

**PC/SC Light Edition
Device Plug-in
for
TruGate**

User's Guide

Rev. 1.0.3



D.O.I-Net Co., Ltd.

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Revision History

Rev.	Date	Details
1.0.0	2013/05/08	Issued.
1.0.1	2014/12/04	Modified descriptions of Supported OSs.
1.0.2	2015/07/21	Added Windows 10 to Supported OSs.
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1. Introduction

This User's Guide explains the operation of TruGate Plug-in for PC/SC Light Edition (PC/SC LE Device Plug-in) produced by D.O.I-Net Co., Ltd. (D.O.I-Net).

2. Operating Conditions

a. Supported OSs

Windows 10 32bit/64bit

Windows 11

Windows Server 2016

Windows Server 2019

b. Applicable Authentication Framework

TruGate ver.5.0.10 or above

c. Supported PC/SC Smartcard Readers

SONY PaSoRi RC-S380

SCM Microsystems SCL010

SCM Microsystems SCL3711

Other smartcard readers complying with PC/SC specification

d. Supported Smartcards

FeliCa

Driver's License (Japanese)

Mifare

ISO1443 type A&B

NFC

Note: Smartcard you can use depends on your smartcard reader.

e. Template Storage

Database

f. Device Drivers

Depends on smartcard reader

3. Product Summary

a. Functions

Device plug-in is the program module that will be added to TruGate produced by D.O.I-Net for using various authentication devices. PC/SC LE Device Plug-in is simplified device plug-in to make a smartcard into an authentication device by PC/SC compatible smartcard reader.

b. Package

2 types of installer packages are prepared; one for PCs with a single license edition, and another for PCs with a volume license edition.

i. Single License Edition

This is a package mainly for personal users. It comes with the exe installer package.

ii. Volume License Edition

This is a package mainly for corporate users. It comes with the msi installer package. You cannot uninstall it from "Apps and a Features" of the OS installed on the PC. Uninstall it from "Active Directory server" or "re-launched msi installer". Either 32bit version or 64bit version is available.

4. Warnings

1. Never install a single license edition and a volume license edition together on the same PC.

5. Installation and Uninstallation Procedure

Note: Please install the smartcard reader device driver for PC/SC as needed before installing the device plug-in. In installing and uninstalling, please log on with the administrator privilege of the local computer.

a. PC/SC compatible Smartcard Reader Device Driver

Follow the instructions of your PC/SC compatible smartcard reader that you want to use it as certification device.

b. PC/SC LE Device Plug-in

i. Installation

A dialog box shown below appears when you execute TruGate Plugin for PCSC Light Edition.exe. Click the "Next" button.

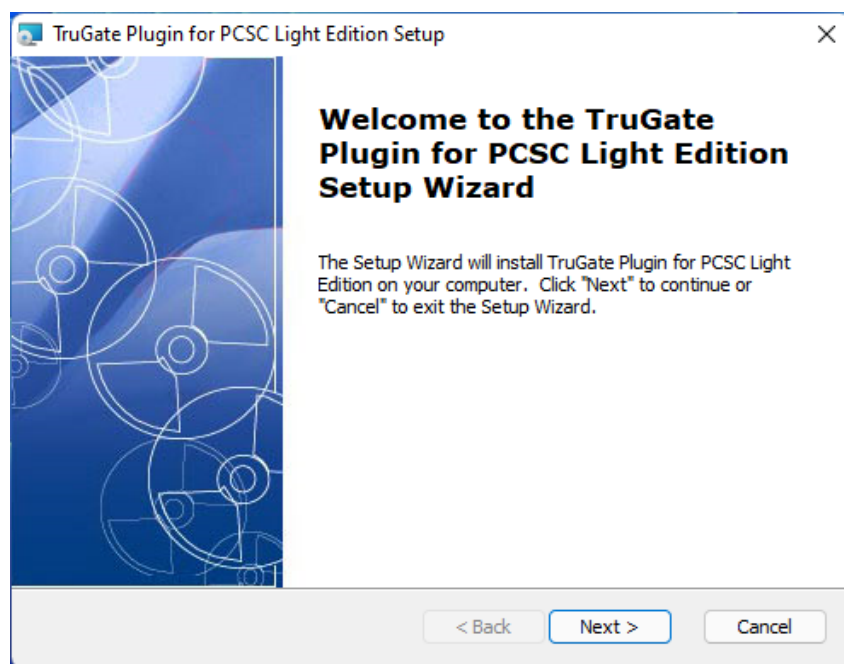


Figure 1 Setup Wizard Welcome Dialog Box

Read "SOFTWARE LICENSE AGREEMENT" shown in the dialog box carefully, and click the "I accept the terms in the license agreement" radio button if you agree, then click the "Next" button.

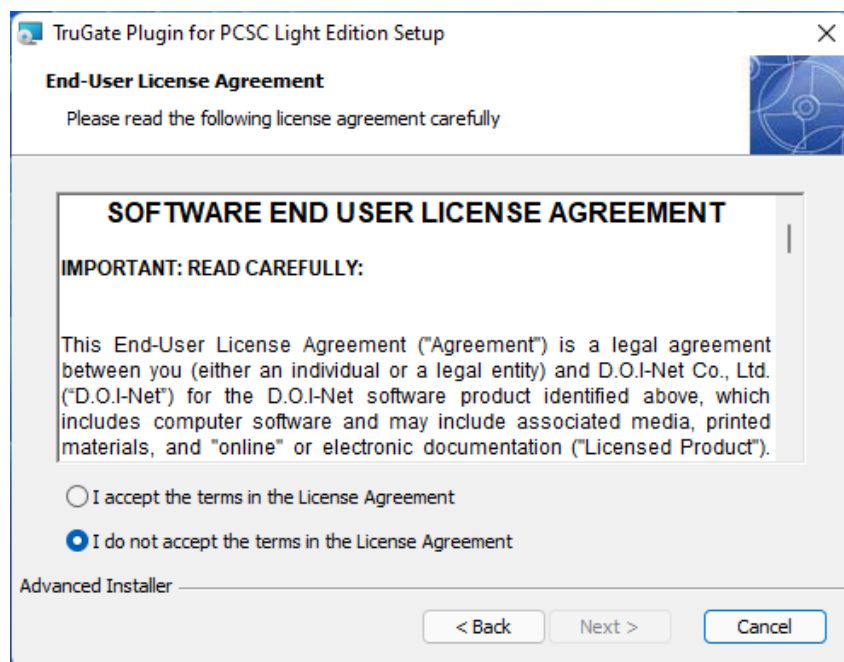


Figure 2 SOFTWARE LICENSE AGREEMENT

When Select Installation Folder dialog box is displayed, modify the destination if you need. Generally, however, this product should be used without modification, then

click the "Next" button.

