the action. When selecting the **Outgoing option**, the computer initiates the action.

Select the Outgoing COM port button and then click the **Browse** button to select the appropriate device for the outgoing serial port. The client machine then begins to install the driver software for the device and the standard serial over *Bluetooth* link for the selected port. Then another incoming port is added. When the task is complete, click OK.

NOTE If the device that is to be added is not displayed, make sure that device is turned on. Follow the setup instructions that came with that device. If the device selected does not have the serial port service running, an error message will be displayed on the screen indicating the device selected does not have a serial port service running. In that case, select another device.

4.1.1.2 Using the Serial Port Profile (SPP)

The Serial Port Profile defines the requirements for *Bluetooth* devices necessary for setting up emulated serial cable connections using Radio Frequency Communication (RFCOMM) between two peer devices. RFCOMM is a simple transport protocol, which provides emulation of RS-232 serial ports over the Logical Link Control and Adaptation Layer Protocol (L2CAP) protocol. The L2CAP is layered over the Baseband Protocol and resides in the data link layer.

The SPP function is provided by the Windows 7 OS. It requires the Vista version of HyperTerminal (or equivalent) which needs to be installed before using this feature. The HyperTerminal tool may be downloaded from the internet.

4.1.1.3 Bluetooth Hardware

The **Hardware** option allows users to check the functionality of the local *Bluetooth* hardware. Click on the **Hardware** tab to display the connected *Bluetooth* devices.

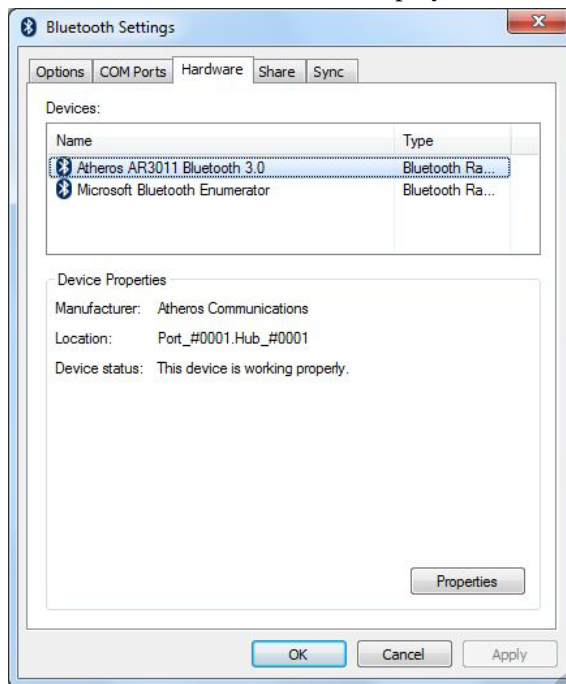


Figure 4-8 Bluetooth Settings - Hardware

Select the desired *Bluetooth* device and click on the **Properties** button, which will produce the properties of the selected device, such as Driver and Radio Information.

WARNING Be careful when using the driver options which might roll back, disable or uninstall the driver. Do not click on these buttons unless there is a real intention to perform those functions.

4.1.1.4 Share

The **Share** option will allow users to share files between *Bluetooth* enabled devices and change the destination location of files that have been transferred from a *Bluetooth* paired device to the Windows 7 computer. To open the shared folder on the local computer, click the Open *Bluetooth* Exchange Folder link, which will display the folder to modify files. To change this destination location, click the Browse button to set the destination location, as seen in [Figure 4-9](#).

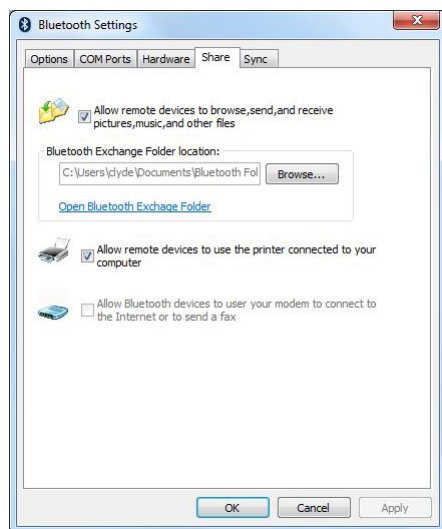


Figure 4-9 Bluetooth Share window

Also within this window, users may open the folder which contains the *Bluetooth* shared files by clicking [Open Bluetooth Exchange Folder](#). Users may also choose to allow other devices to use the printer that is being employed by the Windows 7 computer by checking “Allow remote devices to use the printer connected to your computer”. If users have a fax machine connected to the Windows 7 computer, it may be shared too by checking the “Allow *Bluetooth* devices to use your modem to connect to the Internet or send a fax” box.

