Installing Bluetooth

## Installing Bluetooth

To install the internal Bluetooth, follow the procedures below.

## Removing the battery pack

Before installing the Bluetooth board, remove the battery pack.

## Installing the Bluetooth board

To install the Bluetooth board, follow the steps below and refer to Figure 1 and Figure 2.

- 1. Remove one screw securing the Bluetooth board cover.
- 2. Remove the Bluetooth board cover.



Figure 1 Removing the Bluetooth board cover

3. Connect the antenna cable to the Bluetooth board.

#### Installing Bluetooth

4. Align the board's connector with the connector on the computer. Press the board carefully and firmly to ensure a solid connection.



Figure 2 Installing the Bluetooth board

5. Seat the Bluetooth Board cover and secure it with one screw.

## Installing the battery pack

Install the battery pack.

# Functional Specifications of Toshiba Bluetooth Utility Version 1.0

TOSHIBA CORPORATION

**TOSHIBA CORPORATION** 

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## **TOSHIBA CORPORATION**

## 1. Introduction

This document contains the functional specifications for the Toshiba Bluetooth Utility.

## 2. Summary

This section contains a summary of the Toshiba Bluetooth Utility.

#### 2.1 Compatible Operating Systems

The Bluetooth Utility can be used with one of these Microsoft operating systems: Windows 95, Windows 98 or Windows 98SE, Windows ME, Windows NT 4.0 with Service Pack 6, or Windows 2000.

#### 2.2 Location of Bluetooth Utility

The Bluetooth Utility belongs to the Application group at the top of the Bluetooth software stack.



#### Location of Bluetooth Utility

#### 2.3 Utility Programs

The Bluetooth Utility consists of the following three utility programs.

#### Bluetooth Service Center

Bluetooth Service Center collectively manages all Bluetooth services. Its main functions are to confirm remote devices and provide a connection between local and remote services. You can also use it to switch the security settings according to your location at the time of connection.

#### **Bluetooth Monitor**

You use Bluetooth Monitor, which appears in the taskbar, to configure the default settings of Bluetooth services and to monitor and control Bluetooth operations. You can use the taskbar pop-up menus to start Bluetooth Service Center and perform other functions.

#### Bluetooth LocalCOM

Bluetooth LocalCOM is located in the Control Panel. You can use it to create and manage local COM ports for use with Bluetooth. You can also access the LocalCOM window from the Bluetooth Service Center window.

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#### 2.4 Functions of Bluetooth Service Center

With Bluetooth Service Center, you can:

- Search for remote devices.
- Display a list view of remote devices.
- View the properties of remote devices.
- Confirm the connection status of remote devices.
- Search for remote services.
- Display a list view of remote services.
- View the properties of remote services.
- Confirm the connection status of remote services.
- Connect and disconnect local and remote services.
- Save appropriate security settings for each User Mode.
- Change assigned security settings for each User Mode.
- Reconnect to remote services after starting Bluetooth Service Center.
- Use with Bluetooth device groups. (Available in Version 2.0)

#### 2.5 Functions of Bluetooth Monitor

With Bluetooth Monitor, you can:

- View the connection status (Connected, Waiting to Connect, or Not Connected) via the taskbar icon.
- Use the menu to turn the Bluetooth module Software Switch ON or OFF.
- Use the menu to adjust the Bluetooth default settings.
- Use the menu to start Bluetooth Service Center.
- Use the menu to open SPANworks.
- Use the menu to exit Bluetooth service.

#### 2.6 Functions of Bluetooth LocalCOM

With Bluetooth LocalCOM, you can:

- Create and delete local COM ports for use with Bluetooth.
- Make and modify Service Profile settings for local COM ports.
- View the properties and type of a local service.
- View the properties and type of a local profile.
- Connect to local and remote services.

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## 3. Bluetooth Service Center

Bluetooth Service Center collectively manages all Bluetooth services. Its main functions are to confirm remote devices and connect local and remote services. You can also use it to switch the security settings according to your location at the time of connection. The Bluetooth Service Center user interface and functions are described below.

## 3.1 Starting Bluetooth Service Center

To start Bluetooth Service Center, select **Programs**, **Toshiba Bluetooth Utility**, and then **Bluetooth Service Center** from the **Start** menu. You can also start Bluetooth Service Center from the Bluetooth Monitor menu.



Figure 3.1 Bluetooth Service Center programs menu

## 3.2 Bluetooth Service Center Window

When Bluetooth Service Center is started, this main window appears. The window items and functions are described below.



**TOSHIBA CORPORATION** 

System menu/System	buttons
Pluetooth Service Center	
🗗 Restore 🛛 🖁	
Move	
Size 🎽	
🗕 Minimize 🗮	
Maximize	
X Close Alt+F4 Dev	
System menu	System buttons

#### Description of system menu items

No.	Item	Description
1	<u>R</u> estore	Restores window to original size
2	Move	Enables you to move the window
3	<u>S</u> ize	Enables you to adjust the window's size
4	Mi <u>n</u> imize	Minimizes the window size
5	Ma <u>x</u> imize	Maximizes the window size
6	<u>C</u> lose Alt+F4	Closes the window

#### Description of system buttons

No.	Item	Description
1	8	Bluetooth Service Center program icon
2	x	Close
3		Maximize/Restore (toggle)
4	-	Minimize

#### Menu bar



No.	Add-on Items	Description
1	Bluetooth	Adds on Bluetooth Service Center menu item
2	Help	Adds on Bluetooth Service Center help item

No.	Bluetooth Items	Description		
1	Device Discovery	Discovers devices		
2	Service Search	Searches for services		
3	User Mode	Opens User Mode selection menu		
4	User Mode Properties	Displays User Mode properties		
5	Device Properties	Displays local device properties		
6	Profile Properties	Displays local service profile properties		
7	LocalCOM Setup Wizard	Opens LocalCOM Setup Wizard		

