Product Name	Confidentiality level
mTokenCryptoID	
Product version	
V1.1	

mToken CryptoIDUser Manual

Century Longmai Technology Co., Ltd.

Revision Record

Date	RevisionVersion	Sec No.	Change Description	Author
2015/02/02	V1.0		Initial Version	Longmai ITD

Product name	Confidentiality level
mTokenCryptoID	
Product version	
V1.1	

Contents

1. mTokenCryptoID Product Overview

1.0. Current Situation

Today's world is increasingly getting connected due to rapid development in information and internet technology industry, peoples' work, study and life-style is changing greatly and growing more efficiency; meanwhile, E-Commerce, E-Government, Digital Currency, E-Banking, financial and retailsectors are acceleratingutilization of digital information resources every day.

1.1. Challenge

On the other hand, network security issues are prominently increasing; whereas in traditional process of network security authentication, "username + password" authentication method is used frequently, this kind of strategy is easy butinsecure.

1.2. Century Longmai solution

Meanwhile PKI systems and network security technology based on portable hardware is a new and trending development in digital security to ensure data privacy, confidentiality and availability. Embedded with secure element and smart card chip technology, Century Longmai'smTokenCryptoID is a two-factor USB authenticator utilizing CCID drivers for highly robust authentication and verification deployments across multi-industry. The CCID drivers work to protect the USB connection and are therefore less susceptible to packet sniffing thus providing stronger authentication.

The mTokenCryptoIDproduct design seamlessly integrates with the exiting PKI applications for application developers to easily configuremTokenCryptoIDwith related services like Web, E-mail, VPN, Windows Smart card logon, etc. The end users of mTokenCryptoIDbenefit from driverless Plug & Play operations (without need to manually install any software), which allows for unproblematic yet secure verification of users in web services, E-mail protection, VPN login, Windows smartcard logon for both network and local based authentication.

2. mTokenCryptoIDPKI Certificate Utility

mTokenCryptoIDPKI Certificate Utility is an easy to operate GUI application used to conveniently manage mToken CCID device.
Please run *Setup.exe* to install.

2.1 Basic Functions

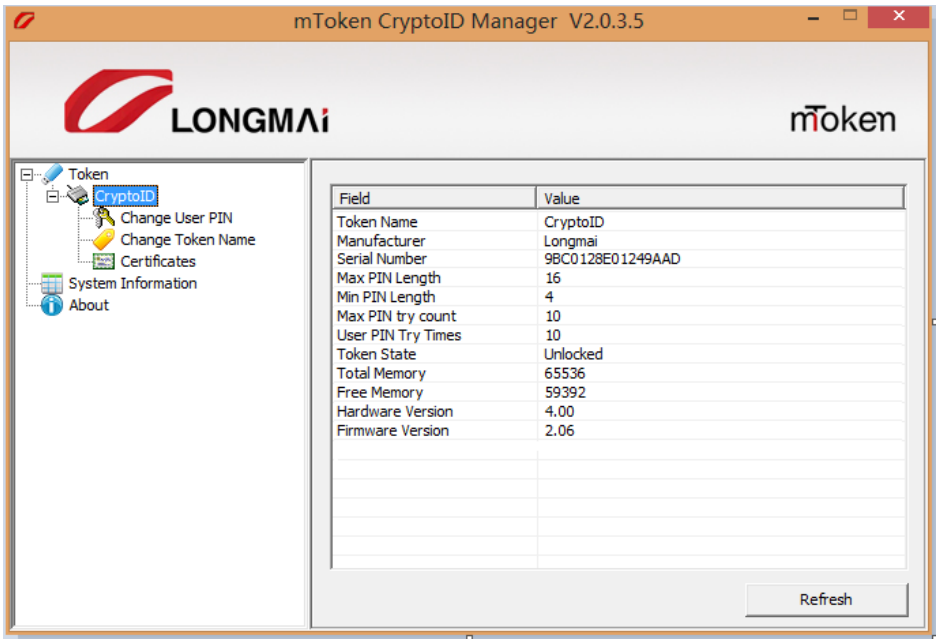
mTokenCryptoIDPKI Certificate Utility's functions include:

1. Import/delete/view certificates
2. Change device name and PIN
3. Advanced configuration

2.2 Basic Operations

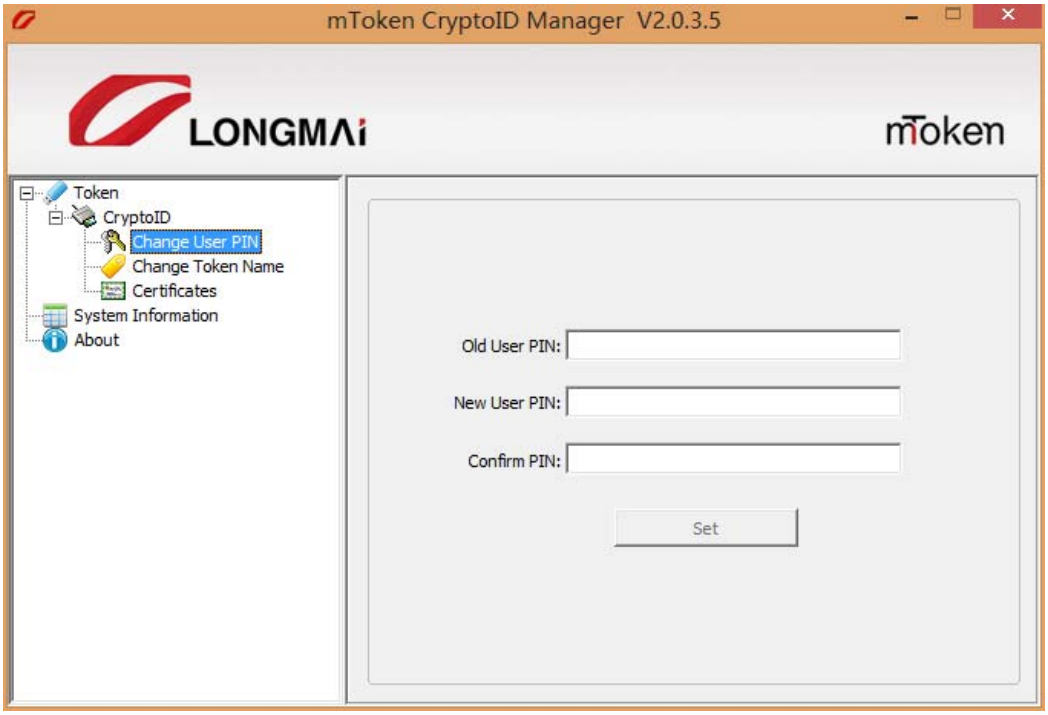
2.2.1 Device Detail

1. Start mTokenCryptoIDPKI Certificate Utility, all the connected mTokenCryptoIDdevices will be auto-detected and listed in the left Panel.
2. Then select a device name, detailedinformationabout connected token will be shown in the right Panel.