4.1.1.5 Bluetooth Sync

The **Sync** option will allow users to synchronize their information with *Bluetooth* paired devices. Simply click the Sync tab as shown in [Figure 4-10](#) which will display the following window:

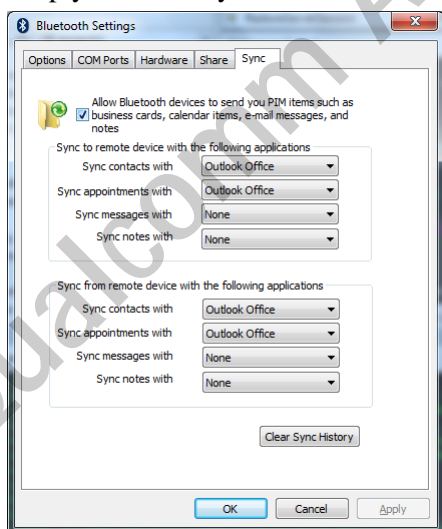


Figure 4-10 Bluetooth Properties - Sync

Click “Allow *Bluetooth* devices to send you PIM items” to allow remote devices to exchange and update folders with the Windows 7 computer. If this box is not checked, remote devices will not be

able to send information to the Windows 7 computer. Use the pull-down menus to set the information to be synchronized, either having the Windows 7 computer acting as a client (“Sync to remote device from the following applications” in Figure 4-10) or as a server (“Sync from remote device from the following applications” in Figure 4-10). When the changes have been made, click OK to set these changes and the information will be interchanged between the Client and Server. Click the **Clear Sync History** button to remove any information previously set using the synchronization feature.

NOTE (Continued from page 27)

- **Open Bluetooth folder** — Clicking this link will open the *Bluetooth* Folder on the local Win7 computer.
- **Show File Transfer Dialog** — The following windows displays the File Transfer Dialog window which will pop upon file transfer initiated.

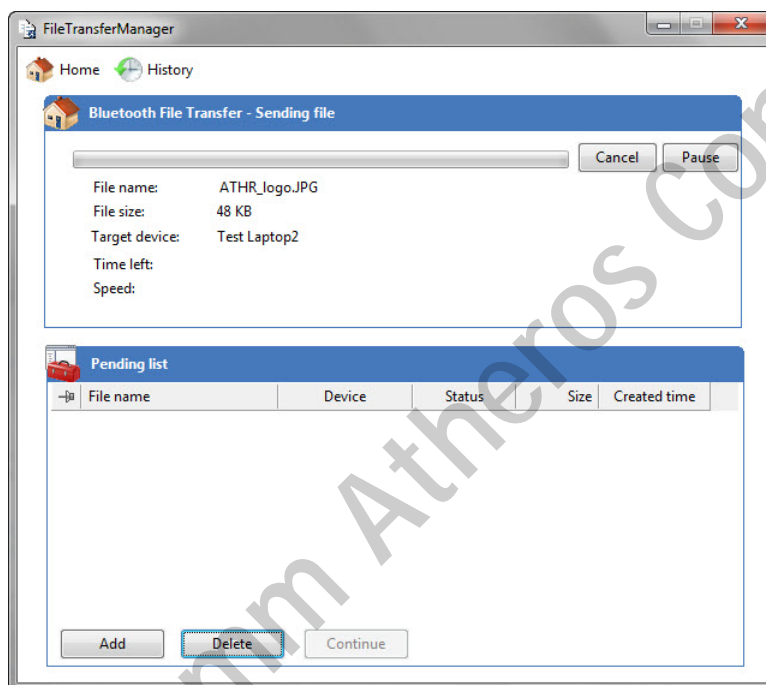


Figure 4-11 File Transfer Manager window

This window will show those transfers that are currently being transferred, along with their pertinent information such as name and file size, as well as those that are in the queue to be transferred. Users may add files to the queue by clicking the Add button, which will open a new list window. Within this new list window, click the Add button, which will open a Windows browser window where users can find files to be transferred.

The user can pause a file transfer and resume the transfer again from the same position where the file transfer is paused. To use this feature click “Pause” while the file is in transfer. The file transfer is paused. To continue transfer, select the file under “Pending list” and click “Continue”. The file transfer resumes from the same position where it is paused. For example, if a file is paused after 20% of file transfer, it will resume from the 20% again when continued.

4.1.2 Bluetooth Operations

The top of the page displays the two devices (named as This Computer and Remote Device) that are currently linked by *Bluetooth* and to be configured in this window, as shown in Figure 4-12.

