SafeNet Authentication Client
Gemalto SafeNet Minidriver 9.0

Customer Release Notes

SafeNet | THE DATA PROTECTION COMPANY

Document Information

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Contents

Introduction

Overview

Gemalto SafeNet Minidriver provides a simple alternative to developing a legacy cryptographic service provider (CSP) by encapsulating the complex cryptographic operations from the card Minidriver vendor.

Gemalto SafeNet Minidriver presents a consistent interface between SafeNet's smart cards and Microsoft's Smart Card Base Cryptographic Service Provider (CSP) or Crypto Next Generation (CNG) Key Storage Provider (KSP) and to the Smart Card Management Interface).

Product Facts

• Password quality policies are managed by SafeNet Authentication Client (SAC), or SafeNet Authentication Manager (SAM), and Gemalto SafeNet Minidriver uses the policies defined by SAC and SAM.

• Gemalto SafeNet Minidriver is compatible with certificates that were enrolled using SAC or SAM, and vice versa. i.e. If certificates were generated using SAC or SAM, they can also be used with Minidriver.

• Gemalto SafeNet Minidriver supports CAPI-based applications such as Smart Card Logon.

Release Description

This release:
• Introduces Gemalto rebranding and documentation standards

• Resolve specific product and customer related issues

Audience

All products are designed to be installed, operated, and maintained by personnel who have the knowledge, training, and qualifications required to safely perform the tasks assigned to them. The information, processes, and procedures contained in this document are intended for use by trained and qualified personnel only.

System Requirements

Supported Operating Systems

Gemalto SafeNet Minidriver 9.0 supports the following Operating Systems:

- Windows 8.1 (32-bit and 64-bit)
- Windows 8 (32-bit and 64-bit)
- Windows 7 (32-bit and 64-bit)
- Windows Server 2008 R2 (64-bit)
- Windows Server 2008 (32-bit and 64-bit)
- Windows Server 2012 R2 (64-bit)
- Windows Server 2012 (64-bit)

SafeNet Authentication Client Compatibility

Gemalto SafeNet Minidriver 9.0 is compatible with Java based token devices initialized with SAC 8.2 and higher.

> **NOTE:** Tokens cannot be initialized with Gemalto SafeNet Minidriver 9.0.

Supported Tokens

Gemalto SafeNet Minidriver 9.0 supports the following tokens:

Certificate-based USB tokens (CCID)

- SafeNet eToken PRO Java 72K (no plug and play applet)
- SafeNet eToken PRO Java 72K ECC (no plug and play applet)
- SafeNet eToken 5100/5105
- Gemalto SafeNet 5110

Smart Cards

- SafeNet eToken PRO Smartcard 72K (no plug and play applet)
- SafeNet eToken 4100 (CCID reader)

Certificate-based Hybrid USB Tokens

- SafeNet eToken 7300 Standard (CCID)

> **NOTE:** Legacy tokens, which do not have a plug and play applet, are supported for automatic download.

Supported Tablets

Gemalto SafeNet Minidriver 9.0 supports the following tablets:

- Microsoft Surface Pro, running Windows 8.1

New Features

Gemalto SafeNet Minidriver 9.0 includes the following new features:

- Gemalto rebranding enhancements/progress

- Microsoft Minidriver Specification Version 7 support (See the note below)

- ECC support
  Algorithms and key sizes supported:

  - Elliptic Curve Diffie-Hellman (ECDH) P256, and P384 - Secret agreement and key exchange

  - Elliptic Curve Digital Signature Algorithm (ECDSA) P256, and P384

- Upgrading from Minidriver 5.1

- Windows 8, Windows 8.1, and Windows Server 2012 R2 support

> **NOTE:** According to the specification, the following API operations are not required and are not supported by SAC Minidriver:
> - CardImportSessionKey
> - CardGetSharedKeyHandle
> - MDImportSessionKey
> - MDEncryptData
> - CardGetAlgorithmProperty
> - CardGetKeyProperty
> - CardSetKeyProperty
> - CardDestroyKey
> - CardProcessEncryptedData

Advisory Notes

Minidriver is not supported on a system that has SafeNet Authentication Client installed.