No.	Help Items	Description
1	Bluetooth Beginner's Guide	Opens Bluetooth Beginner's Guide
2	Bluetooth Utility User's Guide	Opens Bluetooth Utility User's Guide
3	About Bluetooth Service Center	Displays version information

## **TOSHIBA CORPORATION**

#### User Mode bar



No.	Item Description			
1	Bluetooth RF Icon	Displays signal status for Bluetooth module		
2	Office	Office mode button		
3	Mobile	Mobile mode button		
4	Home	Home mode button		
5	Others	Others mode button		
6	All Reconnect	Service reconnection button		
7	User Mode Properties	User Mode properties button		
8	Screen Selection	Show/hide info toggle button		
9	Help	Help button		

You use the **User Mode** bar to manage the settings that are configured for each of the User Modes (Office, Home, Mobile, and Others). You can use the **User Mode** bar to configure the Discoverability Mode and Link Policy settings for each User Mode and switch between the different settings. You can also use the **User Mode** bar to connect to services automatically when Bluetooth is started. (Office is the default User Mode setting.)

#### Toolbar

\$ *	Ø	2	<b>P</b>	$\mathbf{x}$	<b>•</b>	

No.	Item	Description
1	Connect	Connects to device or service
2	Disconnect	Disconnects from device or service
3	Refresh	Updates device and service information
4	Service Search	Searches for devices and services
5	Properties	Displays device and service properties
6	Delete Item	Deletes device or item
7	View	Changes view display format
	[TBD]	[Additional buttons may be added.]

## **TOSHIBA CORPORATION**

#### Remote device tree view Device All discovered Bluetooth devices 🖃 📥 All Devices 🖻 📲 00:50:CD:00:05:7E 🖮 📇 00:50:CD:00:05:71 🖮 📇 00:50:CD:00:05:71 🗄 📲 00:50:CD:00:05:72 🖮 📇 00:50:CD:00:05:71 List of connected devices 🖻 🚠 Connected Devices 🖻 – 🛃 00:50:CD:00:05:73 List of devices with COM service 🖻 – 🌉 00:50:CD:00:05:74 List of devices with DUN service 🗄 💑 COM' Serveing Device List of devices with FAX service List of devices with LAN service 🖭 💑 DUN Serveing Device List of devices with Network service 🖭 💑 FAX Serveing Device 🖭 💑 LAN Serveing Device . List of devices with group properties 🖻 💑 Network, Serveing Device 🖻 📲 00:50:CD:00:05:73 🖻 📲 00:50:CD:00:05:74 🖻 🚠 Group1 🚊 🖓 🛄 00:50:CD:00:05:73 🚊 📲 00:50:CD:00:05:74

The remote device tree view displays a list of discovered Bluetooth remote devices sorted according to services and groups. This type of display categorizes items by usage and is called a filtering display. When you select one of the list items, the corresponding device or service information is displayed in a list view on the right.

## Remote device and service list views

## Remote device list view

Name	ClassOfDevice:ID	Status	Address
📥 ToshibaBt	CoD:000001	Not connected	94:3e:03:b7:d0:00
👍 ToshibaBt	CoD:0c0102	Not connected	e6:3e:03:b7:d0:00
👍 98:92:00:cd:5	CoD:000000	Not connected	98:92:00:cd:50:00
👍 Test3	CoD:0c0176	Not connected	5a:00:11:cd:50:00
👍 Device1	CoD:0c0102	Not connected	97:3e:03:b7:d0:00
👍 TestLAN	CoD:0c0176	Not connected	9d:00:11:cd:50:00
👍 toahiba	CoD:100240	Not connected	4e:00:11:cd:50:00
👍 WinMe(JP)	CoD:0c0176	Not connected	f0:00:11:cd:50:00
1			

The remote device list view displays a list of remote devices that correspond to the filtering item you selected in the remote device tree view. You can view the list as Large Icons, Small Icons, List or Details. Connected devices are indicated on the list by a connection mark that appears next to the remote device icon.

## Remote service list view

Name	Status	Description
🖉 СОМ1	Not connected	Communications Port (COM1)
🔏 соме	Connected [c]	Toshiba Bt Port (COM6)
<u> С</u> ОМ2	Not connected [s]	SerialPort
🎝 LAN3	Not connected [s]	LANAccessUsingPPP
🖏 DUN4	Not connected [s]	DialupNetworking
🞯 FAX5	Not connected [s]	Fax
💑 LANE	Not connected [s]	Toshiba LAN Emulation(LANE)

The remote service list view displays a list of registered services for a remote device that are selected by a filtering item in the remote device tree view. You can view the list as Large Icons, Small Icons, List or Details. Connected devices are indicated on the list by a connection mark that appears next to the remote service icons.

## **TOSHIBA CORPORATION**

#### 3.3 Menu Bar

The **Menu** bar features five menu items (File, Edit, View, Bluetooth, and Help), as shown in Figure 4.1 below.

File	Edit	View	Bluetooth	<u>H</u> elp

Figure 4.1 Menu bar

### 3.3.1 File Menu

No.	File Item	Description
1	Exit	Exits Bluetooth Service Center

#### 3.3.2 Edit Menu

No.	Edit Item	Description
1	Connect	Connects to the selected service
2	Disconnect	Disconnects from the selected service
3	Delete	Deletes the selected view item

#### 3.3.3 View Menu

No.	Bluetooth Item	Description
1	Mini Window	Reduces the window size
2	Normal Window	Returns to normal the window
3	Large Icons	Displays devices and services as large icons
4	Small Icons	Displays devices and services as small icons
5	List	Displays a list
6	Details	Displays details
7	Refresh	Updates device and service information

#### 3.3.4 Bluetooth Menu

No.	Bluetooth Item	Description
1	Device Discovery	Discovers devices
2	Service Search	Searches for services
3	User Mode	Opens User Mode selection menu
4	User Mode Properties	Displays User Mode properties
5	Device Properties	Displays local device properties
6	Profile Properties	Displays local service profile properties
7	LocalCOM Setup Wizard	Opens LocalCOM Setup Wizard