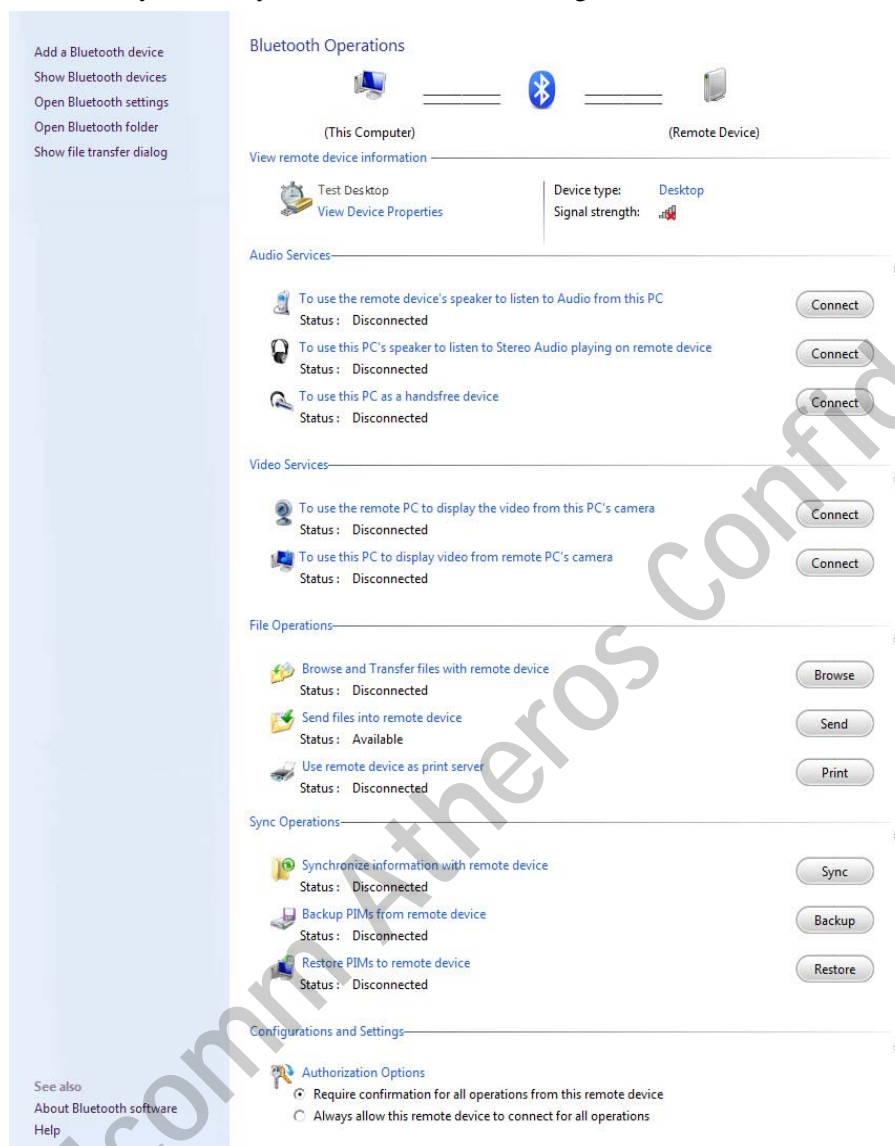


Figure 4-12 Bluetooth Operations window

The next section following provides details regarding the remote device, including its name on the *Bluetooth* network, the type of device, the signal strength between devices and the properties of the remote device, which can be seen by clicking the **View Device Properties** link, which will open the window as seen in Figure 4-13.

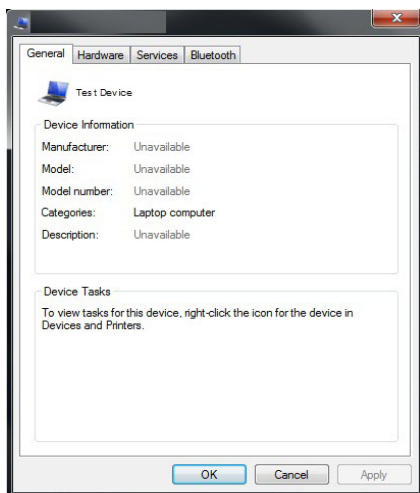


Figure 4-13 Properties window of the remote device

This window lists the general properties of the *Bluetooth* device like name of the manufacture, model, model number, the category of the device, and description of the *Bluetooth* device.

