User Documentation for EIDVirtual

Version 2.0

Prepared by: "Vincent Le Toux"

Date: 17/05/2026

MySmartLogon

Table of Contents

MySmartLogon

Revision History

This section records the change history of this document.

Name	Date	Reason For Changes	Version
Vincent Le Toux	21/02/2013	Creation	1.0
Thierry Martin	28/03/2013	Update	1.1
Vincent Le Toux	26/04/2013	Update to 1.0.1.0	1.2
Vincent Le Toux	22/07/2013	Improved the troubleshooting paragraph	1.3
Daniel Bhatoa	24/09/2015	Minor adjustments to troubleshooting	1.4
Vincent LE TOUX	17/05/2026	Update to 2.0 (complete rewrite)	2.0

System Specifications

EIDVirtual is using a UMDF version 2 driver to install a virtual smart card reader.

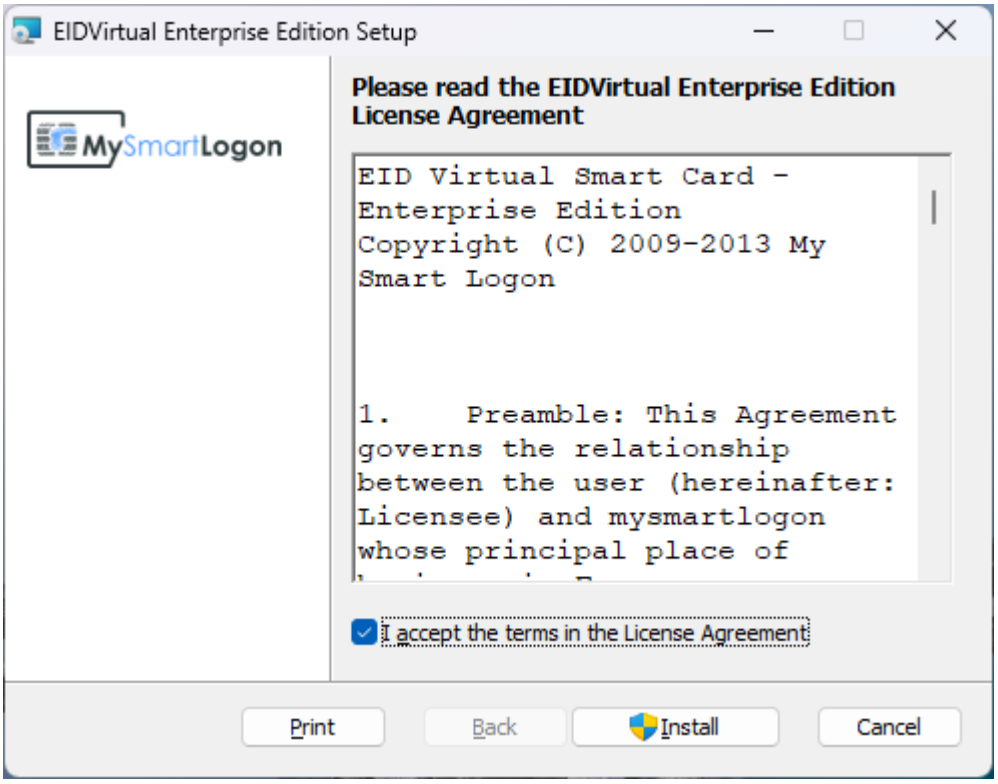
The virtual smart card is implemented using the GIDS specifications.

The following operating systems are supported:

