NEXUS PERSONAL APPLICATION

Pos Digicert Sdn. Bhd.

Document Version 1.0

UM_NEXUSPERSONAL_V1.0_102018

CONTENTS

Important Notice

Please read the instruction below carefully

❖ User who has received smart card from June 2017 onwards and using Windows 7 is required to install Windows Update **KB3033929** before performing authentication (section 4.4).

   Note :
   User that has difficulties in accessing the system due to PIN request window not prompting after selecting the certificate, there is a high possibility that the Windows Updates KB3033929 has not been installed yet. This is a known bug with Windows 7 SP1 which does not support SHA-2 signed DLL (only supports SHA1). However, if you managed to perform authentication/signing with the latest smart card, then you may skip windows updates step.

❖ What is the complication if user did not perform the required instruction?
   1. Electronic ID may not be able to display on the Nexus Personal window.
   2. After selecting certificate to perform authentication, PIN request window will not be prompted.

Step to Install or update Windows Updates KB3033929 on Windows 7

Download the Windows 7 Updates KB3033929.

1. Windows 7 32bit - Click the following link.
https://www.microsoft.com/downloads/details.aspx?familyid=2f79c9bf-18b4-413d-9931a283d1496400

2. Windows 7 64bit - Click the following link.
https://www.microsoft.com/downloads/details.aspx?familyid=e70d8989-dcfe-47be-86b7249e182c95bd

Additional download link and information:
Technical description on the windows patch update KB3033929 can be found below.
https://technet.microsoft.com/en-us/library/security/3033929

https://support.microsoft.com/en-us/help/3033929/microsoft-security-advisory-availability-of-sha-2code-signing-support

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1 Introduction

This document is a reference for smart card certificate user on usage of the Nexus Personal application.

Nexus Personal application is a cryptographic middleware, interlinking smart cards and secure systems/applications. A smart card stores certificates and corresponding private keys used for authentication or signing. A smart card reader is a data input device that reads data from the smart card.

Below is a list of guides available in this manual:

- Nexus Personal Installation Guide **on page 6**
- Smart Card Reader Installation Guide **on page 8**
- Nexus Personal Usage **on page 12**
- Start Nexus Personal Application **on page 12**
- View Smart Card Certificate **on page 13**
- Change Smart Card PIN **on page 14**
- Authentication using Nexus Personal and Smart Card **on page 17**
- Uninstall Nexus Personal Application **on page 19**
- Uninstall Smart Card Reader **on page 20**
- Troubleshooting on Nexus Personal and Smart Card Reader **on page 22**
- Glossary of Terms **on page 23**

1.1 Intended Audience

Pos Digicert's smart card certificates user.

1.2 System Requirement

| Requirement	Description
CPU	Personal Computer with Pentium IV 3GHz or higher
Memory	Minimum 1 GB of RAM
Operating System	Windows 7, 8 and 10
Web Browsers	Microsoft Internet Explorer 11.0 and above Mozilla Firefox 44.0 and above Google Chrome 46.0 and above (With 128-bit encryption)
Hard Disk Space	30 MB space required

1.3 Acronym

No.	Acronym	Definition
1.	CD	Compact Disc
2.	NRIC	National Registration Identity Card Number
3.	IT	Information Technology
4.	URL	Universal Resource Locator
5.	PIN	Personal Identification Number
6.	CCID	Chip Card Interface Device
7.	LED	Light-Emitting Diode
8.	USB	Universal Serial Bus

2 General Information

Nexus Personal version 4.27.7 installer is available in the CD provided during the purchased of the smart card certificate or downloadable from Pos Digicert's website:

https://www.posdigicert.com.my/downloadpage/driver

The installer is available in 32-bit and 64-bit for Windows only.
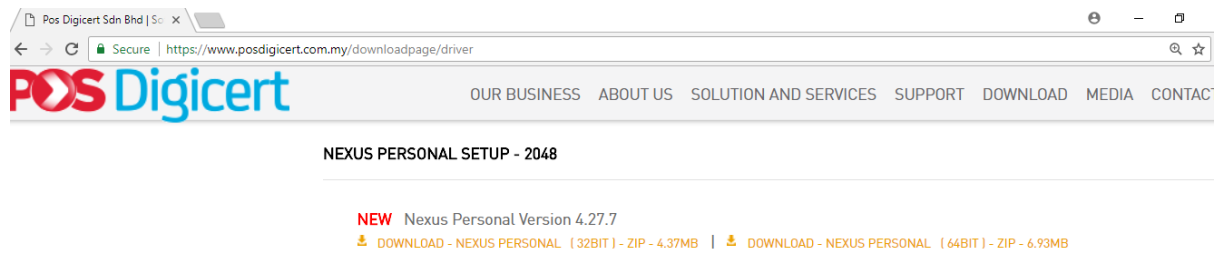
Note:

For new user purchase of smart card certificate (full package), Pos Digicert Sdn. Bhd. shall provide you three items as listed below:

  ➢ CD Installer – That contains installation file for Nexus Personal 4.27.7 and Rockey200 smart card reader.
  ➢ Smart Card – Printed with user's name and NRIC/Passport number.
 ➢ Smart Card reader device – Either Rockey200 or Rockey301(R301).

For smart card certificate renewal, Pos Digicert shall only provide the CD Installer and smart card printed with user's name and NRIC/ Passport number.
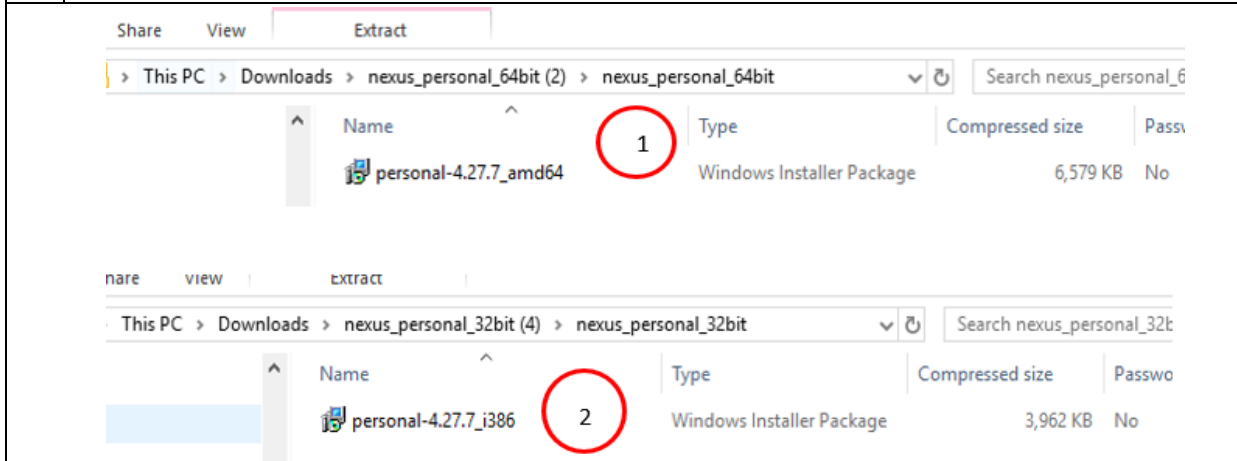
3 Installation Guide

This section will guide you on how to install Nexus Personal application and smart card reader device onto your computer.

Note : Please ensure you have administrative privileges to install the software.

