

Installation Note

VASCO DIGIPASS CCID Filter Driver

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Related documents

The following documents are referred to within this document and are considered to be included portions of this document. In those cases where this document differs from a document referenced here, this document takes precedence.

Ref	Title	Publisher	Date of issue	Version
1	Interoperability Specification for ICCs and Personal Computer Systems – Part 10 IFDs with Secure PIN Entry Capabilities	PC/SC Workgroup	04-2010	2.02.08
2	Specification for Integrated Circuit(s) Cards Interface Devices	USB.org	22-04-2005	1.1

1 Introduction

In order to standardize interaction with secure card readers (card readers facilitating secure PIN entry), the PC/SC 2.0 standard [1] defines a set of features and control codes that can be used to interact with the reader directly through I/O control commands.

The Microsoft USB CCID class driver used by VASCO secure card readers however discard these I/O control commands rather than forwarding them to the CCID equivalents (as defined in [2]), effectively hiding any provided secure reader functionality from PC/SC 2.0 enabled software.

The VASCO DIGIPASS CCID filter driver circumvents this shortcoming by filtering I/O control commands before they are processed by the driver itself. This approach allows the filter driver to “re-map” the control commands to APDU calls that can be interpreted by the VASCO DIGIPASS card reader.

The following commands and features as defined by [1] are forwarded by the VASCO DIGIPASS CCID filter driver:

- GET_FEATURE_REQUEST - see [1] paragraph 2.2
- FEATURE_IFD_PIN_PROPERTIES - see [1] paragraph 2.6.8
- FEATURE_VERIFY_PIN_DIRECT - see [1] paragraph 2.6.4
- FEATURE_MODIFY_PIN_DIRECT - see [1] paragraph 2.6.4

PLEASE NOTE:

Screen shots in this manual may show specific readers such as the VASCO DIGIPASS 865; installation steps are however applicable to all supported readers.

1.1 System Requirements

The following hard- and software is required for using the VASCO DIGIPASS CCID filter driver:

- Microsoft Windows XP (32 bit only), Microsoft Windows Vista, Windows 7, Windows 8 or Windows 8.1 (32 or 64 bit).
- Microsoft USB CCID driver;
- VASCO DIGIPASS 855, 865, 870 or 920 card reader.

1.2 Known Limitations

- Installation of the VASCO DIGIPASS CCID filter driver requires the Microsoft USB CCID driver to be present on the system.

2 Driver Installation

2.1 Preparing for installation

The VASCO DIGIPASS CCID Filter Driver requires the Microsoft CCID driver to be installed on the system. Connect your VASCO DIGIPASS reader to initiate the installation process; once the reader is set up with the Microsoft USB CCID driver, you can install the filter driver as described in the next paragraph.

Note for Windows XP users: Installation of the Microsoft CCID driver on Windows XP requires access to Windows Update. Before installing, make sure that you have a working internet connection. A detailed overview of the CCID driver installation procedure can be found in Appendix A.

2.2 Installing the VASCO DIGIPASS CCID Filter Driver

Extract the downloaded files to a folder and run **setup.exe**. The installer will verify that the Microsoft CCID driver is present on your system and launch the installer best fitted for your Windows version.

Note: Windows may display additional warning messages if **setup.exe** is run from a network location.