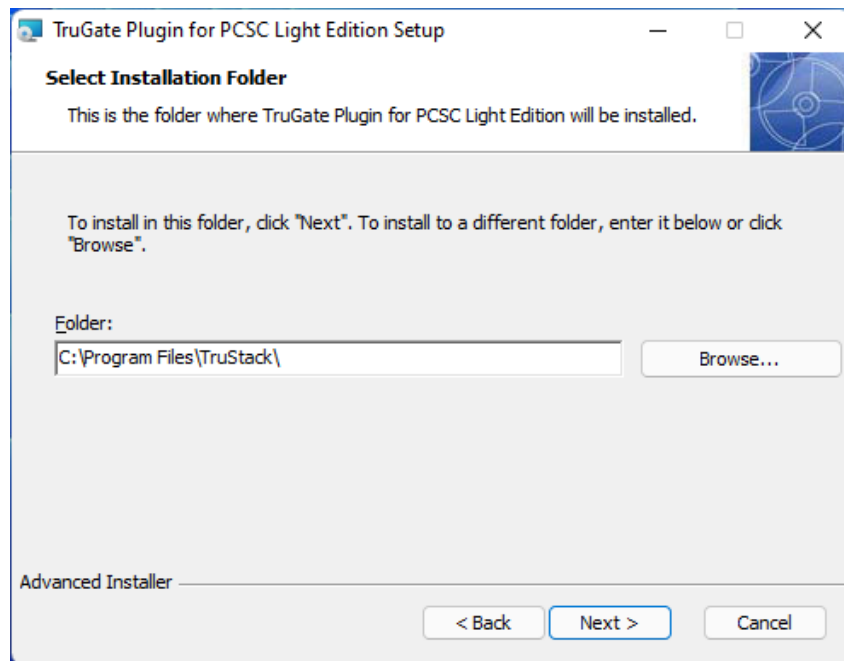


Figure 3 Select Installation Folder Dialog Box

Click the "Install" button unless you need to change. If you need to make some changes, click the "Back" button and return to the dialog box where you want to make changes.

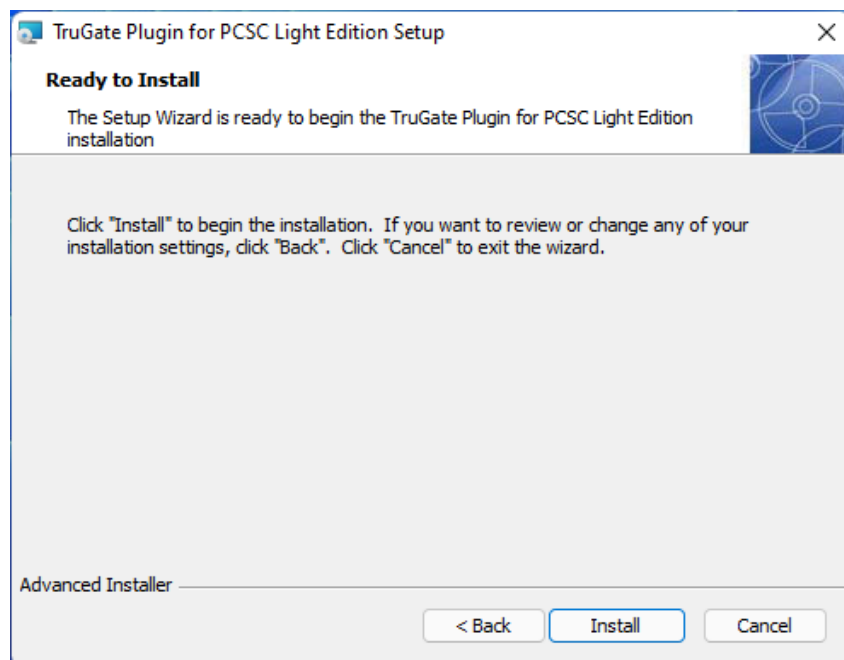


Figure 4 Ready to Install Dialog Box

During installation, the following indicator dialog box will be displayed.

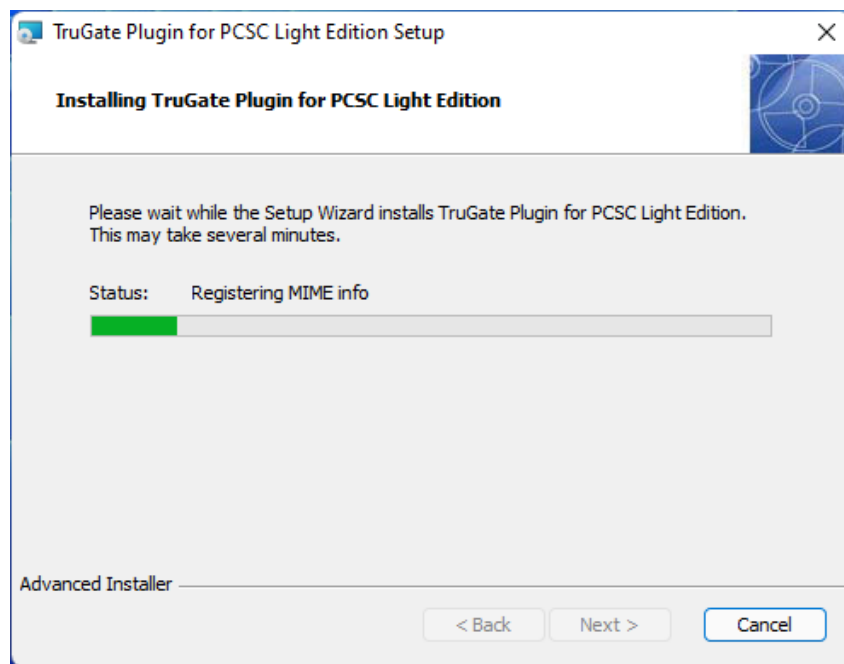


Figure 5 Installation Indicator Dialog Box

When installation is finished, the following installation completion dialog will be displayed. Click the "Finish" button.