## **TOSHIBA CORPORATION**

#### 3.3.5 User Mode Menu

No.	Bluetooth Item	Description
1	Office	Office mode button
2	Mobile	Mobile mode button
3	Home	Home mode button
4	Others	Others mode button

## 3.3.6 Help Menu

No.	Help Item	Description
1	Bluetooth Beginner's Guide	Opens the Bluetooth Beginner's Guide
2	Bluetooth Utility User's Guide	Opens the Bluetooth Utility User's Guide
3	About Bluetooth Service Center	Displays the version information

#### 3.4 User Mode Bar

You use the **User Mode** bar to manage the settings that are configured for each of the User Modes (Office, Home, Mobile, and Others). You can use the **User Mode** bar to configure the Discoverability Mode and Link Policy settings for each User Mode and switch between the different settings. You can also use the **User Mode** bar to connect to services automatically when Bluetooth is started. (Office is the default User Mode setting.)



Figure 4.2.1 User Mode bar

### 3.4.1 Bluetooth RF Icon

The Bluetooth RF icon displays the signal status for the Bluetooth module. The icon changes to match the change in the RF signal status. The table below describes the meaning of the different icons.

No.	Icon	Description
1		Standby (ready to receive)
2	က္ (က္)	Connected (3-image animated icon)
3		Blocked (Gray-colored icon)

## 3.4.2 Changing the User Mode

You can change the User Mode by selecting one of the **User Mode** buttons (Office, Mobile, Home, or Others). When you click a **User Mode** button, the Bluetooth Mode and Bluetooth Link Policy settings for the corresponding mode are selected automatically. You cannot change the User Mode when another Bluetooth application is currently using the Bluetooth service. The table below describes the meaning of the different button icons.

No.	Button Icon	Description
1		Office mode selected
2		Office mode not selected (Gray-colored display)
3		Mobile mode selected
4	$\langle O \rangle$	Mobile mode not selected (Gray-colored display)
5		Home mode selected
6		Home mode not selected (Gray-colored display)
7		Others mode selected
8	<	Others mode not selected (Gray-colored display)

#### 3.4.6 All Reconnect Button

**TOSHIBA CORPORATION** 

You can use the **All Reconnect** button to reconnect any disconnected services after you have restarted the PC or the Toshiba Bluetooth Software by re-supplying power to the Bluetooth device. When you click the **All Reconnect** button, all the services are reconnected. The table below describes the meaning of the button icons.

No.	Button Icon	Description
1	-U-	Default (Gray-colored display)
2	-"L-	Selected

### 3.4.7 User Mode Properties Button

You use the **User Mode Properties** button to display the **User Mode Properties** dialog box in order to configure the settings for each of the User Modes. When you click the **User Mode Properties** button, the **User Mode Properties** dialog box appears. The table below describes the meaning of the button icons.

No.	Button Icon	Description
1	11	Default (Gray-colored display)
2		Selected

#### 3.4.8 User Mode Properties Dialog Box

You use the **User Mode Properties** dialog box to configure the settings for each User Mode. When you click the **User Mode Properties** button, the **User Mode Properties** dialog box appears. User Mode Properties consists of three tabs (Auto Link, Mode, and Link Policy) for each mode.

Auto Link	
Toshiba Bluetooth Device Setting (Office mode)         Auto Link         Mode       Link Policy <ul> <li>Enable Auto Link Mode</li> <li>Category(c)</li> <li>Office</li> <li>Disable Auto Link Mode</li> <li>Disable Auto Link Mode</li> <li>Display confirmation messag</li> <li>Default</li> <li>OK</li> <li>Cancel</li> <li>Apply</li> </ul>	<ul> <li>Select Enable Auto Link Mode to automatically link local devices with remote devices using the configured category settings whenever you start Bluetooth Service Center.</li> <li>The Category box displays the currently enabled category and can be used to select the required category item. If a link has not been established, no items will appear in the box.</li> <li>Select Disable Auto Link Mode if you do not want to automatically establish a device link whenever Bluetooth Service Center is started.</li> <li>Check Display Confirmation Message to have a confirmation message displayed once the link is established automatically after you start the program. (This box is checked as the default setting.)</li> </ul>
FIGURE 3.7.5 AULO LITIK LAD	

#### Mode

Toshiba Bluetooth Device Setting (Office mode)       X         Auto Link       Mode       Link Policy         Discoverability Mode       On-discoverable Mode       On-discoverable Mode         O       General discoverable Mode       One-discoverable Mode	Discoverability Mode   · Non-discoverable Mode  · General Discoverable Mode  Connectability Mode  · Non-connectable Mode  · Connectable Mode
Connectability Mode   Non-Connectable Mode  Connectable Mode  Security Mode  Level 1(No Security)  Default  DK Cancel Apply	Security Mode Select from the following list: Security Mode 1 (Non-secure mode) Security Mode 2 (Service level enforced security mode) Security Mode 3 (Link level enforced security mode) Default button Returns individual User Mode settings to default settings.
Figure 3.7.6 Mode tab	

#### Security Mode Items

No	Menu Items	Description
1	Security Mode 1	Non-secure mode
2	Security Mode 2	Service level enforced security mode
3	Security Mode 3	Link level enforced security mode

Link Policy

Toshiba Bluetooth Device Setting (Office mode)       ×         Auto Link       Mode       Link Policy         Default Link Policy       Reject link Establishment attempt       ▼	Default Link Policy Reject attempt to establish link Prompt before accepting link establishment Automatically accept link establishment Apply to all newly-discovered devices
Apply to all newly discovered device      Default      OK Cancel Apply	Default button Returns individual User Mode settings to default settings.

Figure 3.7.7 Link Policy tab

#### 3.4.9 Screen Selection Button

You use the **Screen Selection** button to toggle between the normal **Bluetooth Service Center** window and a smaller window that displays only the **Menu** bar and **User Mode** bar. Click the **Screen Selection** button to toggle between the two windows. The table below describes the meaning of the button icons.