Clicking the **Hardware** tab will display a window, like the one seen in [Figure 4-14](#)

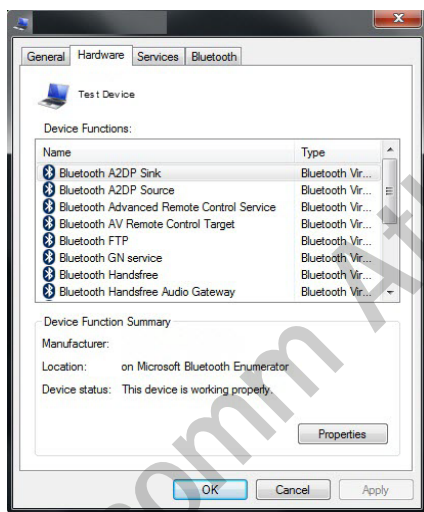


Figure 4-14 Properties window of the remote device - Hardware tab

This window list all the functions supported by the *Bluetooth* device. The window also displays the manufacture, location, and device status of the *Bluetooth* device.

Clicking the **Services** tab will display a window, like the one seen in [Figure 4-15](#).

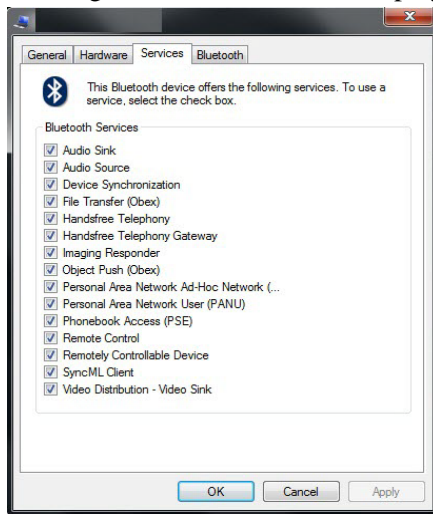


Figure 4-15 Properties window of the remote device - Services tab

This window lists the *Bluetooth* Services that the local computer can use on the remote device. All of the choices are enabled by default. To disable any of these services, simply uncheck its corresponding box and click Apply, but be careful, unchecking of any of these boxes may make certain functions unusable. Users should have a good knowledge of the remote device before performing these actions.

Clicking the *Bluetooth* tab will display a window, like the one seen in [Figure 4-16](#)

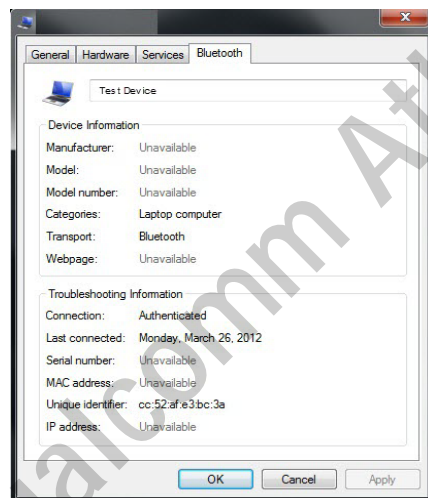


Figure 4-16 Properties window of the remote device - Bluetooth tab

This window displays the some of the information from the **General** tab long with the type of transport connection between the host and the connected device. This window also displays the following troubleshooting information:

Connection — Describes the current method of *Bluetooth* connection used between these two devices.

Last Connected — Displays the last time the remote device was connected to the local computer, through *Bluetooth*.

Serial number— Displays the serial number of the remote device that was connected to the local computer, through *Bluetooth*.

Mac Address — Displays the physical MAC address of the remote device.

Unique identifier — Displays the unique identification number of the *Bluetooth* device.

IP address — Displays the IP address of the connected *Bluetooth* device.

4.1.3 Audio Services

The next section of the *Bluetooth* settings window is used to configure the audio settings between the local computer and the remote device. There are four connections that can be made, as seen in [Figure 4-17](#).

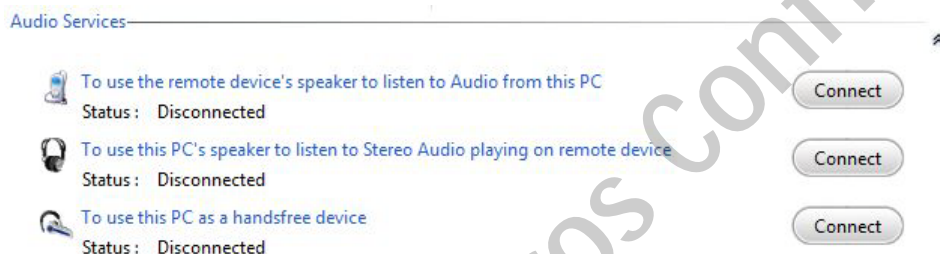


Figure 4-17 Bluetooth Settings - Audio Services

To use this PC's speakers to listen to Stereo Audio playing on remote device — Click the Connect button to hear stereo audio on the local computer, originating from the remote device, using the A2DP protocol for enhanced quality.