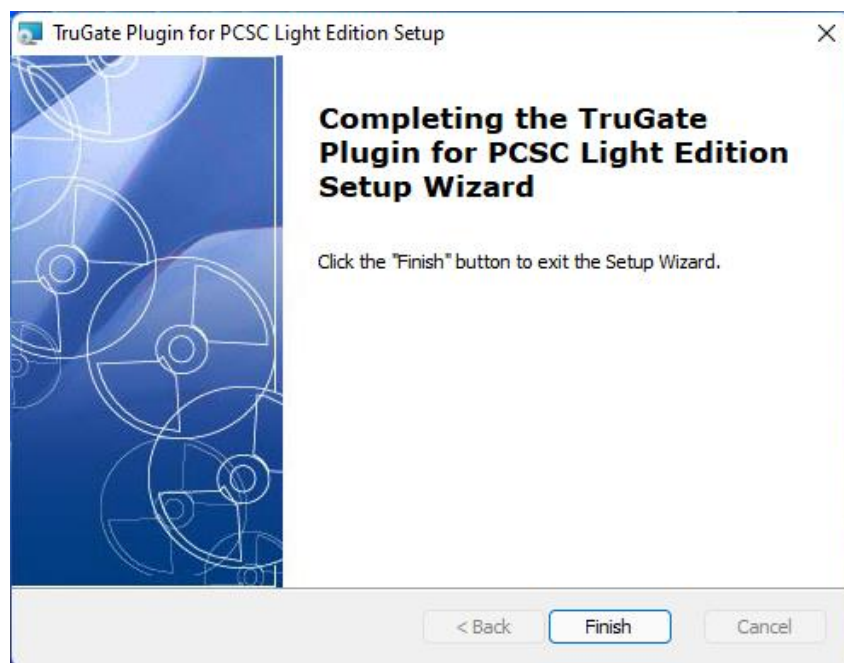


Figure 6 Installation Complete Dialog Box

ii. Uninstallation

Select "TruGate Plugin for PCSC Light Edition" from "Apps and Features" of the OS. The following is an operation example with Windows 11.

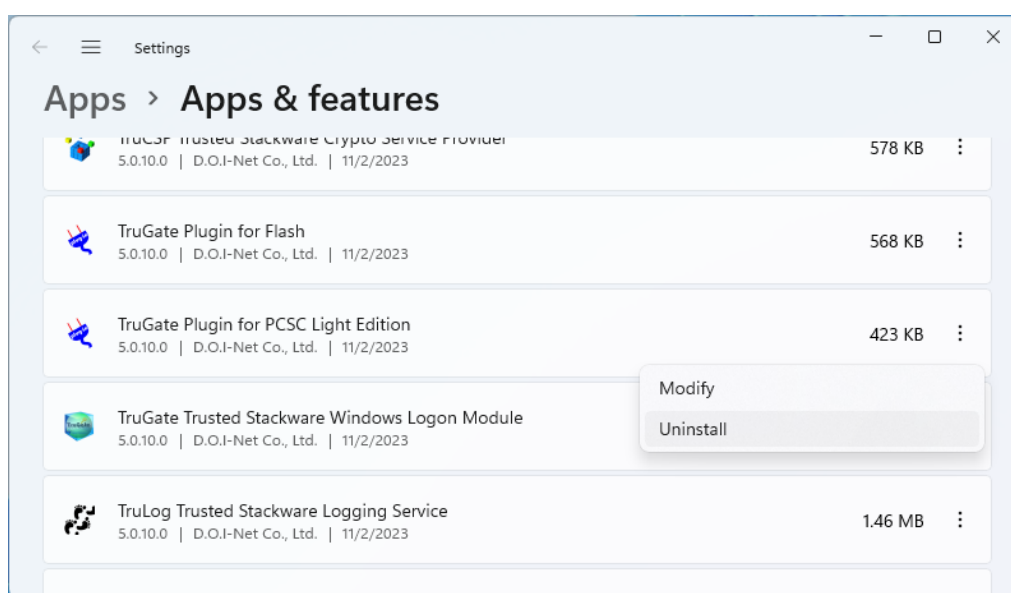


Figure 7 Apps and Features Dialog Box

Then click “Uninstall”, and uninstall the PC/SC LE Device Plug-in following the message.

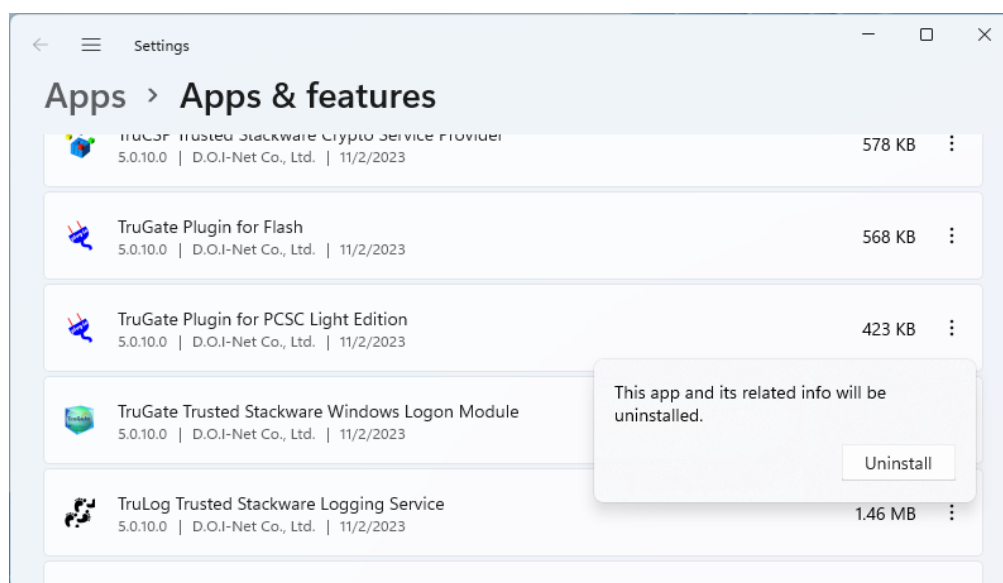


Figure 8 Confirmation of Program Uninstallation Dialog Box

During uninstallation, the following indicator dialog box will be displayed.

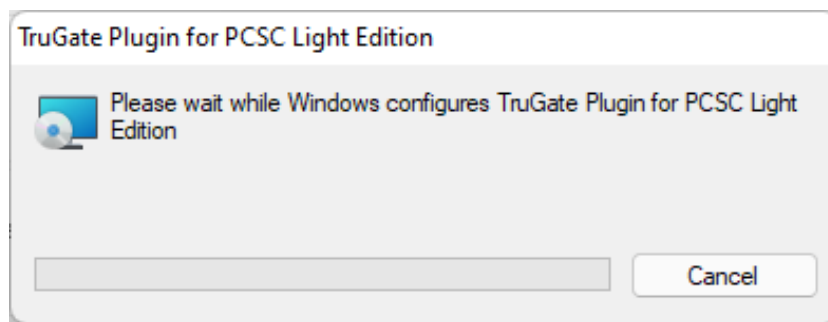


Figure 9 Uninstall Indicator Dialog Box

When uninstallation is completed, the indicator dialog box will disappear.

6. Operation Method

a. Device Configuration

To configure PC/SC LE Device Plug-in, perform the device configuration after launching any of TruGate applications.

The figure below shows the launched dialog box of TruGate Configuration utility as an example.

Click the "Device Detect Config..." button in the TruGate Configuration utility dialog box, and configure the device.

