TWN4 BLE Credential Apps & TWN4 configuration

Table of Content

Purpose of the document 2

TWN4 Firmware requirements 2

Mobile Badge BLE NFC 3

- Function 3
- TWN4 Configuration – Mode BLE 3
- TWN4 Configuration – Mode NFC 5

KleverKey 6

- Function 6
  - Register as new user 6
  - Add new admin 6
  - Grant permission 6
- TWN4 Configuration 6

Safetrust 10

- Function 10
- TWN4 Configuration 10

Purpose of the document

The purpose of this document is to show TWN4 readers configuration for different BLE credentials using the AppBlaster.exe tool. The document will cover the configuration for "Mobile Badge BLE NFC", "KleverKey" and "Safetrust" Apps.

The "TWN4 MultiTech" in this document is used to represent all the TWN4 multi technology readers and "TWN4 MultiTech BLE" is used to represent all the TWN4 multi technology readers with BLE capability. The procedures also apply to other TWN4 readers that do not contain MultiTech in its name, like TWN4 Palon, TWN4 Slim, TWN4 USB Front Reader, etc.

TWN4 Firmware requirements

The requirement for the functionality provided in the document is TWN4DevPack402 or later for Mobile Badge BLE NFC and Safetrust or TWN4DevPack405 or later for Kleverkey. The download link is available from Elatec on request (support-rfid@elatec.com).

Mobile Badge BLE NFC

Function

The function of the app is to send a unique ID to an Elatec “TWN4 MultiTech BLE” reader. The function is realized by connecting automatically to readers in the proximity of the mobile device. The app utilizes two communication technologies: Bluetooth Low Energy (BLE) on Android and iOS and additionally NFC on Android. The distance between the mobile phone and the Elatec reader acts as a "trigger" for transferring the ID to the Elatec reader. This allows users to have card-like user experience. When using BLE communication the distance threshold can be adjusted by the user on its individual mobile phone.

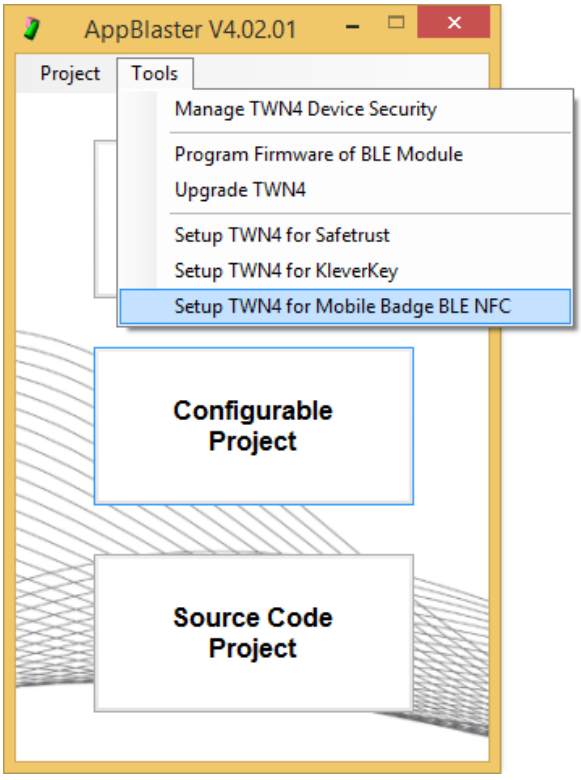
TWN4 Configuration – Mode BLE

The AppBlaster.exe is a simple tool for configuring “TWN4 MultiTech” readers to read various technologies (RFID LF & HF, NFC and BLE). It allows users to configure “TWN4 MultiTech” readers with simple but powerful interactive configuration.

