

Gemalto Bluetooth Device Manager

Version 3.0.X - Windows Single-Host

Integration Guide

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CHAPTER 1

Overview

The Gemalto Bluetooth Device Manager (GBDM) application for Windows 7, 8.1 and 10, and the Bluetooth Smart Card Reader Manager use the standard PCSC interface to communicate transparently with SafeNet Reader CT1100, SafeNet Reader K1100, Ezio Bluetooth Reader and Ezio Flex Token.

The GBDM for Window (7, 8.1 and 10) provides a PC/SC compliant way to operate with Gemalto Bluetooth smart readers. Any application using the Microsoft Windows native PC/SC layer can communicate with a smart card via the Gemalto Bluetooth reader as easily as a USB reader.

A corporate application will provide smart card logon, email signature & encryption, SSL authentication and more.

An eBanking application will provide transaction signing operations between the reader and an online eBanking server.

Prerequisites

- .Net Framework 4.5.1 must be installed on Windows 7 only.
- Update your operating system with the latest Microsoft updates.



NOTE: For more details on Microsoft updates, refer to the Gemalto Bluetooth Device Manager Customer Release Notes.

Audience

This document is intended for Administrators and Integrators.

Supported Operating Systems

The following Windows operating systems are supported:

- Windows 7 SP1 (32-bit, 64-bit)
- Windows 8.1 (32-bit, 64-bit)
- Windows 10 (32-bit, 64-bit)



NOTE: Windows 7 and 8.1 must be used with a Bluegiga dongle.

Supported Gemalto Bluetooth Smart Readers/Tokens

The Gemalto Bluetooth Device Manager (GBDM) operates with the following readers:

- SafeNet Reader CT1100 (Smart Card badge holder)
- SafeNet Reader K1100 (Smart Card Token)
- Ezio Bluetooth Reader
- Ezio Flex Token

CHAPTER 2

Installing Windows Components

This chapter contains information about how to install the Gemalto Bluetooth Device Manager (GBDM) on Windows 7, Windows 8.1 and Windows 10 operating systems.

Installation File Names and Product Version Numbers

The installation package can be accessed from the following link:
http://support.gemalto.com/index.php?id=download_driver_bluetooth_reader

Operating System	Installation File Name	Product Version Number
Windows 7 and 8.1	Gemalto_Bluetooth_Device_Manager_Win7_Win8_3.0.X.msi (This installation can be used on Windows 10 with a dongle)	3.0.X
Windows 10	Gemalto_Bluetooth_Device_Manager_Win10_3.0.X.msi (This installation is to be used with a built-in Bluetooth LE)	3.0.X

Installing the GBDM on Windows Operating Systems

The GBDM is a middleware service, which brings the Gemalto Bluetooth smart card connectivity to the PC/SC applications.

The GBDM provides the link & the logic between the Gemalto PC/SC driver & the Gemalto Bluetooth smart reader. The GBDM is launched automatically when the operating system is started and runs in the background as long as Windows is running. It is visible in your system Services, and on the system tray bar.

Installing the GBDM will also install the Bluegiga Bluetooth Low Energy dongle driver (with Windows version 7 and 8.1) as well as the Gemalto PC/SC Virtual reader driver (V1.1.8).

It is recommended that you enable the USB Wake Support feature by installing the ControlVault driver and firmware on your DELL laptop (The relevant links are available in the Gemalto Bluetooth Device Manager Customer Release Notes), or by using the system BIOS on DELL laptops.

For more information, see the Gemalto Bluetooth Device Manager Customer Release Notes.



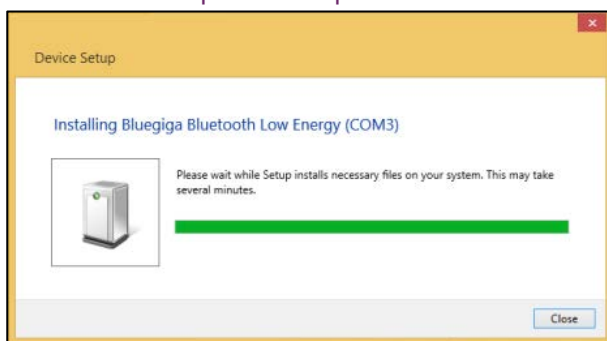
NOTE: The installation requires administrative rights.



NOTE: The Bluegiga dongle is always used on Windows 7 and 8.1 (It may also be used on Windows 10).

During the GBDM installation, ensure that the Bluegiga Bluetooth Low Energy dongle is disconnected. After the GBDM has been installed, perform the following:

1. Connect the Bluetooth Low Energy dongle.
The Device Setup window opens.



2. Let the installation run and complete automatically.

To install the Gemalto Bluetooth Device Manager:

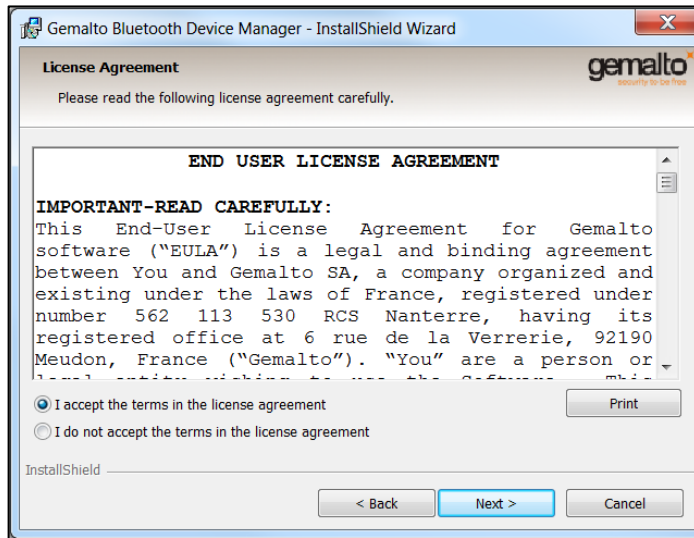
This installation will install the Gemalto Bluetooth Device Manager (GBDM).

1. From the files provided by Gemalto, double-click either one of the following file names:
 - On Windows 7 and 8.1, double-click: **Gemalto_Bluetooth_Device_Manager_Win7_Win8_3.0.X.msi**.
 - On Windows 10, double-click: **Gemalto_Bluetooth_Device_Manager_Win10_3.0.msi**.

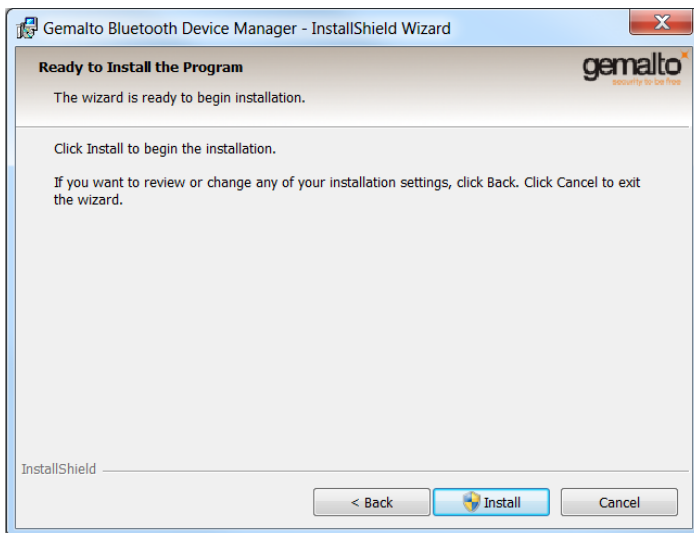
The **Welcome to the Gemalto Bluetooth Device Manager Installation Wizard** window opens.