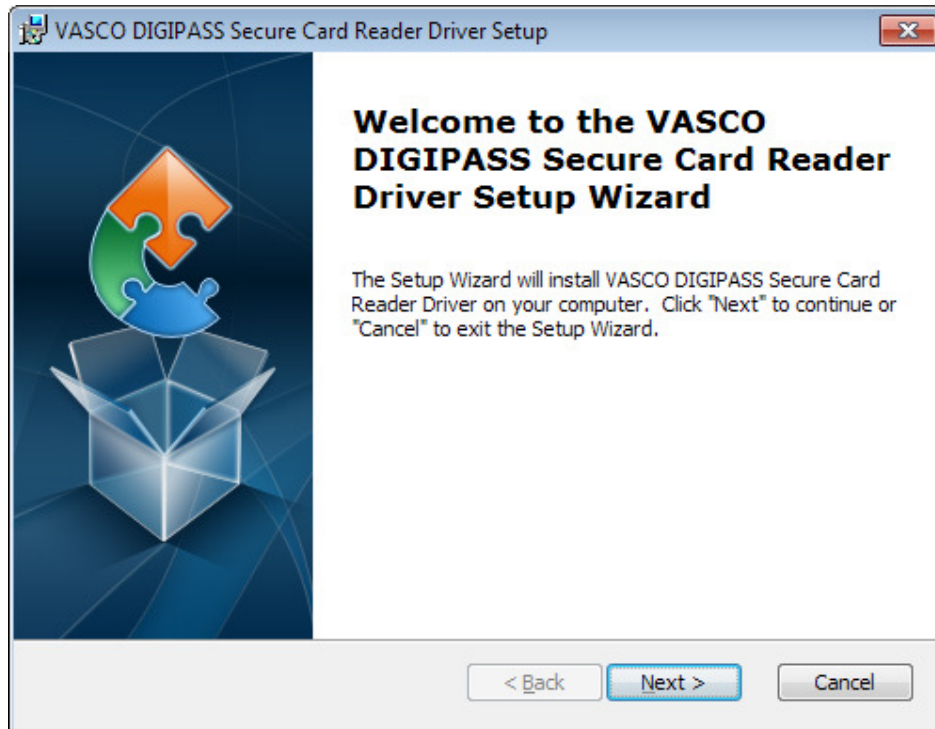


Figure 1 – Installation welcome page

Click 'Next' in the welcome page to start the installation. Setup will now ask you where to install the filter driver files:

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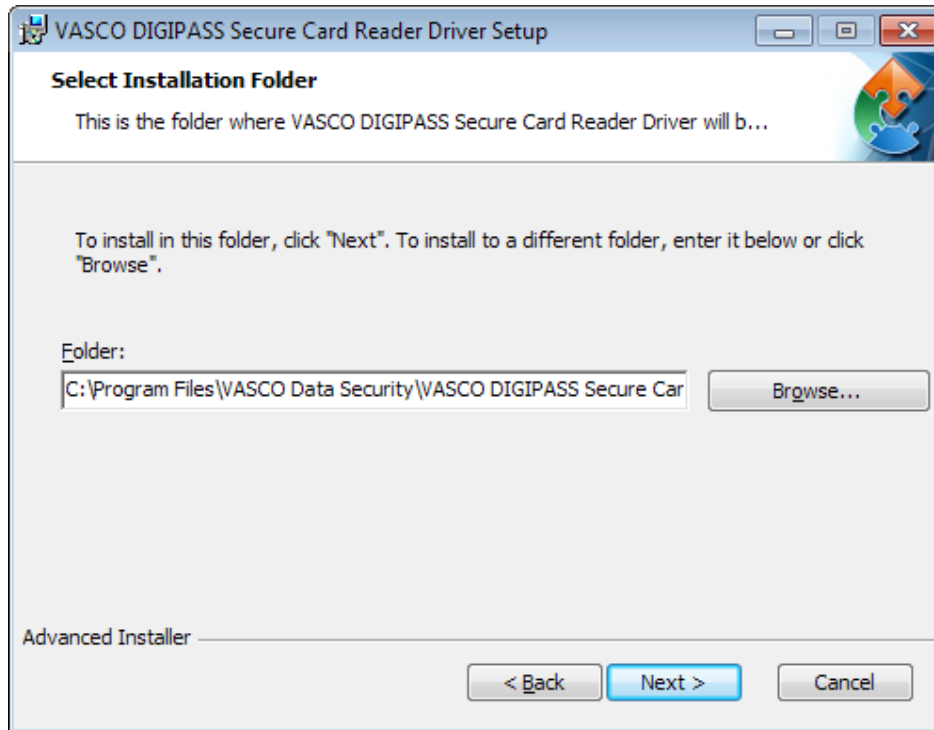


Figure 2 – Installation folder selection

Click 'Browse' to select a specific location or 'Next' to accept the default suggestion and continue. Setup is now ready to install the filter driver:

