

e-gate USB Smart Card Driver Install Notes (Windows 2000/XP/Server 2003)

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Supported Platforms

The e-gate USB 3.0.6 drivers were tested on the following platform versions:

- Windows 2000 Professional <SP0> , SP1, SP2, SP3, SP4.
The MSI installer runs only on SP3 and SP4, but deployed driver runs also on <SP0> and SP1 and SP2.
- Windows XP Professional, Home Edition <SP0>, SP1, SP2
- Windows Server 2003 Standard Edition.

The driver 3.0.6 supports egate card v2 (PID =0001) and egate v3 (PID = 0001 or PID = 0003).

Package Contents

Installer.

File	Description	Version
Axalto egate 3.0.6.0.msi	setup	1.1.0
Axalto egate 3.0.6.0.msn	Merge Module	1.1.0

Deployed Driver / default <program files>/axalto/egate-driver 3.0.6.0

File	Description	Version
egate.sys	System file	3.0.6.0
egate.cat	Signed Security catalog (signed by Microsoft for XP/2000, signed by Axalto for Server 2003)	
egate.inf	Setup information for PID 0001 and 0003	
egatebus.sys	System file	3.0.6.0
egatebus.cat	Signed Security catalog (signed by Microsoft for XP/2000, signed by Axalto for Server 2003)	
egatebus.inf	Setup information	
egaterdr.sys	System file	3.0.6.0
egaterdr.cat	Microsoft Signed Security catalog	
egaterdr.inf	Setup information	
egatecoins.dll	Co-installer file	3.0.6.0
slbmjpg.dll	Virtual Reader Enumerator property page	

Documentation

File	Description	Version
egate_W2K_README.pdf	<i>e-gate USB Smart Card Driver Install Notes (Windows 2000/XP)</i>	
egate_License.txt	License Agreement	

About e-gate USB Connectors

The e-gate technology embeds the USB interface electronics normally found in a smart card reader within the card itself. Therefore, an e-gate USB Smart Card does not require a smart card reader. The e-gate USB Smart Card simply plugs into a USB port on the computer using one of these two connector types:

- A token form factor connector if the card is used in its cut-down token format.
- A desktop form factor connector if the card is used in standard smart card format. (An e-gate USB Smart Card in standard smart card format also works with ISO 7816-3 compliant terminals and readers; that scenario falls outside the scope of this document.)

For more information about the e-gate USB connectors, including how to plug them in, see the *e-gate USB Smart Card Installation Guide*, available from the Reflex Reader Technical Support website, www.reflexreaders.com/Support/support.html.

About e-gate USB Drivers

The e-gate USB Smart Cards use a system of interdependent drivers, and each driver corresponds to a different type of device in the Device Manager.

- **egatebus.sys**, which corresponds to the “ e-gate Virtual Reader Enumerator” device under the “e-gate Virtual Reader Enumerators” device type.
- **egaterdr.sys**, which corresponds to one or more “e-gate USB Smart card reader” devices under the “e-gate Smart card readers” device type.
- **egate.sys**, which corresponds to one or more “e-gate USB Smart Card” devices under the “e-gate USB Smart Cards” device type.

Installation and Update Instructions

NOTE *The Microsoft Smart Card Base Components are pre-installed on Windows 2000, Windows XP, and Windows Server 2003 systems; do **not** reinstall the Microsoft Smart Card Base Components.*

- 1 Download and extract the driver package in any available space on your system (for example, in a *downloads* directory). This is a location for the driver software that you will identify when you configure the e-gate USB Smart Card to use the drivers.
- 2 Run the *Axalto egate 3.0.6.0.msi* and follow-up the instruction. The installer will setu or upgrade the driver automatically.

Silent Installation

These drivers installation is done using the Microsoft Windows Installation service and can be executed in a silent mode. For more information, see the Windows installer (msiexec) command line options.

On Server 2003, Silent Installation requires Axalto certificate already installed. Contact your support to get Axalto certificate installation package.

Configuring the e-gate Auto Power.

By default, the egate driver **does not** request the operating system to go to standby mode when the card is unused for a certain period of time (idle). To save power, especially for laptop computer, it may be necessary to request the computer to save power (the battery) when the card is idle.

To perform the change, do the following:

- 1 Open the Device Manager. On Windows 2000, select **Start Settings Control Panel**. Double-click **System**, click the **Hardware** tab, and then click the **Device Manager** button. On Windows XP (Classic View), select **Start Control Panel**. Double-click **System**, click the **Hardware** tab, and then click the **Device Manager** button.
- 2 In the Device Manager, expand the e-gate USB Smart Cards device type.
- 3 In the device's Properties, click the **Power Management** tab and enable the "allow the computer to turn off this device to save power" checkbox.