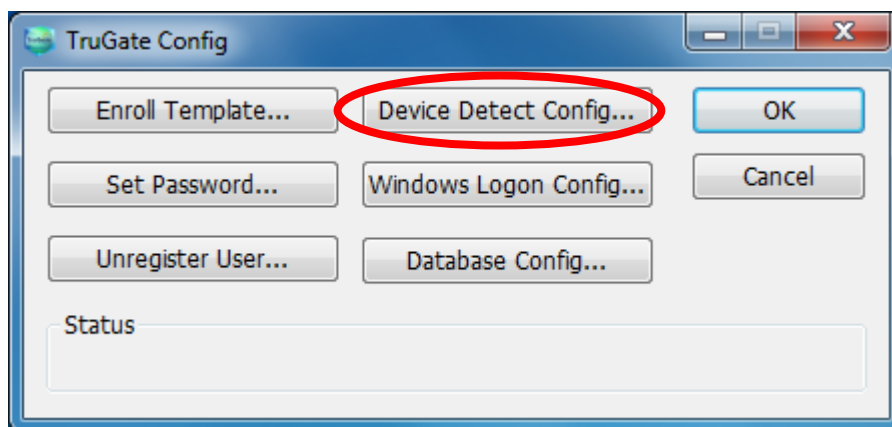


Figure 10 TruGate Configuration Utility Dialog Box - Device Detect Config.

By clicking the "Device Detect Config..." button, Device Detect Configuration dialog box as follows will be displayed, then, select "PC/SC LE" from the "Select Device" list view, and click the "Select Device Config..." button.

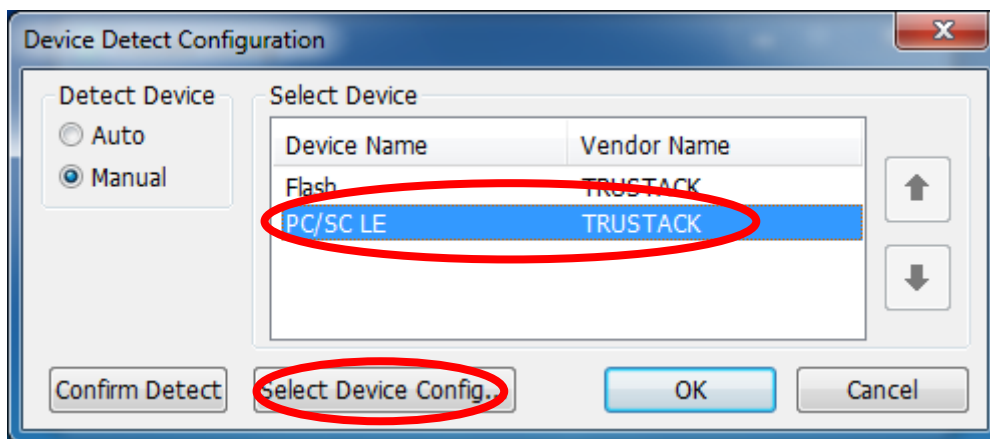


Figure 11 Device Detect Configuration Dialog Box

When the “Select Device Config...” button is clicked, Device Configuration dialog box shown below will be displayed.

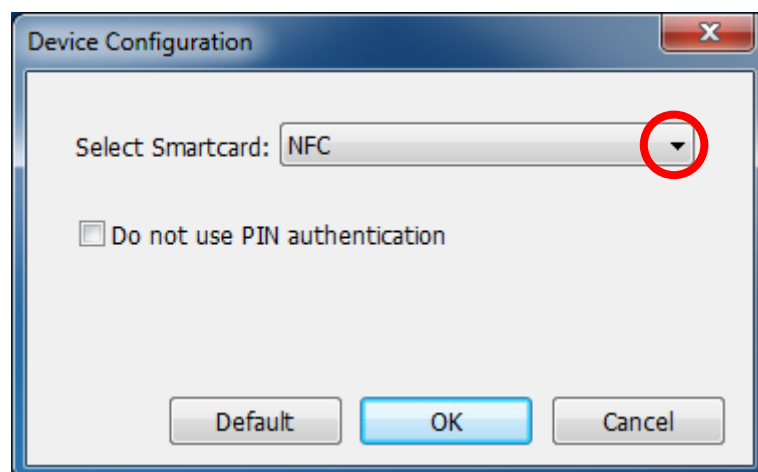


Figure 12 Device Configuration Dialog Box

When Device Configuration dialog box appears, select the classification of the smartcard from the "Select Smartcard" drop-down list that you want to use as a certification device. As for the NFC, non-contact smartcards, CONTACT are contact type smartcards.

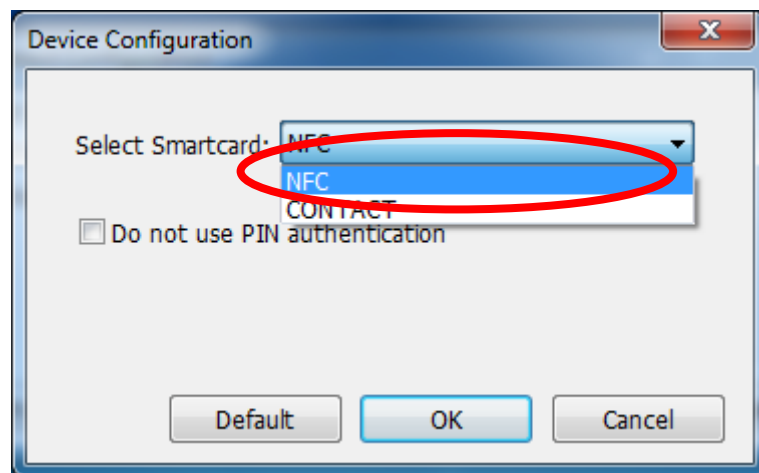


Figure 13 Select Smartcard

Usually leave the "Do not use PIN authentication" check box as unchecked. It is recommended that you check the check box only if you prefer convenience rather than security and do not mind even the simple certification.

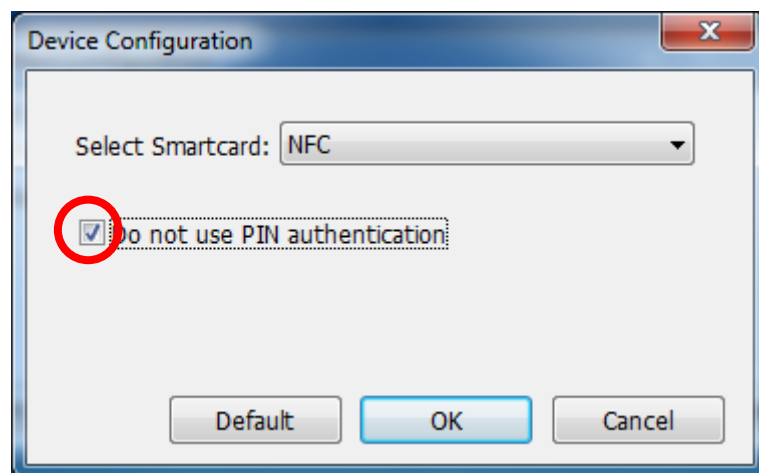


Figure 14 Without PIN Authentication

Click the "OK" button to finish. The configuration data will be kept in Windows registry. Once after the configuration data is kept in Windows registry, when the device plug-in is started afterward, the configuration data in Windows registry will be applied.