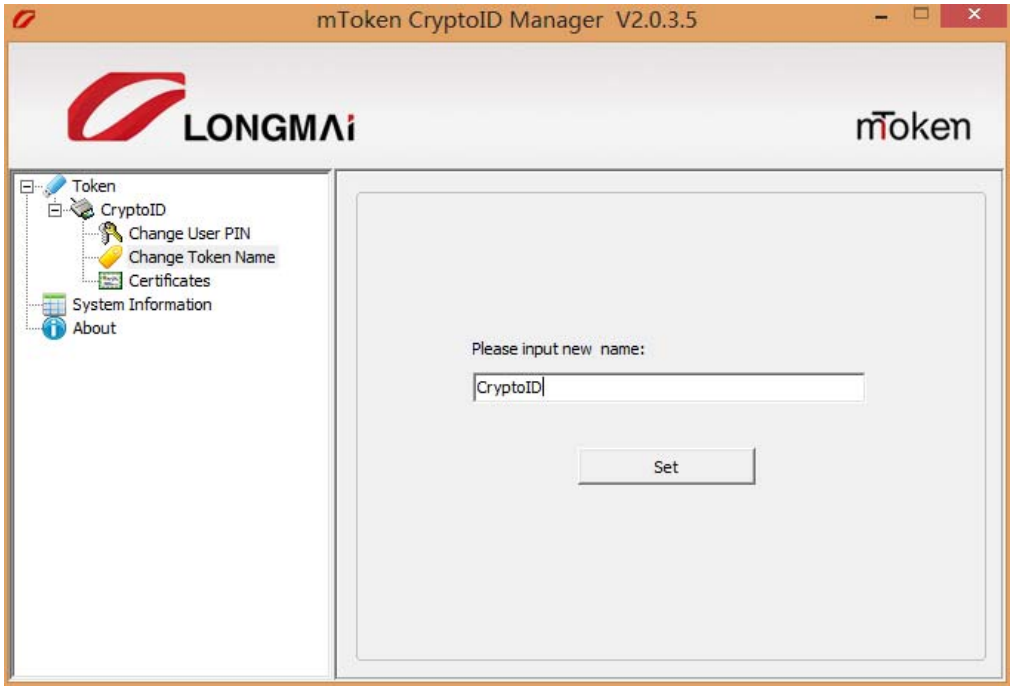


2.2.2 Change mTokenCryptoIDUser PIN and Name

- To change mTokenCryptoIDUser PIN, perform the following operations:
  1. Select***Change User PIN***in the left tree.
  2. Input the old User PIN.
  3. Input a new User PIN and a confirm PIN.
  4. Click ***Set*** button.



- To change the token's name, select ***Change Token Name***in the left tree and input a new name in the dialog box,click ***Set*** to save changes.



2.2.3 View Certificates

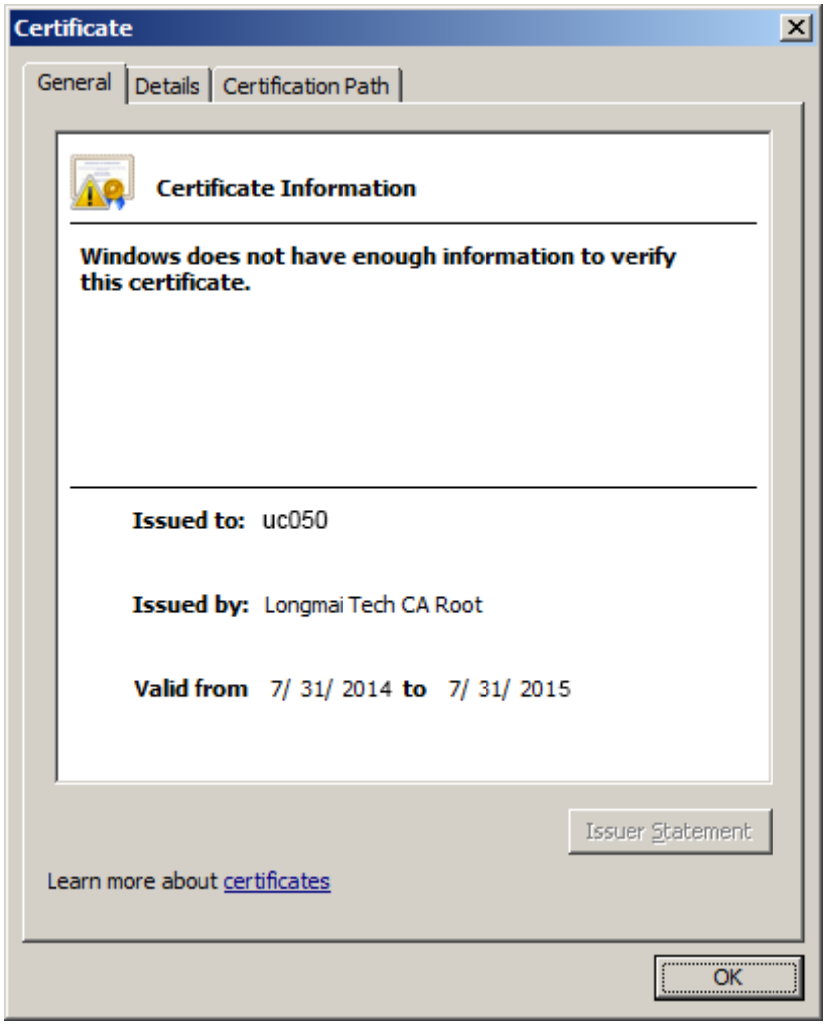
- To view certificates in the device, perform the following operations:
  1. Select ***Certificates*** in the left tree.
  2. Input the correct PIN in the dialog box that pops up. (The default value is 12345678)

Note: The token will be locked after ten time's wrong PIN inputs. In this case, user has to contact the developer to unlock it.
The remaining trialsare independent of reconnection and time, but willrestore to default value after successful PIN verification.

- User can check the "***User PIN Try Times***" by clicking the device name in the left tree.

After successful login the Certificate Utility, you can view the available containers and certificates in them.