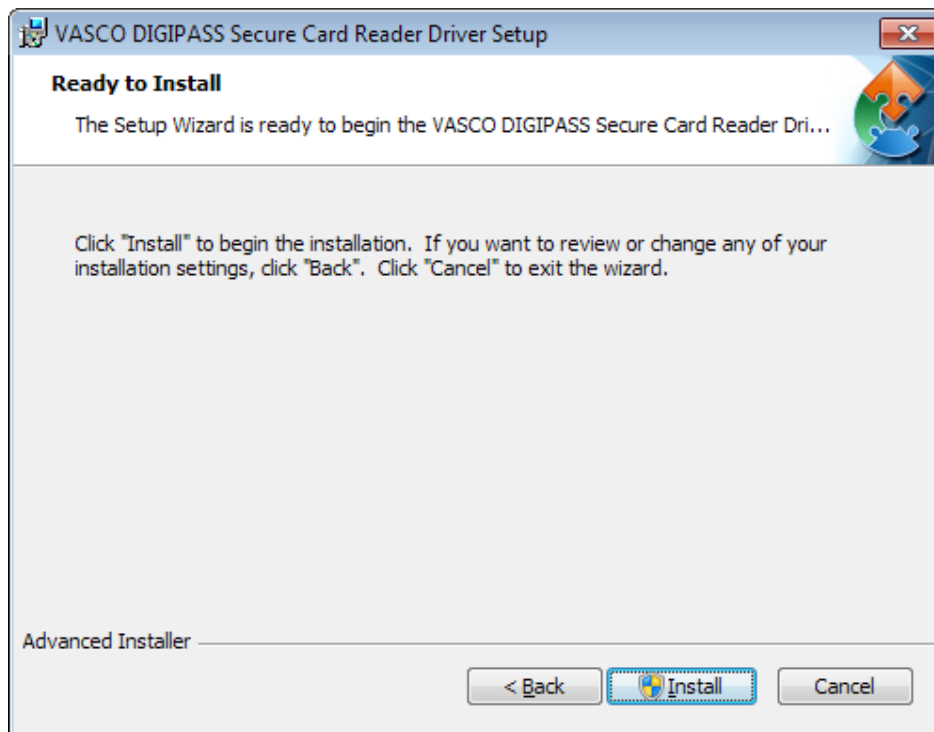


Figure 3 – Ready to install

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Click 'Install' to start the installation. Depending on your Windows version and user account type, you may be prompted to confirm installation and/or to provide administrator credentials:

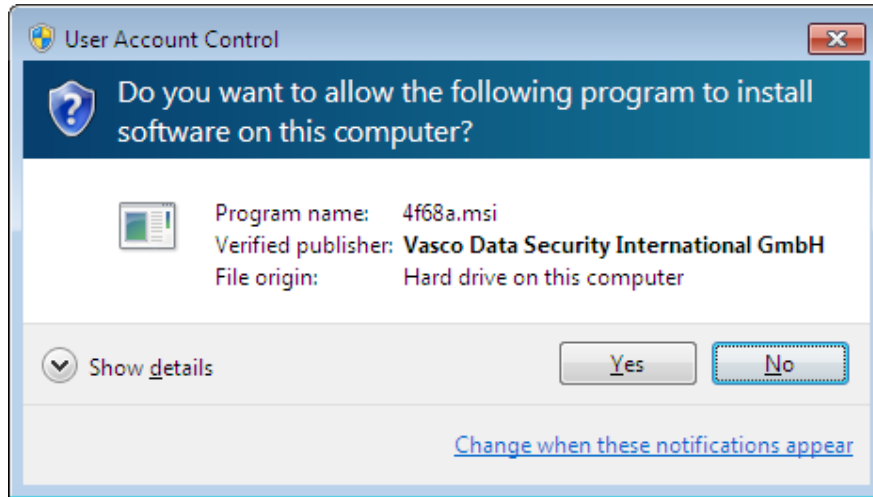


Figure 4 – UAC Confirmation Prompt for administrator accounts

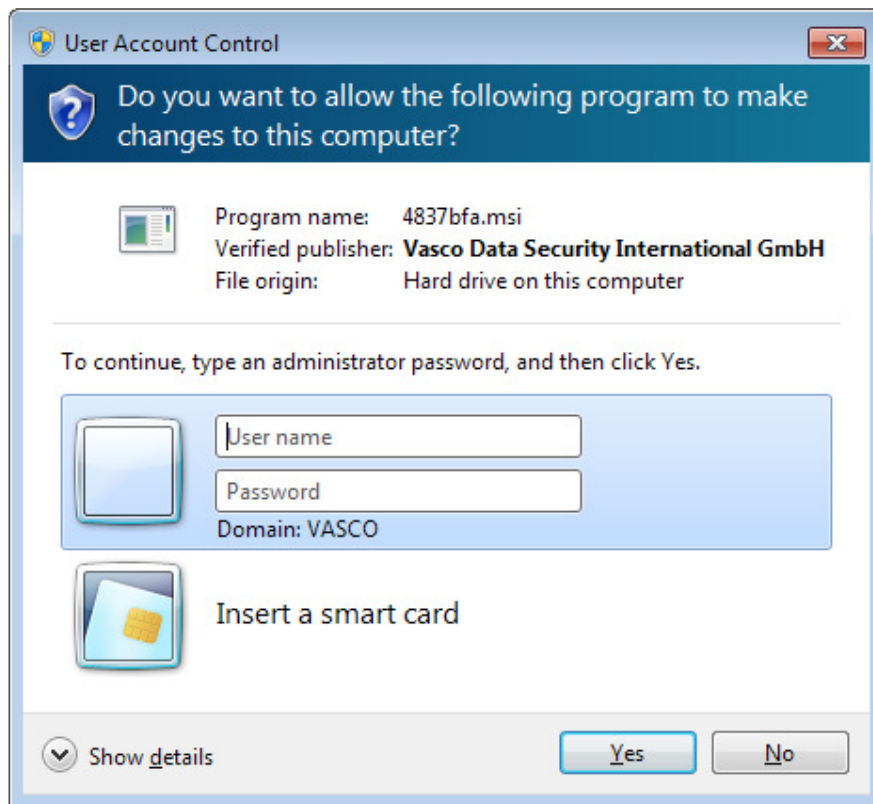


Figure 5 – UAC Confirmation Prompt for restricted user accounts

Enter the requested administrator credentials if necessary, and click 'Yes' to continue.

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Note: On Windows 7 and 8 an additional window may be displayed to confirm the driver installation:

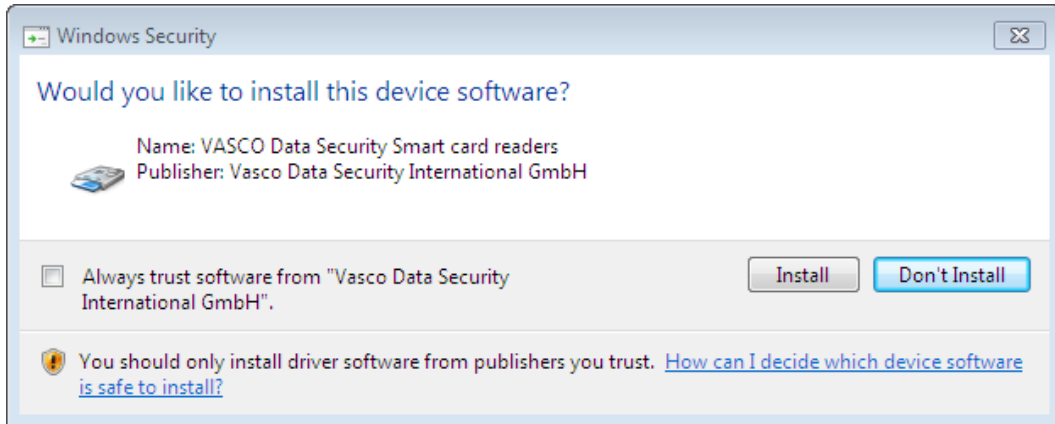


Figure 6 – Device driver signature confirmation

Setup will now install the filter driver. After completion, click 'Finish' to close the installer.