To use this PC as a handsfree device — Click Connect will allow the local computer to receive an audio stream from a remote device. This choice is used more for telephone connections than music audio, as the quality will not be as good.

4.1.4 File Operations

The file operations section is used to configure the operations of the remote device, such as file transfer and browse print server, as shown in [Figure 4-18](#).

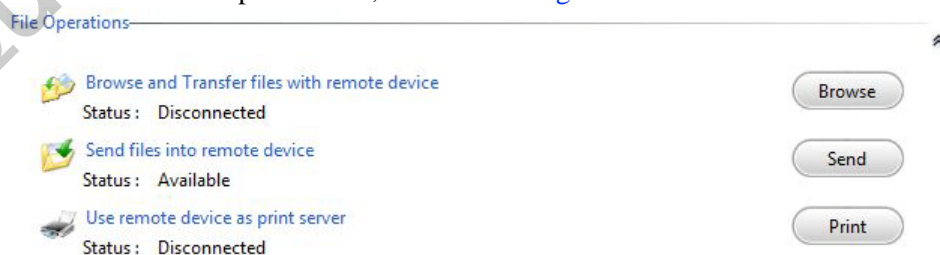


Figure 4-18 Bluetooth settings - File Operations

The following items may be configured in this window:

Browse and Transfer files with remote device — Clicking the Browse button opens the shared *Bluetooth* folder that has been previously created on the remote device. Files may be pasted to this window, deleted, copied or cut from it. Any actions taken in this window will be done in the shared *Bluetooth* folder on the remote device.

Send files into remote device — Clicking the Send button will open a Windows browser window to find a file to be sent to the remote device. Simply browse the local computer for the file to transfer and then click the Open button, which will automatically send that file to the shared *Bluetooth* folder of the remote device.

4.1.5 Advanced Phone Operations

The advanced phone operation (Figure 4-19) allows the user to connect to a remote phone and use the phone features. The user can sync the phone contacts, make calls, answer calls, and send short messages using the local computer. The user can also view the history of dialed numbers, received calls, and missed calls. To access these features click the “Open” button under “Advanced Phone Operations”. A new dialog box is displayed as show in Figure 4-20. The user can also see the network operator name, signal strength, and battery level of the connected remote phone.

The user can use the remote phone modem and connect to internet using DUN services.

NOTE Make sure the *Bluetooth* connection between the local computer and the remote phone is established and working properly. The “Advanced Phone Operations” is displayed if the remote phone supports at least one of the four profiles Hands Free (HF), Serial Port Profile (SPP), Phonebook Access Profile (PBAP), and Sim Access Profile (SAP).



Figure 4-19 Advanced Phone Operations

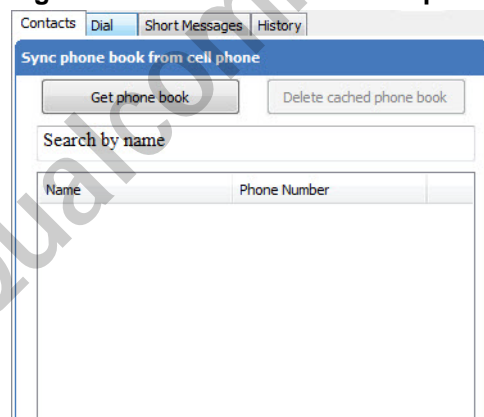


Figure 4-20 Advanced Phone Operations Open dialog box

Contacts - Allows the user to synchronize contacts from the phone and search the contacts. The available options are sync, sync and save to local, sync contacts to phone. The user can also send the contacts to other remote devices connected to the local computer. The user can call or send a message to the selected contact.

To synchronize the contacts from the phone to the local computer click “Get Phone Book” the following three options are displayed and the user can select any one option.

Sync: Allows the user to synchronize the remote phone book contacts to the local computer. If the user closes the dialog box and opens the contacts are not displayed.

Sync and save to local: Allows the user to synchronize the remote phone book contacts to the local computer and store them in the local cache. If the user closes the dialog box and opens it all the contacts are displayed from the local cache.

Sync contacts to phone: Allows the user to synchronize the remote phone book contacts from the local computer to the remote device.

To delete the contacts from the local cache click “Delete cached phone book”.

Right Click: Once the contacts are synchronized, the user can right click on a selected contact and perform the following actions.

The user can call, send a message, or send the contact to other devices that are connected to the local computer.

Dial - Allow the user to dial the desired phone numbers from the local computer, see [Figure 4-21](#). To dial the numbers click “Dial”, a dialing pad appears. Click the desired numbers and click “call”. A call is made to the dialed numbers and the user can listen and speak using the local computer speakers and microphone.