2. Click **Next**.
The **License Agreement** window opens.

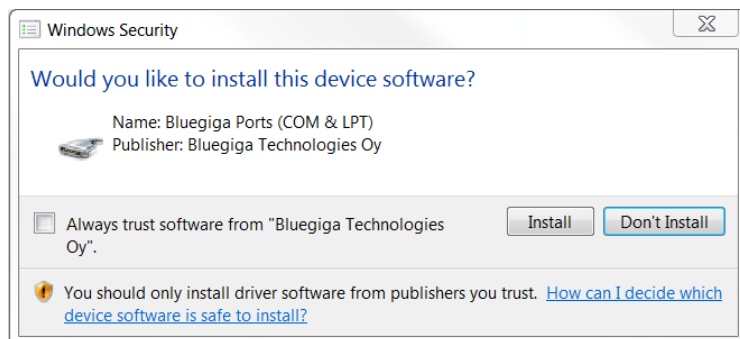


3. Select **I accept the terms in the license agreement** and click **Next**.
The **Ready to Install the Program** window opens.



4. Click **Install**.
The **Installing Gemalto Bluetooth Device Manager** window opens and the installation begins.

During the installation process, a security window opens asking if you would like to install the Bluegiga device software. This window is relevant only to Windows 7 and 8.1.



NOTE: Ensure that the **Always trust software from “Bluegiga Technologies Oy”** check box is selected.

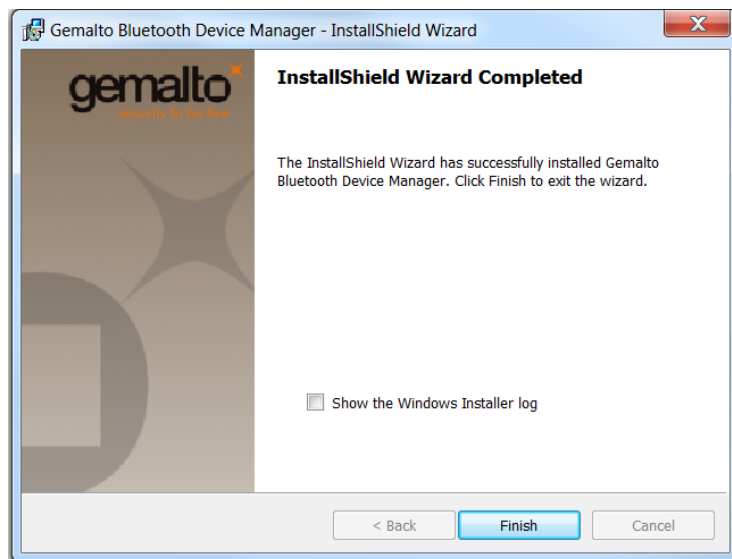
When running the Gemalto_Bluetooth_Device_Manager.msi installation in silent mode, the system requests that you confirm whether or not you trust the Bluegiga software.

Selecting the check box, followed by clicking **Install** confirms this.

This process is performed only once. If the Gemalto_Bluetooth_Device_Manager software is upgraded, or uninstalled and then re-installed, the user will not be prompted with the **Always trust software from “Bluegiga Technologies Oy”** check box again.


To work around this, the IT division can trust the Bluegiga certificate via the Group Policy Object (before the Gemalto_Bluetooth_Device_Manager is installed) using the Trusted Publishers certificate store.

- Click **Install**.
The **InstallShield Wizard Complete** window opens.



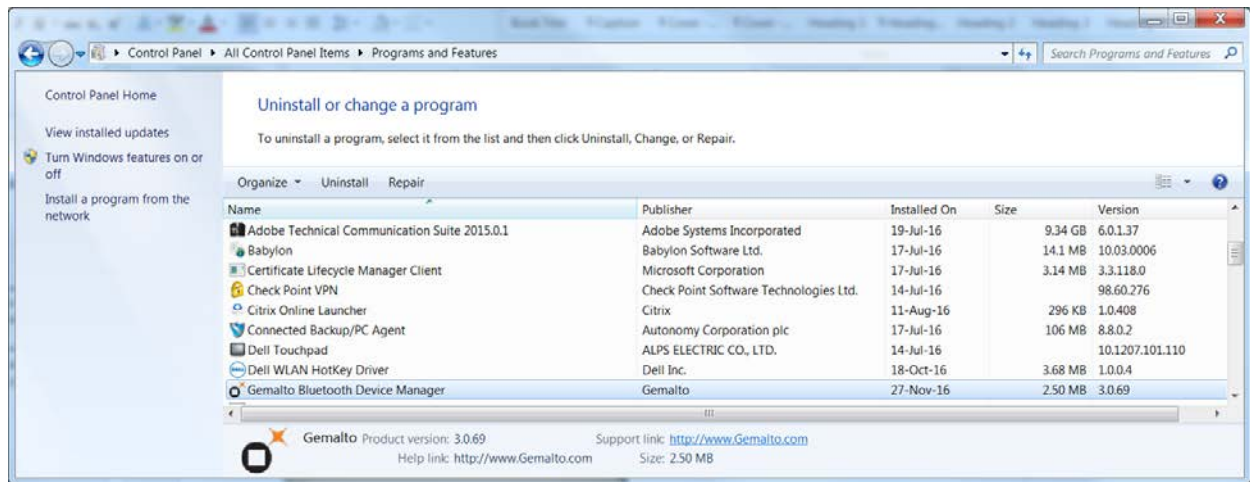
- Click **Finish**.

The Gemalto Bluetooth Device Manager appears in the system tray.

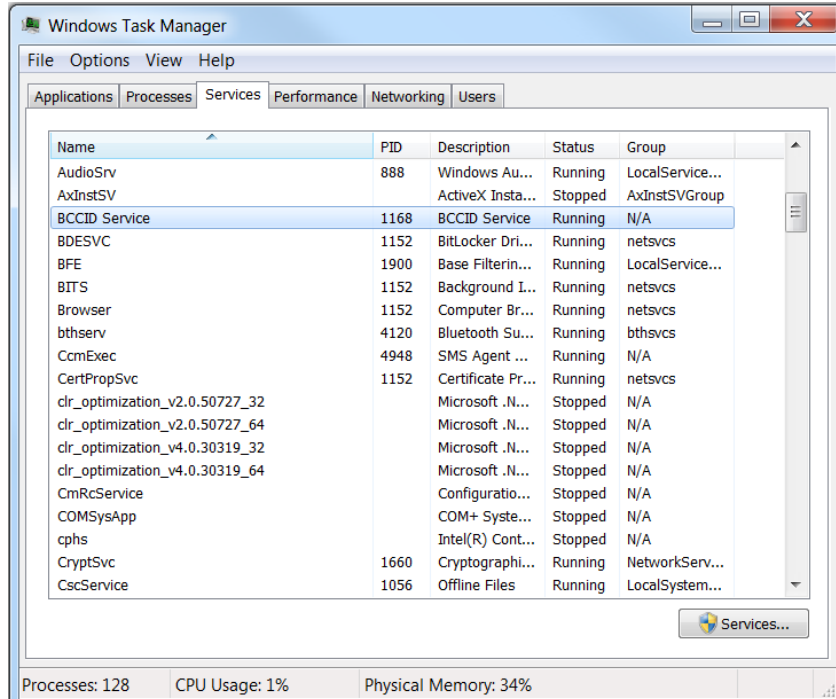
Depending on how your system is set up, the icon may also appear in your hidden system tray notification area. Click  to open the hidden icons.



The Gemalto Bluetooth Device Manager can be found under Programs and Features.



The Bccid Service runs in the Task Manager window.