Double-click the ***certificate*** or click the ***View*** button to see the detailedinformation in the Certificate dialog box (as seen below)



3. mTokenCryptoIDPKI Manager

3.1 Basic Functions

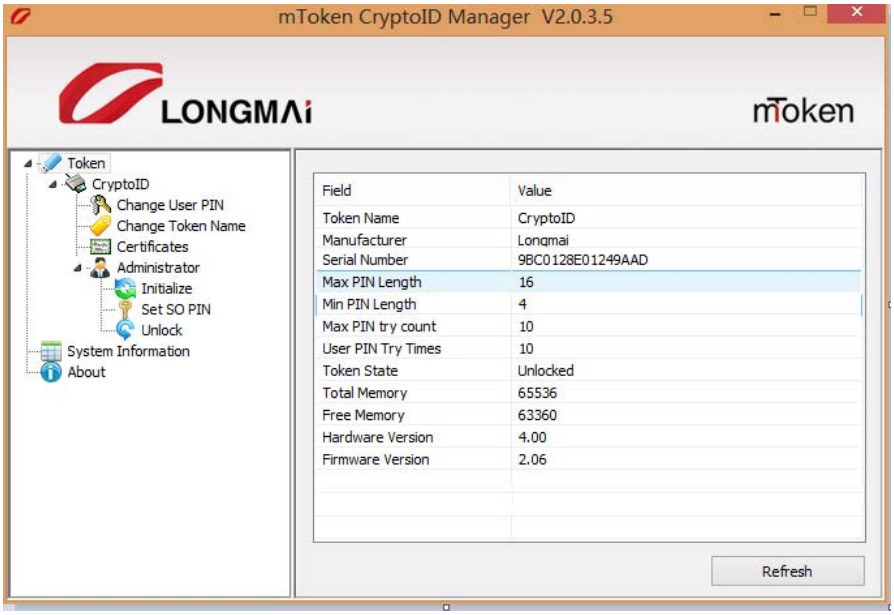
mTokenCryptoIDPKI Manager is designed to manage the token device, including *Device initialization, SO PIN setup, device Unlock, ISO download and Certificates management.*

Note:PKI Manager is designed to manage mTokenCryptoIDdevices- it is not recommended to send this tool to end-users.

3.2 Basic Operations

3.2.1 Find mTokenCryptoID

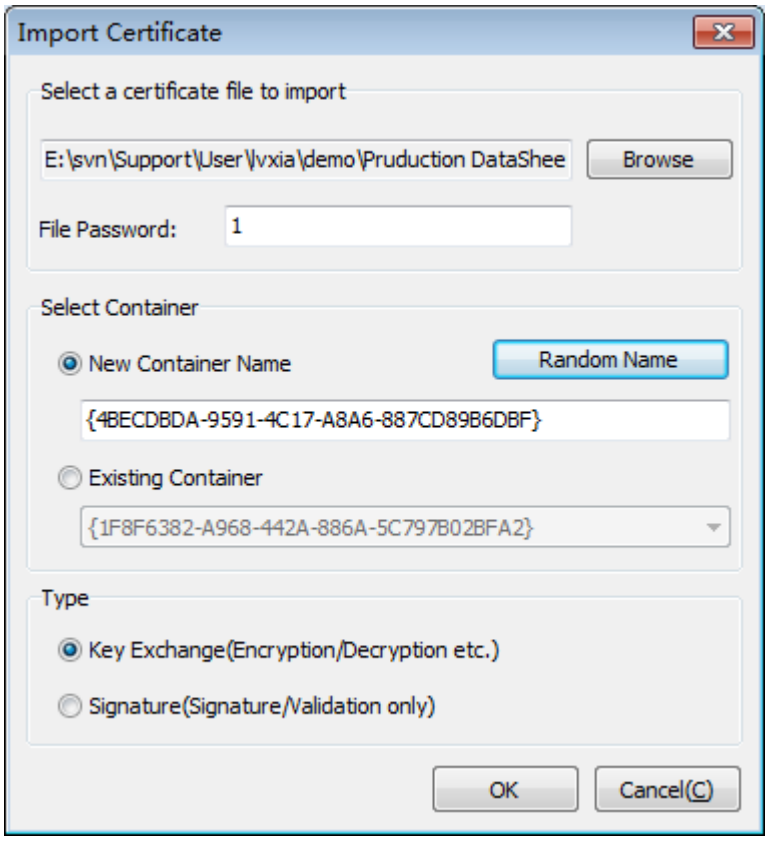
1. Starts the mTokenCryptoIDPKI Manager, all the connected mTokenCryptoIDdevices are auto-detected andlisted in the left part,
2. Then select a device name, the detail information of the connected token will be shown in the right Panel.