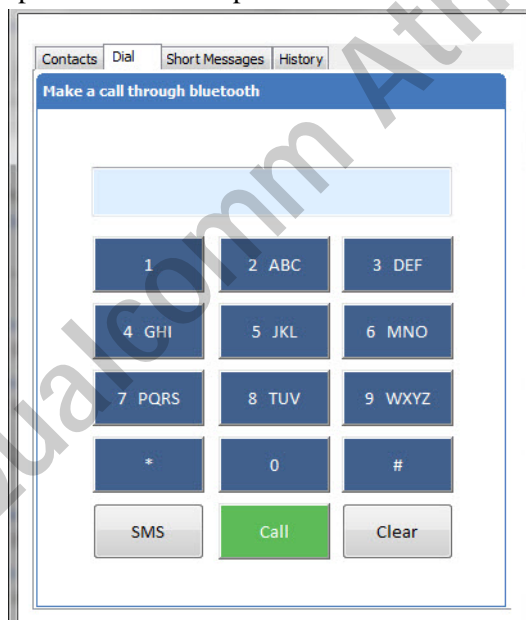


Figure 4-21 Dial Option

Short Messages - Allow the user to send short messages to the desired numbers, see [Figure 4-22](#). To send a short message click “Short Messages”. Type the message in the provided space and enter

the desired phone number or retrieve the phone number from the book. Click “Send”, the message is sent to the desired phone number. The user can see the date, time, phone number, and the contents of the sent message.

NOTE To send message to multiple users, enter the phone numbers separated by semicolon “;”.

Disconnect: Allow the user to break the SPP connection to the remote phone, this button is only available after SPP connection is established.

NOTE The user can send a short message of 70 characters in one SMS. However, if the message is more than 70 characters it is automatically broken into short messages of 70 characters and sent.

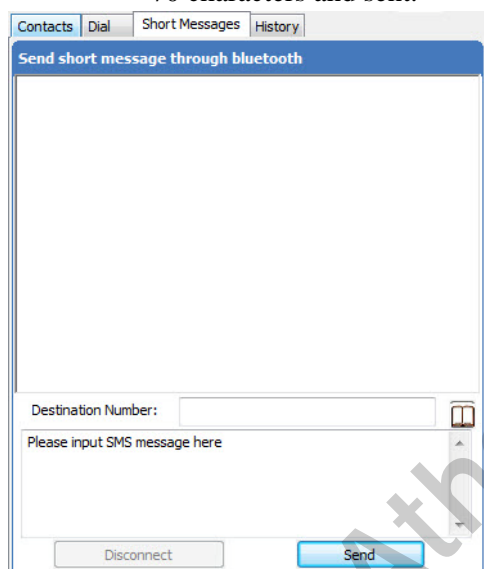


Figure 4-22 Short Message Services

History - Allows the user to view the answered, called and missed phone calls.

4.1.5.1 DUN Services

The user can connect to Dial-up Network (DUN) using the remote phone as modem. To use this feature click “Connect” under “DUN Service on Phone”. A message appears on the remote phone to connect to the local computer for dial-up connection, accept the request.

4.1.6 Video Services

The video services allow the user to stream the video from the source computer to a remote computer. The user need a web camera attached to the source computer to activate this feature. To access the video feature click “Connect” under the option “To use remote PC to display the video from this PC camera”. A dialog “Bluetooth Video Source” appears as shown in [Figure 4-23](#). Select the web camera under the dropdown list and click “Start Capture”. The user can see the web

camera activates and starts streaming the video. Click “Send to Remote” to send the streaming video to a remote computer.

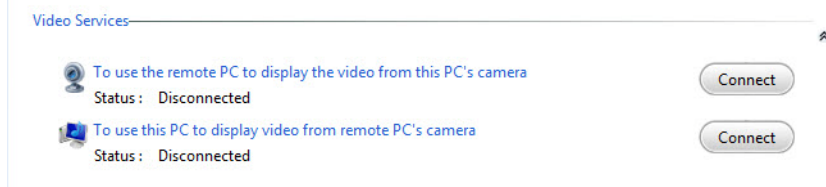


Figure 4-23 Video Source

NOTE Make sure the source and the remote computer are connected via *Bluetooth*. When the user clicks the “Connect” under “To use remote PC to display the video from this PC camera” the other option gets disabled automatically.

4.1.7 Sync Operations

Sync operations allow users to exchange and update important files, like calendars or address books from the Windows 7 computer to a remote device, such as a smartphone or PDA. To configure the settings for the Sync function, go to the main *Bluetooth* Settings page and see the Sync Operations section, as shown in [Figure 4-24](#).