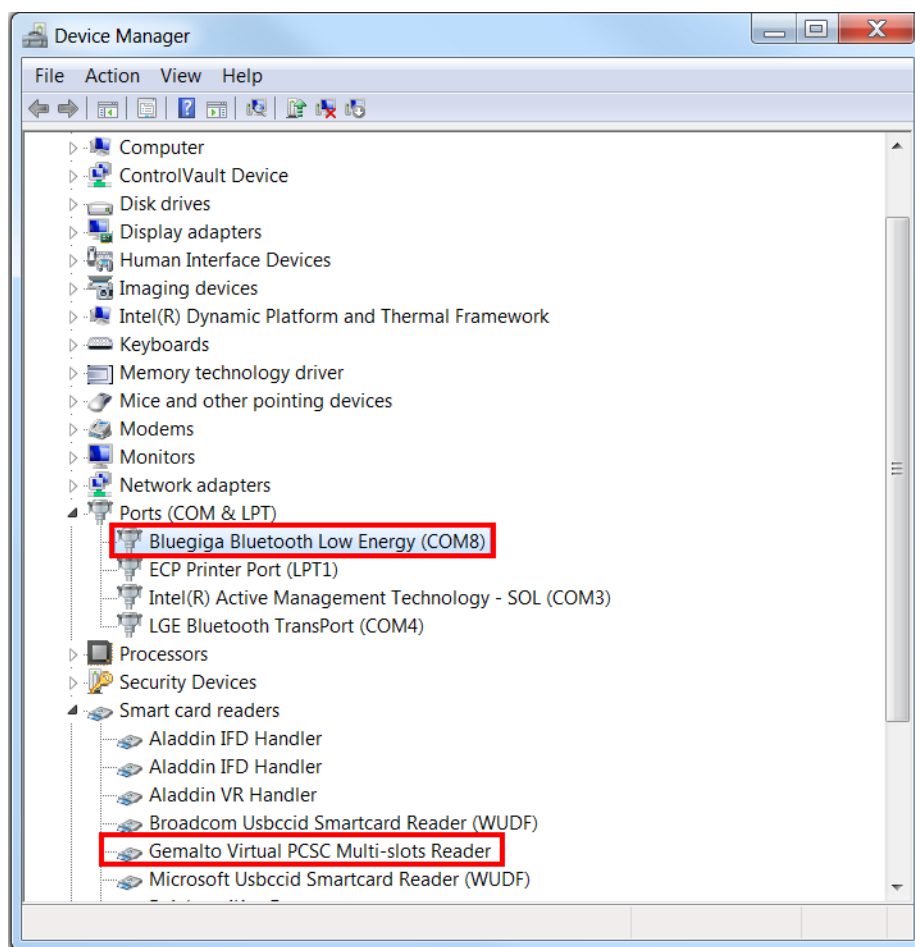
The **Gemalto Bluetooth Device Manager (e.g. COM3)** can also be found under **Computer Management>Device manager>Ports (COM & LPT)**.



NOTE: This window is relevant only to Windows 7 and 8.1.

The Gemalto Virtual PC/SC Multi-slots Reader is installed under the Smart card readers node.

The Bluegiga Bluetooth Low Energy dongle appears under the Ports (COM & LPT) node only if the Bluegiga dongle is connected.



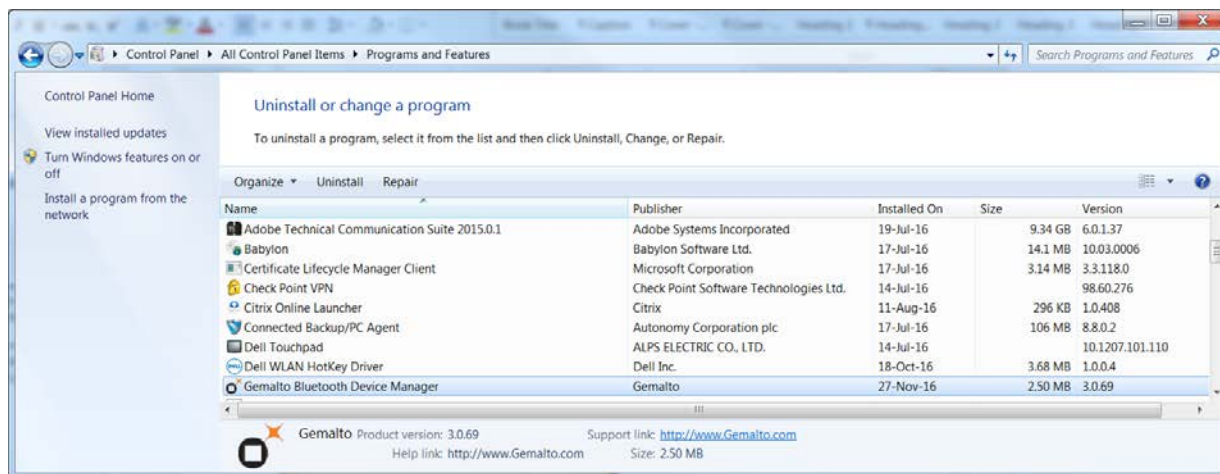
NOTE: Ensure the latest version of Gemalto Virtual PC/SC Multi-slots Reader is V1.1.8 by right-clicking **Gemalto Virtual PC/SC Multi-slots Reader>Properties>Driver**.

Your readers and tokens are now ready to work with the operating system.

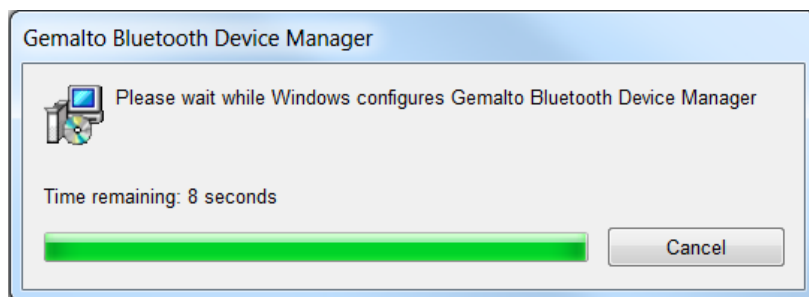
Uninstalling the GBDM from a Windows Operating Systems

The GBDM can be uninstalled by removing the **Gemalto Bluetooth Device Manager** from Add Remove Programs.

1. Go to **Control Panel>Programs>Programs and Features**, right-click **Gemalto Bluetooth Device Manager** and select **Uninstall**.



The **Bluegiga Driver** files are uninstalled (on Windows 7 and 8.1), followed by the GBDM files.



CHAPTER 3

The Pairing Process

Use the Gemalto Bluetooth Device Manager application to manage and configure paired readers.

The following may be performed using the Gemalto Bluetooth Device Manager:

- Detect & pair new readers
- List already paired readers
- Connect & disconnect manually to paired reader
- Configure the settings on a paired reader
- Remove a paired reader



The tool is available as an icon from the system tray. Click on the icon to display the main interface of the application. When the tool opens, and a device was already paired, the list of available paired devices is displayed.



NOTE: Only one reader can be connected at a time. To switch between smart card readers, be sure to disconnect the one that's connected before connecting a new one. For details on how to disconnect the smart card reader, see the section: [Connecting/Disconnecting the Smart Card Reader on page 26](#)

Connecting the Dongle

Connect the relevant dongle to the USB Port as follows:

- **Window 7 and 8.1** - Dongle Bluegiga BLED112 USB.
- **Windows 10** – If Bluetooth Low Energy is not supported by your computer/device, connect Dongle Bluegiga BLED112 USB

Hardware Pairing on Windows 10

Ensure that your Windows 10 PC has native built-in Bluetooth hardware. Hardware pairing must be performed on Windows 10 systems before software pairing.

Hardware pairing is performed only once.

Follow the procedure below to establish a connection between the computer and the relevant reader.