## 3.1 Nexus Personal Version 4.27.7 Installation Guide
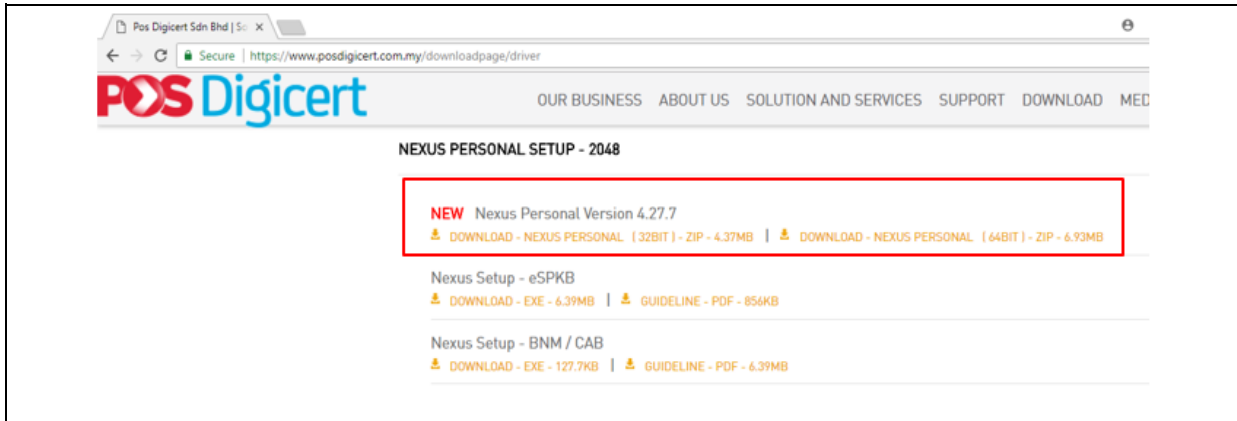
| 1.	▪ Download the Nexus Personal version 4.27.7 32-bit or 64-bit from the URL provided in **Section 2**. **Or** ▪ Use the Nexus Personal CD installer provided by Pos Digicert Sdn. Bhd. ○ Insert the CD into CD-ROM Drive. ○ Go to CD-ROM drive > NexusSetup > Open the Nexus Personal-4.27.7 folder.

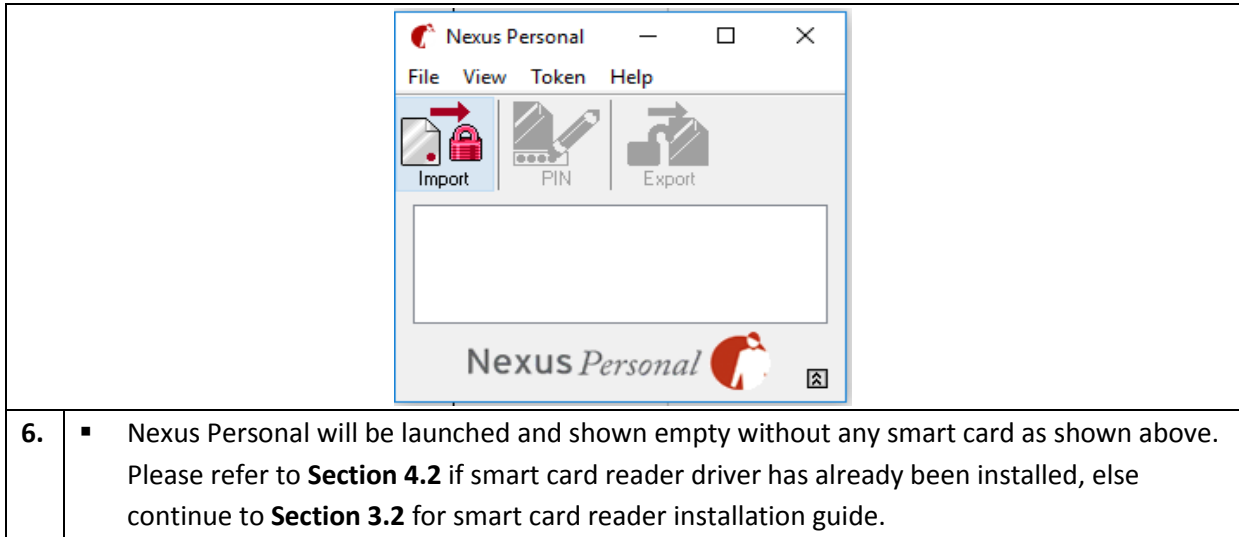| 2.	▪ Double click on the installation file to install. Choose which version is applicable for you. ○ For 64bit, your installation file is personal-4.27.7_amd64 as per label 1. ○ For 32bit, your installation file is personal-4.27.7_i386 as per label 2.
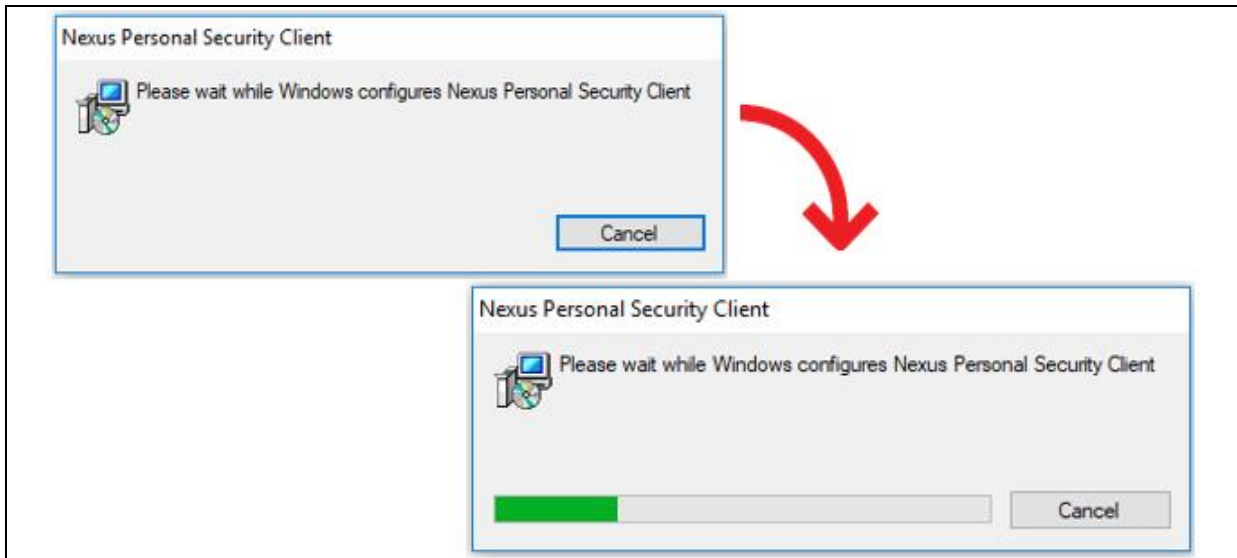
3.	▪ The installer shall run and complete by itself. Note: ▪ If "User Access Control" screen is prompted, click **Yes** to continue with installation, otherwise kindly refer to your company's IT personnel for further assistant.
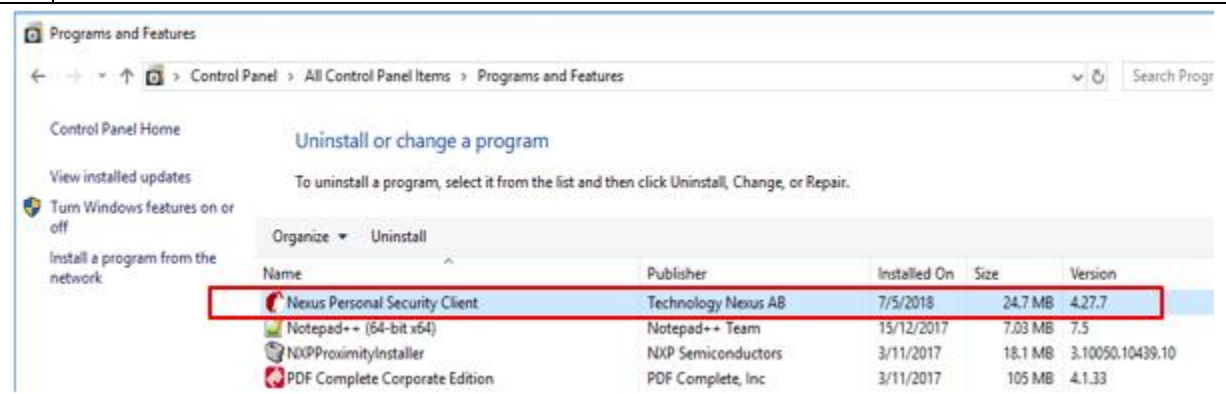
4.	▪ Nexus Personal has successfully installed in your computer. ▪ Go to **Control Panel** -> **Programs and Features** -> Ensure there is a **Nexus Personal Security Client** as per red highlighted box.
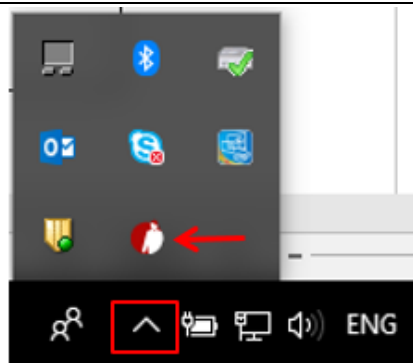
5.	▪ Click on show hidden icons arrow located on the window system tray as per red highlight box to see the Nexus Personal icon. ▪ Double click on the Nexus Personal icon to launch the application window. Note: ▪ By default, Nexus Personal shall start automatically after successfully installed or upon windows start up.