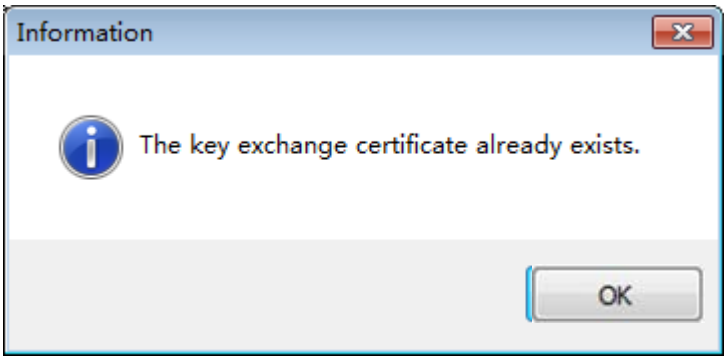
3.2.2 Import certificate

To import certificate into the mTokenCryptoID, perform the following operations:

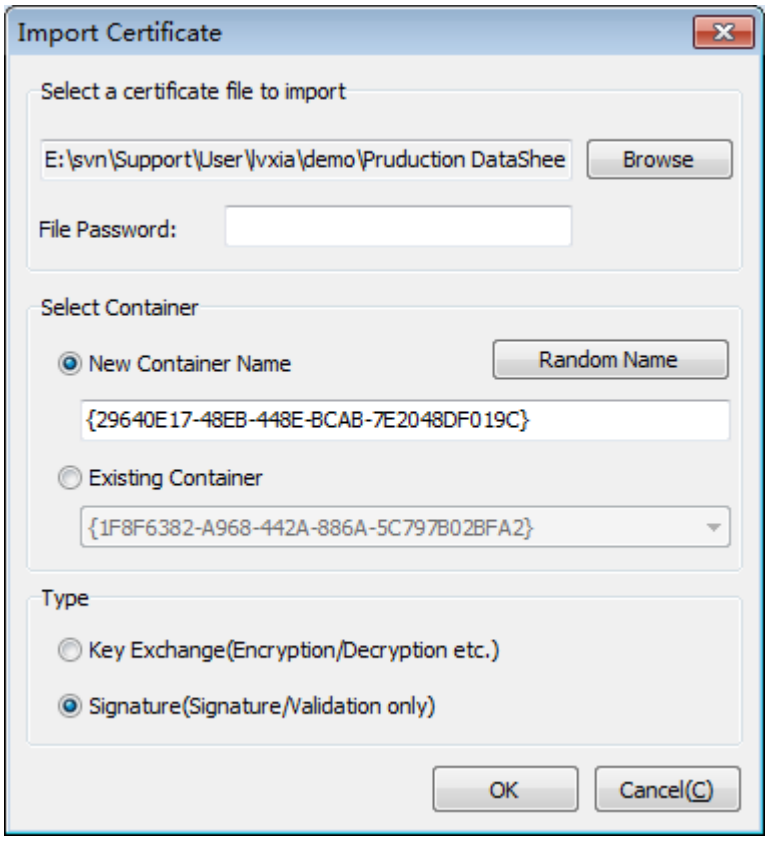
1. Select Certificate in the left tree and input correct User PIN.
2. Click Import Certificate button.
3. Click Browser button to select a certificate.
4. Input its correct password if needed.
5. Select New Container Name (manually input a name or use an auto-name by clicking Random Name button)
6. Select Existing Container (choose from drop-down list).
7. Select the type of the key.
8. Click OK button to import the key.



Note:A container can contain up to two certificates, but must different type; for example, the first one's type is Key Exchange, the other one must be Signature and vice versa. Importing a certificate whose type already exists results intothe below pop up alert.



If importing a different type of certificate, the importation can execute successful.

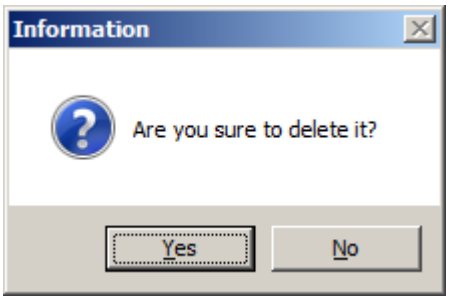


3.2.3 Delete container

You can delete containers and certificates quickly with mTokenCryptoIDManager.