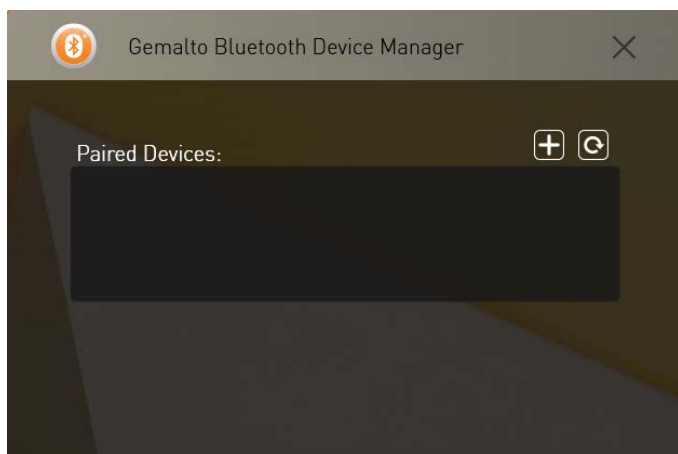
To perform hardware pairing on Windows 10:


1. Turn the reader/token on.
 - a. On a SafeNet Reader CT1100 or SafeNet Reader K1100 device:

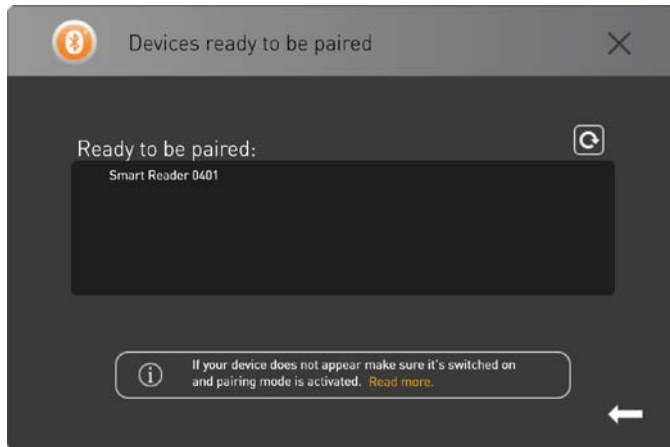
The red and blue lights are turned on for a second. Thereafter the red light turns off, while the blue light continues to flicker slowly.
 - b. On the Ezio Bluetooth Reader:

Press **OK** and ensure the device is set in Bluetooth mode (i.e. the Bluetooth switch is in the upper position).
 - c. On the Ezio Flex Token:

Press **OK** and ensure the device is set in Bluetooth mode (See Pairing the Ezio Flex Token on page 21).
2. Open the Gemalto Bluetooth Device Manager application by clicking the icon in the system tray
The Gemalto Bluetooth Device Manager window opens.

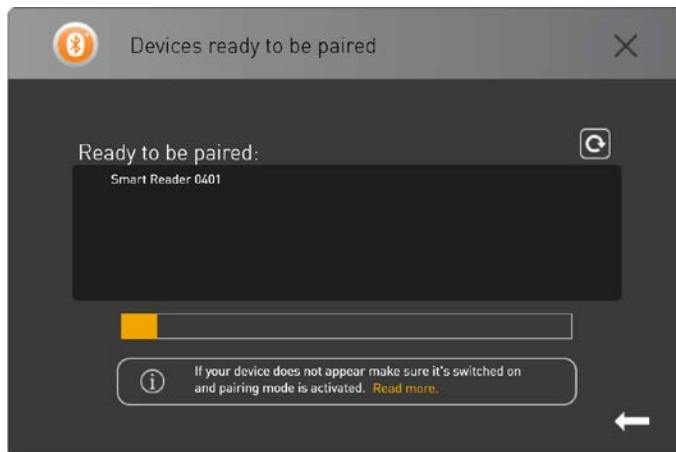


3. Click .
The Devices ready to be paired window opens.



4. Click the device you want to pair.

The Progress bar is displayed indicating the progression of the hardware pairing.



The **Device Successfully Connected** window is displayed.



5. Your device appears as connected and is now paired with the GBDM.

Pairing SafeNet Reader CT1100



NOTE: The SafeNet Reader K1100 is paired the same way as the SafeNet Reader CT1100, except that no smart card is inserted into the SafeNet Reader K1100.

Follow the procedures below to pair your device.

To pair the SafeNet Reader CT1100:

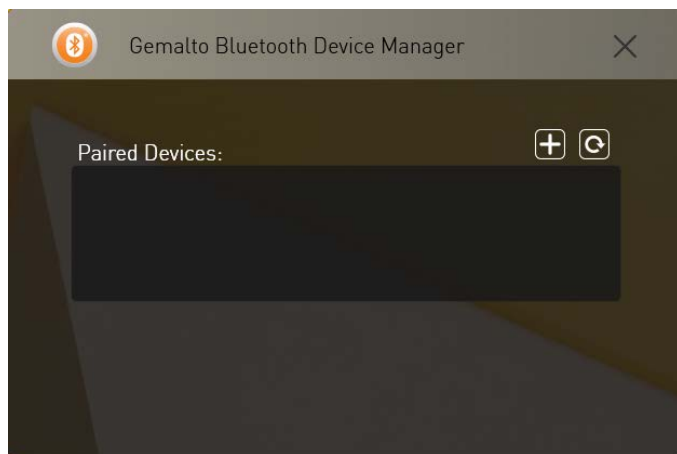
1. Insert the smart card into the SafeNet Reader CT1100.
2. Press the button on the SafeNet Reader CT1100.

The red and blue lights are turned on for a second. Thereafter the red light turns off, while the blue light continues to flicker slowly.

3. Open the **Gemalto Bluetooth Device Manager** by clicking the icon in the system tray.



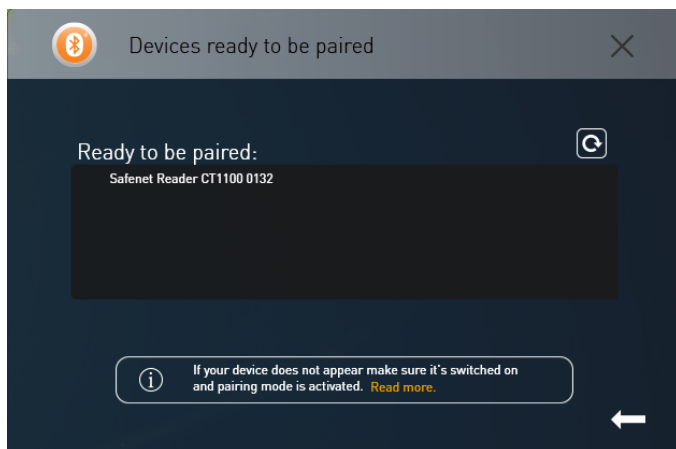
The **Gemalto Bluetooth Device Manager** window opens.



Move the device to software pairing mode, by pressing the button on the device continuously (long press). The blue light begins to flicker fast and the paired smart card appears in the Ready to be paired window.

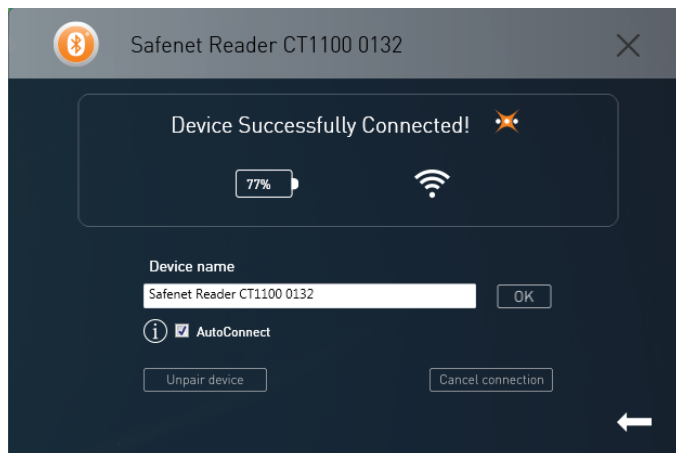
4. Click .

The **Devices ready to be paired** window opens.