- Windows 10, 11 and later
- Windows 2016,2019,2022,2026 and later

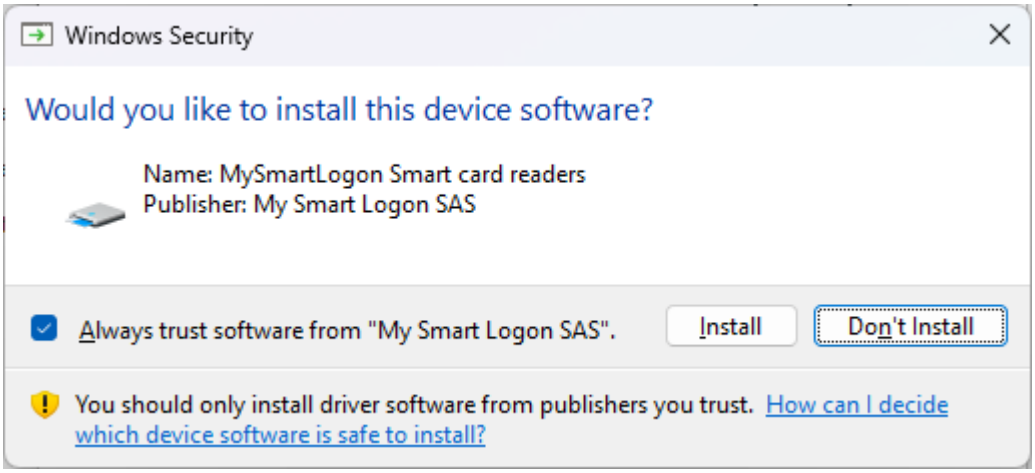
Installation

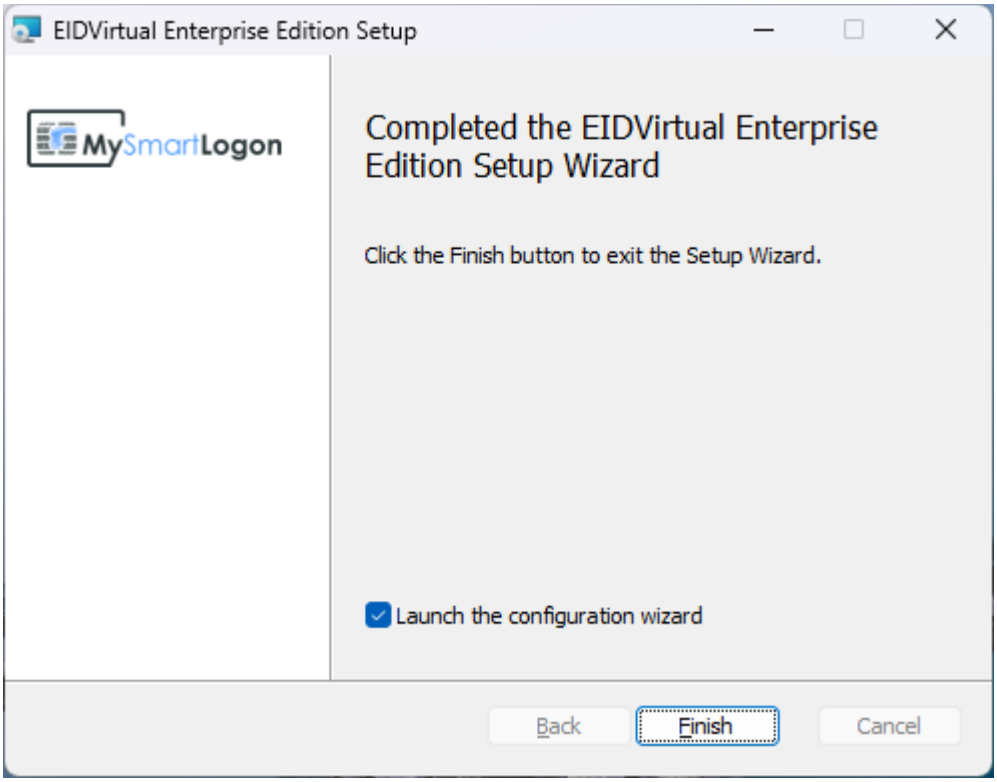
Run the installer. The user performing the installation must have administrator privileges.



During installation, a device driver must be installed.

You must click on Install.