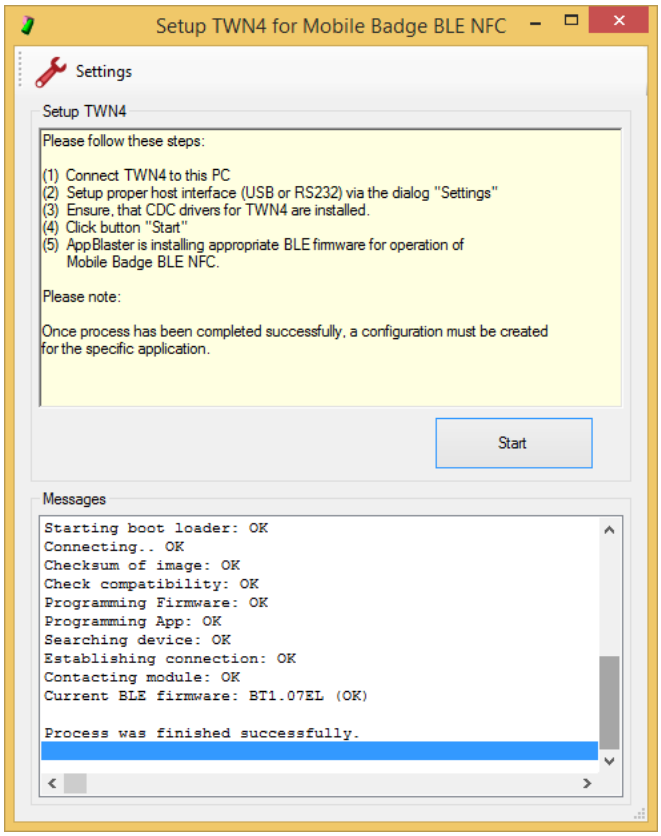
The first step in configuring “TWN4 MultiTech BLE” readers to support “Mobile Badge BLE NFC” credentials is to ensure that the BLE Module on the reader is running the appropriate firmware. The latest version TWN4-BGM1XX-Elatec (BT1.07EL).gbl is pre-loaded in Elatec’s facilities prior shipping to all standard “TWN4 MultiTech BLE” articles.

To program the BLE Module firmware and configure the reader to support “Mobile Badge BLE NFC”, one can follow the steps below.

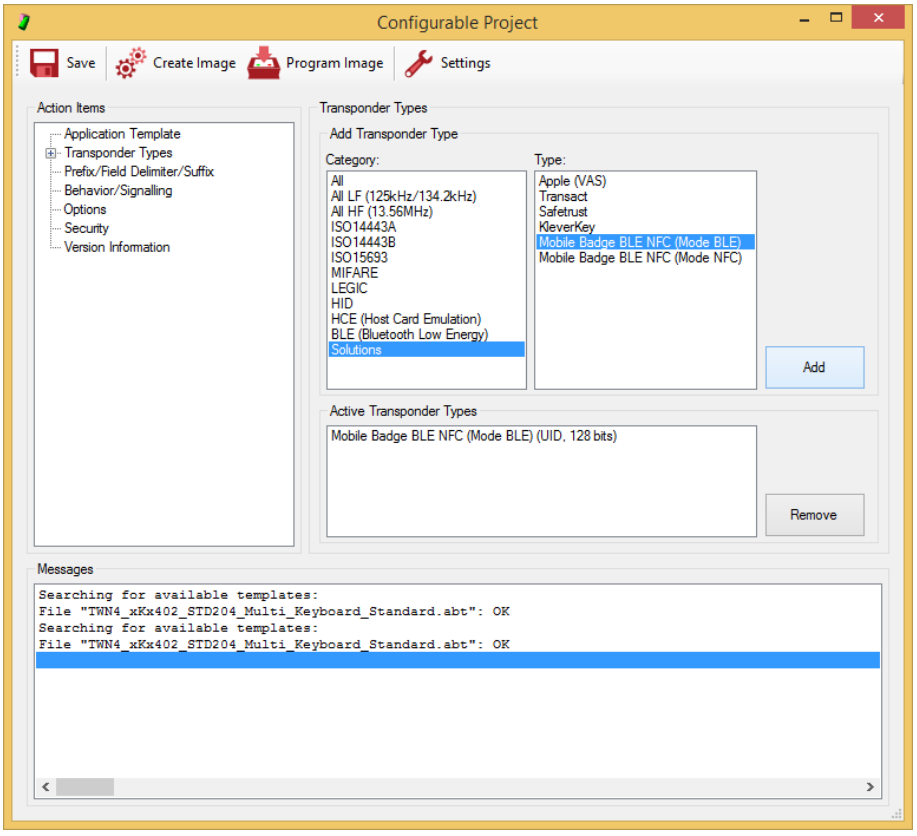
1. Open AppBlaster and under “Tools” select “Setup TWN4 for Mobile Badge BLE NFC”