Select a container and click **Delete Container** button (all certificates in it will be deleted).

Note: You can only delete certificate through deleting the container.



3.2.4 InitializemTokenCryptoID

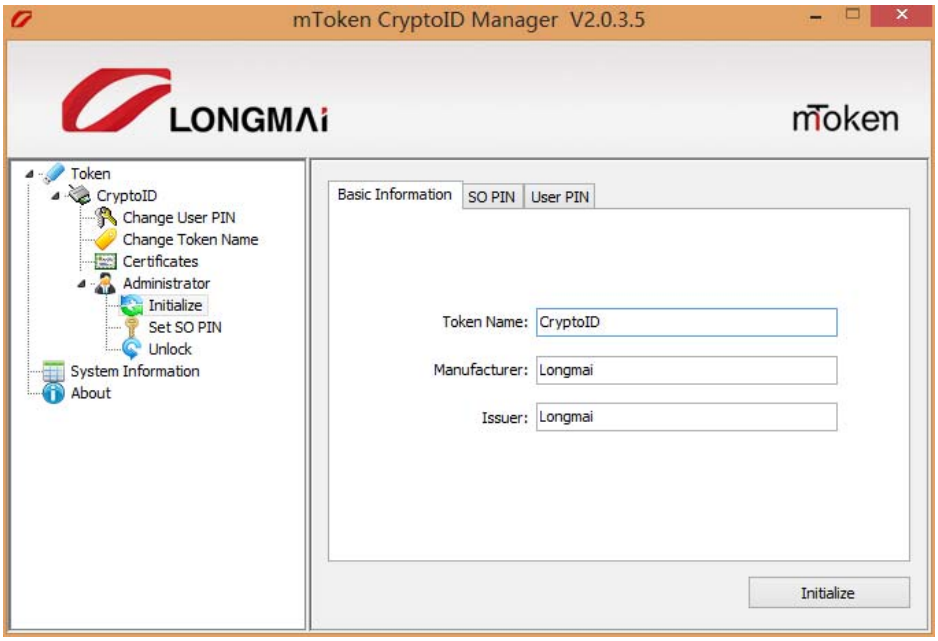
To initialize the mTokenCryptoIDdevice, perform the following operations:

1. Select Initialize in the left tree.
2. Fill out all input boxes.

3. Click **Initialize**.

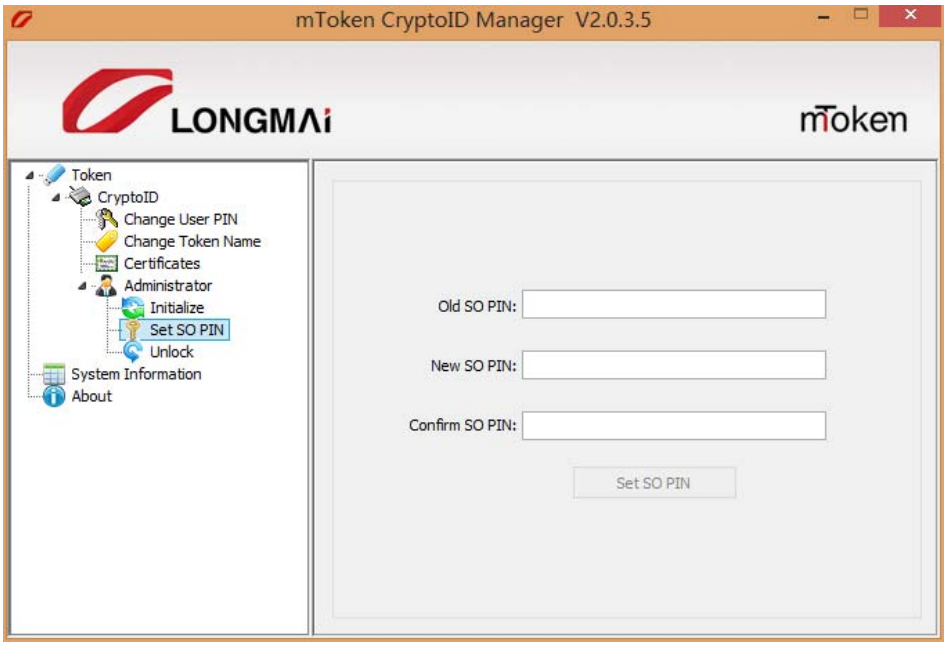
Min PIN length and Max PIN length are limited to 4~16Bytes while Max PIN try count is limited to 1~15 trials.