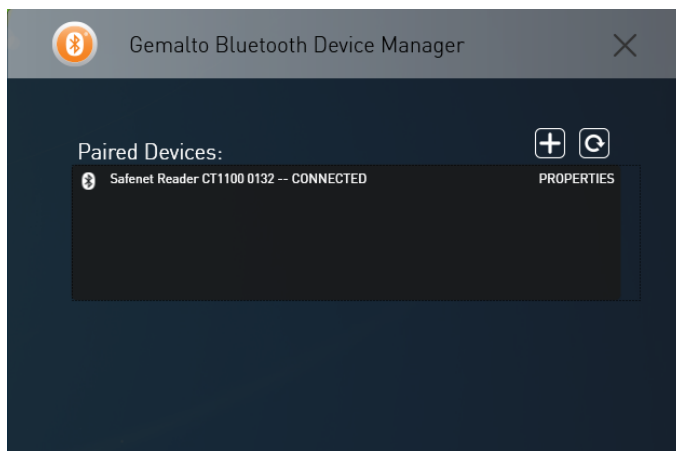


5. Click the device name (**Safenet Reader CT1100 0132**).

The **Device Successfully Connected** window opens.




6. The AutoConnect checkbox is enabled by default. If you do not want the smart card reader to connect automatically next time, then be sure to uncheck this option.
7. Click **OK**.
The device will now appear as connected.



Pairing the Ezio Bluetooth Reader

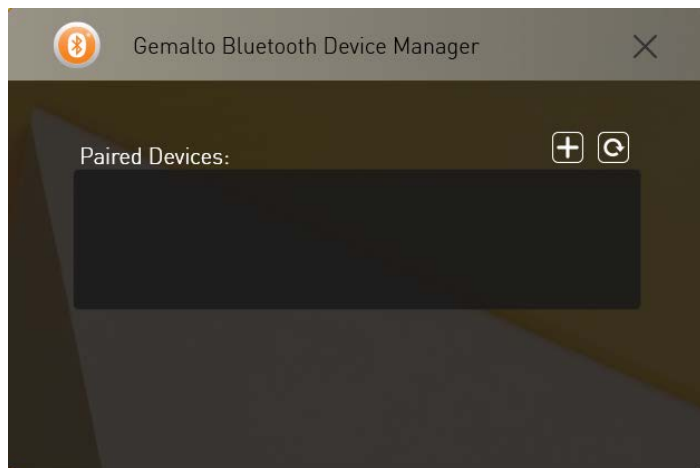
Follow the procedures below to pair your device.


To pair the Ezio Bluetooth Reader:

1. Open the **Gemalto Bluetooth Device Manager** by clicking the icon in the system tray, or open your hidden notification area by clicking  in the system tray.



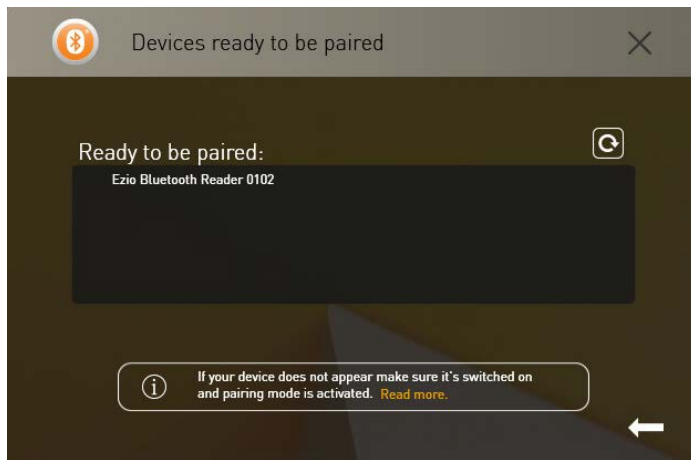
The **Gemalto Bluetooth Device Manager** window opens.



1. Click .
2. Start the Ezio Bluetooth Reader by pressing **OK**. Ensure the device is set in Bluetooth mode (i.e. the Bluetooth switch is in the upper position).
A message is displayed: Waiting for connection.
3. Press **Menu**.
The LCD displays: 1=Enable pairing.
4. Press **1**.
The LCD displays: Waiting for connection. The letter '**P**' is displayed at the top of the LCD.

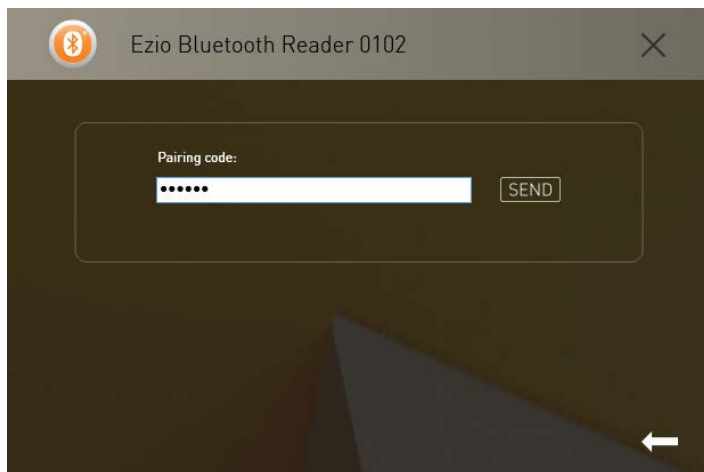
5. Click .

The **Devices ready to be paired** window opens.



6. Select the reader displayed in the list.

The **Ezio Bluetooth Reader – Pairing code** window opens.

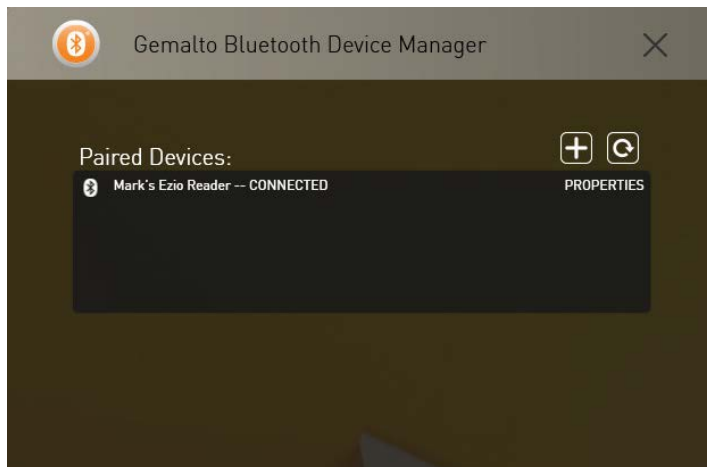


7. Enter the pairing code displayed on your Ezio Bluetooth Reader and click **Send**.

The **Device Successfully Connected** window opens.




8. Enter a **Device name**.
9. The AutoConnect check box is enabled by default. If you do not want the smart card reader to connect automatically next time, then be sure to uncheck this option.
10. Click **OK**.
Your device has been successfully connected.



Pairing the Ezio Flex Token

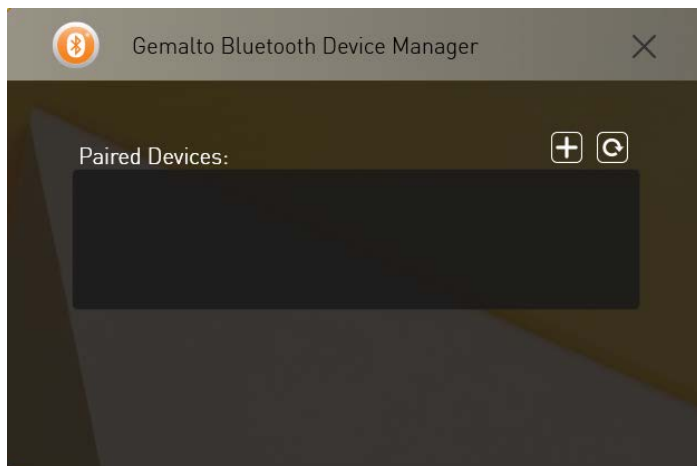
Follow the procedures below to pair your device.