No.	Button Icon	Description
1	C.	Default (Gray-colored display)
2	<b>E</b> .	Selected



Figure 4.2.2 Mini window

## **TOSHIBA CORPORATION**

#### 3.4.10 Help Button

Click the **Help** button to view the Bluetooth Utility User's Guide. The table below describes the meaning of the button icons.

No.	Button Icon	Description
1	?	Default (Gray-colored display)
2	?	Selected

## 3.5 Toolbar

You use the **Toolbar** with the remote device and service list views. The buttons on the toolbar are, listed from left to right, Connect, Disconnect, Refresh, Service Search, Property, Delete, and View. Each of these buttons is described below.



### 3.5.1 Connect Button

You use the **Connect** button to connect a local service with a remote service. From the remote service list view, select the icon of an unconnected remote service and click **Connect**. The utility will attempt to connect the two services. If the utility connects the services successfully, a connection mark appears next to the remote service icon. The table below describes the meaning of the button icons.

No.	Button Icon	Description
1	\$	Default (Gray-colored display)
2	4	Selected

۶ ۲	<b>(</b> )	Q 🖆	×   🗉	-		
Name	ClassOfDevice:ID	Status	Address	Name	Status	Description
👍 Device1	CoD:000001	Not connected	e1:3e:03:b7:d0:00	🖉 СОМ1	Not connected	Communications Port (COM1)
👍 Test4	CoD:0c0176	Not connected	f0:00:11:cd:50:00	🖉 СОМ7	Not connected [c]	Toshiba Bt Port (COM7)
👍 Device2	CoD:0c0102	Not connected	97:3e:03:b7:d0:00	<u> С</u> ССМ2	Not connected [s]	SerialPort
📥 Test5	CoD:0c0176	Not connected	fc:00:11:cd:50:00	🖉 СОМ6	Not connected [s]	SerialPort
👍 ToshibaBt2	CoD:0c0102	Not connected	94:3e:03:b7:d0:00	🖏 LAN3	Not connected [s]	LANAccessUsingPPP
👍 Test2	CoD:0c0176	Not connected	a1:00:11:cd:50:00	🐯 DUN4	Not connected [s]	DialupNetworking
👍 ABCDEFGHIJ	CoD:000000	Not connected	cd:3e:03:b7:d0:00	FAX5	Not connected [s]	Fax
👍 5e:00:11:cd:5	CoD:0c0176	Not connected	5e:00:11:cd:50:00	💑 LANE	Not connected [s]	Toshiba LAN Emulation(LANE)
da 🖕 🗠	CoD:0c0102	Not connected	97:00:11:cd:50:00	<u> </u>		

Figure 3.5.2 Using the Connect button

THC lat	The table below describes the meaning of the leons.				
No.	lcon	Description			
1	₿	Connection mark			
2	<b>N</b>	Service disconnected (COM port service used as example)			
3	¢ ط	Service connected (COM port service used as example)			

The table below describes the meaning of the icons.

#### 3.5.2 Connecting to Remote Services

Once you click **Connect** and the utility successfully connects the remote and local services, a connection mark appears next to the remote service icon. The utility will attempt to connect to an existing local service. If, however, an unconnected local service cannot be found, a message appears informing you that the required local service is already connected. You can then either select **Create and connect to a new client service** or **Cancel connection**.

If you select **Create and connect to a new client service**, the LocalCOM Setup Wizard **Create LocalCOM Client** dialog box appears. Follow the on-screen instructions to create and connect to a new client service.



Figure 3.5.3 Service connection message

You can also select the LocalCOM Setup Wizard from the Bluetooth menu before clicking **Connect** or after canceling the connection.

(See the description of the LocalCOM utility for more information on the LocalCOM Setup Wizard.)

#### 3.5.3 Disconnect Button

You use the **Disconnect** button to disconnect a local service from a remote service. From the remote service list view, select the icon of the remote service from which you want to disconnect, and click **Disconnect**. The utility will attempt to disconnect the services. If the utility disconnects the services successfully, the connection mark next to the remote service icon will disappear. You cannot disconnect a Bluetooth service when another Bluetooth application is currently using that service. The table below describes the meaning of the button icons.

No.	Button Icon	Description
1	*	Default (Gray-colored display)
2	*	Selected

## **TOSHIBA CORPORATION**

9 🛞	2 🛛	Q 🖆	X 🗆	-		
Name	ClassOfDevice:ID	Status	Address	Name	Status	Description
🍅 Device1	CoD:000001	Not connected	e1:3e:03:b7:d0:00	🖉 СОМ1	Not connected	Communications Port (COM1)
🍅 Test4	CoD:0c0176	Not connected	f0:00:11:cd:50:00	🖉 СОМ7	Not connected [c]	Toshiba Bt Port (COM7)
👍 Device2	CoD:0c0102	Not connected	97:3e:03:b7:d0:00	🖉 СОМ2	Not connected [s]	SerialPort
👍 Test5	CoD:0c0176	Not connected	fc:00:11:cd:50:00	🖉 СОМ6	Not connected [s]	SerialPort
👍 ToshibaBt2	CoD:0c0102	Not connected	94:3e:03:b7:d0:00	🖏 LAN3	Not connected [s]	LANAccessUsingPPP
👍 Test2	CoD:0c0176	Not connected	a1:00:11:cd:50:00	🐯 DUN4	Not connected [s]	DialupNetworking
👍 ABCDEFGHIJ	CoD:000000	Not connected	cd:3e:03:b7:d0:00	FAX5	Not connected [s]	Fax
🍅 5e:00:11:cd:5	CoD:0c0176	Not connected	5e:00:11:cd:50:00	🍰 LANE	Connected	Toshiba LAN Emulation(LANE)
diga 🖕 @2	CoD:0c0102	Not connected	97:00:11:cd:50:00	<u> </u>		

Figure 3.5.4 Using the Disconnect button

#### 3.5.4 Refresh Button

You use the **Refresh** button to update all on-screen information. Click the **Refresh** button to update the status information for all remote devices and services. Please note that it may take several minutes to update the information for all remote devices. The table below describes the meaning of the button icons.