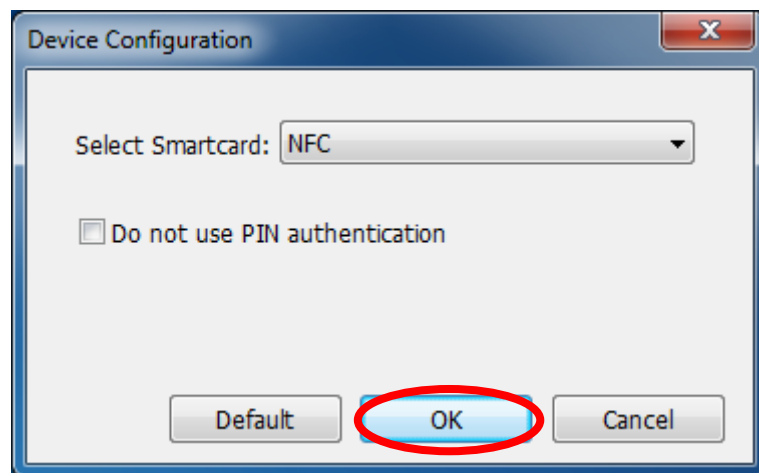


Figure 15 Complete Device Configuration

After the device configuration is completed, click the "Confirm Detect" button on a Device Detect Configuration dialog box.

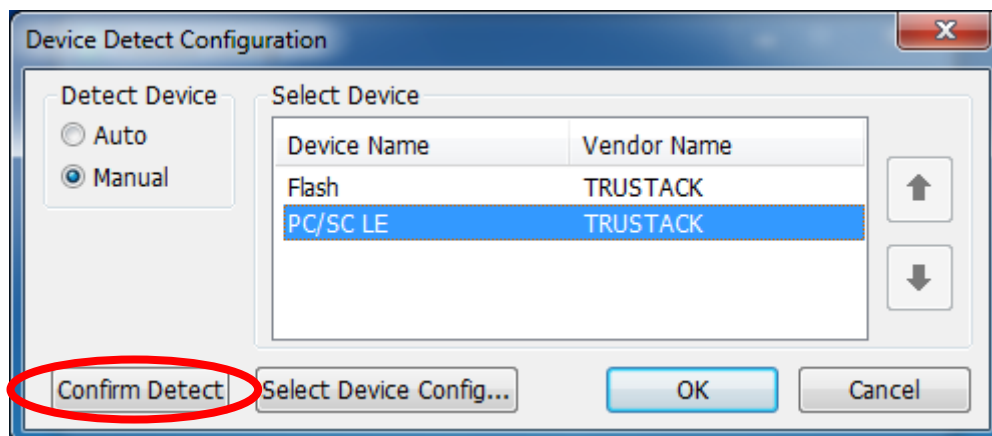


Figure 16 Device Detect Confirmation

If the device configuration is accomplished normally, the detect confirmation message as follows will be displayed.

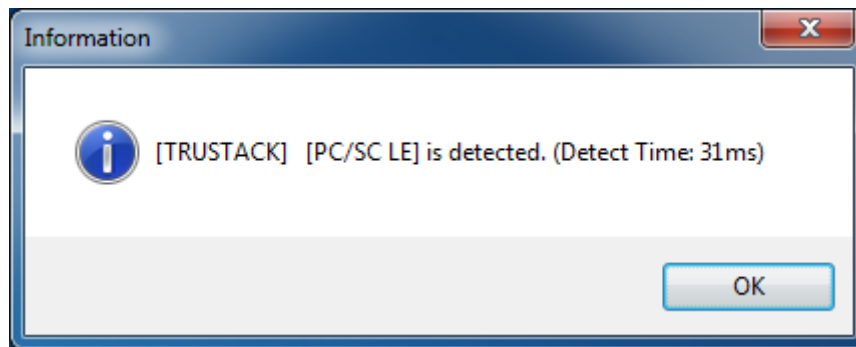


Figure 17 Device Detect Confirmation Message

If the device detection is carried out normally, please click the "OK" button to finish the device configuration.

b. Template Enrollment

To enroll the template of PC/SC LE Device Plug-in, launch the "TruGate Configuration" utility.

After "TruGate Configuration" utility launch dialog box is displayed, click the "Enroll Template" button.

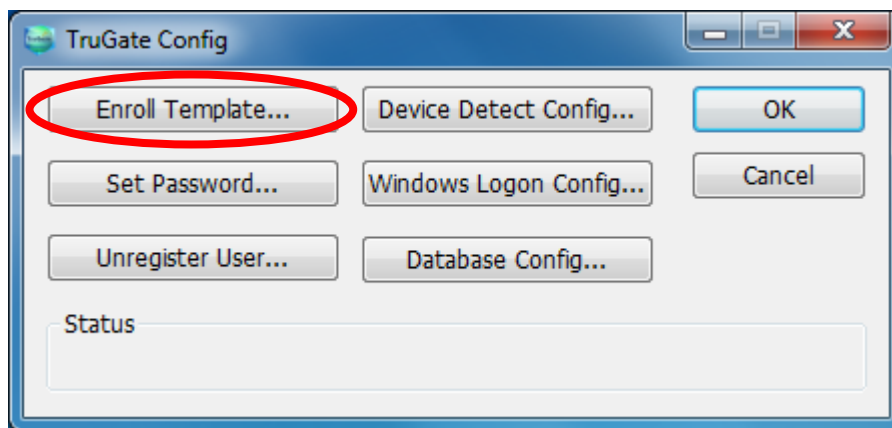


Figure 18 TruGate Configuration Utility Dialog Box - Enroll Template

When the Template Enrollment Utility dialog box as follows appears, click the "Select Device ..." button at first.