To pair the Ezio Flex Token:

1. Open the **Gemalto Bluetooth Device Manager** by clicking the icon in the system tray, or open your hidden notification area by clicking  in the system tray.

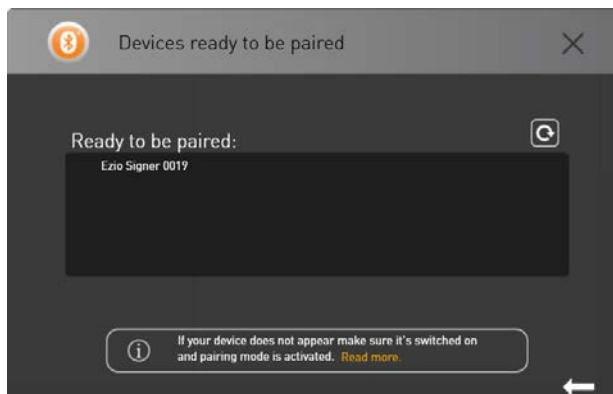


The **Gemalto Bluetooth Device Manager** window opens.



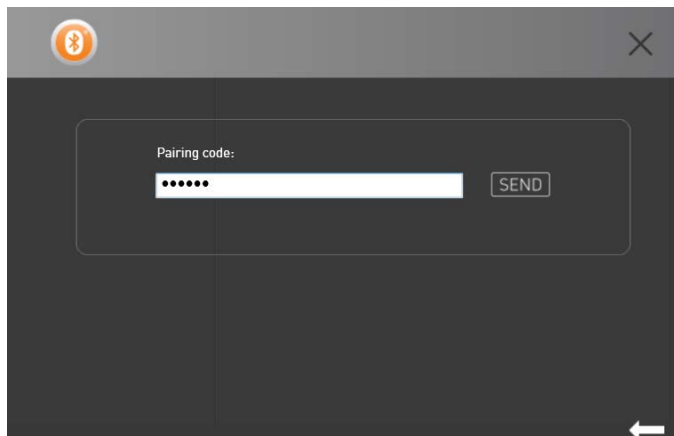
2. Click .
3. Turn the Ezio Flex Token on by pressing **OK**.
4. Press **9**. The LCD displays: **Set Parameters?** Press **OK**.
5. Press **2** to select **Bluetooth** from the menu.
6. The LCD displays: **Pair The Device?** Press **OK** to activate Pairing mode.
7. The LCD displays: **Pairing In Progress**.

The **Devices ready to be paired** window opens.



8. Select the token displayed in the list. (Ezio Signer 0019)

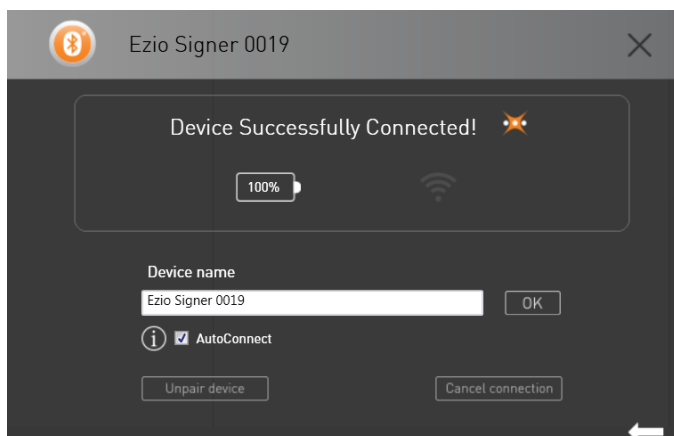
The **Ezio Flex Token – Pairing code** window opens.



9. Enter the **code** displayed on your Ezio Flex Token and click **Send**.

The **Device Successfully Connected** window opens.

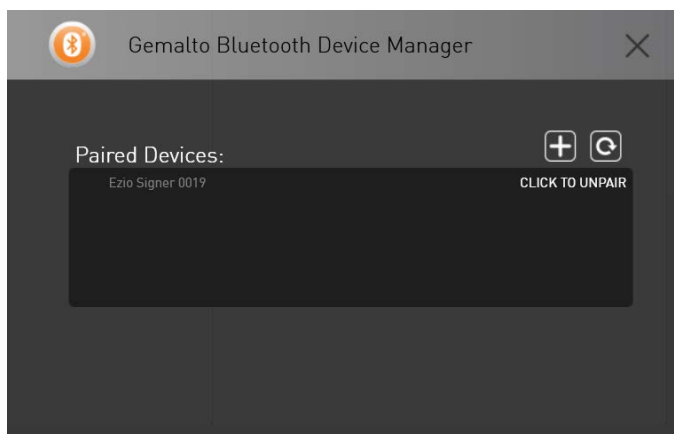
At this point, the device is paired.



10. The AutoConnect check box is enabled by default. If you do not want the token to connect automatically next time, then do not select this option.

11. Click **OK**.

Your device has been paired successfully.



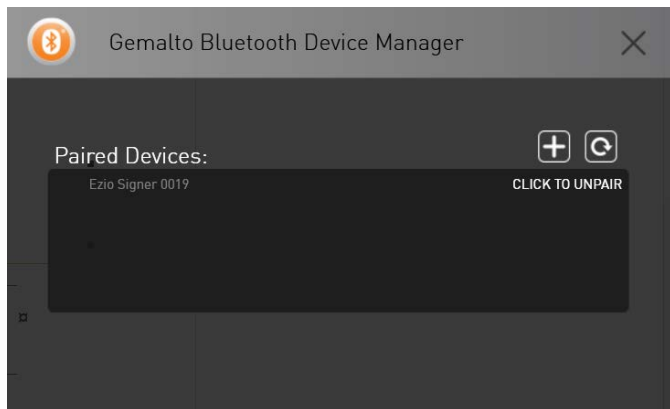
Unpairing the Ezio Flex Token

Follow the procedures below to unpair your device.

To unpair the Ezio Flex Token:

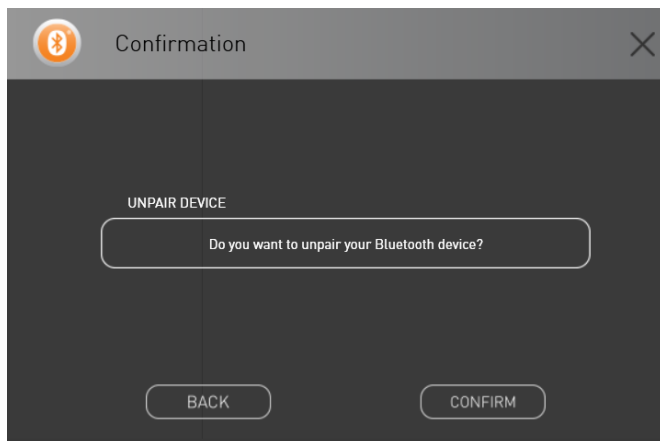
1. Click the **Gemalto Bluetooth Device Manager** icon.

The **Paired Devices** window opens.



2. Click **CLICK TO UNPAIR**.

The **Unpair Device Confirmation** window opens.



3. Click **Confirm**.

Your device is unpaired.