6.	▪ Nexus Personal will be launched and shown empty without any smart card as shown above. Please refer to **Section 4.2** if smart card reader driver has already been installed, else continue to **Section 3.2** for smart card reader installation guide.

3.2 Smart Card Reader Installation Guide

This section will guide you on how to install smart card reader device onto your computer.

Note: Pos Digicert has two types of smart card reader device. Both function in a same way but differences only at installation steps.

Pos Digicert shall provide you with one of the following devices:

1. Rockey200 Smart Card Reader –Refer Section 3.2.1
2. Rockey301 (R301) Smart Card Reader – Refer Section 3.2.2

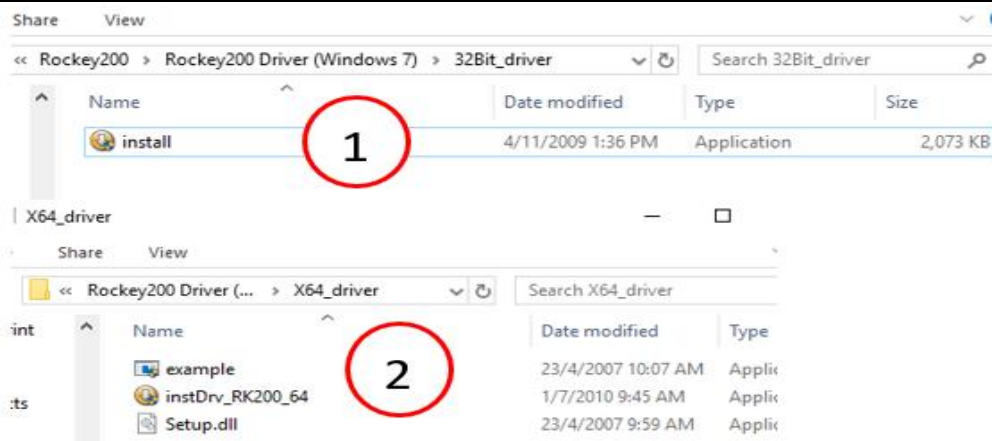### 3.2.1   Installation Guide for Rockey200 Smart Card Reader


Note :
▪   Do not plug in the Rockey200 smart card reader prior to driver installation.
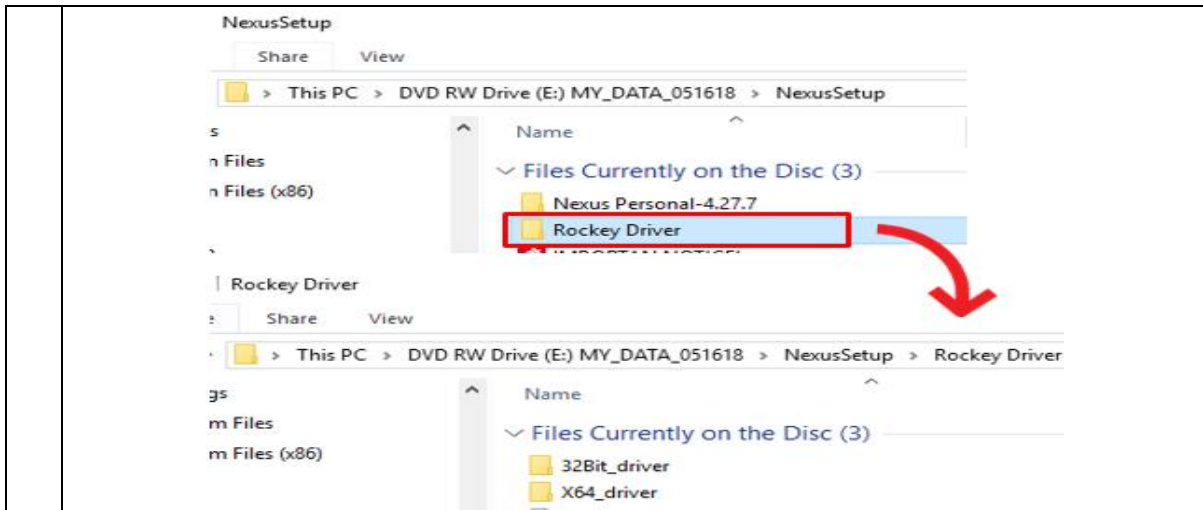
| 1.	▪ Insert the CD provided by Pos Digicert into the CD ROM Drive. ▪ Go to CD ROM Drive > Nexus Setup > Rockey Driver. ▪ The driver is available in 32bit and 64bit.

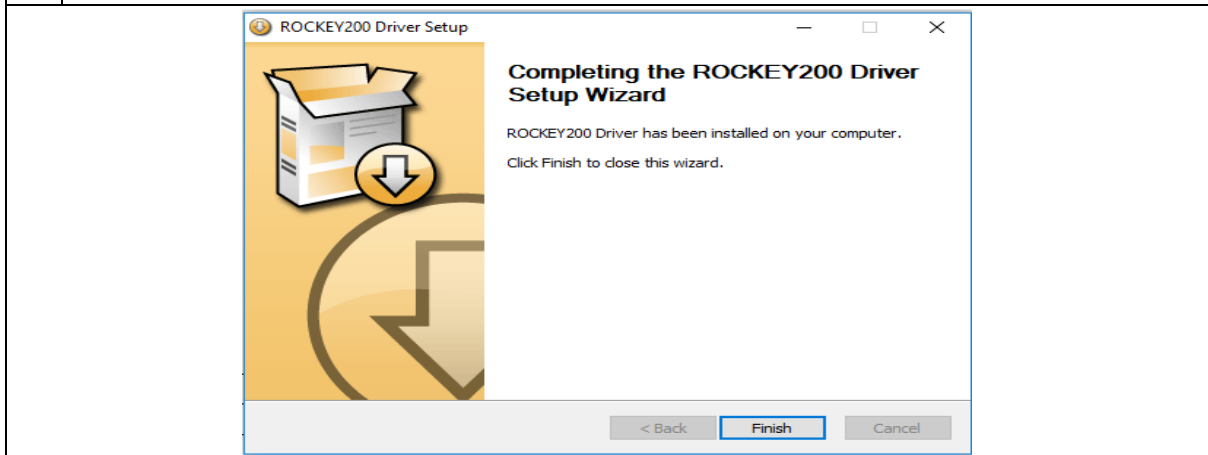| 2.	▪ Select which version is applicable to you. Double click installation file to install. 　○ For 32bit, your installation file should be as per Label 1. 　○ For 64bit, your installation file is instDrv_RK200_64 as Label 2.
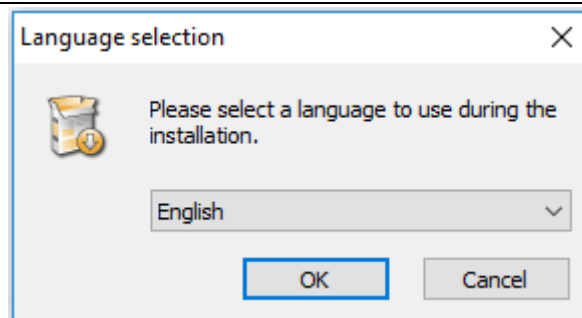
3.	▪ Select language installation as English -> Click **OK**.