Password Quality Limitation

Password Quality policies that are managed by SAC, are supported by Gemalto SafeNet Minidriver 9.0. However, the following settings are ignored by Minidriver even though they are configured on the token:

- **Maximum Length –** this setting is configured and enforced by the SafeNet Authentication Client Settings on all operating systems**.**

- **Expiry Warning Period –** no alerts or warning prompts are displayed.

Smart Cart Logon with ECC Certificates

To enable Smart Card logon with ECC certificates:

1. Click **Start**, and enter **gpedit.msc** in the search field.
2. In the Local Group Policy Editor, select **Computer Configuration>Administrative templates>Windows Components>Smart Card**.
3. Select **Enabled** in the **Allow ECC Certificates to be used for logon and authentication** field.

Compatibility with Third-Party Applications

The majority of third-party applications listed below have been validated and tested with Gemalto SafeNet Minidriver 9.0.

Solution Type	Vendor	Product Version
Remote Access VPN	Check Point	Client E-80 (Security Gateway)
	Palo Alto	GlobalProtect 2.1
	Juniper	Juniper SA 700
Virtual Desktop Infrastructure (VDI)	Citrix	XenDesktop 7.5
	Microsoft	Remote Desktop
Identity Access Management (IAM)	VMware View	Horizon 6.0
Identity Access Management (IDM)	Microsoft	FIM 2010 R2
Pre Boot Authentication (PBA)	Microsoft	BitLocker
	CheckPoint	PointSec
Digital Signatures	Adobe	Reader X, XI
	Microsoft	Outlook 2010,and 2013

Installing Gemalto SafeNet Minidriver 9.0

Installing Gemalto SafeNet Minidriver

Gemalto SafeNet Minidriver 9.0 is downloaded automatically (from the Microsoft Update Catalog site) when connecting one of the tokens listed in the Supported Tokens section above.

Automatic Installation

To install Gemalto SafeNet Minidriver 9.0 automatically:

Connect one of the tokens listed in the Supported Tokens list on page 5, and
Gemalto SafeNet Minidriver 9.0 is installed automatically from the Microsoft Update Catalog site.
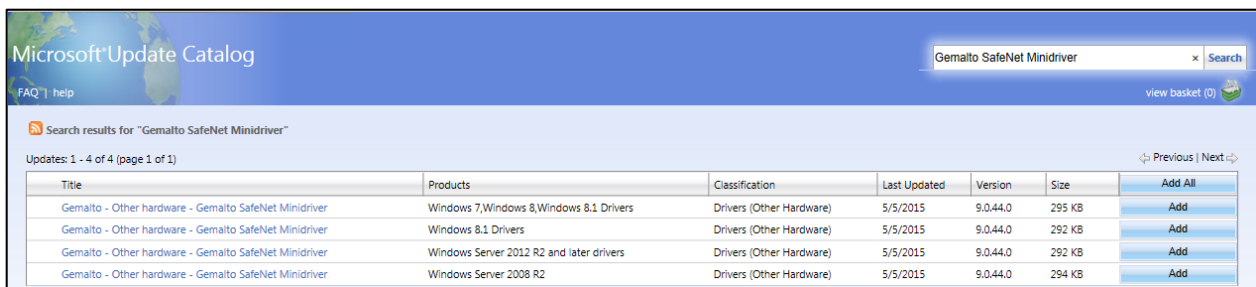
Manual Installation

If the Microsoft Update Catalog is not available, the manual installation method allows administrators to save the Minidriver files on a system for manual distribution.

To install Gemalto SafeNet Minidriver 9.0 manually:

1. Browse to Microsoft Update Catalog: http://catalog.update.microsoft.com/v7/site/Home.aspx.

2. In the Search box, at the top right of the screen, enter **Gemalto SafeNet Minidriver**, and click **Search**.

    Your search results will be displayed in a table as follows:

3. Select the relevant operating system by clicking **Add**, and the item is added to your basket.

4. Click **View basket**, and a **Download** button appears on the top right corner of the table.

5. Click **Download**.

    The **Download Options** window opens.

6. Browse to where you want to save the Minidriver package. Click **OK**, and then **Continue**.

    A message confirms that your updates were successfully downloaded.
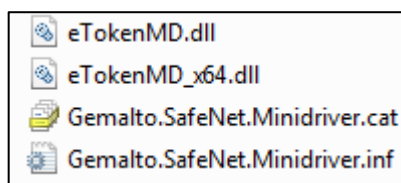
7. Click **Close**.

