Gemalto Bluetooth Device Manager

Version 3.1.0 - Windows

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.

GBDM Version 3.1.0 provides multi-host support for SafeNet Reader CT1100 and SafeNet Reader K1100 devices on Windows operating systems only.

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_3.1.0.X.msi (This installation can be used on Windows 10 with a dongle)	3.1.0
Windows 10	Gemalto_Bluetooth_Device_Manager_Win10_3.1.0.X.msi (This installation is to be used with a built-in Bluetooth LE)	3.1.0

Installing the GBDM on Windows Operating Systems

The GBDM is a middleware service, which allows the Bluetooth dongle to communicate with readers.

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 (on Windows 7 and 8.1) as well as the Gemalto PC/SC Virtual 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 Bluetooth_Device_Manager_Release Notes), or by using the system BIOS on DELL laptops.

For more intomation, see the Gemalto_Bluetooth_Device_Manager_Customer Release Notes.

NOTE: The installation requires administrative rights.

Ø



NOTE: The Bluegiga dongle is used only on Windows 7 and 8.1 (It is not 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.

Installing Ph	unging Plustoph Law Energy (COM2)
installing bit	
0	Please wait while Setup installs necessary files on your system. This may take several minutes.
\checkmark	

- 2. Let the installation run and complete automatically.
- 3. Restart your operating system.

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_3.1.0.X.msi.
 - On Windows 10, double-click: Gemalto_Bluetooth_Device_Manager_Win10_3.1.0.msi.

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

🕼 Gemalto Bluetooth Device N	Nanager - InstallShield Wizard			
gemalto	Welcome to the InstallShield Wizard for Gemalto Bluetooth Device Manager			
	The InstallShield(R) Wizard will install Gemalto Bluetooth Device Manager on your computer. To continue, click Next.			
WARNING: This program is protected by copyright law and international treaties.				
	< Back Next > Cancel			

2. Click Next.

The License Agreement window opens.

Gemalto Bluetooth Device Manager - InstallShield Wizard	X
License Agreement Gem	alto
Please read the following license agreement carefully.	y to be free
END USER LICENSE AGREEMENT	*
TMPORTANT-READ CAREFULLY	=
This End-User License Agreement for Gemalta software ("EULA") is a legal and binding agreement between You and Gemalto SA, a company organized and existing under the laws of France, registered under number 562 113 530 RCS Nanterre, having its registered office at 6 rue de la Verrerie, 92190 Meudon, France ("Gemalto"). "You" are a person of	o t d r s 0 r
I accept the terms in the license agreement Print	
○ I do not accept the terms in the license agreement	
InstallShield	
< Back Next > Cancel	

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

🕼 Gemalto Bluetooth Device Manager - InstallShield Wizard	×
Ready to Install the Program The wizard is ready to begin installation.	gemalto
Click Install to begin the installation.	
If you want to review or change any of your installation settings, click Back. Click t the wizard.	Cancel to exit
InstallShield < Back Install	Cancel

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.

E Windows Security	
Would you like to install this device software?	
Name: Bluegiga Ports (COM & LPT) Publisher: Bluegiga Technologies Oy	
Always trust software from "Bluegiga Technologies Oy".	Install Don't Install
You should only install driver software from publishers you tr device software is safe to install?	ust. How can I decide which

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.

5. Click Install.

Ø

The InstallShield Wizard Complete window opens.

Gemalto Bluetooth Device N	Aanager - InstallShield Wizard	X
gemalto	InstallShield Wizard Completed	
	The InstallShield Wizard has successfully installed Gemalto Bluetooth Device Manager. Click Finish to exit the wizard.	
	Show the Windows Installer log	
	< Back Finish Cano	cel