Unpairing SafeNet Reader CT1100



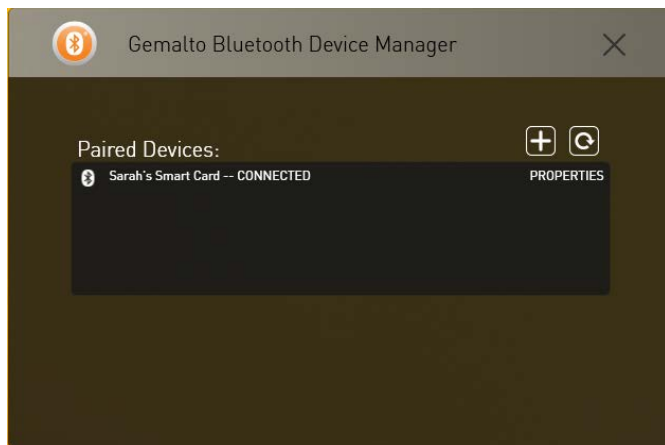
NOTE: The information in this section is relevant to both the SafeNet Reader K1100 and the SafeNet Reader CT1100.

Follow the procedures below to unpair your device.

To unpair the SafeNet Reader CT1100:

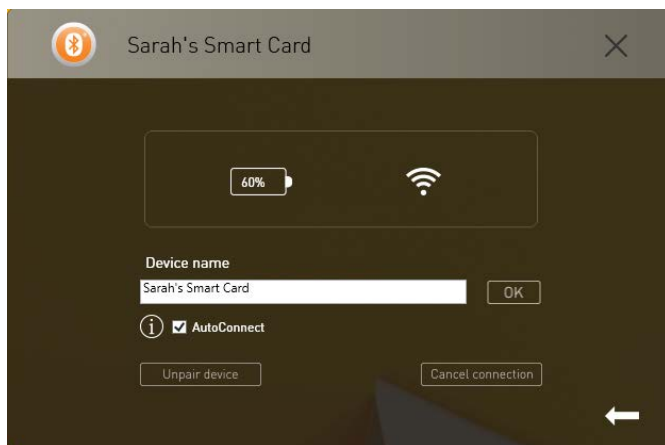
1. Click the **Gemalto Bluetooth Device Manager** icon.

The paired device window opens.



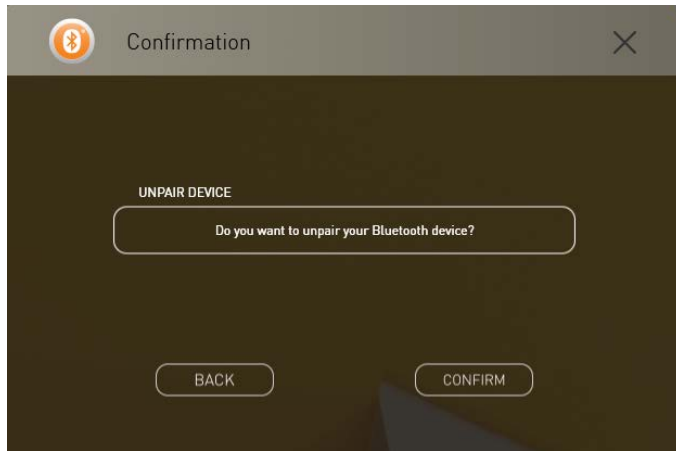
2. Select the device, which you want to unpair from the list by clicking the device name.

The **Unpair device** window opens.



3. Click **Unpair the device**.

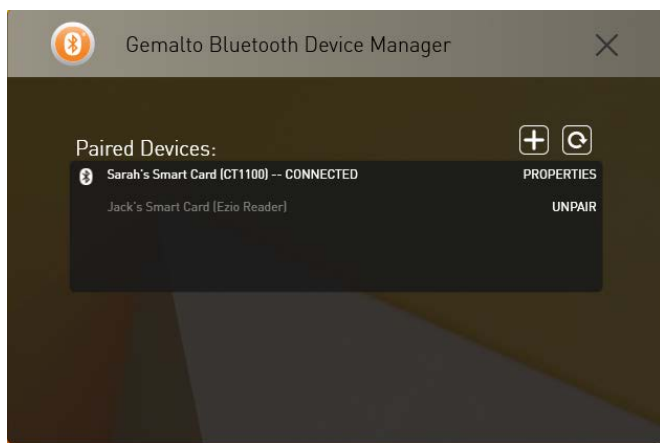
The **Confirmation** window opens.



4. Click **Confirm**. The device will be removed from the list.
5. If you do not want to unpair the device, click **Back**.

Working with more than one Smart Card Reader

Two Smart Card readers cannot be used at the same time. To be able to work with one reader, disconnect the reader that is not going to be used.



This may be performed using either one of the following methods:

- Right-click the **Gemalto Bluetooth Device Manager** icon and select **Disconnect**.
- Open the **Gemalto Bluetooth Device Manager** by double-clicking the icon. Select the relevant reader and click **Cancel connection**.

Connecting/Disconnecting the Smart Card Reader

Follow the procedures below to connect and disconnect your smart card reader.

To connect a Smart Card reader:

Right-click the **Gemalto Bluetooth Device Manager** icon and select **Connect**.

Or,

1. Press the button on the SafeNet Reader CT1100.

The red and blue lights are turned on for a second. Thereafter the red light turns off, while the blue light continues to flicker slowly.

2. Open the Gemalto Bluetooth Device Manager.
3. Select the device that appears under Paired Devices.

To disconnect a Smart Card reader:

A Smart Card Reader can be disconnected by using either one of the following methods:

- Left-click the **Gemalto Bluetooth Device Manager** icon.
- Disconnecting via the Gemalto Bluetooth Device Manager.

To disconnect the Smart Card Reader via the Gemalto Bluetooth Device Manager icon:

1. Right-click the **Gemalto Bluetooth Device Manager** icon.
2. Select **Disconnect**.
3. Select the relevant reader name.

CHAPTER 4

BCCIDService Settings

This chapter describes the registry key settings that are written to **HKEY_LOCAL_MACHINE\SOFTWARE\Gemalto\BCCIDService** when installing GBDM.

BCCID settings are policy settings that are stored in a Windows Administrative Template (ADM) file, and can be edited using Windows tools. When edited on the server, the settings can be propagated to client computers. All properties used by the BCCIDService are configurable using the registry keys. The BCCID Service reads the registry key configurations after launching the service.

When configured on a client, BCCID settings apply to the local computer only. When configured on a server, BCCID settings can be set to be propagated to the entire domain, or to apply to the domain controllers only.



NOTE: The BCCID service must be restarted in order for the configuration changes to be saved.

- For 32-bit systems, go to:
HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Gemalto\BCCIDService
- For 64-bit systems, go to:
HKEY_LOCAL_MACHINE\Wow6432Node\Policies\Gemalto\BCCIDService.