No.	Button Icon	Description
1	<b>1</b>	Default (Gray-colored display)
2	<b>2</b>	Selected

#### 3.5.5 Service Search Button

You use the **Service Search** button to search for remote service information from displayed remote devices. Please note that it may take several minutes to search for information from all remote devices. The table below describes the meaning of the button icons.

No.	Button Icon	Description
1	3	Default (Gray-colored display)
2	3	Selected

#### 3.5.6 Properties Button

You use the **Properties** button to display the properties for a selected remote device or service. From the remote device or service list view, select the icon of a remote device or service and click the **Properties** button. The properties dialog box appears. The table below describes the meaning of the button icons.

No.	Button Icon	Description
1	2 C	Default (Gray-colored display)
2		Selected

When you select a remote device from the remote device list view and click the **Properties** button, the **Device Properties** dialog box, shown below, appears.

デバイスのプロパティ	×	
	Device1	The <b>Device Properties</b> dialog box displays the remote device information and enables you to change the Role setting.
デバイスアドレス:	00:50:CD:00:05:73	
種類	Bluetooth Device	To change the Role setting select either
メーカー名:	Toshiba	Master or Slave and click <b>OK</b> or <b>Apply</b>
ビート団	Japanese	waster of Slave and click <b>OR</b> of <b>Apply</b> .
状態:	Connected	Click <b>OK</b> to enable the Role setting and
作成日:	2000年9月8日	close the dialog box
アクセス日:	2000年9月10日	
- 役割	<ul> <li>Master</li> <li>C Slave</li> </ul>	Click <b>Cancel</b> to cancel a change to the Role setting and close the dialog box.
	OK キャンセル 適用	

Figure 3.5.5 Device Properties dialog box

To display the **Service Properties** dialog box, select a service device from the service device list view and click the **Properties** button.

サービスのプロパティ	
COM10 デバイスアドレス: 00:50:CD:00:05:73 種類: Serial Port	The <b>Service Properties</b> dialog box displays the service information and enables you to connect to or disconnect from the service.
状態     Connected       作成日:     2000年9月8日       アクセス日:     2000年9月10日       接続切断(©)	To connect to the service, click <b>Connect</b> . This button has the same function as the <b>Connect</b> button on the Toolbar.
接続先サービス名: COM5 接続先デバイスアドレス: 00-50-CD:00:05:7A Connect Disonnect	To disconnect from the service, click <b>Disconnect</b> . This button has the same function as the <b>Disconnect</b> button on the Toolbar.
	Click <b>OK</b> to close the dialog box.

Figure 3.5.6 Service Properties dialog box (COM port service used as example)

#### 3.5.7 Delete Item Button

You use the **Delete Item** button to delete items, such as remote device or service listings that are no longer needed. From the remote device or service list view, select the icon of the remote device or service listing you want to delete and click the **Delete Item** button. The item will be deleted from the list view. If you delete a listing for an existing device or service, you can click the **Refresh** button to re-display that listing. The table below describes the meaning of the button icons.

No.	Button Icon	Description
1	×	Default (Gray-colored display)
2	×	Selected

#### 3.5.8 View Button

You use the **View** button to change the display format for the remote device and service list views. You can change the display format by selecting one of the **View** menu items. The table below describes the meaning of the button icons.

No.	Button Icon	Description
1	<b>Ⅲ</b> ▼	Default (Gray-colored display)
2	IIII▼	Selected

	Large Icons	
	S <u>m</u> all Icons	
	<u>L</u> ist	
,	<u>D</u> etails	

Figure 3.5.7 View menu

The table below describes the functions of the different menu items.

No.	Menu Item	Description
1	Large Icons	Displays devices and services as large icons
2	Small Icons	Displays devices and services as small icons
3	List	Displays a list
4	Details	Displays details

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#### 3.6 Remote Device Tree View

The remote device tree view displays a list of discovered Bluetooth remote devices sorted according to services and groups. You can use the tree view to quickly identify and select the devices that belong to a particular service. This type of display categorizes items by usage and is called a filtering display.



Figure 3.6.1 Remote device tree view

When you select one of the list items, the corresponding device or service information is displayed in the list view screen at the right.

Device	•	Service	Status	Description	
🖃 📥 All Devices		SCOM10	Connected	Serial Port	
🖻 🛃 00:50:CD:00:05:7E		🔡 DUN	Not connected	Dial-up Networking	
Ė~, 🖳 00:50:CD:00:05:71	1	🗂 FAX	Not connected	Fax	
🖻 📲 00:50:CD:00:05:71		LAN	Not connected	LAN Access	
🖻 – 📇 00:50:CD:00:05:72		📥 Network	Connected	Ethernet Network	
Ē.~♣ 00:50:CD:00:05:71					
🖻 🚠 Connected Devices		7			
🖻 🛃 00:50:CD:00:05:73					
🚊 🛃 00:50:CD:00:05:74		17			
🗄 🖓 COM' Serveing Device		/			
🗄 📲 DUN Serveing Device		①連動して、	リストビューの表	示が切り替わる。	
🛛 🗄 🛱 FAX Serveing Device 🛛 🗕	1	r			
🗜 🚔 LAN Serveing Device	/				
Park Network Serveing Device					
CE 00:50:CD:00:05:73					
E					
Figure 3.6.2 Selecting a remote device item					

#### 3.6.1 All Devices Filtering Display

All Devices displays a list of all discovered Bluetooth remote devices. Select **All Devices** to display all Bluetooth remote devices, below. (All Devices items are displayed each time Bluetooth Service Center is started.)

#### 3.6.2 Connected Devices Filtering Display

Connected Devices displays a list of discovered Bluetooth remote devices with connected services. Select **Connected Devices** to display the connected Bluetooth remote devices, below.