6. 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





7. Ensure that the Gemalto Bluetooth Device Manager exists under Programs and Features.

TTORN STR.	「「「日本日」」」」」	Beat Trans. Transe	Non- Kine	gi freatig, is	ung) inungi		×
😋 🔵 🗸 🖡 🕨 Control Panel 🕨	All Control Panel Items + Programs and Feature	15		-	- + Search	Programs and Feature	5 P
File Edit View Tools Help							
Control Panel Home View installed updates	Uninstall or change a program To uninstall a program, select it from the list	st and then click Uninstall, Cf	ange, or Repair.				
off	Organize • Uninstall Repair						0
Install a program from the	Name	1	ublisher	Installed On	Size	Version	
HELMOIK	G Check Point VPN	(heck Point Software Technologies L	td. 14-Jul-16		98.60.276	
	Citrix Online Launcher	(litrix	11-Aug-16	296 KB	1.0.408	
	Standard Backup/PC Agent	1	autonomy Corporation plc	17-Jul-16	106 MB	8.8.0.2	
	Dell Touchpad	1	LPS ELECTRIC CO., LTD.	14-Jul-16		10.1207.101.110	
	Dell WLAN HotKey Driver	(Dell Inc.	18-Oct-16	3.68 MB	1.0.0.4	
	O [*] Gemalto Bluetooth Device Manager	(Semalto	22-Jan-17	2.22 MB	3.1.0	+
	•		111				
	Gemalto Product version: 3.1.0 Help link: http://v	Support i www.Gemalto.com S	ink: <u>http://www.Gemalto.com</u> ize: 2.22 MB				

8. Ensure that the Bccid Service is running in the Task Manager window.

🚇 Windows Task Manager						X
File Options View Help						
Applications Processes Services Pe	rformance Network	ing Users				
	1					
Name	PID	Description	Status	Group		
AudioSrv	888	Windows Au	Runnina	LocalService.		_
AxInstSV		ActiveX Insta	Stopped	AxInstSVGrou	D	_
BCCID Service	1168	BCCID Service	Running	N/A	<u> </u>	=
BDESVC	1152	BitLocker Dri	Running	netsvcs	_	
BFE	1900	Base Filterin	Running	LocalService.		
BITS	1152	Background I	Running	netsvcs		
Browser	1152	Computer Br	Running	netsvcs		
bthserv	4120	Bluetooth Su	Running	bthsvcs		
CcmExec	4948	SMS Agent	Running	N/A		
CertPropSvc	1152	Certificate Pr	Running	netsvcs		
clr_optimization_v2.0.50727_32		Microsoft .N	Stopped	N/A		
clr_optimization_v2.0.50727_64		Microsoft .N	Stopped	N/A		
clr_optimization_v4.0.30319_32		Microsoft .N	Stopped	N/A		
clr_optimization_v4.0.30319_64		Microsoft .N	Stopped	N/A		
CmRcService		Configuratio	Stopped	N/A		
COMSysApp		COM+ Syste	Stopped	N/A		
cphs		Intel(R) Cont	Stopped	N/A		
CryptSvc	1660	Cryptographi	Running	NetworkServ.		
CscService	1056	Offline Files	Running	LocalSystem.		-
				•	Service	5
Processes: 128 CPU Usage: 1%	Physical	Memory: 34%				

9. Ensure that the Gemalto Bluetooth Device Manager (e.g. COM3) exists under Computer Management>Device manager>Ports (COM & LPT).

Ø

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.

Bevice Manager	- 0 X
File Action View Help	
⇐ ⇒ ☶ 📴 🚺 ☶ № 😭 № 6	
> 📲 Computer	•
🖂 🔮 ControlVault Device	
Disk drives	
🖂 🏣 Display adapters	
🖂 🕼 Human Interface Devices	
> 🔚 Imaging devices	
Intel(R) Dynamic Platform and Thermal Framework	
Keyboards	
Memory technology driver	
Mice and other pointing devices	
🖂 Modems	
Monitors	=
Network adapters	
Ports (COM & LPT)	
- 🚰 Bluegiga Bluetooth Low Energy (COM8)	
ECP Printer Port (LPT1)	
Intel(R) Active Management Technology - SOL (COM3)	
LGE Bluetooth TransPort (COM4)	
Processors	
Security Devices	
Smart card readers	
Aladdin IFD Handler	
Aladdin IFD Handler	
Aladdin VK Handler	
Broadcom Usbeeld Smarteard Reader (WUDF)	
MICROSOTT USDCCID Smartcard Reader (WUDF)	-

10. Ensure that Gemalto Virtual PC/SC Multi-slots Reader appears under Computer Management>Device Manager>Smart card readers.



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 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.