8. Browse to the location of the downloaded **.cab** file, and extract the files.

> **NOTE:** The .cab file is saved in the folder: **Gemalto - Other hardware - Gemalto SafeNet Minidriver**.

The following files are extracted:

9. Right-click the file: **Gemalto.SafeNet.Minidriver.inf**, and select **Install**.

Manually installing Gemalto SafeNet Minidriver 9.0 on Window 7

After manually installing the Gemalto SafeNet Minidriver 9.0 on a Windows 7 operating system, the Smart Card may need to be installed manually via the Device Manager.

To install the smart card on a Windows 7 operating system:

1. Connect the token and perform steps 1 – 9 above.

2. Click **Start**, type **Device Manager** in the Search programs and files text box, and then press **Enter**.

3. Double-click **Other devices.**

4. Right-click **Smart Cards – Smart Card** (with the yellow exclamation mark), and select **Update Driver Software.**

    The **Update Driver Software** window opens.
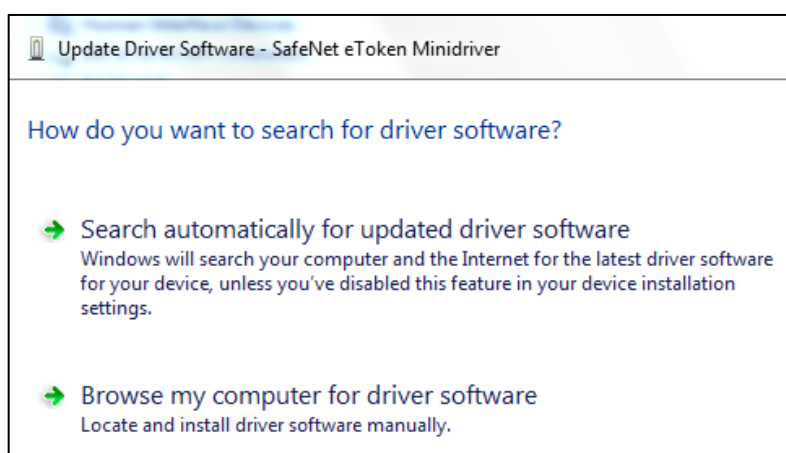
5. Perform either one of the following:

    a. Click **Search automatically for updated driver software** if the internet connection is available.

    Gemalto SafeNet Minidriver 9.0 is automatically updated via the Microsoft Catalog site.

    b. Click **Browse my computer for driver software** if you have already downloaded and extracted the Gemalto SafeNet Minidriver 9.0 package onto your local driver (See step 8 under Manual Installation).

      • Locate the folder in which the **Gemalto.SafeNet.Minidriver.inf** file is saved, select it, click **OK** and then click **Next**.

        A message appears: **Do you want to update this device software?**

      • Click **Update**.

        The **Gemalto SafeNet Minidriver has been updated** window opens.

   • Click **Close**.

Upgrading to Gemalto SafeNet Minidriver 9.0

Automatic Upgrade

To automatically upgrade from SafeNet eToken Minidriver 5.1 to Gemalto SafeNet Minidriver 9.0:

Connect one of the tokens listed in the Supported Tokens list on page 5, to a system which has Minidriver 5.1 installed, and Gemalto SafeNet Minidriver 9.0 is automatically downloaded from the Microsoft Update Catalog site.

If the automatic upgrade process does not succeed when connecting a token to the USB port, follow the procedures below:

1. Click **Start**, type **Device Manager** in the Search programs and files text box, and then press **Enter**.

2. Select **Smart cards > SafeNet eToken Minidriver > Update Driver Software.**
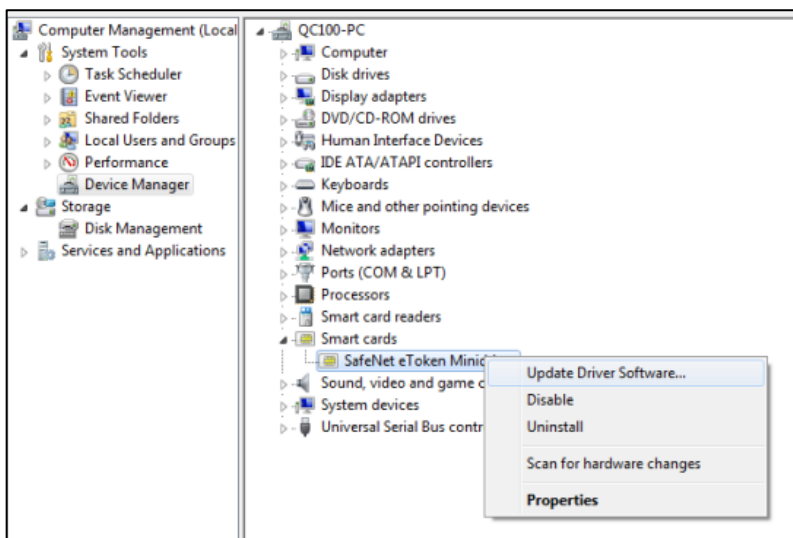
The **Update Driver Software** window opens.

Continue by following step 5 in the section: Manually installing Gemalto SafeNet Minidriver 9.0 on Window 7.

NOTE: Restart the system after upgrading to Gemalto SafeNet Minidriver 9.0.

Uninstalling Gemalto SafeNet Minidriver

When Gemalto SafeNet Minidriver is installed from the Microsoft Update Catalog, you need to perform the following to uninstall the Gemalto SafeNet Minidriver:

- On a 32-bit system, the file that defines the registry card media (eTokenMD.dll) must be deleted from the system32 folder.
- On a 64-bit system, these must be deleted from both sysWOW64 & system32 folders.

Remove the following keys from the HKEY_LOCAL_MACHINE registry tree:

32-bit Systems:

SOFTWARE\Microsoft\Cryptography\Calais\SmartCards\eTokenCard/JC1.0

SOFTWARE\Microsoft\Cryptography\Calais\SmartCards\eTokenCard/JC1.0b

64-bit Systems:

SOFTWARE\Microsoft\Cryptography\Calais\SmartCards\eTokenCard/JC1.0

SOFTWARE\Microsoft\Cryptography\Calais\SmartCards\eTokenCard/JC1.0b

SOFTWARE\Wow6432Node\Microsoft\Cryptography\Calais\SmartCards\eTokenCard/JC1.0
SOFTWARE\Wow6432Node\Microsoft\Cryptography\Calais\SmartCards\eTokenCard/JC1.0b

> **NOTE:** Restart the system after uninstalling Gemalto SafeNet Minidriver 9.0.

Known Issues and Limitations

This section lists known issues and limitations in Gemalto SafeNet Minidriver 9.0.

Jira #	Description
ASAC-2379	When a token is initialized with the 'Password must be changed on first logon' field, and is then connected to the operating system with SC Logon using Gemalto SafeNet Minidriver, an error message is displayed as soon as a password is entered. **Workaround:** Change the password using SafeNet Authentication Client before using the Minidriver.
ASAC-2429	Performing a remote desktop connection from a system which has Minidriver installed, to a system with SAC installed, causes errors in the RDP, after entering the smart card pin. **Workaround:** Edit the RDP file (on the Client) by following these steps: 1. Open the **Remote Desktop** connection window. 2. Click **Show Options**. 3. Under **Connection Settings**, click **Save as**, and save the RDP file locally. 4. Open the file using Notepad. 5. Add **enablecredsspsupport:i:0** to the end of the RDP file, and then save the file. 6. Connect to the server using the edited RDP file. For more details, see: https://support.microsoft.com/en-us/kb/941641 https://technet.microsoft.com/en-us/library/ff393660(v=ws.10).aspx

Support Contacts

If you encounter a problem while installing, registering or operating this product, please make sure that you have read the documentation. If you cannot resolve the issue, contact your supplier or SafeNet Customer Support. SafeNet Customer Support operates 24 hours a day, 7 days a week. Your level of access to this service is governed by the support plan arrangements made between SafeNet and your organization. Please consult this support plan for further information about your entitlements, including the hours when telephone support is available to you.

Table 1: Support Contacts

Contact Method	Contact Information	
Address	SafeNet, Inc. 4690 Millennium Drive Belcamp, Maryland 21017, USA	
Phone	US	1-800-545-6608
	International	1-410-931-7520
Technical Support Customer Portal	https://serviceportal.safenet-inc.com Existing customers with a Technical Support Customer Portal account can log in to manage incidents, get the latest software upgrades, and access the SafeNet Knowledge Base.	