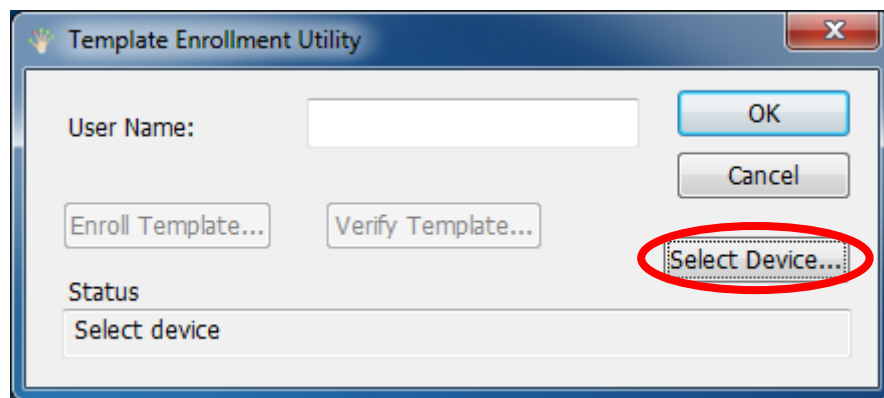


Figure 19 Template Enrollment Utility Dialog Box

After the Select Authentication Device dialog box is shown subsequently, select "PC/SC LE" from the "Device Name" drop-down list, and then click the "OK" button.

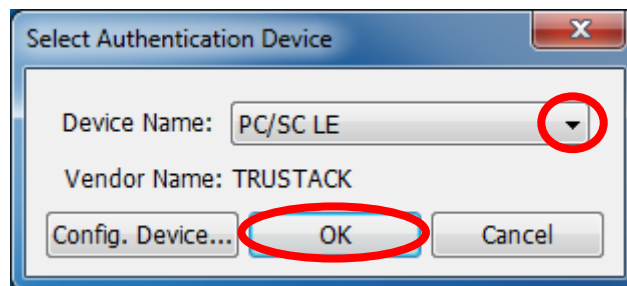


Figure 20 Select Authentication Device Dialog Box

If the Select Device is finished, according to the displayed message, enter the user name in the "User Name" edit box who you want to register a template.

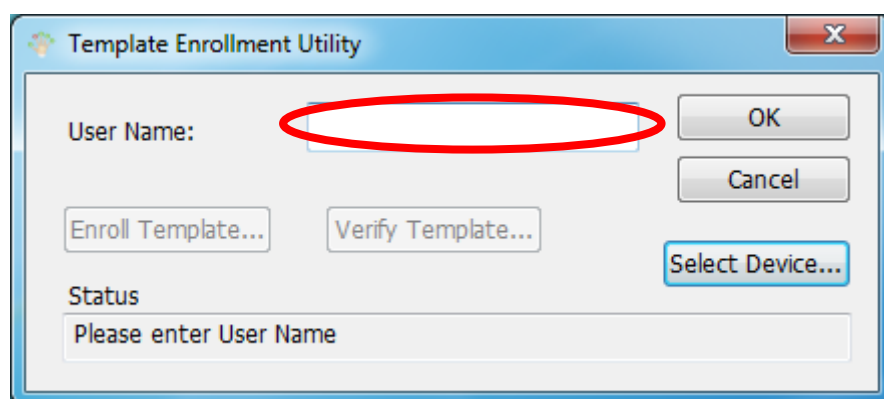


Figure 21 Template Enrollment Utility - type User Name

Then click the "Enroll Template..." button.

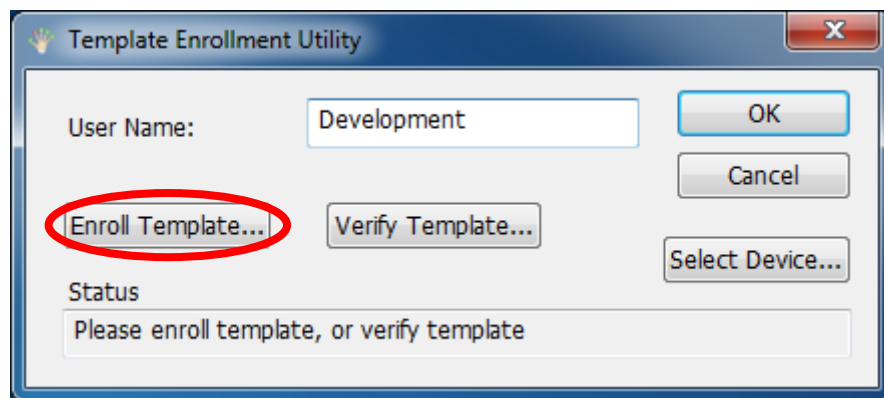


Figure 22 Template Enrollment Utility - enroll template

When the Registration dialog box appears, place a smartcard on a smartcard reader that you want to relate to the user, and then click the "Register" button.

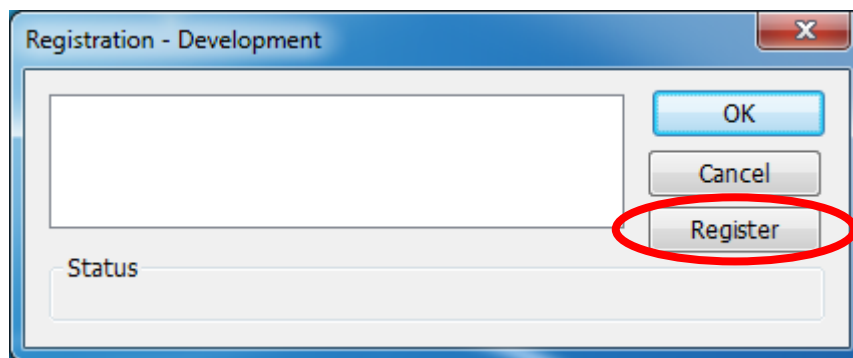


Figure 23 Registration Dialog Box - Registration

If "PIN Registration" dialog box is displayed, enter any code character string in the "PIN" edit box. The maximum length of the character string is eight characters. After entering of the code character string is completed, click the "OK" button.

If "Do not use PIN authentication" check box in Device Configuration was checked, the following "PIN Registration" and "PIN Confirmation" dialog boxes will not appear.

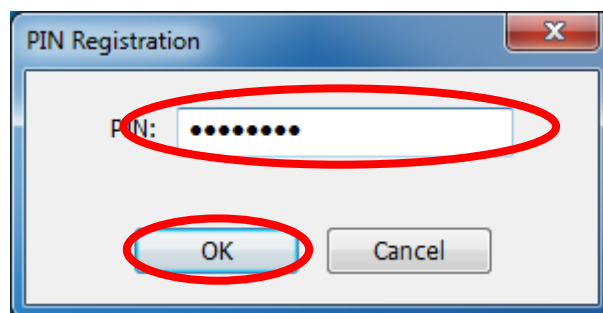


Figure 24 PIN Registration

If "PIN Confirmation" dialog box is displayed sequentially, enter the same code character string in the "PIN" edit box, then click the "OK" button.