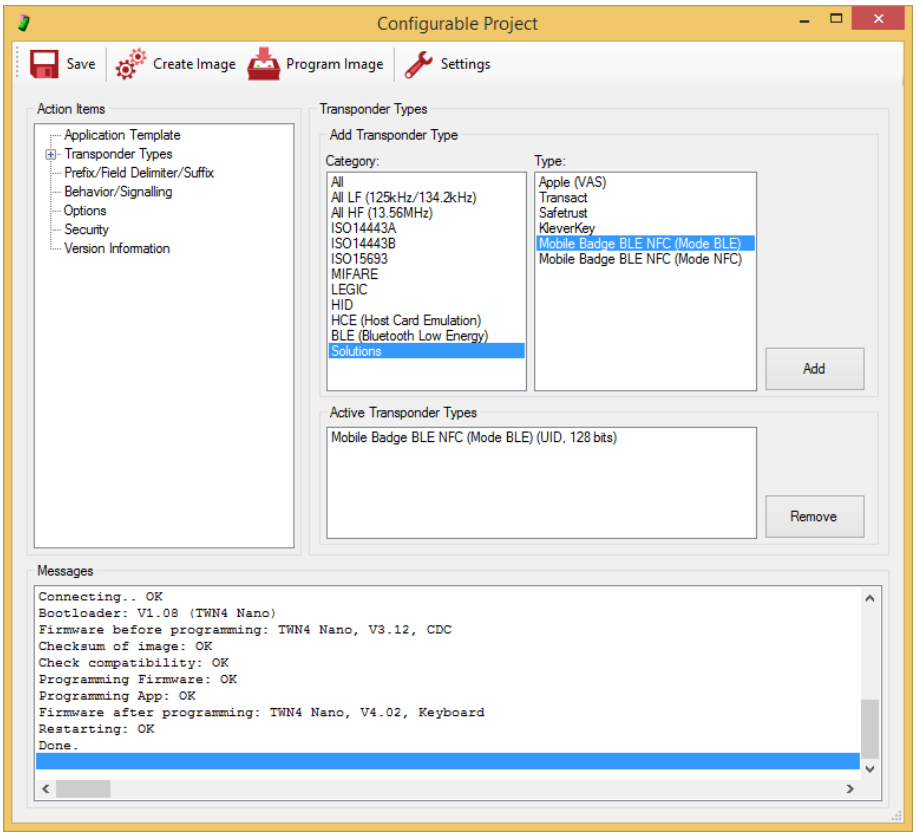
2. The current firmware running on the BLE Module will be checked in the process and the module will be reprogramed only if the firmware doesn't match the selected setup. The AppBlaster messages window will display the current firmware for the verification. In case reprogramming is necessary the process may take up to 1 minute.



3. Return to the main AppBlaster window and start a new project with "Configurable Project" button. Under *Transponder Types -> Solutions* select "Mobile Badge BLE NFC (BLE Mode)"

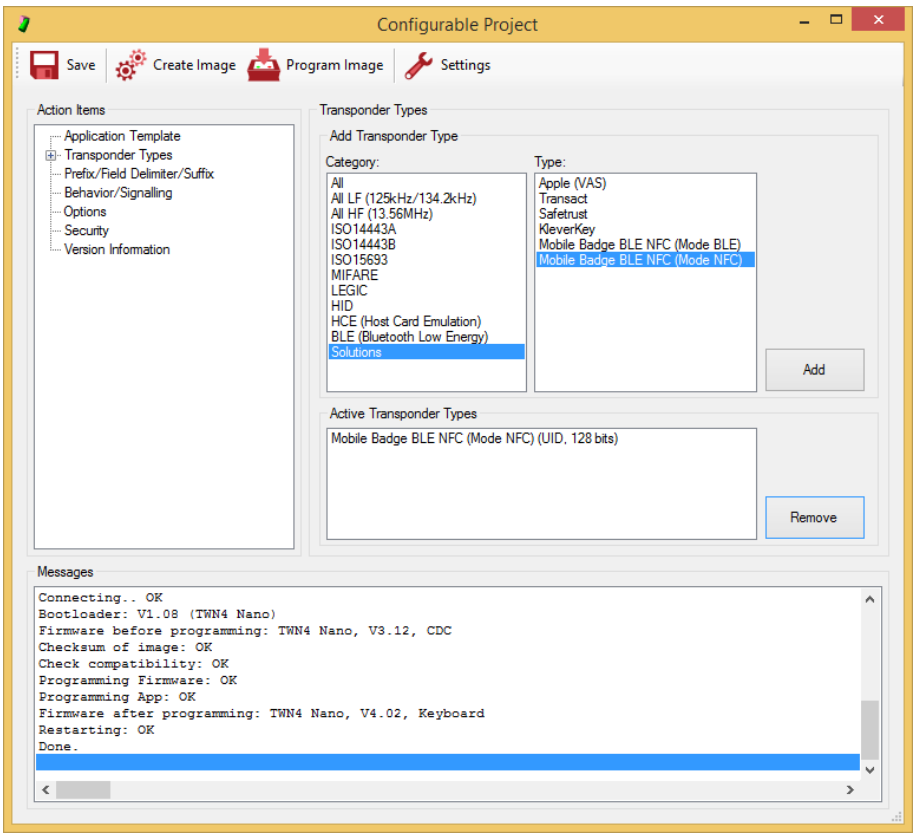


4. Using “Create Image” for compiling a new firmware image and “Program Image” button for loading it on the reader, the process of configuration is finished. The reader now supports the BLE Mode of “Mobile Badge BLE NFC” Android and iOS Apps.