🗿 🔵 🗸 🕅 🕨 Control Panel 🕨	All Control Panel Items Programs and Features			• + Search I	Programs and Featu	res 🖇
ile Edit View Tools Help						
Control Panel Home View installed updates Turn Windows features on or	Uninstall or change a program To uninstall a program, select it from the list and the	en click Uninstall, Change, or Repair.				
off	Organize - Uninstall Repair				E •	0
Install a program from the	Name	Publisher	Installed On	Size	Version	
network	G Check Point VPN	Check Point Software Technologies Ltd.	14-Jul-16		98.60.276	
	Citrix Online Launcher	Citrix	11-Aug-16	296 KB	1.0.408	
	ST Connected Backup/PC Agent	Autonomy Corporation plc	17-Jul-16	106 MB	8.8.0.2	
	Dell Touchpad	ALPS ELECTRIC CO., LTD.	14-Jul-16		10.1207.101.110	
	Dell WLAN HotKey Driver	Dell Inc.	18-Oct-16	3.68 MB	1.0.0.4	
	Gemalto Bluetooth Device Manager	Gemalto	22-Jan-17	2.22 MB	3.1.0	
	<	111				
	Y Complete St. 4 and 51.0					

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

Gemalto Bluetooth Device Manager		
Please wait while Windows configures Gemalto Bluetooth Device Manager		
Time remaining: 8 seconds		

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 interface of 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 29

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:

- 2. 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 24).

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

The Gemalto Bluetooth Device Manager window opens.



4. Click

The Devices ready to be paired window opens.



5. Click the device you want to pair.

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



The Device Successfully Connected window is displayed.



6. 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.



[¥]

The Devices ready to be paired window opens.

Oevices ready to be paired	×
Ready to be paired: Safenet Reader CT1100 0132	C
If your device does not appear make sure it's switched on and pairing mode is activated. Read more.	

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

The Device Successfully Connected window opens.

(3)	Safenet Reader CT1100 0132	×
	Device Successfully Connected!	₩
	Device name Safenet Reader CT1100 0132 (i) 🛛 AutoConnect	ОК
	Unpair device Cance	l connection

- 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.

(3)	Gemalto Bluetooth Device Manager	×
Pa	ired Devices:	+0
8	Safenet Reader CT1100 0132 CONNECTED	PROPERTIES

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.

🔞 Gemalto B	Bluetooth Device Manager	×
Paired Devices:		+ 0



3. 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.

4. Press Menu.

A message is displayed: 1=Enable pairing.

5. Press 1.

A message is displayed: Waiting for connection. The letter 'P' is displayed at the top of the LCD.



The Devices ready to be paired window opens.



7. Select the reader displayed in the list.

The Ezio Bluetooth Reader - Pairing code window opens.

Pairing code:			
•••••		SEND	

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

The Device Successfully Connected window opens.

Ezio Bluetooth Reader 0102	×
Device Successfully Connected! 🛛 🔆	
100%	
Device name	
Mark's Ezio Reader OK	
(j) 🗹 AutoConnect	
Unpair device Cancel connection	
	-

- 9. Enter a **Device name**.
- 10. 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.
- 11. Click **OK**.

Your device has been successfully 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.

0	Gemalto Bluetooth Device Manager	×
	Paired Devices:	+ 0

- 2. Click
- 3. 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.

- 4. Press Menu. The LCD displays: 1=Enable pairing.
- 5. Press 1.

The LCD displays: Waiting for connection. The letter 'P' is displayed at the top of the LCD.



The Devices ready to be paired window opens.



7. Select the reader displayed in the list.

The Ezio Bluetooth Reader – Pairing code window opens.

	~
Pairing code:	
•••••• SEND	

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

The Device Successfully Connected window opens.

Ezio Bluetooth Reader 0102	×
Device Successfully Connected! 🔆	
Device name	
Image: Connect Unpair device Cancel connection	
	÷

- 9. Enter a **Device name**.
- 10. 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.
- 11. 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.

() Gemalto Bluetooth Devic	e Manager 🛛 🗙
Paired Devices:	+ 0



- 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.



Select the token displayed in the list. (Ezio Signer 0019)
 The Ezio Flex Token – Pairing code window opens.

(3)		×
	Pairing code:	

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.

(8)	Ezio Signer 0019	×
	Device Successfully Connected! 🛛 🗮	
	100%	
	Device name	
	() Z AutoConnect	
	Unpair device Cancel connection	-

- 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.

🛞 Gemalto	Bluetooth Device Manager	×
Paired Devices Ezio Signer 0019	5:	CLICK TO UNPAIR

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)	Confirmation	\times
	Do you want to unpair your Bluetooth device?	
	(BACK) (CONFIRM)	

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.

(3) Gemalto Bluetooth Device Manager	×
Daired Davisor	F O
Sarah's Smart Card CONNECTED	PROPERTIES

Select the device, which you want to unpair from the list by clicking the device name.
 The Unpair device window opens.