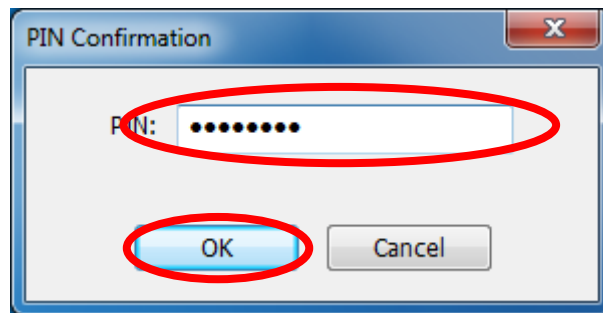


Figure 25 PIN Confirmation

When a template is registered normally, "ID" will be added to the Registration dialog box shown below, and a message "New registration data" will be displayed.

If you have any other smartcards you want to additionally register, replace the smartcard here, and click the "Register" button again.

Click the "OK" button if it's registered normally.

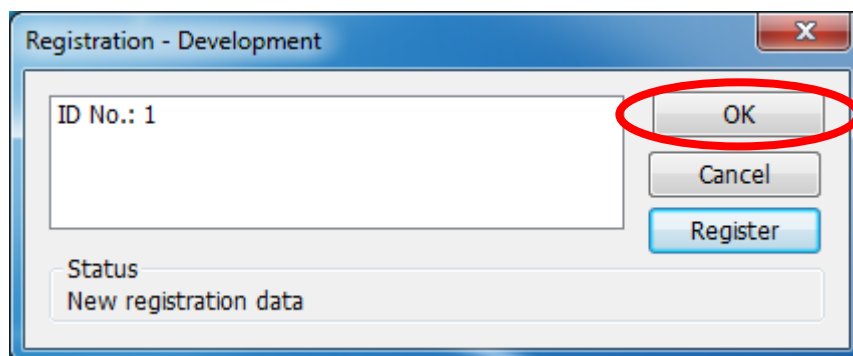


Figure 26 Registration Dialog Box - registration succeeded

In the case of failed at the registration of the template, e.g., when double registration was carried out, a message like "Data is already registered" shown below will be displayed on Registration dialog box.

If you want to delete the registered template, you can delete it by double-clicking on an "ID" number.

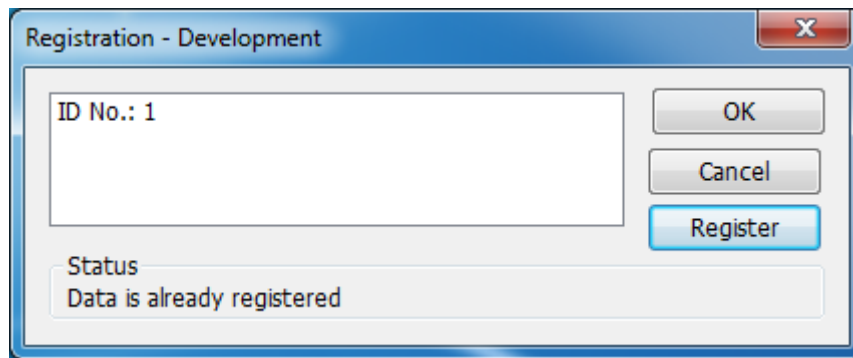


Figure 27 Registration Dialog Box - registration failed

Like the figure below, the message "Succeeded to enroll template" will be displayed in the status information column when you succeed in template registration.

If you want to register the template of the different user sequentially, go from above-mentioned procedure of entering the user name repeatedly.

If registration is completed successfully, click the "OK" button to finish, or click the "Verify Template" button to confirm a template.

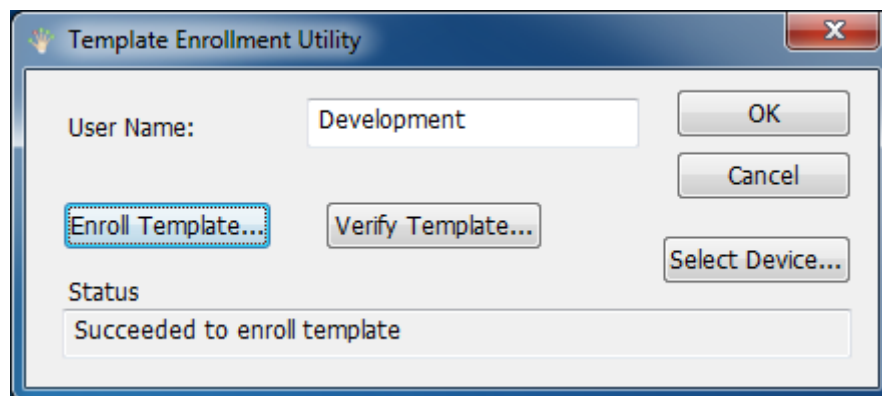


Figure 28 Template Enrollment Utility - registration normal

c. Template Verification

To verify the template of PC/SC LE Device Plug-in, launch "TruGate Config" utility.

After "TruGate Config" utility launch dialog box is displayed, click the "Enroll Template" button.

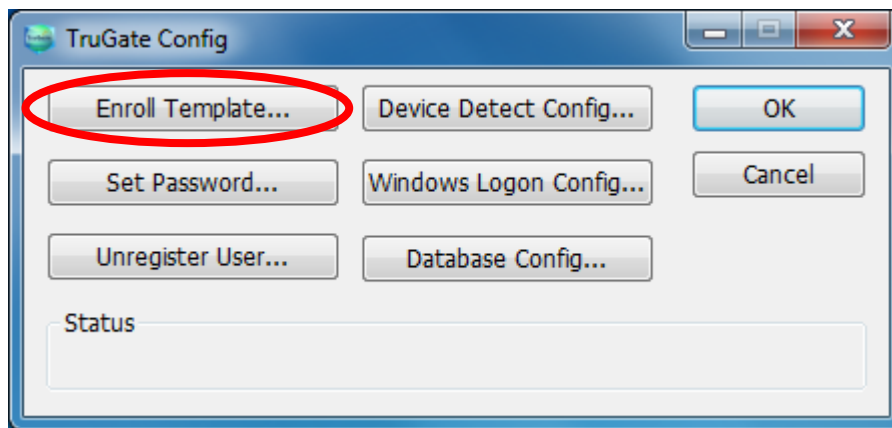


Figure 29 TruGate Configuration Utility Dialog Box - Verify Template

When the Template Enrollment Utility dialog box as follows appears, click the "Select Device..." button at first.

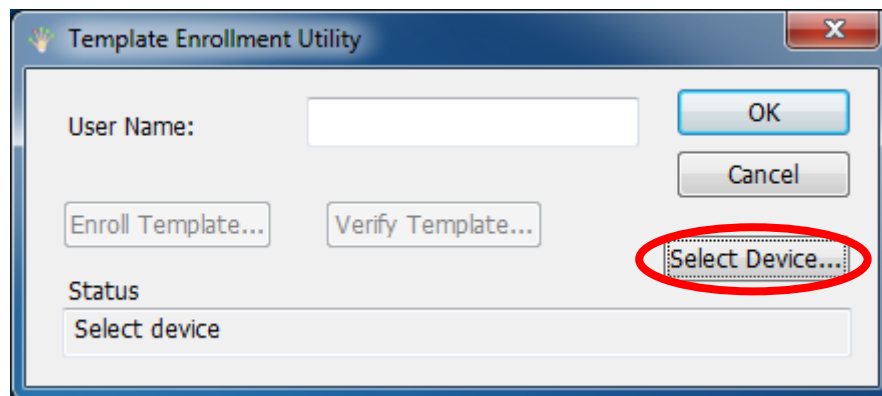


Figure 30 Template Enrollment Utility Dialog Box

After the Select Authentication Device dialog box is displayed sequentially, select "PC/SC LE" from the "Device Name" drop-down list, and then click the "OK" button.