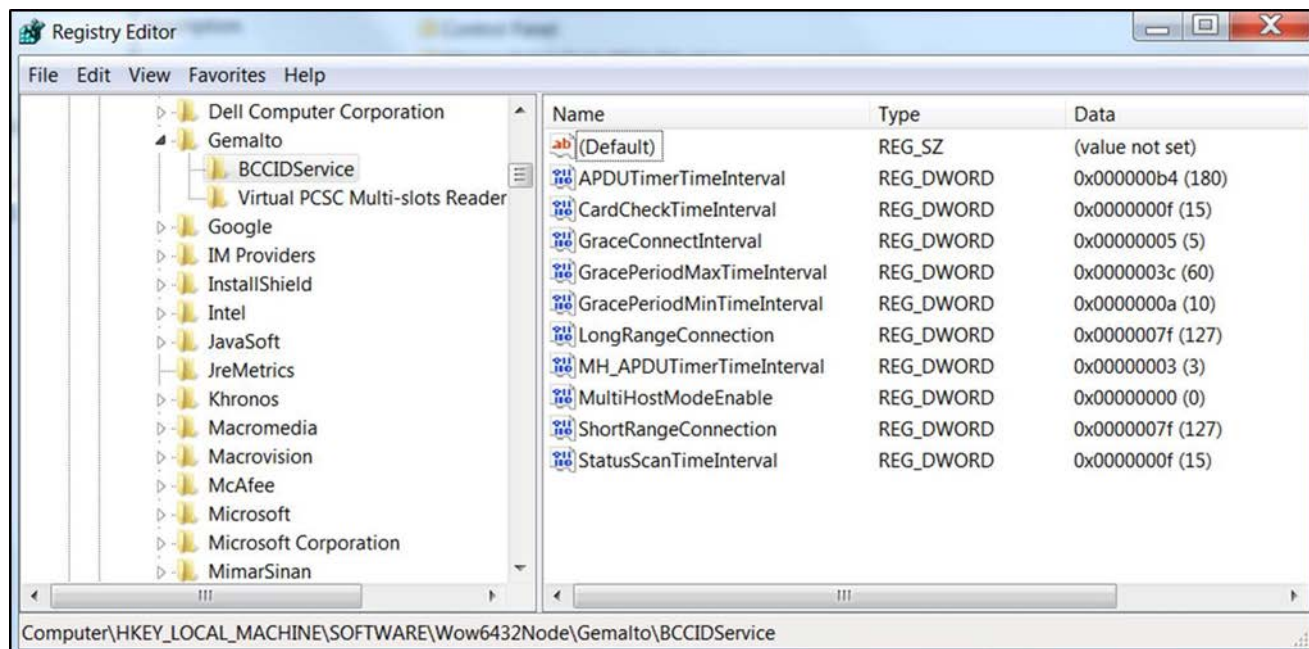
The BCCIDService contains the following registry key settings:

- APDUTimerTimeInterval
- CardCheckTimeInterval
- GraceConnectInterval
- GracePeriodMaxTimeIntrval
- GracePeriodMinTimeInterval
- GracePeriodMinTimeInterval
- LongRangeConnection
- MH_APDUTimerTimeInterval
- MultiHostModeEnabled
- ShortRangeConnection
- StatusScantimeInterval

**NOTE:**

It is recommended that the default settings installed with the GBDM installation are not tampered with. Changing the default settings is for advanced users only.

The image below displays the BCCIDService settings after installing GBDM.



APDUTimerTimeInterval

Used specifically for single host mode, the APDUTimerTimeInterval registry key enables the reader to power off a card automatically after a predefined period of time. By defining this registry key, you can save a reader's (SafeNet Reader CT1100, SafeNet Reader K1100, Ezio Bluetooth Reader) power consumption. By default, the APDUTimerTimeInterval registry key is set to power off the device when idle for 180 seconds (3 minutes).

To disable the APDUTimerTimeInterval registry key, enter **0 (zero)** in the **Value data** field and click **OK**.

StatusScantimeInterval

Smart Card Status Scan Time Interval defines how often the scan runs to check if the card is in the reader.

Value: in Seconds

Default: 15 seconds

CHAPTER 5

Device Information

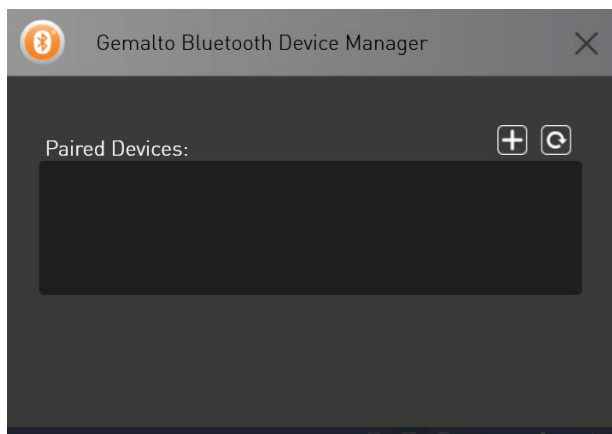
This chapter contains information about how to view device information.

Viewing Device Information

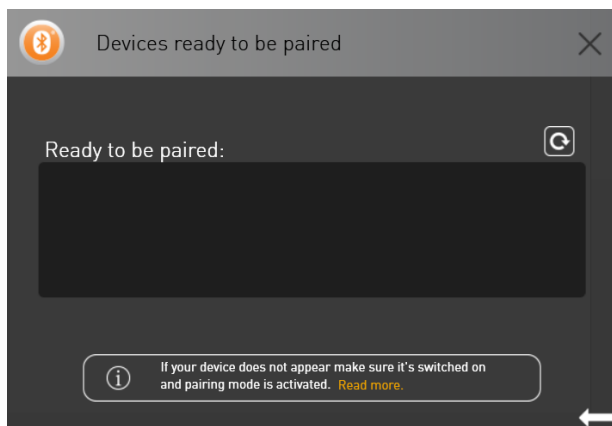
The Device Information option allows you to view the smart card readers that support the Bluetooth pairing feature as well as provides instructions on how to pair each device.

To open the Device Information window:

1. Open the **Gemalto Bluetooth Device Manager**, and click .



The **Devices ready to be paired** window opens.



2. Click **Read more**.

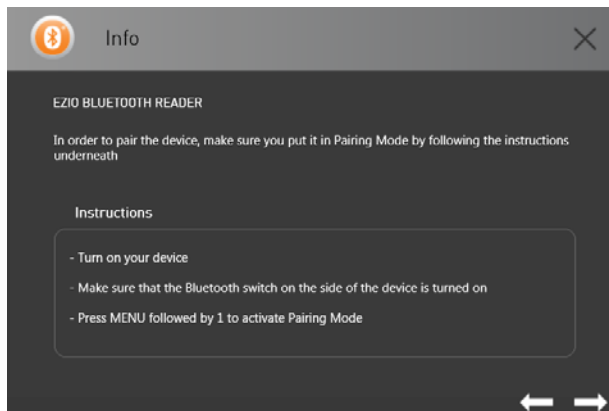
The **Select your device** window opens.



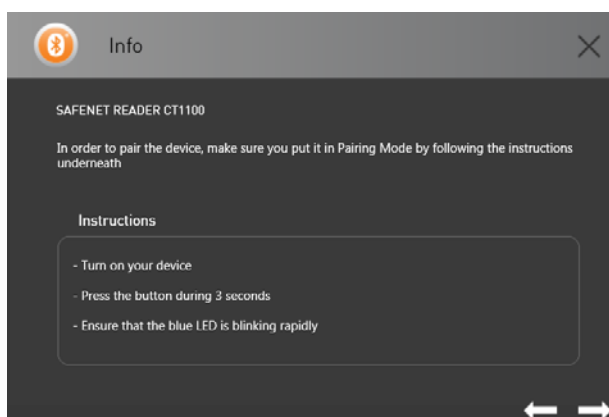
3. Click one of the following readers:

- Ezio Bluetooth Reader

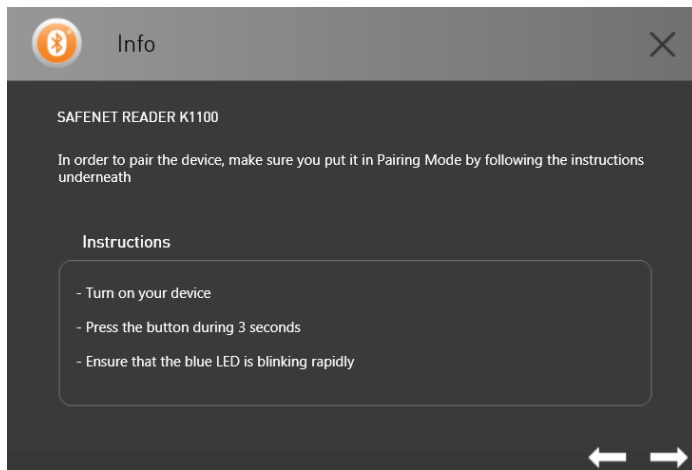
The **Info** window opens with instructions on how to pair the device.



- SafeNet Reader CT1100



- SafeNet Reader K1100



- Ezio Flex Token