Figure 4-24 Bluetooth Settings - Sync Operations

Users can:

Synchronize information with remote device - Clicking the Sync button will sync pre-selected folders and files with the remote device. These files and folders can be configured in the *Bluetooth* Settings-Sync folder, as shown in [Figure 4-10](#).

Backup PIM from remote device - Clicking the Backup button will import PIMs from a remote device.

Restore PIM to remote device - Clicking the restore button will export PIMs to a remote device.

4.1.8 Authorization Options

The last section of the **Bluetooth Settings** window is for the authorization settings for the remote device when connecting to the local computer. The options are shown in [Figure 4-25](#).

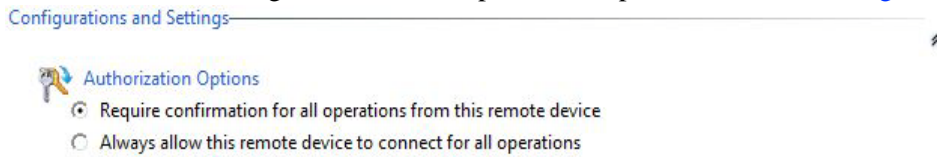


Figure 4-25 Authorization Options

Two choices exist and they are:

Require confirmation for all operations from this remote device — Choose this option to configure the local computer to prompt for authorization when the remote device requests permission to send perform actions on the local computer, such as sending and receiving files.

Always allow this remote device to connect for all operations — Choose this option to allow the remote device to perform operations on the shared *Bluetooth* folder of the local computer.

Right click on the *Bluetooth* icon and choose **Show Bluetooth Devices**. See [Figure 4-1](#).

4.2 Managing Bluetooth LE Devices

The Qualcomm Atheros *Bluetooth* Windows 7 Suite adds and configures *Bluetooth* enabled LE devices. To discover, pair and add an LE device follow the same procedure as discovering, pairing and adding a normal *Bluetooth* device. Once the connection is established between the host and an LE device the following *Bluetooth* options are available as shown in [Figure 4-26](#).

- Proximity
- FindME

NOTE The options are available if the remote LE device supports proximity and find me profiles. Otherwise these options are not available.

4.2.1 Proximity

This feature allows the user to set the proximity level and alert level. Select the check box “Use the LE Device as proximity device” to enable this feature. The user can set the alert level from the available options and proximity sensitivity using the slide bar. If the paired remote LE device moves away from the proximity of the host device an alarm is triggered in the remote device indicating that the device is out of range. This also indicates that the connection to the host may be lost.

NOTE The proximity is calculated by the signal strength. If the host is paired with two or more LE devices, the user can enable the proximity feature with only one device at any given time.

The proximity feature also allows the host computer to unlock automatically when a paired LE device is in range. Select the check box “Unlock the computer automatically when the LE device is in range” to enable this feature. The user must enter the Windows password for the first time. The *Bluetooth Win7 Suite* remembers the password.

NOTE When a LE device moves out of range, a message to lock the computer is displayed on the host computer. User can lock the computer or cancel the message.

4.2.2 Find Me

This feature allows the user to find the remotely paired device. When the user click “Find Device” button the remote device starts an alarm, indicating the physical location of the remote device. Find Me alert level will determine the alarm level of the remotely paired LE device. Select the desired alert level from the available options.

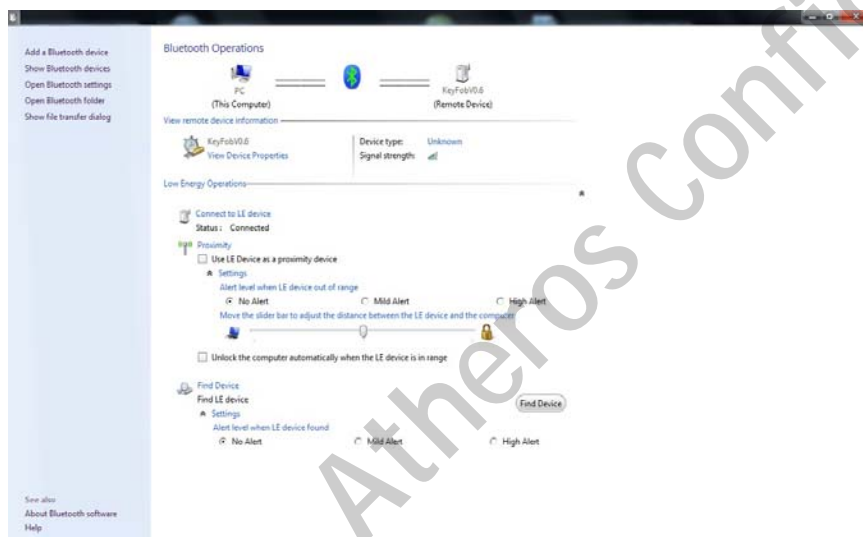


Figure 4-26 *Bluetooth LE Device*

4.3 The Right-Click Option

Alternatively, users can send files from their computer to a *Bluetooth* device using right-click. Simply find the file or picture on the computer to be sent and then right-click the icon of the file or picture which will open a menu where the user chooses **Send by Bluetooth To > Bluetooth Device** where users can choose a connected *Bluetooth* Device to which to transfer the file. This will produce File Transfer Window, as seen in [Figure 4-11](#), where the user can see the progress of the file transfer that is automatically being transferred.