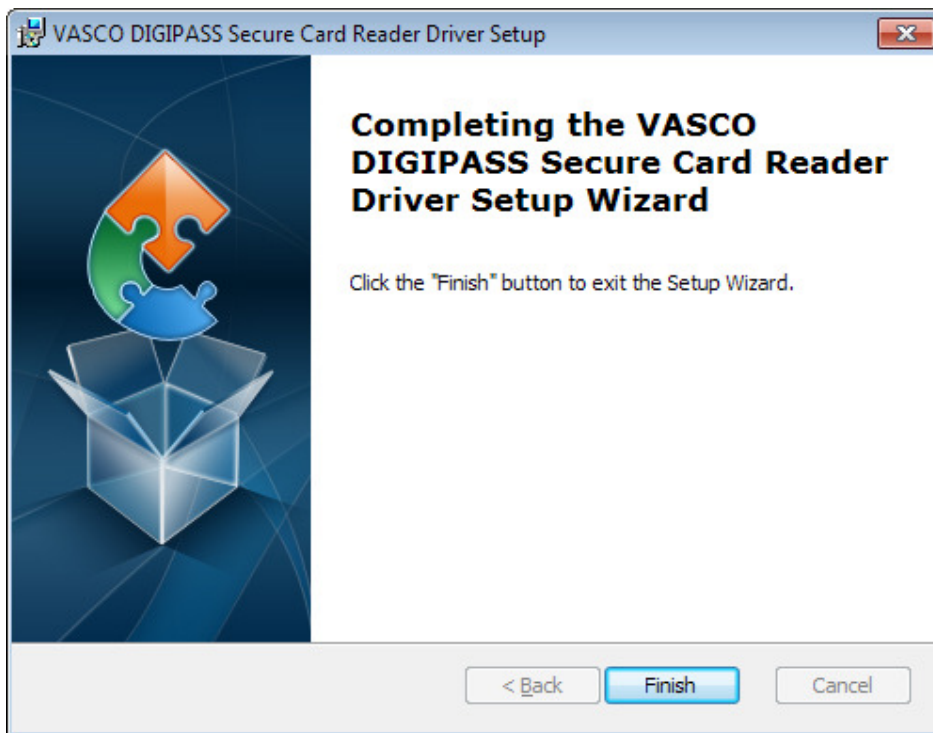


Figure 7 – Setup complete

If so prompted, reboot the system to finalize installation. The VASCO DIGIPASS reader is now ready for use with PC/SC 2.0 enabled applications.

3 Appendix A: Installing the Microsoft CCID driver on Windows XP

Connect the VASCO DIGIPASS reader and wait for the “Found New Hardware Wizard” dialog:



Figure 8 – New Hardware Wizard

Make sure you have a working internet connection and select “Yes, this time only” for searching Windows Update:

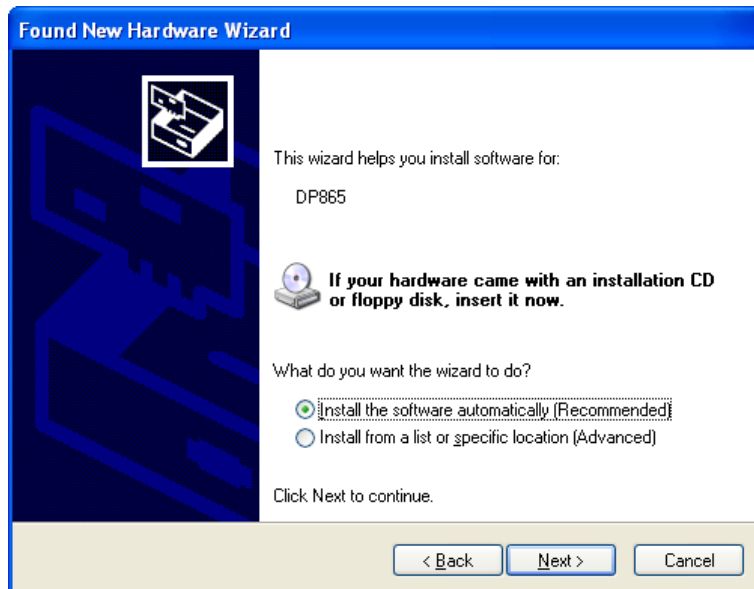


Figure 9 – Installation source selection

Select “Install the software automatically (Recommended)”.

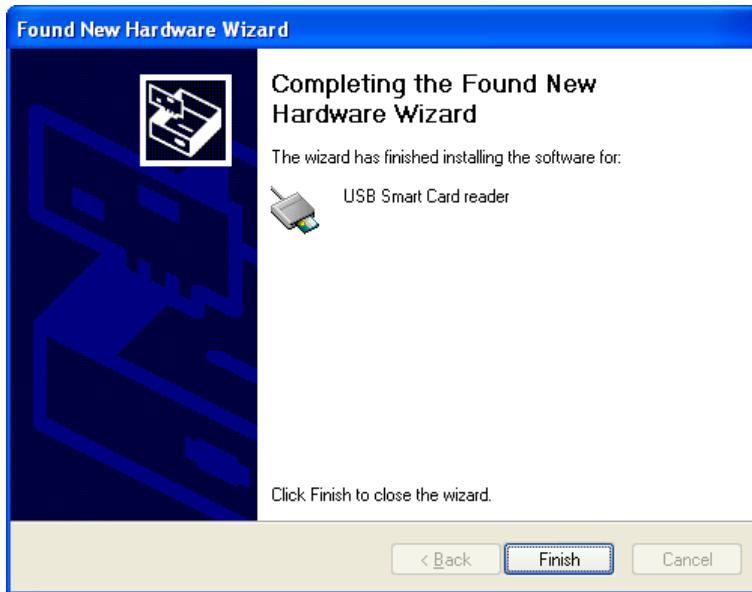


Figure 10 – Successful CCID driver installation

The Microsoft CCID driver is now installed. The reader will be listed in the device manager as “USB Smart Card reader”. You can open the Computer Management console by right-clicking “My Computer” in the Start menu and selecting the “Manage” menu option.