4.	▪	Click **Install**.
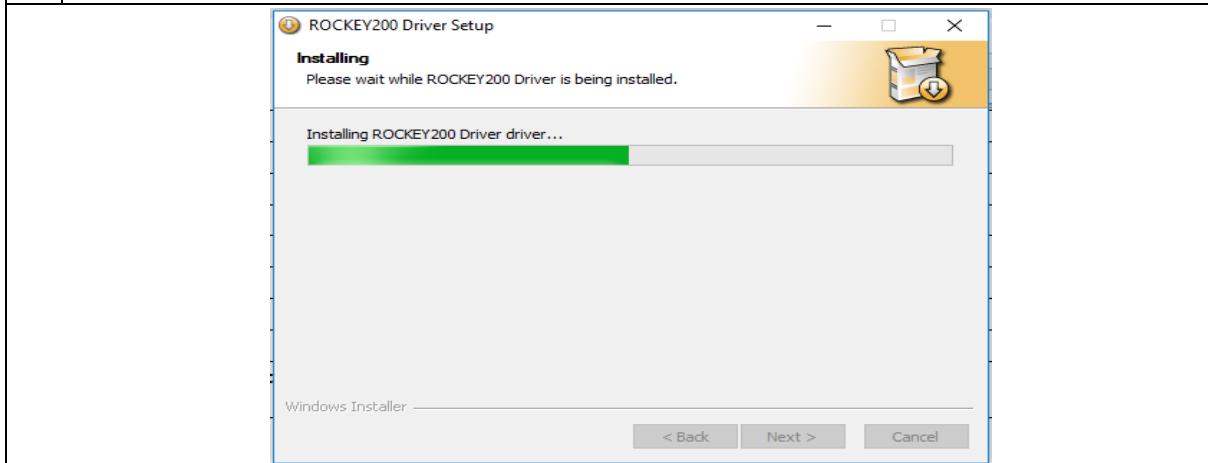
5.	▪	Wait for the installation to finish.

6.	▪	Click **Finish**.
	▪	Restart your computer.
7.	▪	After computer has restarted, plug in Rockey200 smart card reader to your computer, windows will auto detect the new hardware if installed successfully.

3.2.2 Installation Guide for Rockey301 (R301) Smart Card Reader

Note : ■ Rockey301 is a CCID compliant smart card reader with USB 2.0 full speed support. It offers a plug-and-play solution. No installation of driver is needed.	
1.	■ Plug in Rockey301 smart card reader into your computer, the reader will install all necessary drivers by itself. ■ Your computer shall automatically detect and recognize the device. ■ The LED shall turn to red colour indicates that your computer detecting the smart card reader.
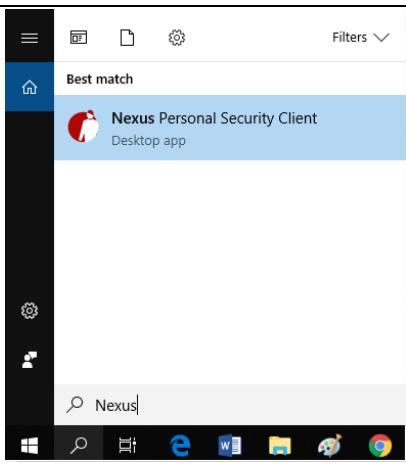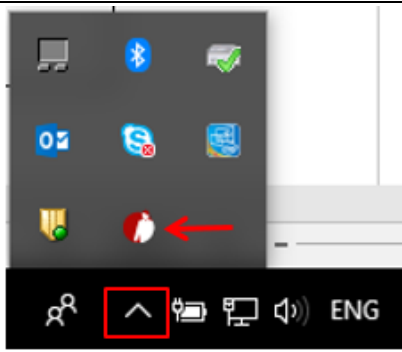
4 Nexus Personal Usage

This section will guide you on the usage of Nexus Personal application.
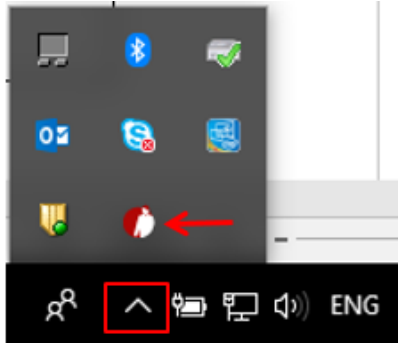
Note:
1. Nexus Personal version 4.27.7 is only compatible with new smartcard that was released around June 2017 onwards.
2. Ensure the Nexus Personal application is running before using the smart card to access the intended system/application.
3. Ensure the smart card reader device is already plugged in and detected by the computer .

4.1 Start Nexus Personal Application

1.	▪ To start/run the Nexus Personal application, click on the Search icon on the taskbar and type Nexus Personal. ▪ Double click on Nexus Personal Security Client. The Nexus Personal icon shall appear at taskbar's system tray.
2.	▪ To launch the Nexus Personal application window, click on show hidden icons arrow located on the taskbar as per red highlight box to see the Nexus Personal icon. ▪ Double click on the Nexus Personal icon.