Another right-click feature is from the *Bluetooth* Icon located in the lower right task bar of the Windows 7 desktop. From here users can perform various *Bluetooth* actions as seen in [Figure 4-27](#).

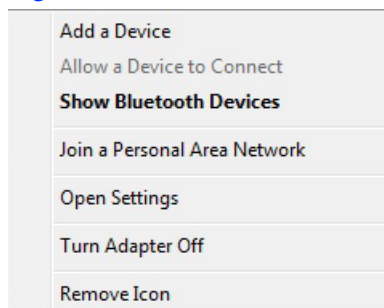


Figure 4-27 Right-Click options

The following options are available in the previous *Bluetooth* menu:

Add a device — Choosing this option will open the window seen in [Figure 3-2](#). Please use the same method described at this figure for adding *bluetooth* devices.

Allow a device to connect — If the user has not already given permission for the local computer to be discoverable, users can click this choice which will make this device discoverable on the *Bluetooth* network.

Show *Bluetooth* Devices — Clicking this option will open the window seen in [Figure 4-1](#) to configure *Bluetooth* connected devices.

Join a Personal Area Network — Clicking this option will open the window seen in [Figure 4-1](#) to configure the *Bluetooth* PAN.

Open Settings — Clicking this option will open the window seen in [Figure 4-5](#). This window and its tabs are described in “Bluetooth Settings” on page 28.

Turn Adapter Off — Clicking this option will disable the connected *Bluetooth* dongle. One turned off, the option for the dongle to be turned on again will appear in this place. To turn it back on, just click this place.

Remove Icon — Clicking this choice will remove the *Bluetooth* Icon from the taskbar. This is not recommended.

Index

A

add COM Port screen [30](#)
adding a port [29](#)
adding trusted device [19](#)
AR3011 chip [6](#)

B

Bluetooth cellular phone [6](#)
Bluetooth devices
 discover
 add
 pair
 configure [18](#)
bluetooth devices [6](#), [7](#), [23](#)
Bluetooth headset [6](#), [7](#)
Bluetooth menu [18](#)
Bluetooth mouse [6](#)
Bluetooth radios [14](#)
Bluetooth Win7 Suite
 main screen [6](#)
BtvStack.exe, Skype message [13](#)

C

COM port [29](#)
COM port selection [29](#)
configuring Bluetooth devices [23](#), [42](#)
connected Bluetooth devices [31](#)
connecting to remote devices [6](#)

D

default destination [11](#)
device driver software
 installation [14](#)
devices within range, checking [18](#)
downloading
 Qualcomm Atheros Bluetooth Win7 Suite [9](#)
driver installation, verifying [14](#)
driver options [31](#)

E

exchanging files [6](#)
executable file
 Bluetooth Win7 Suite [10](#)
extracting files [10](#)

F

Fax machine [7](#)

H

HCI USB Adapter [6](#)

I

incoming port option [30](#)
installation destination folder [11](#)
installation process [9](#)
installing
 Qualcomm Atheros Bluetooth Win7 Suite [9](#)
installing Bluetooth device [9](#)
Installing radio drivers [9](#)
InstallShield wizard [10](#)

L

launching [9](#)
login [9](#)

M

managing Bluetooth devices [23](#)

O

outgoing COM port [29](#)
overview [6](#)

P

pairing devices [18](#)
password [9](#)
properties tab [31](#)

S

select a COM port [29](#)
selected port, specifying [30](#)
selecting another device [30](#)

- serial port service [30](#)
- serial ports
 - incoming
 - outgoing [29](#)
- setup requirements, bluetooth [6](#)
- Skype program [13](#)
- software CD [10](#)
- software installation [9](#)
- support web site [9](#)
- supported bluetooth devices [6](#)

T

- turning on the device [30](#)

U

- uninstalling the Qualcomm Atheros Bluetooth Win7 Suite [16](#)
- USB dongle [14](#)
- USB port [6](#)
- user name [9](#)

V

- verifying driver installation [14](#)

W

- wireless personal area network [6](#)
- WPAN [6](#)