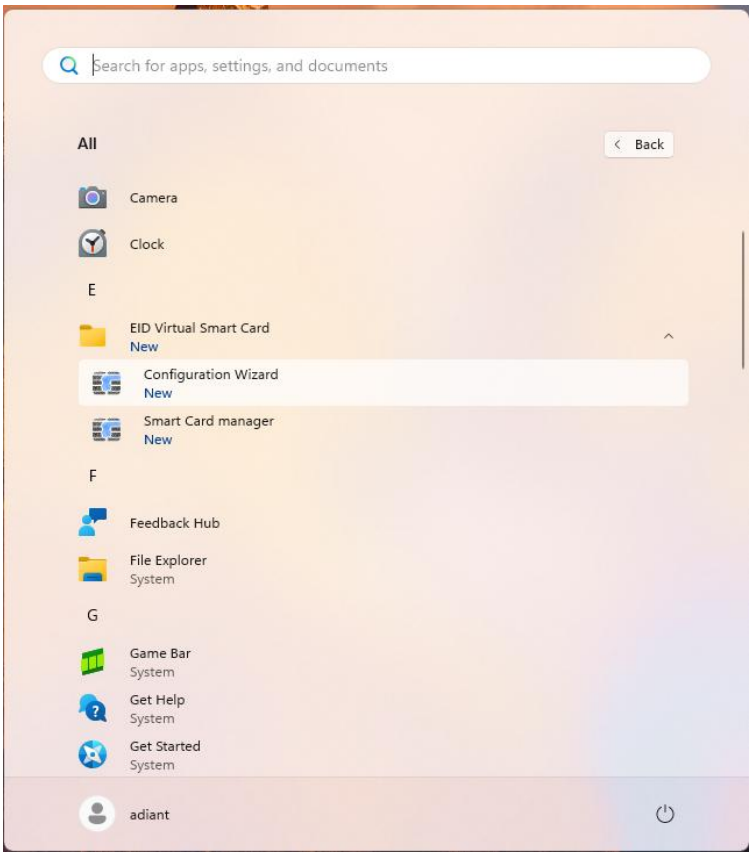




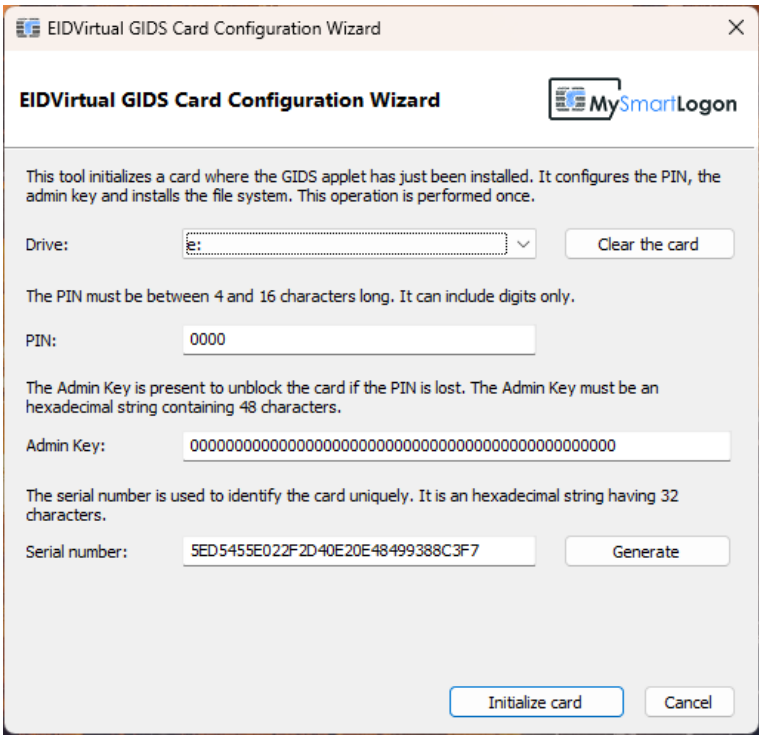
On Windows XP, if driver signing is enabled (not the default), the following warning may be shown. You must click on "Continue Anyway".

Create a virtual smart card

The installer adds entries to the Start menu:



You can launch the "Configuration Wizard" to create a new Virtual Smart card.



Insert a removable device and the associated drive letter will appear instantly.

Note: The "Drive" list is automatically updated when a new removable device is inserted.

Choose a PIN and click on Format.

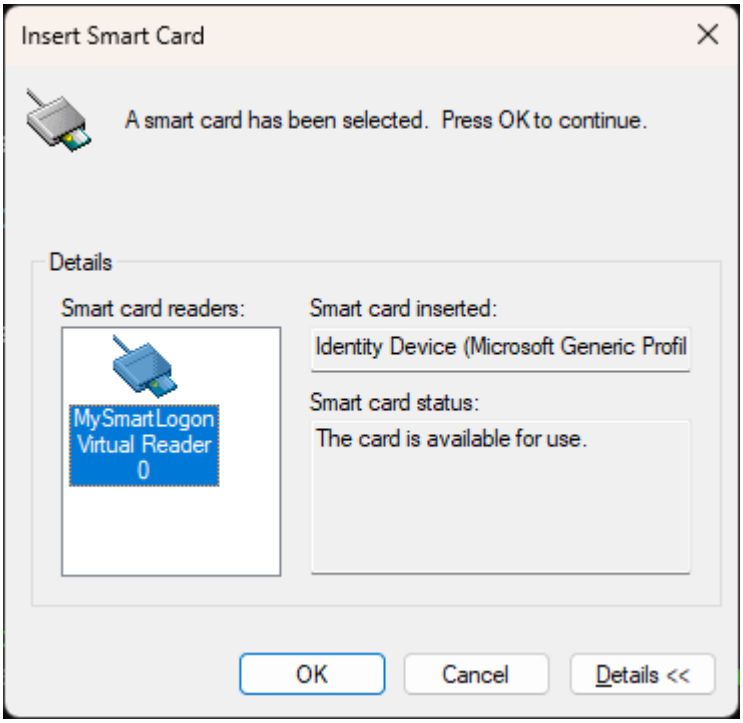
Remove and insert the device again to trigger the container load.

Your virtual smart card has been successfully created.

Manage Virtual Smart Card

You can launch the "Smart Card Manager" to edit the content of your smart card or any CAPI compliant tool, like Internet Explorer or the mmc certificate snap-in. In this documentation, only the "Smart Card Manager" will be described.

Run the "Smart Card manager" using its shortcut in the start menu. When launched, the manager will try to read a virtual smart card. The following dialog will be shown if no virtual smart card is present.