(3)	Sarah's Smart Card	×
	60%	
	Device name Sarah's Smart Card	
	(i) V AutoConnect	←

3. Click Unpair the device.

The Confirmation window opens.

(3)	Confirmation	×
	UNPAIR DEVICE Do you want to unpair your Bluetooth device?	
	BACK CONFIRM	

- 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:

- Right-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:

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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.

File Edit View Favorites Help							
		Dell Computer Corporation Gemalto BCCIDService Virtual PCSC Multi-slots Read Google IM Providers InstallShield Intel JavaSoft JreMetrics Khronos Macromedia Macrovision McAfee Microsoft Microsoft Corporation MimarSinan	der	Name CDefault) APDUTimerTimeInterval CardCheckTimeInterval GraceConnectInterval GracePeriodMaxTimeInterval CongRangeConnection MH_APDUTimerTimeInterval MultiHostModeEnable ShortRangeConnection StatusScanTimeInterval	Type REG_SZ REG_DWORD REG_DWORD REG_DWORD REG_DWORD REG_DWORD REG_DWORD REG_DWORD REG_DWORD REG_DWORD REG_DWORD	Data (value not set) 0x000000b4 (180) 0x0000000f (15) 0x00000005 (5) 0x00000003c (60) 0x00000000 (10) 0x00000003 (3) 0x00000000 (0) 0x0000000 (15)	
		111	P.	۲ II	1		

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.

GraceConnectInterval

Used specifically for multi host mode, the GraceConnectInterval registry key defines how often (in seconds) the GBDM checks the status of the card (i.e. if the card is present or not). The GraceConnectInterval works only during the GracePeriodMaxTimeInterval parameter.

By default, this registry key is set to 5 seconds.

GracePeriodMaxTimeInterval

Used specifically for multi host mode, the GracePeriodMaxTimeInterval value defines the maximum number of seconds a computer will remain connected to a smart card reader even though the reader is being used by a different host (e.g. mobile phone).

During the grace period, GBDM displays the device as connected.

If after the 60 second grace period the device remains unavailable, GBDM notifies Microsoft Resource Manager of a card removal event.

By default, this registry key is set to 60 seconds.

Values: in seconds

GracePeriodMinTimeInterval

Used specifically for multi host mode, the GracePeriodMinTimeInterval value defines the minimum number of seconds that remain until GBDM notifies the Microsoft Resource Manager that the smart card is unavailable.

Example: If during the 60 second max grace period, another application (e.g. a mail application) attempts to connect to the smart card and the smart card remains unavailable, GBDM will notify the Microsoft Resource Manager that the smart card is not available only after 30 seconds (GracePeriodMinTimeInterval).

By default, this registry key is set to 30 seconds.

CardCheckTimeInterval

Used specifically for multi host mode, the CardCheckTimeInterval registry key defines how often (in seconds) the BCCIDService connects to the reader to check the status of the card (i.e. if the card is present or not).

By default, this registry key is set to 15 seconds.

LongRangeConnection

The LongRange value is used for multi-host mode only. Initially to connect with the device the user must be within the ShortRange, but as soon as the host continues in multi-host mode and releases the device, it begins advertising and the host useses the LongRange value to reconnect with the device. When the device is out of range (the LongRange value) the GRACE period is activated and if the device is not moved within the LongeRange distance before the GRACE period times out, then the device is seen as disconnected and the device must be moved within the ShortRange distance again to connect.

The range values that can be set for ShortRange and LongRange are between -127 and 0 dBm. The default value is -127dBm which means that the 'weakest' signal strength is allowed for connection.



NOTE: This registry key setting is for evaluation only.

ShortRangeConnection

The ShortRange value is used for both single and multi-host mode. It is used to define the signal strength required as soon as an initial connection is made, allowing the host to determine which device is available and ready to be connected manually or automatically (using the auto connect feature). Once the device is connected, it can be moved further away until it is physically out of range. The device must then be moved within the ShortRange distance again to be able to re-connect.

The range values that can be set for ShortRange and LongRange is between -127 to 0 dBm. The default value to set is -127dBm which means that the 'weakes' signal strength is allowed for connection.



This registry key setting is for evaluation only.