Note: Initialize function should be used carefully, because all containers and certificates will be cleared during this process. In addition, all PINs (including SO PIN) will be reset.



3.2.5 Change SO PIN

- If the device administrator needs to change SO PIN, please directly use PKI Manager to for this modification.

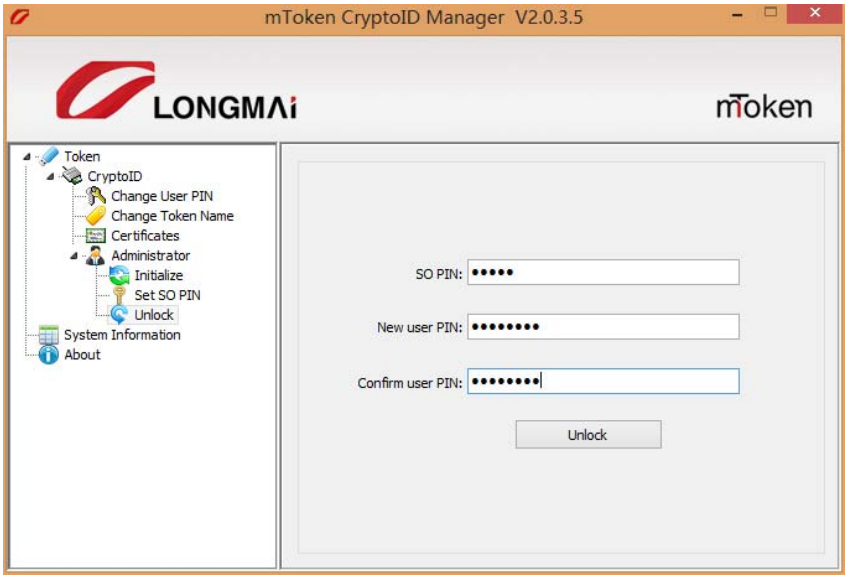


3.2.6 Unlock operation

In case the user forgets the PIN (user PIN); manager can use mTokenCryptoIDPKI Manager to unlock the device.

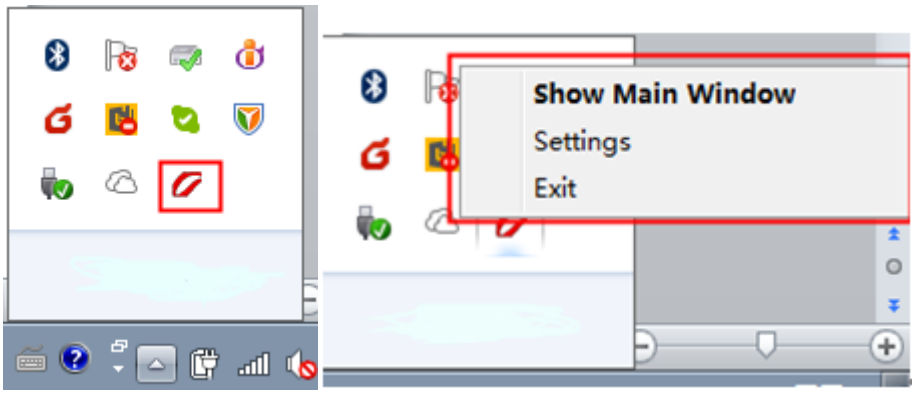
- To unlock the token, perform the following operations:
  1. Select***Unlock*** in the left tree,
  2. Input the correct SO PIN, otherwise can't change the User PIN,
  3. Input a new User PIN and confirm it again,
  4. Click ***OK*** to change the User PIN.

Note: The length of the PIN has to be limited by the Min PIN and MAX PIN length.