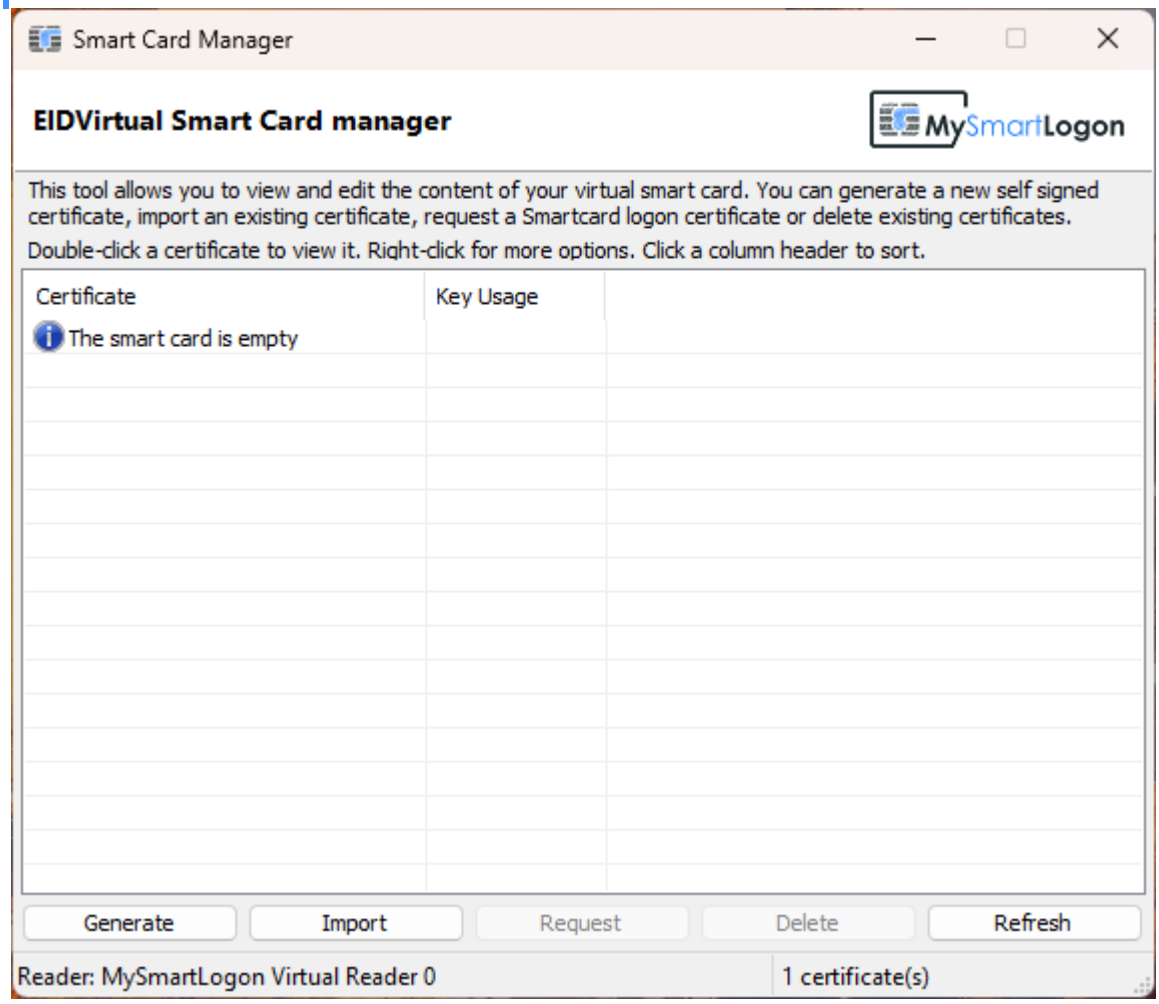


Important: if you see "`Smart card inserted: Unknown`", look at our `troubleshooting section`.

To continue further, you must insert a token previously formatted by the "Configuration Wizard".

Note: if no virtual smart card reader is present, you can restart the "Smart Card" service.

EIDVirtual Smart Card manager



Note: by default, no certificate is present and the following icon is shown:

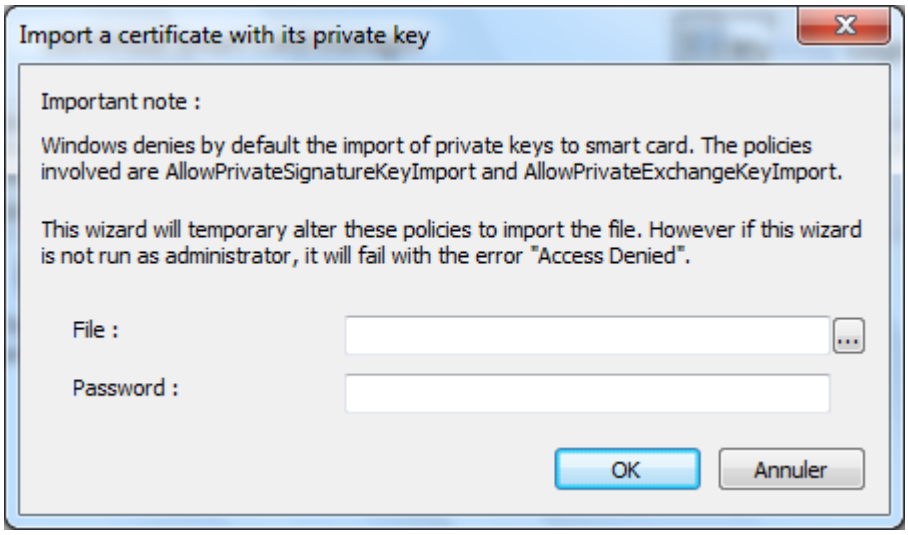
Generate

This button creates a self-signed certificate. The key length is 2048 bits.

Note: the GIDS specification and the current Microsoft implementation supports only 1024 and 2048 bits lenghts

Import

This button imports a .p12 or .pfx file. A .p12 file contains a certificate and its associated public/private key pair. This file is protected by a password.



Important: by default importing a certificate is prohibited by the Windows default Policy. Ensure the tool is run as administrator to import a file.

Request

This button requests a smart card logon certificate on behalf of the current user from the Active Directory Certificate Authority, if one is installed. The key length is 2048 bits.

Note: The *Enterprise PKI* component must be installed and the user MUST have the right to request a certificate using the template *Smart Card Logon* (the default template must be loaded, using a custom or duplicated template will not work).

In addition, each domain controller must have a valid “Domain Controller” certificate and a valid “Domain Controller Authentication” certificate.

Delete

This button deletes the selected certificates and their associated private keys. This operation cannot be undone.

Refresh

This button refreshes the view if changes were made outside of this tool.