MH_APDUTimerTimeInterval

NOTE:

Used specifically for Multi host mode, the MH_APDUTimerTimeInterval registry key enables the host (computer or mobile phone) disconnect a reader automatically after a predefined period of time. This allows other hosts to connect to the reader as it is available.

By default, the MH_APDUTimerTimeInterval registry key is set to 3 seconds.

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

MultiHostModeEnable

Multi Host mode enables you to authenticate and perform cryptographic operations using your smart card on more than one device at the same time. i.e. you can pair your smart card reader simultaneously with a computer/s and mobile device.

Multi Host mode allows you to connect your smart card to a mobile phone, while the smart card remains connected to a PC without having to disconnect it.

If Multi host mode is disabled, you will be working in single host mode. (Ensure you disconnect the smart card reader from the PC)

Values:

- Selected Multi Host mode is enabled (Value = 1)
- Not selected Multi Host mode is disabled (Value = 0)

Default: Not selected

StatusScantimeInterval

Used for both single host and multi host mode, the StatusScanTimeInterval registry key defines how often the scan runs to check if the card is in the reader.

Value: Seconds

Default:15 seconds

CHAPTER 5 Configuration Properties

Gemalto Bluetooth Device Manager properties are stored on the computer as registry key values which can be added and changed to determine the behavior of GBDM. Depending on where a registry key value is written, it will apply globally, or to a specific computer.

This chapter describes how to change certain registry key values using the Group Policy Editor.



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

Administrative Template ADM File

Administrative Template files (ADM) are used to display registry-based GBDM policy settings for editing by the administrator.

Use the Active Directory Group Policy Editor (GPO) to configure the Administrative Template ADM files.

Adding an ADM file to a Client/Server Computer

You can add ADM files to Windows 7, 8, 8.1, and 10. When configured on a client, GBDM settings apply to the local computer only.

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

The Administrative Template file (BLE.adm) is provided by Gemalto as part of the the GBDM software package and is saved in the GroupPolicyTemplate folder, under the Install directory.

C:\Program Files (x86)\Gemalto\Bluetooth Low Energy Devices\GroupPolicyTemplate

To add GBDM settings:

- 1. From the Windows taskbar, select **Start > Run**.
- 2. In the Run dialog box, enter gpedit.msc on a client and gpmc.msc on a server, and click OK.
- 3. The Group Policy Editor opens.



4. Under the **Computer Configuration** node, right-click **Administrative Templates**, and select **Add/Remove Templates**.

The Add/Remove Templates window opens.

Ac	d/Remove Templates		X
	Current Policy Templates:		
	Name	Size	Modified
	Add Remove		Close

- Click Add and browse to the appropriate ADM file (BLE.adm) located under: C:\Program Files (x86)\Gemalto\Bluetooth Low Energy Devices\GroupPolicyTemplate.
- 6. Select the file, and click **Open**.

The selected template file is displayed in the Add/Remove Templates window.

7. Click Close.

In the Group Policy Editor window, the Gemalto Bluetooth Device Manager node is added under Administrative Templates > Classic Administrative Templates (ADM).

To edit GBDM settings:

- 1. Click the setting to edit. An explanation of the setting is displayed on the left describing the setting and its values.
- 2. Double-click the setting to define the following options:
 - Not Configured

No change is made to the registry for this setting.

• Enabled

The registry is changed to indicate that the policy applies to users or computers that are subject to this GPO.

• Disabled

The registry is changed to indicate that the policy does not apply to users or computers that are subject to this GPO.

🌲 Enable Multi Host	Mode	
🔄 Enable Multi Hos	t Mode	Previous Setting Next Setting
 Not Configured Enabled Disabled 	Comment: Supported on:	× •
Options:		Help:
☑ Enable Multi Host	: Mode	Multi Devices per Host means that there is more than one device paired to the same host. It could be that the different devices belong to the same user or to different users (such as in the case of Support / Service office that work in shifts and the PC does not belong to a specific user). Values: • Selected - Multi Host mode is enabled • Not selected - Multi Host mode is disabled - Default: Not selected
		OK Cancel Apply

- 3. Click **Previous Setting** or **Next Setting** to progress through the settings in the same folder, or click **OK** to return to the list of settings.
- 4. Click **OK** and **Apply** to save changes.

The registry is updated.

CHAPTER 6 Device Information

This chapter explains 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)	Select	your device		×
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Ħ	T		-	
Ezio Blueto	ooth Reader	Safenet Reader CT1100	Safenet Reader K1100	Ezio Flex Token

- 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