4.2 View Smart Card Certificate

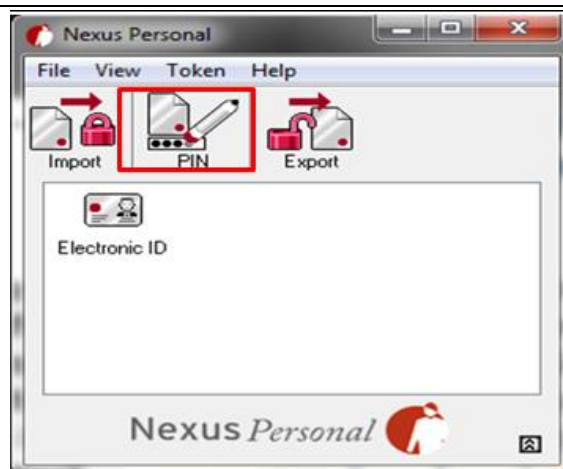| 1.	▪ Insert the smart card into the smart card reader. ▪ Once the smart card is inserted, the LED indicator shall start to blink. This indicates that the smart card reader has detected your smart card.
2.	▪ Double click on the Nexus Personal icon to launch the application window.
3.	▪ An "Electronic ID" will appear on Nexus Personal screen as shown above. ▪ Double click on **Electronic ID** to view the certificate information. Note: ▪ Nexus Personal application will detect and also display available certificate from Internet Explorer (IE) certificate store.
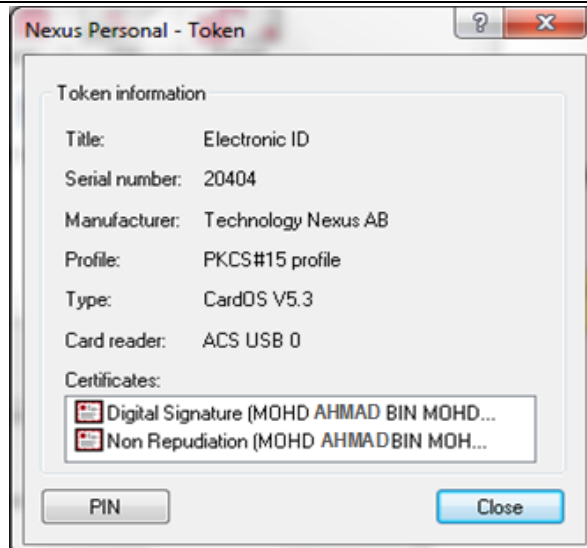
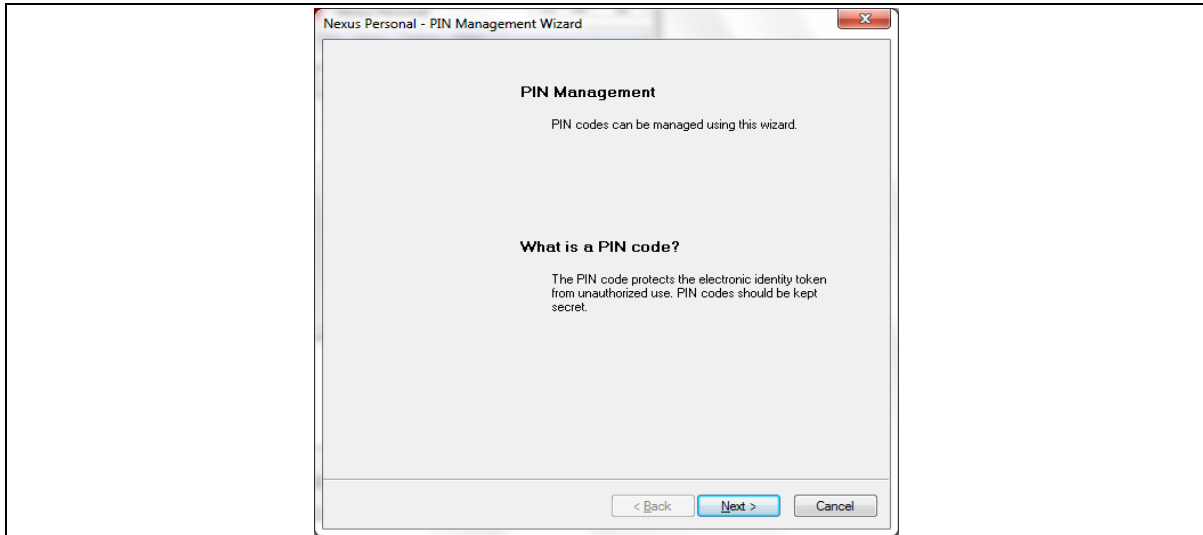| 4.	▪ Double click on either Digital Signature or Non Repudiation to view the certificate information.
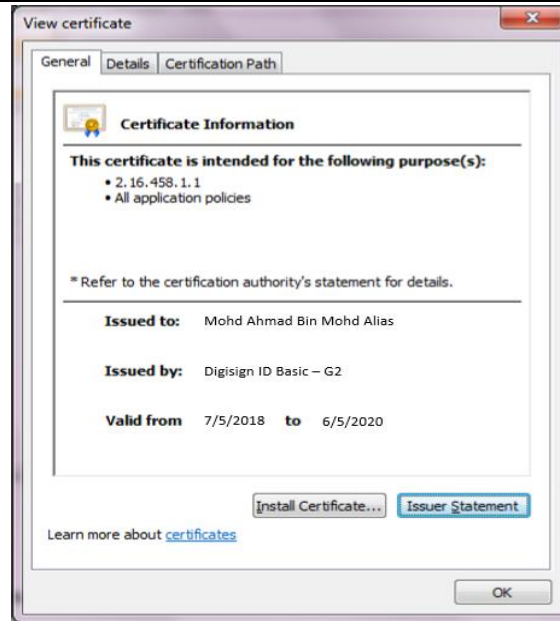
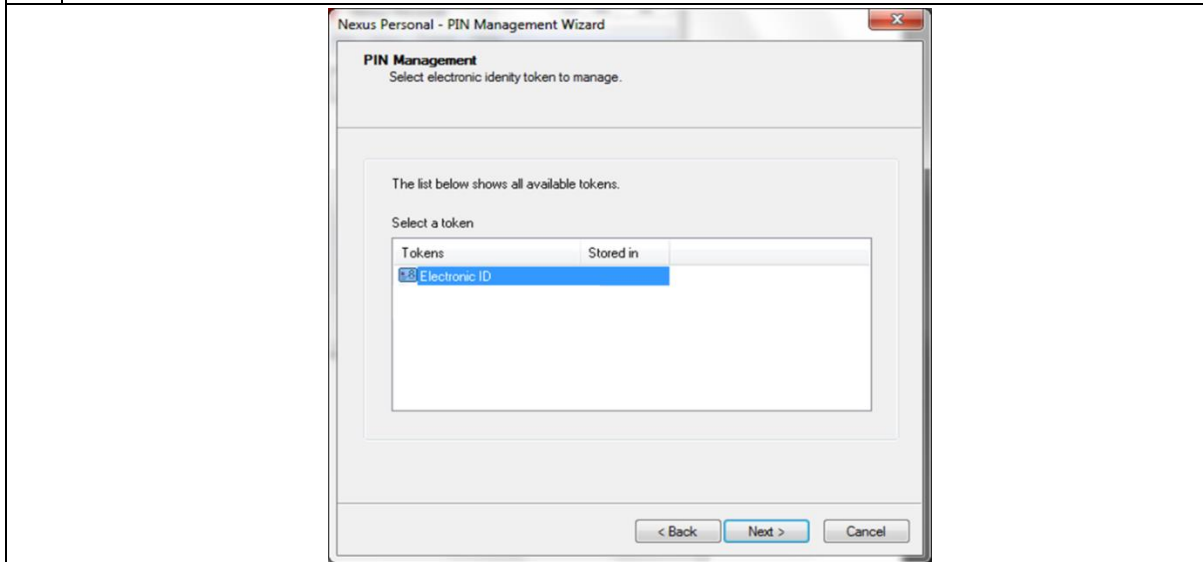| 7.	▪ Certificate Information window will be displayed as shown above. Click **OK** or **X** to close the windows. Note: ▪ Smart card user should ignore the "Install Certificate.." and "Issuer Statement" button.

4.3   Change Smart Card PIN

Note: The steps below are only for Changing PIN.   If your smart card PIN is blocked, you need to send the smart card to Pos Digicert by hand or via courier service to unblock your PIN. This section does not help to solve the PIN blocked issue.
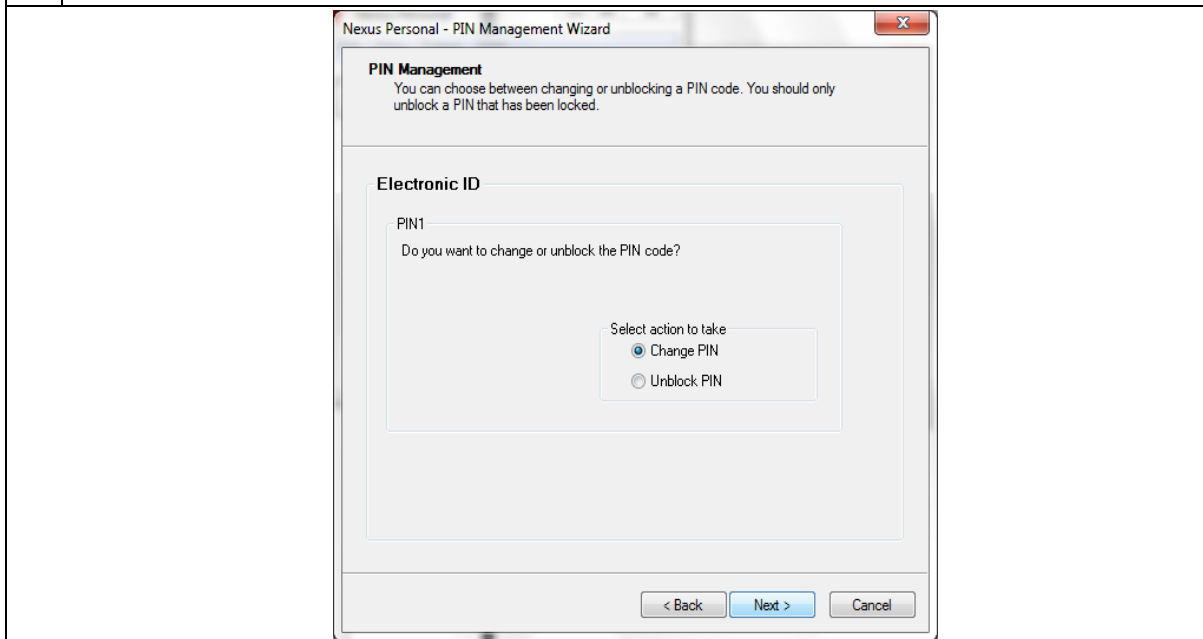