Configuring the e-gate Virtual Reader Enumerator

In the current e-gate USB driver architecture, if you will be connecting multiple e-gate USB smart cards to the computer, you have the option to simply plug in additional cards and let the system automatically add them as devices and associate them with virtual e-gate USB Smart Card Reader devices, a feature called *automatic enumeration*. In this scenario, the system goes through a plug-and-play discovery sequence when you plug in an e-gate USB smart card; if there is no available e-gate USB Smart Card Reader device, the system adds a e-gate USB Smart Card Reader device to be associated

with the new card. This option offers the advantage of not requiring you to perform any manual configuration tasks associated with adding additional e-gate USB smart cards to the system.

Alternatively, you have the option to configure the system to automatically create some number (to a maximum of ten) of e-gate USB Smart Card Reader devices each time you boot the computer, even if those devices are not attached to the computer at boot time. The advantage of this scenario is that the plug-and-play discovery sequence for the preset number of e-gate USB Smart Card Reader devices happens at boot time, so when you attach the e-gate connector and plug in the card, there is no post-insertion delay before the card becomes active.

Here are instructions about preconfiguring the number of virtual e-gate USB Smart Card Reader devices to create each time the computer is rebooted.

Setting the Virtual Reader Enumerator Count

The e-gate Virtual Reader Enumerator device's property sheet defines the number of e-gate USB Smart Card Readers to create when the computer is booted.

NOTE *Because each e-gate USB Smart Card requires a separate e-gate connector at the time it is in use, the e-gate Virtual Reader Enumerator maximum count number is usually set to the maximum number of e-gate connectors expected to be attached to the computer at one time.*

These are the steps to configure the number of virtual e-gate USB Smart Card Readers:

- 1 Open the Device Manager. On Windows 2000, select **Start Settings Control Panel**. Double-click **System**, click the **Hardware** tab, and then click the **Device Manager** button. On Windows XP (Classic View), select **Start Control Panel**. Double-click **System**, click the **Hardware** tab, and then click the **Device Manager** button.
- 2 In the Device Manager, expand the e-gate Virtual Reader Enumerators device type, and then double-click the **e-gate Virtual Reader Enumerator** device to open its Properties.
- 3 In the device's Properties, click the **e-gate Readers** tab.
- 4 Use the size arrows to change the maximum count value from the default, which is 1. The maximum allowable value is 10. After you have selected a value, click **OK**. Close the property sheet and the Device Manager.
- 5 Reboot the computer.

NOTE *Each e-gate USB Smart card reader device uses system resources; therefore, we recommend that you configure the maximum count to the number of concurrently active e-gate USB Smart Cards you anticipate you will need, and no more.*

Installation and Update Tips

Driver Version Identification Following Update

On all platforms, after updating e-gate drivers, follow these steps to accurately identify driver version number information:

- 1 Start the Device Manager. On Windows 2000, select **Start Settings Control Panel**. Double-click **System**, click the **Hardware** tab, and then click the **Device Manager** button. On Windows XP (Classic View), select **Start Control Panel**. Double-click **System**, click the **Hardware** tab, and then click the **Device Manager** button.
- 2 In the Device Manager, expand the device type that includes the e-gate driver whose driver version number you want to check, and then double-click the name of the device to open its Properties. For example, to check the version number of the e-gate USB Smart Card Reader driver, expand the Smart card reader device type, and then double-click **e-gate USB Smart Card Reader**.
- 3 In the device's Properties, click the **Driver** tab, and then click the **Driver Details...** button.
- 4 The File version number displayed in the Driver File Details dialog correctly describes the current driver.

NOTE: During the installation, a logging file named "egateinstall.log" is created in the installation directory.

Known Issues and Limitations

Device State Might Not be Maintained on Older BIOS Systems

On systems on which the BIOS does not correctly support integrated power management through an Advanced Configuration and Power Interface (ACPI) BIOS, device state might not be correct when returning from standby mode. Depending on how your application interacts with the SCRM, communication with the card might not be possible following resume from standby mode. In this case, you might need to remove and then reattach the e-gate USB Smart Card.

Standby/Resume Behavior Anomalies

If your e-gate USB Smart card is inserted when the system goes into hibernate or standby mode, and the card is still inserted when the system resumes, the card may have removed its context. It is due to faulty machine that shutdowns completely the USB power. In this case, you might need to remove and then reattach e-gate USB Smart Card.

e-gateUSB: Desktop Form Factor Power Light

The e-gate desktop form factor connector's power light glows steadily at two different points while a card is in the process of being inserted into the connector. (In addition, the power light glows steadily at the same points when the card is being removed from the connector.) This behavior should not be taken as a signal that the card is completely inserted; in fact, the card must be fully inserted and seated in the desktop form factor connector to communicate with the host system. When the card is fully inserted, the power light flickers briefly as the system detects the card.

Additional Documentation Resources

For information about installing the connector hardware, understanding the interconnected e-gate drivers, and troubleshooting installation or operation problems, see the *e-gate USB Smart Card Installation Guide*, available from the Reflex Reader Technical Support website, www.reflexreaders.com/Support/support.html.

Changes in the e-gate USB Smart Card drivers since release of the version 2.6drivers for Windows 2000/XP are listed in the *e-gate USB 3.0.6 Release Notes* document found in the driver package (file name *egate_3.0.6_RelNotes.pdf*).

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