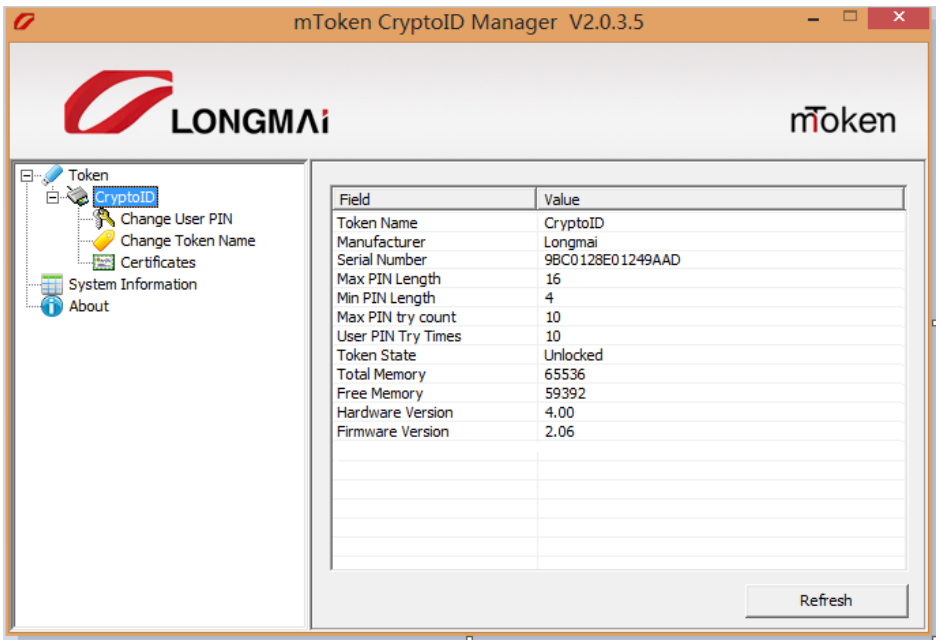
3.3 Extra Functions

If the user has mTokenCryptoIDMiddleware installed, the CryptoIDtray icon will display upon connecting mTokenCryptoIDdevice.

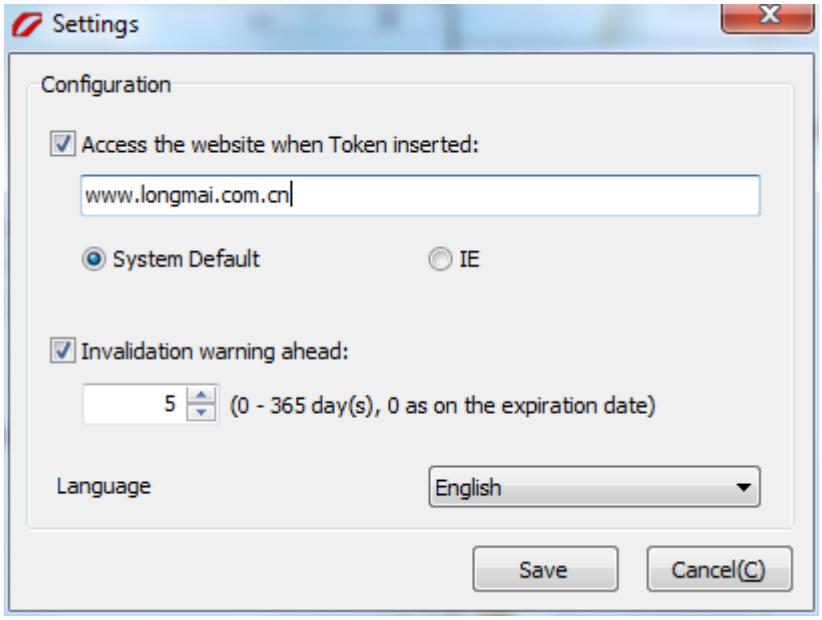


Right-click the tray icon to display the three functions shown in figure above.

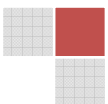
① **Show Main Window**--- Click to start PKI Certificate Utility.



② **Settings** ---Click here to configureURL and warning periodfor expiredcertificate.



③ **Exit–** Click here to close PKI Certificate Utility.



4. About Century Longmai

Established in 2003, Century Longmai Technology Co., Ltd is one of the most leading information security device vendors in China with over 12years experience developing latest generation of digital security solutions and products for secure information access and transmission. Our product portfolios include PKI dongles, wireless PKI tokens, OTP tokens, smart card, smart card readers, electronic document protection solution, software license dongles, Smartcard readers and OEM services. Proved to be secure and convenient, our solutions and products are dedicated to help customers build safe, efficient and sustainable networks, financial systems and enjoy secure access to data and information everywhere whenever they want.

Century Longmai Technology Co., Ltd

3rd Floor, GongKong Building, No.1, WangZhuang Road, Haidian District, Beijing, China
Postcode: 100083
Tel: (86) 10-62323636 | Fax: (86) 10-62313636
Sales E-mail: info@longmai.net Support E-mail: support@longmai.net
Website: http://lm-infosec.com

FCC Warning

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by

one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.