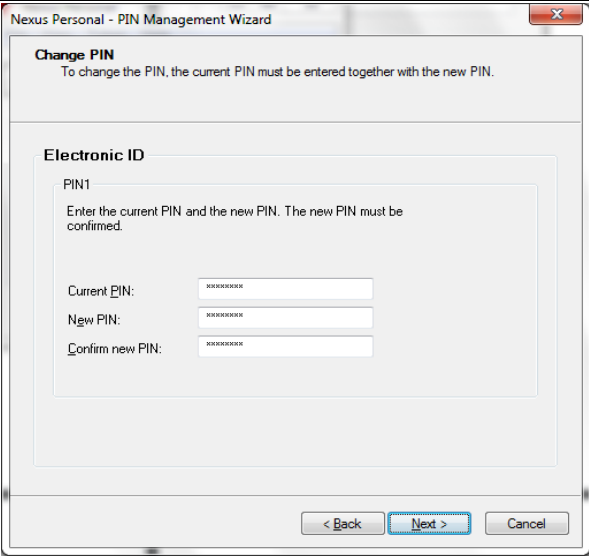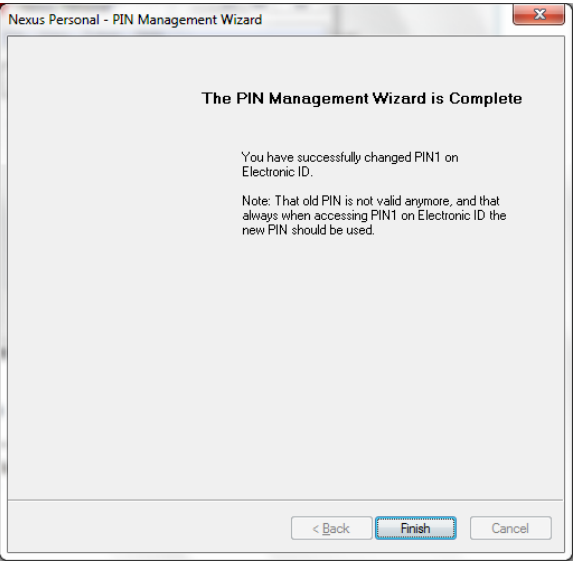| 1.	▪ Insert the smart card into smart card reader and ensure indicator is ON. ▪ Select on the respective **Electronic ID** -> Click **PIN** icon on the top.

2.	▪ Click **Next**.

3.	▪ Click **Next**.
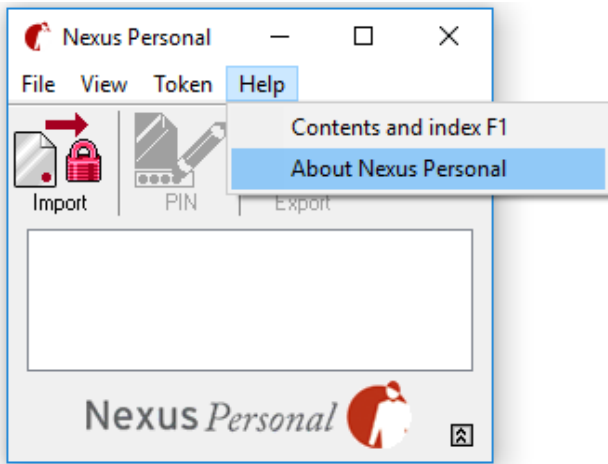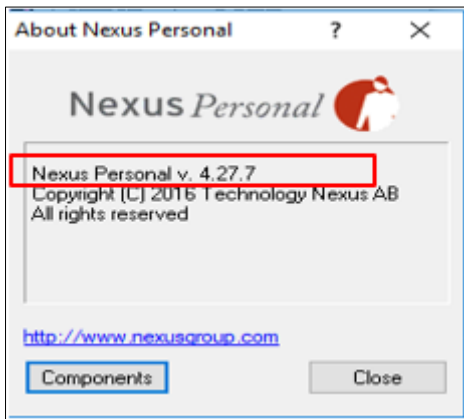
4.	▪ Tick **Change PIN** option -> Click **Next**.
5.	▪ Enter **Current PIN**. ▪ Enter **New PIN** -> Enter **Confirm new PIN**. ▪ Click **Next**. Note: ▪ **Nexus Personal PIN policy** for smart card certificates is restricted to **8 characters only** (may consists of alphanumeric and special characters)
6.	▪ Click **Finish**. ▪ The smart card can be used as usual by using new PIN. Note: You may try to perform authentication using the new PIN to confirm on the PIN change.

4.4   Authentication Using Nexus Personal and Smart Card
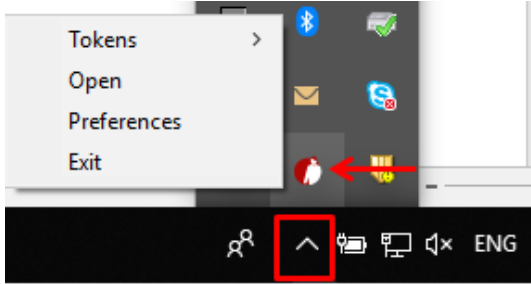

1.	- Upon authentication is required, Nexus Personal application will prompt PIN request window as above. - Enter your smart card PIN and click **Verify my identity.** - If successful, you will able to access the system/application and perform your transaction as usual. Note: **Nexus Personal PIN policy** for smart card certificates is restricted to **8 characters only** (may consists of alphanumeric and special characters). - Your smart card will be blocked if you type three invalid PINs consecutively

4.5   About Nexus Version

1.	Launch the Nexus Personal application
2.	Click **Help** -> Click About **Nexus Personal**.

3.	▪ Nexus Personal application version shall be displayed as per red colour highlighted box. Note: ▪ Click **Close** to close the window.

4.6 Exit Nexus Personal

|	
1.	▪ Click on show hidden icons arrow located on the taskbar as per red highlight box to see the Nexus Personal icon -> Right click Nexus Personal. ▪ Click **Exit**. Note: ▪ The Nexus Personal icon shall not appear anymore at your taskbar. Kindly take note that this does not uninstall the Nexus Personal application from your computer. Refer to **Section 5.1** to Uninstall Nexus Personal.