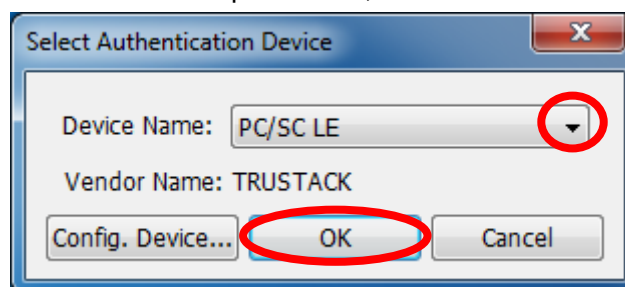


Figure 31 Select Authentication Device - device selected

After the Select Device is completed, according to the displayed message, enter the user name in the "User Name" edit box who you want to verify the template.

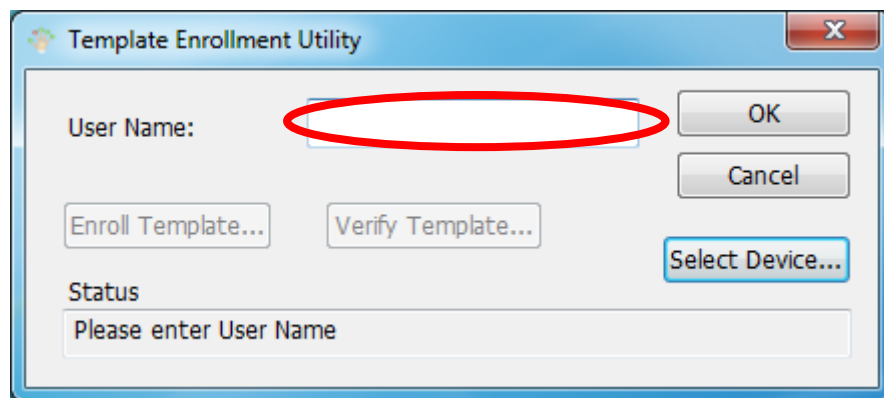


Figure 32 Template Enrollment Utility - input user name

Place the smartcard on a smartcard reader which is related to the verify user, then click the "Verify Template..." button.

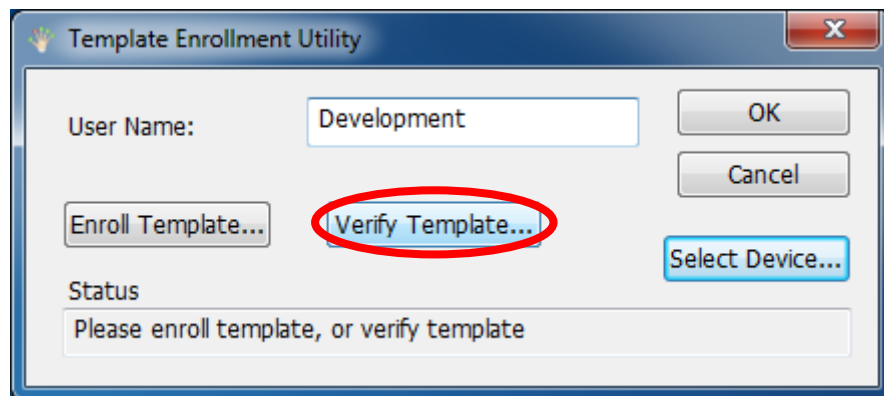


Figure 33 Template Enrollment Utility - verify template

If "PIN Authentication" dialog box is displayed, enter the code character string in the "PIN" edit box that has been set, then click the "OK" button. If "Do not use PIN authentication" check box in Device Configuration was checked, the following "PIN Authentication" dialog box will not appear.

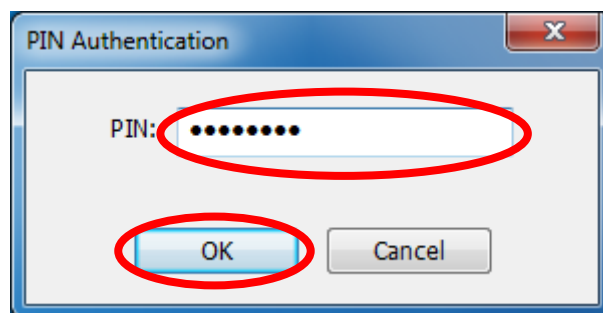


Figure 34 PIN Authentication

Like the figure below, the message "Succeeded to verify template" will be displayed in the status information column when you succeed in template verification.

If you want to verify the template of the different user sequentially, go from above-mentioned procedure of entering the user name repeatedly.

Click the "OK" button to complete if you can verify it normally.

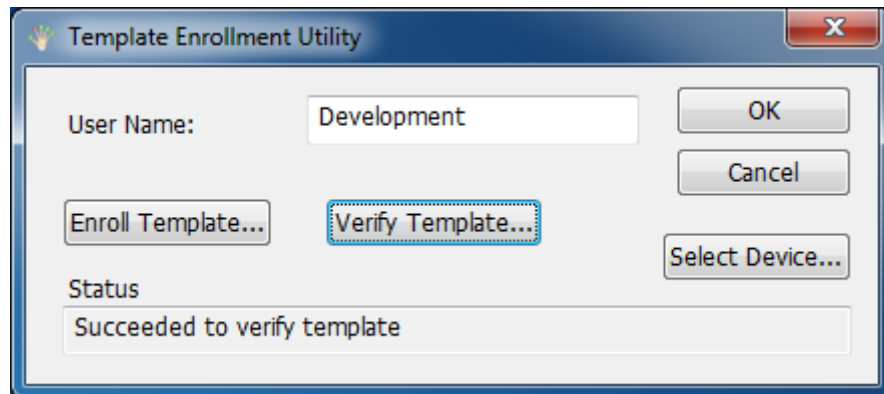


Figure 35 Template Enrollment Utility - succeeded verify

End of document

Questions to Trusted Stackware series product

D.O.I-Net Co., Ltd.

Zip Code: 190-0011

2-25-23 Takamatsu, Tachikawa, Tokyo JAPAN

E-Mail: info@doi-net.com

URL: <https://www.doi-net.com/>