#### 3.6.3 COM Service Devices Filtering Display

COM (Serial Port) Service Devices displays a list of discovered Bluetooth remote devices with COM port service. Select **COM Service Devices** to display the Bluetooth remote devices sorted by COM port service, below.

#### 3.6.4 DUN Service Devices Filtering Display

DUN (Dial-up Networking) Service Devices displays a list of discovered Bluetooth remote devices with DUN service. Click **DUN Service Devices** to display the Bluetooth remote devices sorted by DUN service, below.

#### 3.6.5 FAX Service Devices Filtering Display

FAX Service Devices displays a list of discovered Bluetooth remote devices with FAX service. Click **FAX Service Devices** to display the Bluetooth remote devices sorted by FAX service, below.

#### 3.6.6 LAN Service Devices Filtering Display

LAN Service Devices displays a list of discovered Bluetooth remote devices with LAN service. Click **LAN Service Devices** to display the Bluetooth remote devices sorted by LAN service, below.

#### 3.6.7 Network Service Devices Filtering Display

Network (Ethernet Network) Service Devices displays a list of discovered Bluetooth remote devices with Network services. Click **Network Service Devices** to display the Bluetooth remote devices sorted by Network service, below.

#### 3.6.8 Group Service Devices Filtering Display (Available in Version 2.0)

Group Service Devices displays a list of discovered Bluetooth remote devices that are set with group properties. Click a group to display the Bluetooth remote devices that belong to that group, below.

#### 3.7 Remote Device List View

The remote device list view displays a list of remote devices that correspond to the filtering item you selected in the remote device tree view. You can view the list as Large Icons, Small Icons, List or Details. Connected devices are indicated on the list by a connection mark that appears next to the remote device icon.

Name	ClassOfDevice:ID	Status	Address
📥 @2	CoD:000001	Not connected	97:00:11:cd:50:00
oshiba BT-AP 👘	CoD:000000	Not connected	38:00:11:cd:50:00
👍 ToshibaBt	CoD:0c0102	Not connected	94:3e:03:b7:d0:00
👍 NY Server	CoD:0c0102	Not connected	e1:3e:03:b7:d0:00
👍 toahiba	CoD:100240	Not connected	4e:00:11:cd:50:00
👍 Device1	CoD:0c0102	Not connected	97:3e:03:b7:d0:00
👍 ToshibaBt	CoD:0c0102	Not connected	e6:3e:03:b7:d0:00

#### 3.7.1 Remote device list view

The table below describes the meaning of the icons.

No.	lcon	Description
1	₿	Connected
2	- <b>t</b>	Remote device disconnected
3	<b>₩</b>	Remote device connected
4	-	Ghost (Device no longer exists on list view)

The table below describes the column headings in the details list.

No.	Column Heading	Description
1	Name	Local name of remote device
2	Class:ID	Class ID of remote device
3	Status	Status of remote device (Connected, Not connected, Ghost)
4	Address	Address of remote device

#### 3.8 Remote Service List View

The remote service list view displays a list of registered services for a remote device selected from a filtering item in the remote device tree view. You can view the list as Large Icons, Small Icons, List or Details. Connected devices are indicated on the list by a connection mark that appears next to the remote service icons.

Name	Status	Description
🖉 СОМ1	Not connected	Communications Port (COM1)
🖉 СОМ2	Not connected [c]	Toshiba Bt Port (COM2)
🖉 СОМЗ	Not connected [s]	SerialPort
🆏 lana	Not connected [s]	LANAccessUsingPPP
🖏 duns	Not connected [s]	DialupNetworking
🧐 FAX6	Not connected [s]	Fax
💑 LANE	Connected [c]	Toshiba LAN Emulation(LANE)

Figure 3.7.2 Remote service list view

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The table below describes the column headings in the details list.

No.	Column Heading	Description
1	Service	Name of remote service
2	Status	Status of remote service (Connected, Not connected)
3	Description	Type of remote service

#### The table below describes the meanings of the icons.

No.	lcon	Description
1	<b>@</b> =	Connection mark
2	þa	COM port service not connected
3	¢ <b>ď</b>	COM port service connected
4	<b>6</b> 0	DUN service not connected
5		DUN service connected
6	<b>1</b>	FAX service not connected
7	<b>~</b>	FAX service connected
8	80) 80)	LAN service not connected
9	م الم	LAN service connected
10	88 88	Network service not connected
11	<b>₽</b> ©	Network service connected

## 4. Bluetooth Monitor

You use Bluetooth Monitor, which appears in the taskbar, to configure the default settings of Bluetooth services and to monitor and control Bluetooth operations. You can use the pop-up menus to start Bluetooth Service Center and perform other functions. The following sections describe the different visuals and functions of Bluetooth Monitor.

### 4.1 Starting Bluetooth Monitor

To start Bluetooth Monitor, select **Programs**, **Toshiba Bluetooth Utility**, and then **Bluetooth Monitor** from the **Start** menu.



Figure 4.1 Bluetooth Monitor programs menu

#### 4.2 Taskbar Icon

When you start Bluetooth Monitor, the Bluetooth Monitor icon appears in the taskbar. The icon changes according to the connection status, as shown below.



Figure 4.2.1 Taskbar icon

When Bluetooth service is connected, a 3-image animated icon appears.

No.	Icon	Description
1	î î î	Connected (3-image animated icon)

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#### 4.3 Pop-up Menus

You can use the pop-up menus to operate Bluetooth Monitor. Click the right mouse button to display the main menu and the left mouse button to display the sub-menu.

#### 4.3.1 Main Menu

To display the main menu, shown below, place the cursor over the Bluetooth Monitor icon and press the right mouse button.