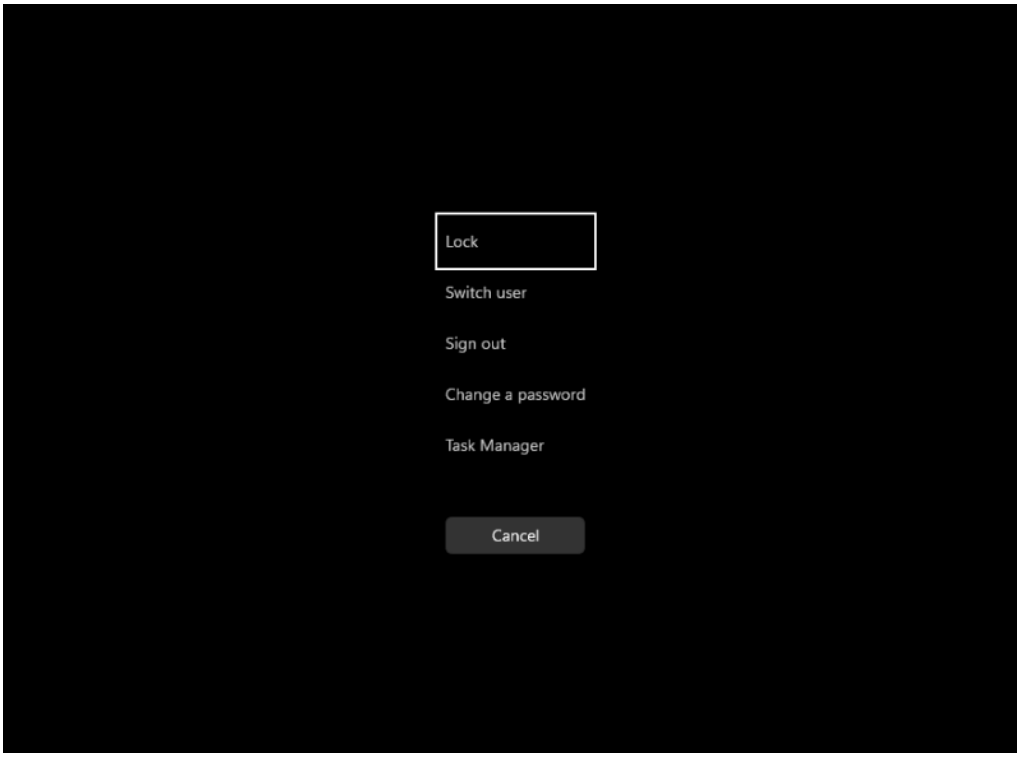
PIN Change

This procedure describes how to change the user PIN (not the admin PIN) of a smart card using the Microsoft Base Smart Card Cryptographic Provider.

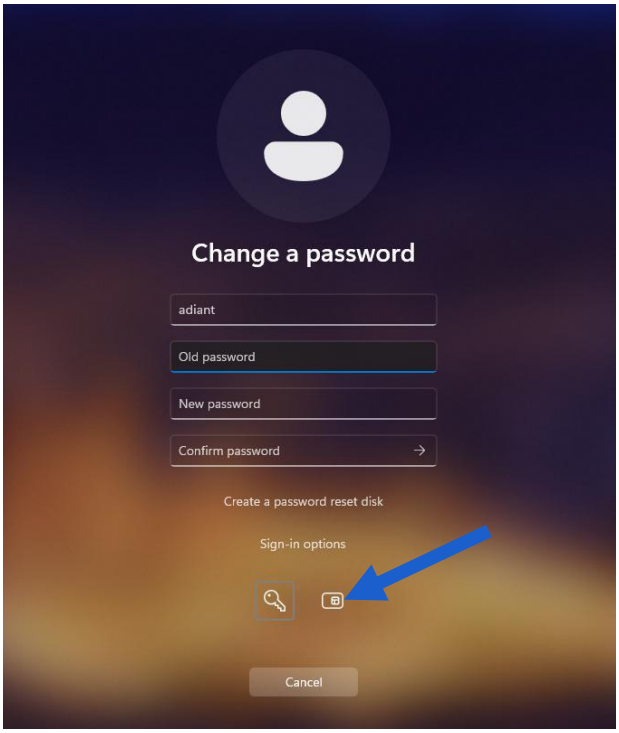
On Windows Vista / Seven / Windows Server 2008 and Windows Server 2008 R2

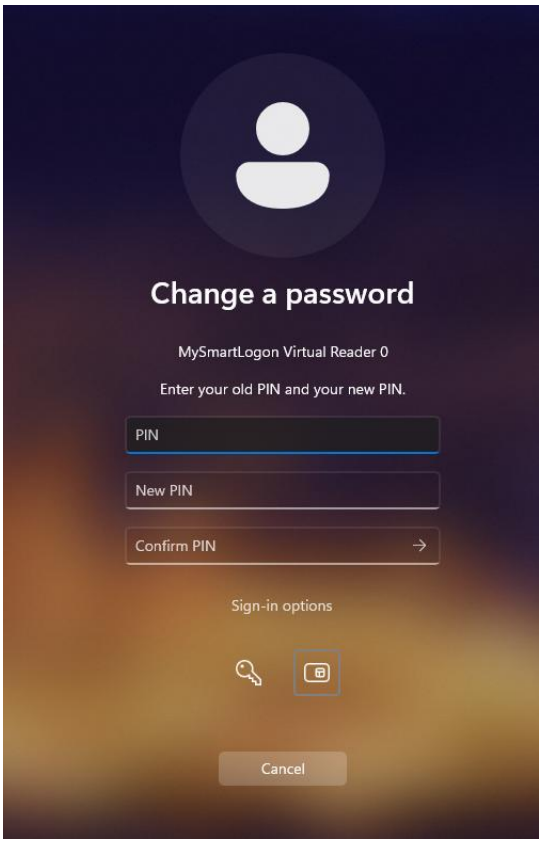
Reference: https://learn.microsoft.com/en-us/windows/security/identity-protection/smart-cards/smart-card-how-smart-card-sign-in-works-in-windows