5 Uninstall Guide

5.1 Uninstall Nexus Personal Application

This section will guide you on how to uninstall the Nexus Personal version 4.27.7.
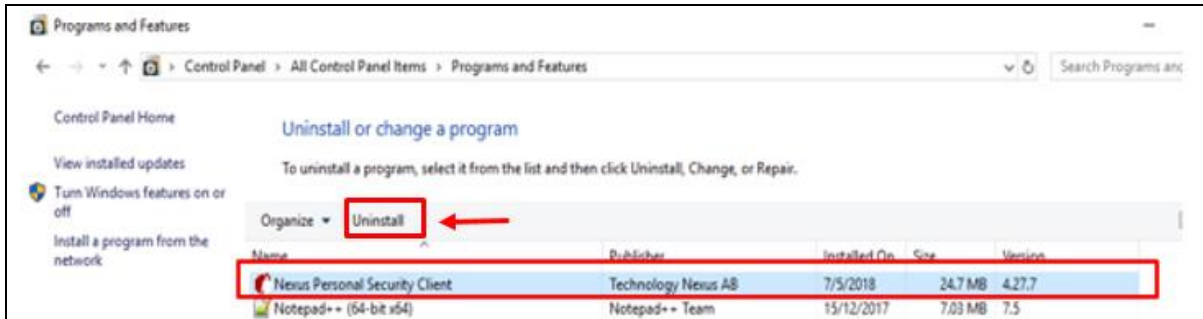
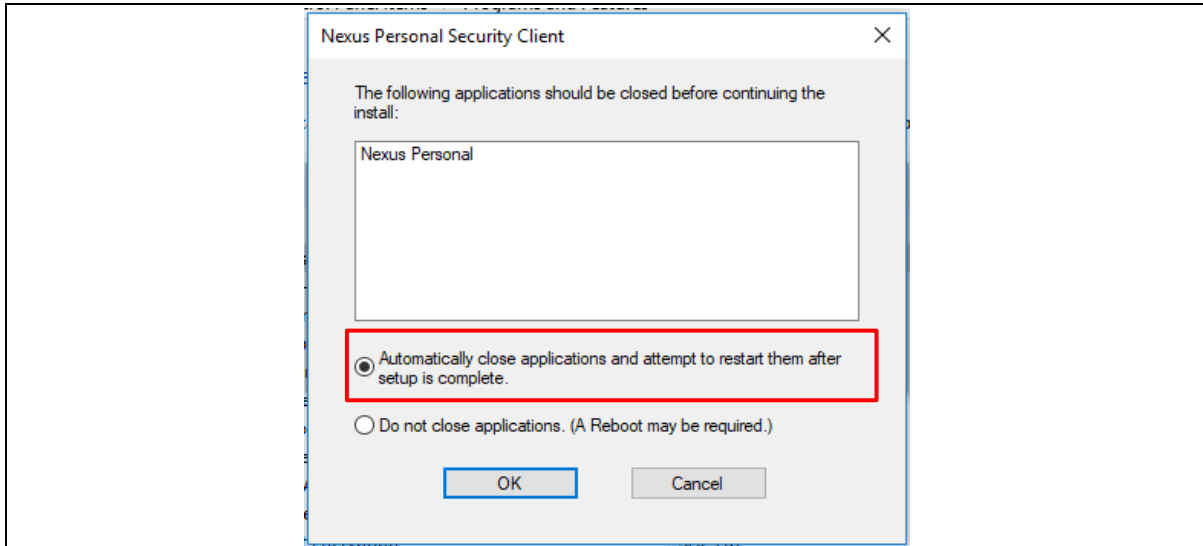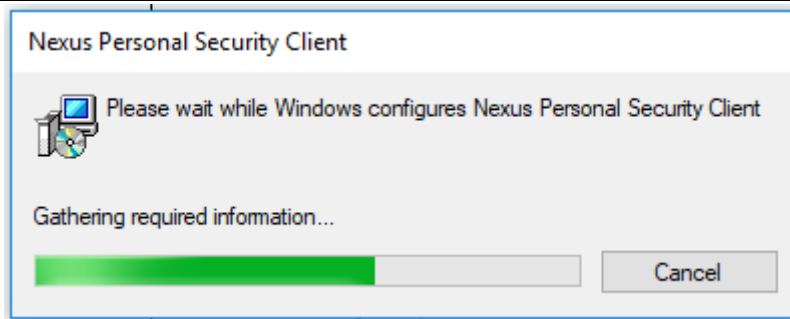| 2.	▪ Click on **Nexus Personal Security Client**-> Click **Uninstall**.
3.	▪ Click **Yes** to proceed. Note: ▪ Click **No** to cancel.
4.	▪ The uninstallation process will start. Note: ▪ Click **Cancel** to cancel the uninstallation process.
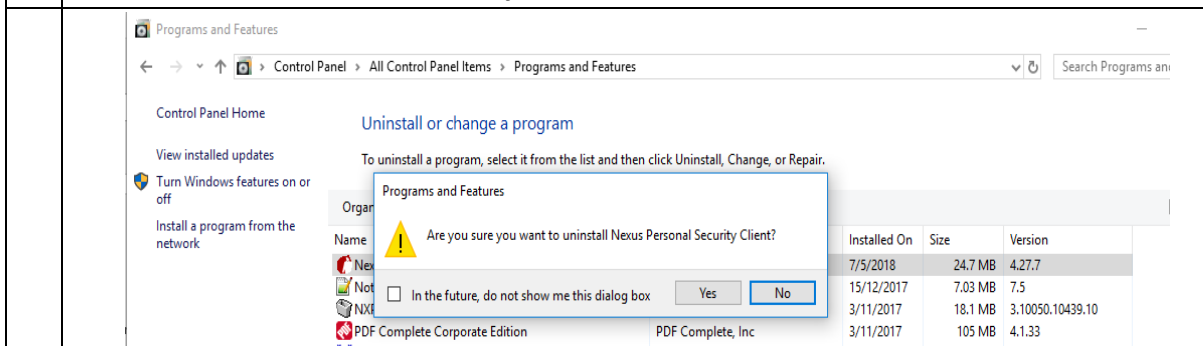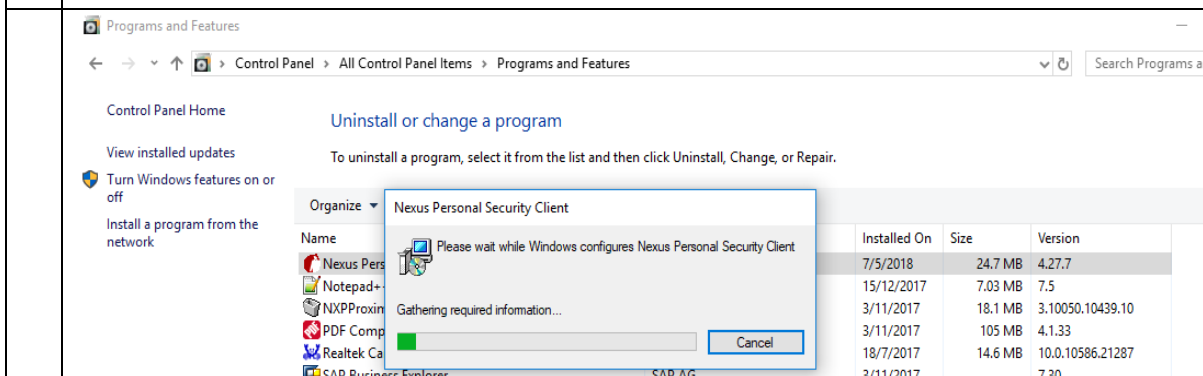
| 5. | ▪ If the screen above is prompted, leave selection to auto-default -> Click **OK**. |

| 6. | ▪ Wait for the Nexus Personal Security Client uninstallation process to complete.
▪ If your computer prompt User Access Control -> Click **Yes** to continue with uninstallation.
▪ Nexus Personal Security Client dialog box will close once Uninstallation process completes.
▪ Press F5 at Program and Features, double check that the Nexus Personal Security Client has been removed and successfully uninstalled. |

5.2 Uninstall Smart Card Reader

This section will guide you on how to uninstall Rockey200 Smart Card Reader.
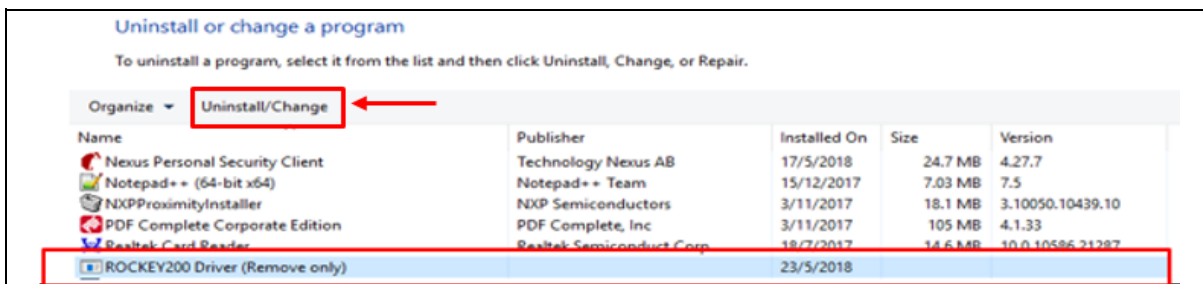
| 1. | ▪ Click on **ROCKEY200 Driver (Remove only)** -> Click **Uninstall**.
Note:
▪ Click **Yes** to continue uninstall if your system prompt user access account control. |