Bluetooth Service Center SPANworks			Bluetooth Service Center SPANworks
Setting			Setting
RF Software Switch OFF			RF Software Switch ON
Help			Help
Exit			Exit
The second se	<b>₩</b>	_	<u> </u>

Figure 4.3.1 Bluetooth Monitor main menu

No.	Main Menu Item	Description
1	Bluetooth Service Center	Starts Bluetooth Service Center
2	<u>S</u> PANworks	Opens SPANworks
3	Device Properties	Displays properties for Bluetooth local device
4	<u>R</u> F Software Switch OFF/ <u>R</u> F Software Switch ON	Switches Bluetooth service on and off
5	<u>H</u> elp	Opens the Bluetooth Utility User's Guide
6	<u>E</u> xit	Exits Bluetooth Monitor

#### 4.3.2 Sub-Menu

You use the sub-menu to change the User Mode of Bluetooth Service Center from Bluetooth Monitor. To display the sub-menu, shown below, place the cursor over the Bluetooth Monitor icon and press the left mouse button. The current User Mode is indicated by a check mark.



Figure 4.3.2 Bluetooth Monitor sub menu

No.	Sub Menu Item	Description
1	<u>O</u> ffice	User Mode set to Office
2	<u>M</u> obile	User Mode set to Mobile
3	<u>H</u> ome	User Mode set to Home
4	O <u>t</u> hers	User Mode set to Others

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#### 4.3.3 Double Click

You can start Bluetooth Service Center by double-clicking the Bluetooth Monitor icon. If Bluetooth Service Center has already been started, double-click the icon to bring the **Bluetooth Service Center** window to the foreground.

#### **4.4 Properties**

To display the **Toshiba Bluetooth Device Properties** dialog box, select **Device Properties** from the Bluetooth Monitor main menu. You can select one of the four property tabs (General, Power Management, Mode, or Link Policy).

#### 4.4.1 General Properties

Toshiba Bluetooth Device Setting       X         General       Power Management       Mode       Link Policy         Device Information       Device       Toshiba Taro         Device Address       None       LMP Version         LMP Version       Device       Device	Device Information Device Name Device Address LMP Version HCI Version Country Code
Country 1 Default	
OK Cancel Apply	

Figure 4.4.1. General tab

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#### **4.4.2 Power Management Properties**

Toshiba Bluetooth Device Setting	
General Power Management Mode Link Policy	Power policy
Davies Dates	Power OFF in Hibernation
Power UFF in Standb; J Power UFF in Hibernation	Periodic Inquiry Mode
Periodic Inquiry Mode	Max Period Length [] hrs
Max Periodic 0 hrs Change	Inquiry Length [] Incs
Min Periodic 0 hrs Change	
Inquiry Length 1.28 sec Change	Automatic battery shutdown ON/OFF
Automatical Setting dependently on CON COFF	Reduce RF
Reduce RF ON OFF	ON/OFF
Wakeup Policies Inquiry Result Filte All New Device Connections Setup Filter from all Devices Default OK Cancel Apply	Wakeup Policies Inquiry Result Filter [Display new devices that respond to the inquiry process] [Display devices with a specific device class that respond to the inquiry process] [Display devices with a specific device address that respond to the inquiry process] Connection Setup Filter
	[Allow connection to all devices] [Allow connection to devices with specific device class] [Allow connection to device with specific device address]
	<b>Default</b> button Returns all settings to default Bluetooth device settings.

Figure 4.4.2. Power Management tab

#### **4.4.3 Mode Properties**

Toshiba Bluetooth Device Setting       X         General       Power Management       Mode         Discoverability Mode       Ink Policy         Image:	Discoverability Mode Non-discoverable Mode General Discoverable Mode Connectability Mode Non-connectable Mode Connectable Mode
Security Mode Security 1(No security)	Security Mode [Security Mode 1 (Non-secure mode)] [Security Mode 2 (Service level enforced security)] [Security Mode 3 (Link level enforced security)] Default button Returns all settings to default Bluetooth device settings.
OK Cancel Apply	

Figure 4.4.3. Mode tab

#### 4.4.4 Link Policy

Toshiba Bluetooth Device Setting       General       Power Management       Mode       Link Policy	Default Link Policy
Default Link Policy           Automatic Accept link establishment           Apply to all newly discovered device	[Reject attempt to establish link] [Prompt before accepting link establishment] [Automatically accept link establishment]
Device Discovery	Apply to all newly-discovered devices
15       days before         Display devices found during previous device discove         Display all Bluetooth Devices ever discover         Display Bluetooth Devices Discovery during the I         16         Default	<ul> <li>Device Discovery</li> <li>Remove stored discovered devices not found for the past [ ] days</li> <li>Display previously-discovered devices</li> <li>Display all Bluetooth Devices ever discovered</li> <li>Display Bluetooth Devices discovered during the past [ ] days</li> <li>Default button</li> <li>Returns all settings to default Bluetooth device settings.</li> </ul>

Figure 4.4.4. Link Policy tab

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## 5. Bluetooth LocalCOM

You can use Bluetooth LocalCOM to create and manage local COM ports for use with Bluetooth. Its main functions are to create server or client services to meet the needs for local COM ports when using Bluetooth, and to configure service profiles. You can also use it to change the names of the service profiles or services and delete unnecessary local COM ports. You can also access the **LocalCOM** window from the **Bluetooth Service Center** window. The different windows and functions of Bluetooth LocalCOM are described below.

### 5.1 Starting Bluetooth LocalCOM

To start Bluetooth LocalCOM, double-click the LocalCOM icon in the Control Panel or select **Start** on the **Properties** dialog box.



Figure 5.1. 1 Control panel

### 5.2 LocalCOM Window

When LocalCOM is started, the LocalCOM window, shown below, appears.

	<u>áí</u> í LocalCOM		×
	Existing COM Port(E)	Service Profile(P)	
0—	Port         Description           COM1         Communications Port (COM1)           COM5         Toshiba Bt Port (COM5)	Serial Port Profile	2
		Service Name( <u>N</u> )	
		Сом5	
	TOSHIBA Add Delete	OK Cancel Apply	

Figure 5.2.1 LocalCOM window

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#### Existing COM Port

This box displays a list of existing COM port devices recognized by the system device manager.