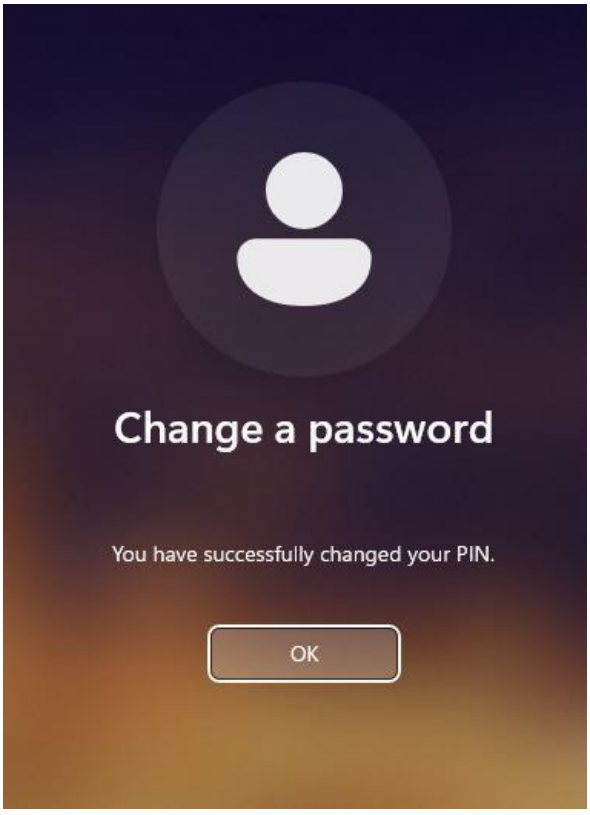
Press Ctrl+Alt+Del and choose "Change a password"



Click on "Other credentials"


Change a password
adiant
Old password
New password
Confirm password
Create a password reset disk
Sign-in options
Cancel


Change a password
MySmartLogon Virtual Reader 0
Enter your old PIN and your new PIN.
PIN
New PIN
Confirm PIN
Sign-in options
Cancel


Change a password
You have successfully changed your PIN.
OK

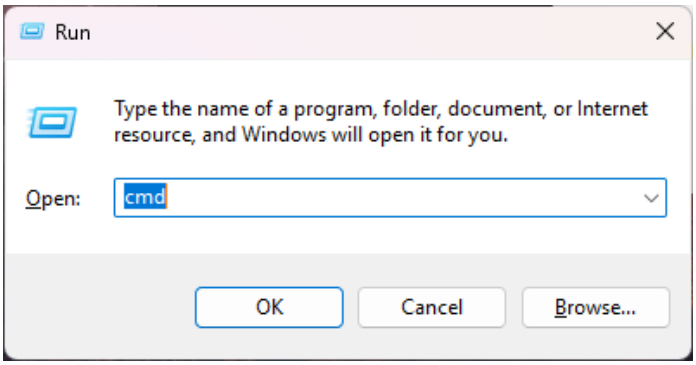
Troubleshooting

Using certutil

Certutil is a troubleshooting tool developed by Microsoft.

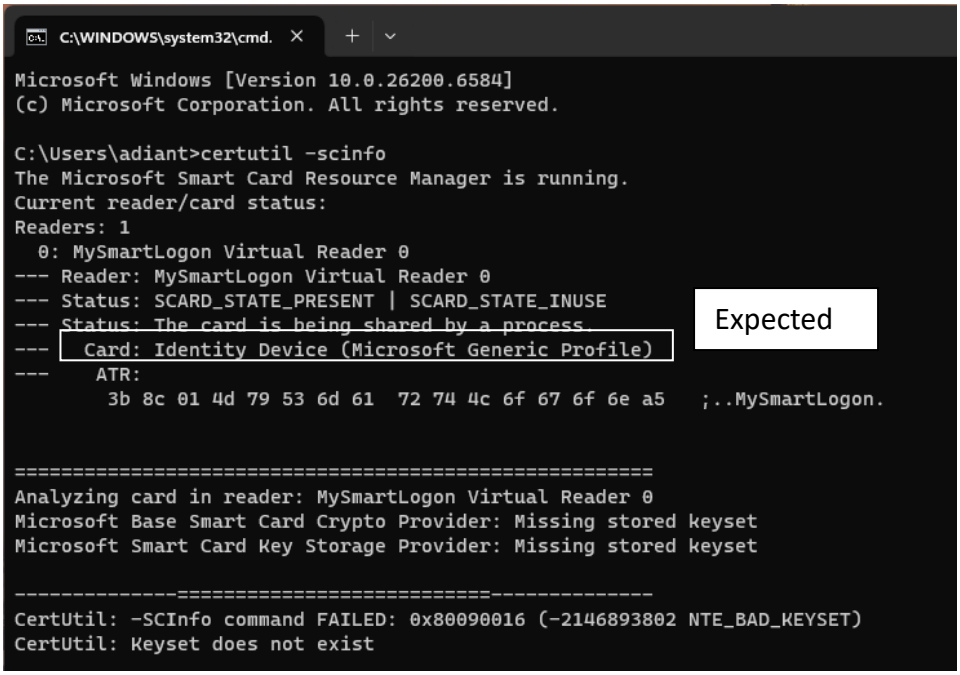
Note: certutil.exe is installed by default starting Windows Vista and Windows 2008. Certutil can be installed on Windows XP by the package "WindowsServer2003-KB304718-AdministrationToolsPack"