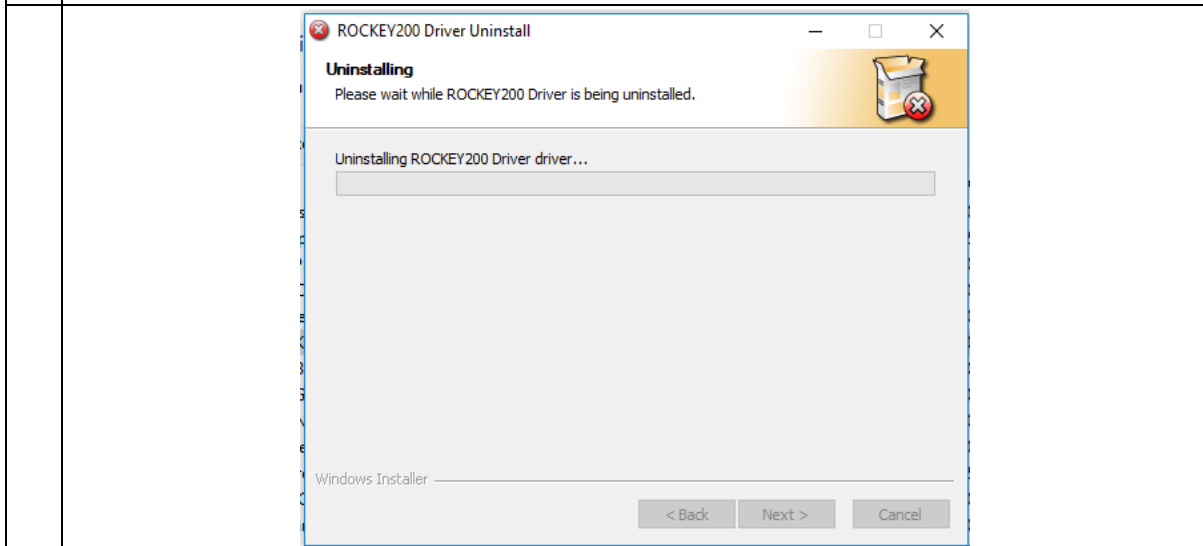|	
2.	▪ Click **Uninstall**. Note: ▪ Click **Cancel** to cancel uninstallation.
3.	▪ Wait for a few seconds until next screen is shown.
4.	▪ Select **Reboot now** -> Click **Finish**.
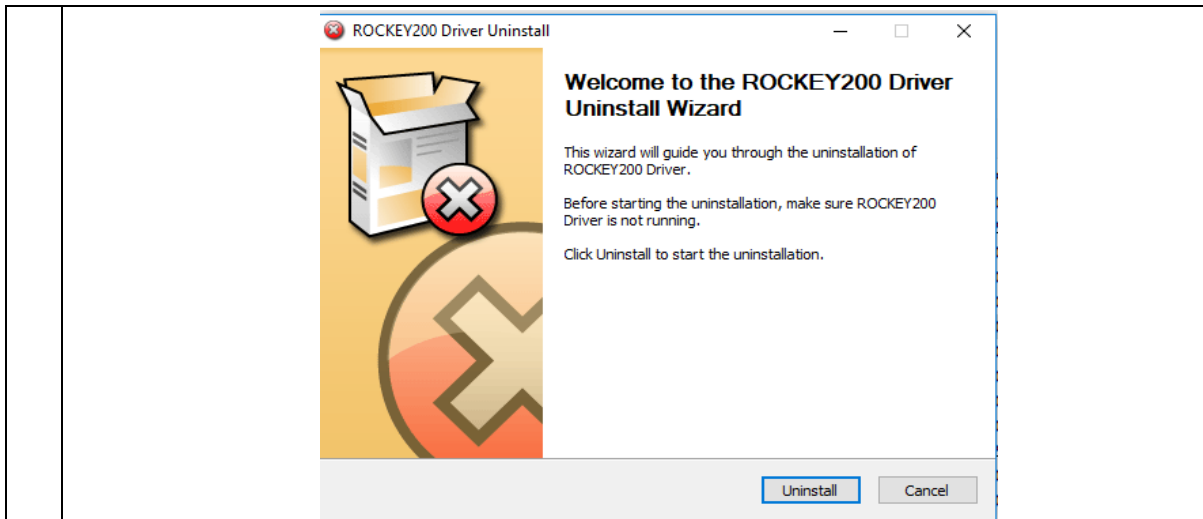
6   Troubleshooting

6.1   Troubleshooting Nexus Personal Application
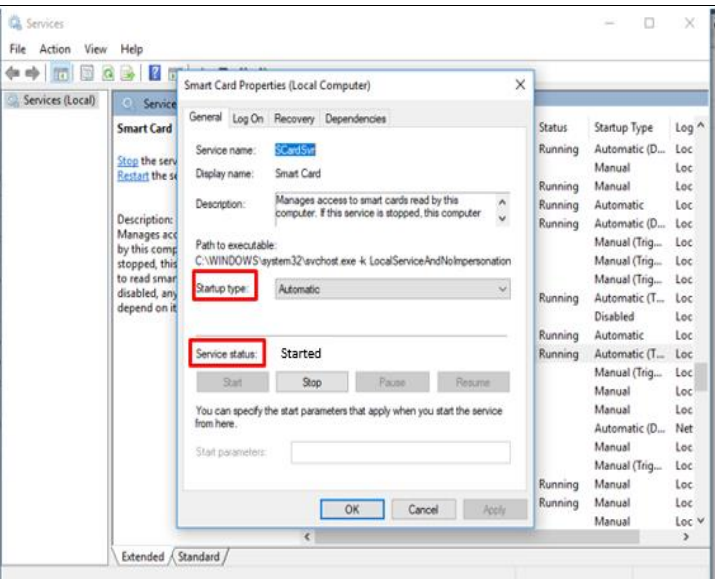
This section will guide you on troubleshooting the Nexus Personal application.

No.	Error message/cause	Solution

1.	Nexus Personal does not detect your Smart Card. "Electronic ID" does not show in Nexus Personal Application.	Refer the following steps:
		1. Ensure your Smart Card reader is connected to your PC and installed with the correct driver.
		2. Restart Nexus Personal
		   -Go to icon Nexus Personal at Taskbar.
		   -Right click at Nexus Personal and Exit.
		3. Start Nexus Personal
		   -Go to start -> All Program > Personal > Double click at Personal or Search for Nexus Personal and double click the Nexus Personal.
		   -Check that "Electronic ID" should be shown inside the Nexus Personal.
		4. Clear Cache
		   -On the Nexus Personal-> Click View menu -> Click Preferences -> Card Readers tab.
		   -Click "Empty Cache" -> Click OK.

2.	Nexus Personal does not detect your certificate. "Electronic ID" displayed but certificate name is empty.	Ensure your Smart Card reader is connected to your PC and installed with the correct driver.

6.2   Troubleshooting Smart Card Reader

This section will guide you on troubleshooting the Smart Card Reader.

If you have no access permission or non-technical experience to perform the steps below, kindly seek assistance from your company's IT Personnel, otherwise call our Customer Service 03-8800 8008 to report the issue.

No.	Error message/cause	Solution
1.	If the solution provided in Section 6.1 does not solve your issue, check the Smart Card service is configured correctly.	 1.Go to Start -> Control Panel -> Administrative Tools -> Services 2.Select Smart Card (Double click -> Change the Startup Type to AUTOMATIC and Service status to STARTED, then click OK).

7   Glossary of Terms

No.	Acronym	Description
1.	Certificate	The digital ID of a user issued by a Certification Authority.
2.	Digital Certificate	The digital equivalent of a paper certificate (i.e. passport, driver's license or identity card). The file contains the individual's public key and a signature made by a Certification Authority. It serves to prove the individual's identity or right to access information or services on the Internet.
3.	Personal Identification Number (PIN)	A secret code used for identification purposes.
4.	Pos Digicert's Smart Card	The Smart Card stores a digital certificate, and a pair of keys (a private key and a public key). The digital certificate is issued by the Pos Digicert Sdn. Bhd. Certification Authority (CA).
5.	Reader and Smart Card	A pair that consists of a Smart Card and its reader. Since every token must have a reader, this pair is treated as one object.
6.	Smart Card	A card, the size of a credit card, that has memory and a processor.
7.	Smart Card reader	Hardware which is used to read the Smart Card. It can be external to a computer (using a cable connection) or internal. You insert your Smart Card into this component so that information can be extracted from it.