#### Service Profile

You use this box to change the service profile for a Bluetooth local COM port. To display the currently-set service profile, select the Bluetooth local COM port from the **Existing COM Port** box. To change the setting, select the required service profile from the pull-down menu. You cannot change the service profile for a COM port that is currently in use,

#### Service Name

You use this box to change the service name of the Bluetooth local COM port. To display the currently-set service name, select the Bluetooth local COM port from the **Existing COM Port** box. This name is set when the service is created. To change the name, type the new name in the input field. You cannot change the service name for a COM port that is currently in use.

#### Add button

You use this button to add a Bluetooth local COM port to the COM port list. Click this button to display the LocalCOM Setup Wizard. Follow the instructions in the LocalCOM Setup Wizard to create a local COM port for use with Bluetooth applications. See **5.3 LocalCOM Setup Wizard** for more information on using the LocalCOM Setup Wizard.

#### Delete button

You use this button to delete a Bluetooth local COM port from the **Existing COM Port** box. You can only delete local COM ports created and managed by the LocalCOM utility. Click this button to display the deletion confirmation message below. You cannot delete COM ports that are currently in use. Figure 5.2.2 Deletion confirmation message

ローカルCOMの削除	X
マーカルサービスよりローカルCOMボート"COM9"を削除します。 よろしいですか?	
Yes No	

#### OK button

Click this button after making any changes to the COM port service profile or service name.

#### Cancel button

Click this button to cancel any changes made to the COM port service profile or service name.

#### Apply button

Click this button to immediately apply any changes made to the Bluetooth local COM port service profile or service name while keeping the **LocalCOM** window open.

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### 5.3 LocalCOM Setup Wizard

From the LocalCOM window, click Add to display the LocalCOM Setup Wizard shown below. Select the type of service, either server or client, you want to create for the local COM port. (Create LocalCOM Server is selected as default when LocalCOM Setup Wizard is opened.)

LocalCOM Wizard		×
	LocalCOM wizard enables you to quickly and easily establish a Bluetooth virtual COM connection between two computers. LocalCOM wizard enables you to create a Bluetooth virtual COM port for Server or Client service. Specify which one you are using:	
	<ul> <li>Selection Service</li> <li>Create a Server service waiting for a connect request from a Client service.</li> <li>Create a Client service to connect a Server service you want to use.</li> </ul>	
	< <u>B</u> ack <u>N</u> ext > Cancel Help	

#### Figure 5.3.1 LocalCOM Setup Wizard

#### The table below describes the functions of the buttons used in LocalCOM Setup Wizard.

No.	Wizard Buttons	Function
1	Back	Displays previous dialog box
2	Next	Displays next dialog box
3	Finish	Closes window after all settings are complete
4	Cancel	Closes window without completing settings
5	Help	Opens Bluetooth Utility User's Guide

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#### 5.4 Creating a LocalCOM Server

To create a server that functions as the client destination during connection, select **Create LocalCOM Server** from the LocalCOM Setup Wizard and click **Next**. The **Create LocalCOM Server (1/2)** dialog box will appear, as shown in Figure 5.4.1.

## 5.4.1 Create LocalCOM Server (1/2)

LocalCOM Server Create (1/2)	Procedure
Select the Service Profile you want to use.	Follow the on-screen instructions to create a LocalCOM server.
	Assign a name for the new local COM port.
Existing COM Port       Port     Description       COM1     Communications Port (CC	Click <b>Next</b> to continue to the next dialog box.
Cancel Help	

Figure 5.4.1 Create LocalCOM Server (1/2) dialog box

## 5.4.2 Create LocalCOM Server (2/2)

LocalCOM Server Create (2/2)	×	Procedure
Select the Service Profile	you want to use,	Assign a LocalCOM port service profile from the <b>Service Profile</b> pull-down menu.
Local COM Port	<u> </u>	Confirm that the information on the screen is correct and click <b>Finish</b> , to create the local COM port and local service and exit the wizard.
<u>&lt; B</u>	ack Finish Cancel Help	



### 5.5 Creating a LocalCOM Client

To create a client that connects to a server, select **Create LocalCOM Client** from the LocalCOM Setup Wizard and click **Next**. The **Create LocalCOM Client** dialog box will appear, as shown in Figure 5.5.1.

## 5.5.1 Create LocalCOM Client

LocalCOM Client Create (1/1)	Procedure
To create a Bluetooth virtual CDM port for Client service, select the port you want to use. When you want to connect a Server service now, press [Link] button.	Follow the on-screen instructions to create a LocalCOM client.
	Assign a name for the new local COM port.
Existing COM Port Port Description COM1 Communications Port (CC	Confirm that the information on the screen is correct and click <b>Finish</b> to create the local COM port and exit the wizard.
Link(L)	Click <b>Connect</b> to create the local COM port and connect to a remote service.

Figure 5.5.1 Create LocalCOM Client dialog box

## 5.6 Connecting to a Remote Service

To connect to a remote service once a client is created, click **Connect** in the **Create LocalCOM Client** dialog box. The **Service Connection** dialog box will appear, as shown in Figure 5.6.1.

## 5.6.1 Service Connection (1/2)

Connects Service Profile. Selects Service Profile and Remote. [Next] button click please.	Follow the on-screen instructions to connect to a remote service.
Service Profile[P] Service Profile[P] Service Profile Remote Device[D] Name Address ToshibaBt 94:3e:03:b7:d0:00 Device1 97:3e:03:b7:d0:00 RemoteNT3 05:a0:13:cd:50:00 NT4M fa:00:11:cd:50:00 NT4M fa:00:11:cd:50:00 NT4M fa:00:11:cd:50:00 Refresh[P]	From the remote service list select a remote service that matches the profile conditions. Click <b>Next</b> to continue to the next dialog box.



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## 5.6.2 Service Connection (2/2)

From the pull-down menu, select the desired remote service.
Confirm that the information on the screen is correct and click <b>Finish</b> to connect to the remote service and exit the wizard.

Figure 5.6.2 Service Connection dialog box

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