Run certutil -scinfo by pressing Windows + R



Then “cmd” then “certutil -scinfo”

Expected diagnostic of a healthy virtual smart card

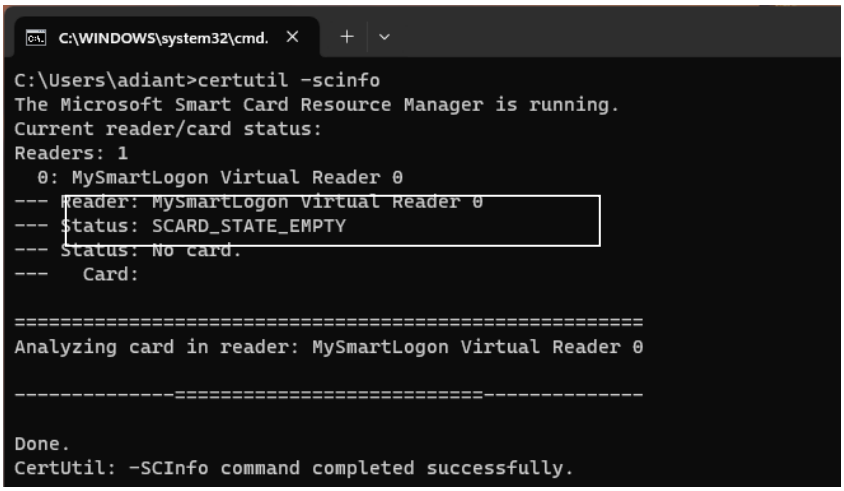


The previous screenshot shows an empty smart card, without any certificate or private key stored (the KeySet does not exist)

(Look at the ATR and the mention “SCARD_STATE_PRESENT”)

Virtual smart card not formatted or corrupted

A container not loaded will produce the following output:



(Look at the mention “SCARD_STATE_EMPTY”)

In this case, no USB drive with a secure container was found.

Causes:

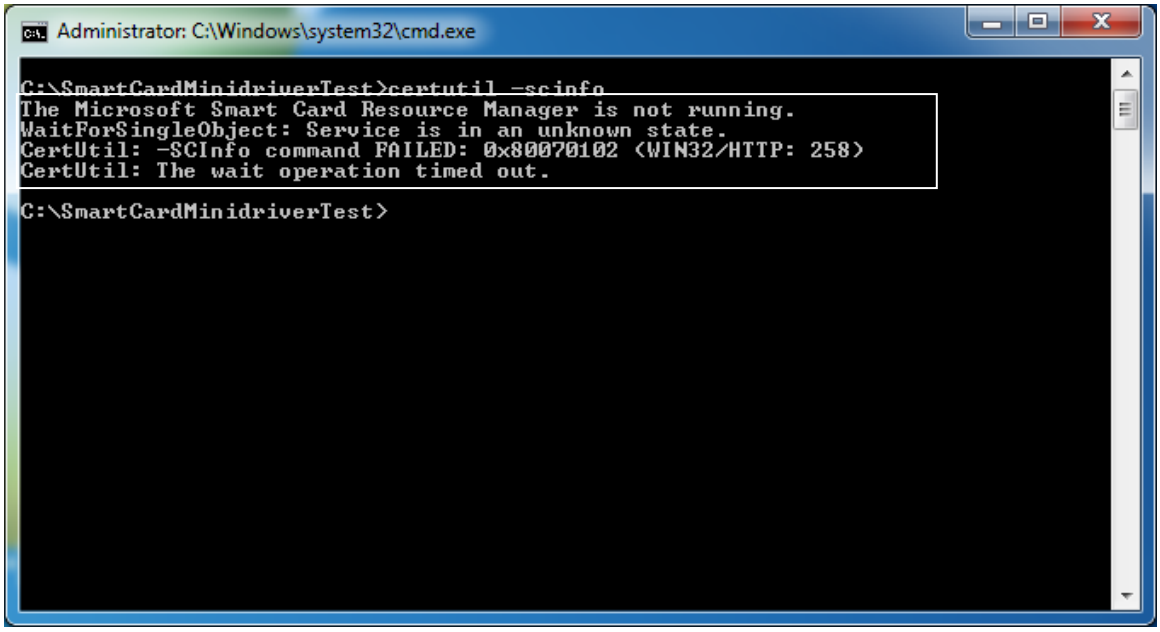
- USB key not formatted
- Secure container copies from one USB key to another
- Secure container corrupted (probable cause: usb key removed without having informed the system)

Solutions:

- Run the configuration wizard to create a new container
- Run the log tool and check for errors related to corrupted container

The smart card resource manager is not running

If the Virtual Smart Card reader is not loaded or if the smart card service is not running, the following error will be shown:



Causes:

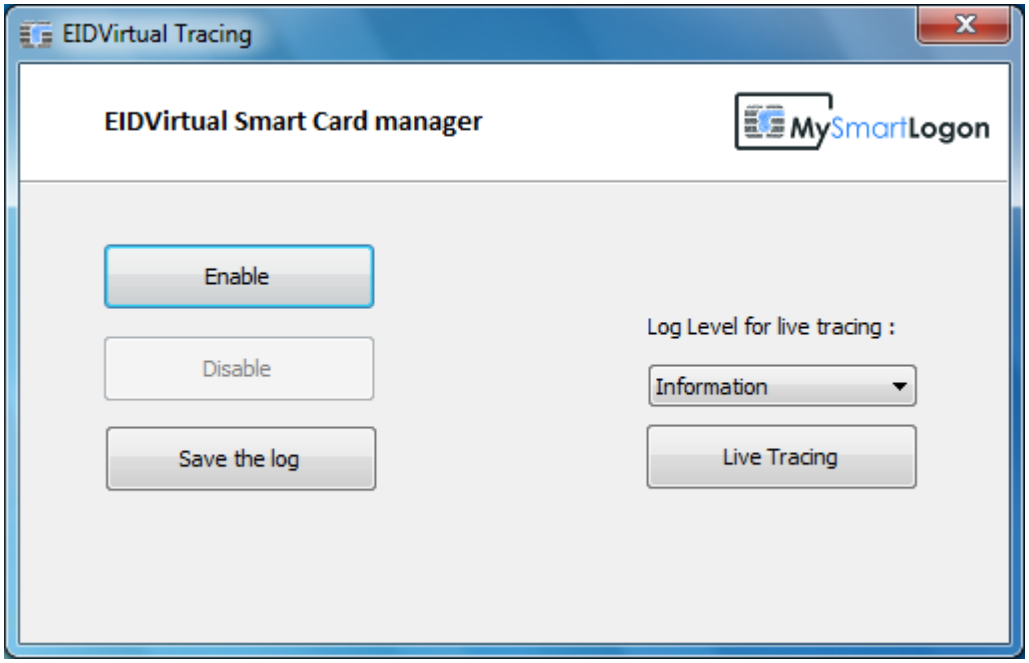
- The “Smart card” service has been disabled
- The virtual smart card reader has been installed

Solutions

- Go to “service” (administrative tools), find the service and start it
- Reinstall the program

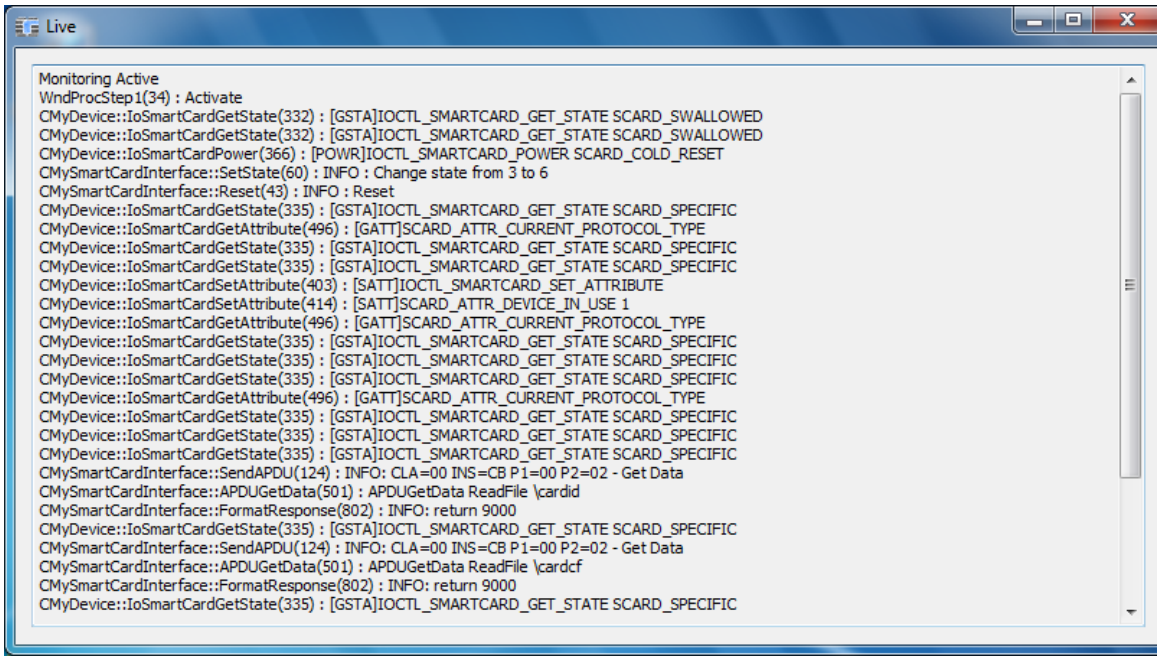
Using EIDVirtual Trace

By default the Tracing tool named "EIDVirtualTrace" is installed in "C:\Program Files\EID Virtual Smart Card"



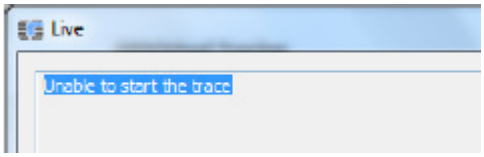
You can record a trace by clicking on "Enable", doing some actions, then click on "Save the log".

Or you can view live tracing.



A recorded trace is the preferred method when contacting support.

If the live trace can't start, you may have not the permission to run ETW (event tracing). This happens in large organization were permissions are restricted. You can run Process Monitor on the tracing process to look for errors.



Troubleshooting the setup

To troubleshoot setup issues, run the MSI with verbose logging:

msiexec /i EIDVirtual.msi /L*v install_log.txt