TWN4 Configuration – Mode NFC

The “TWN4 MultiTech” readers can support NFC of “Mobile Badge BLE NFC” App additional or separate to BLE Mode. The process includes only steps 3 and 4 (steps 1 and 2 do not apply in case of NFC Mode) from the previous paragraph. The only difference is in step 3 where “Mobile Badge BLE NFC (NFC Mode)” has to be selected instead.



KleverKey

Function

KleverKey is a Software-as-a-Service product and turns smartphones into virtual keys. It adds mobile credential functionality to “TWN4 MultiTech BLE” readers with ease. KleverKey is fully integrated into the ELATEC DevPack structure and configuration is as simple as adding a standard RFID tag. As an administrator, you can manage permissions easily by using the KleverKey portal or the KleverKey smartphone App. As a user, you can use your smartphone to securely release your print job, open doors, unlock cabinets, etc. No more need to carry a physical badge with you.

Every reader is a separate lock with its own key. Each lock contains LockID and LockPIN used for assigning the lock to a user or group of users. Only the users with permission to use a lock are able to authenticate to it.

More information is available on the following links:

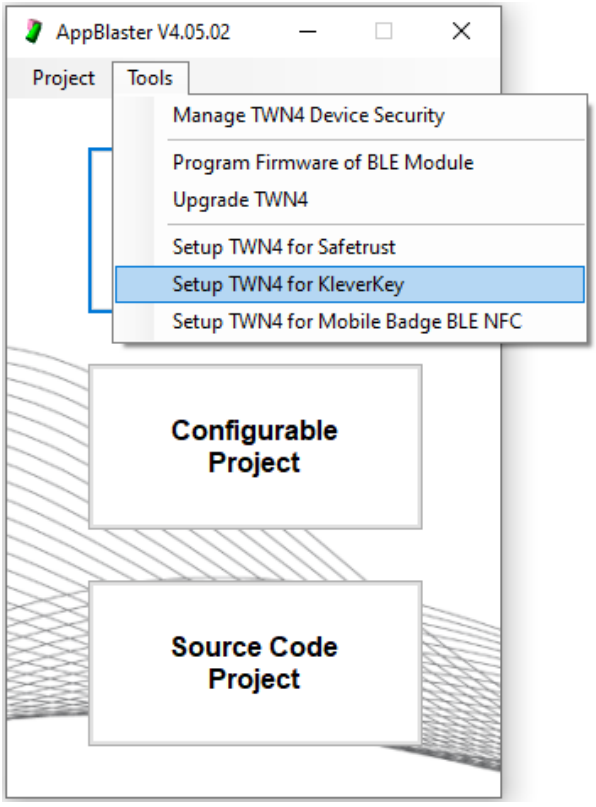
- Register as new user: https://vimeo.com/395733861
- Add new admin: https://vimeo.com/394220088
- Grant permission: https://vimeo.com/386261799

TWN4 Configuration

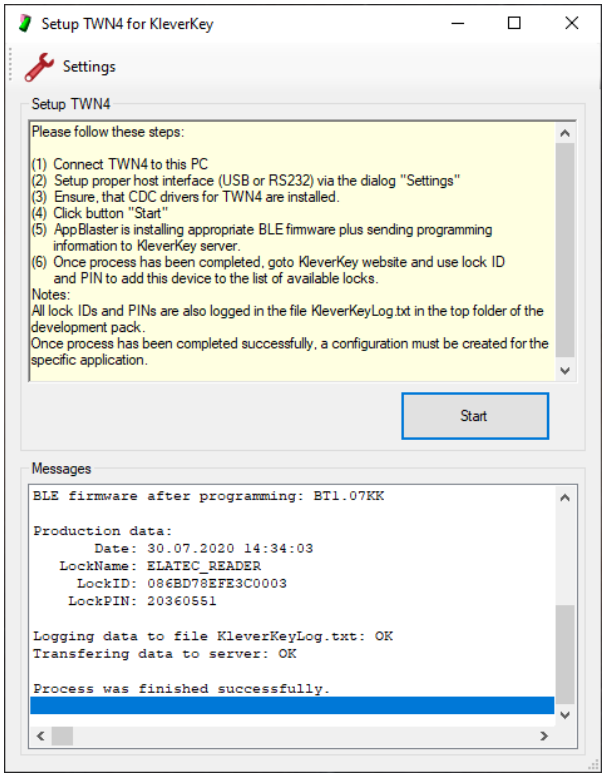
The first step in configuring “TWN4 MultiTech BLE” readers to support “KleverKey” is to confirm the BLE Module on the reader is running the appropriate firmware. The latest version TWN4-BGM1XX-KleverKey (BT1.07KK).gbl is included in any DevPack4.05 or later.

To program the BLE Module firmware and configure the reader to support “KleverKey”, one can follow the steps below.

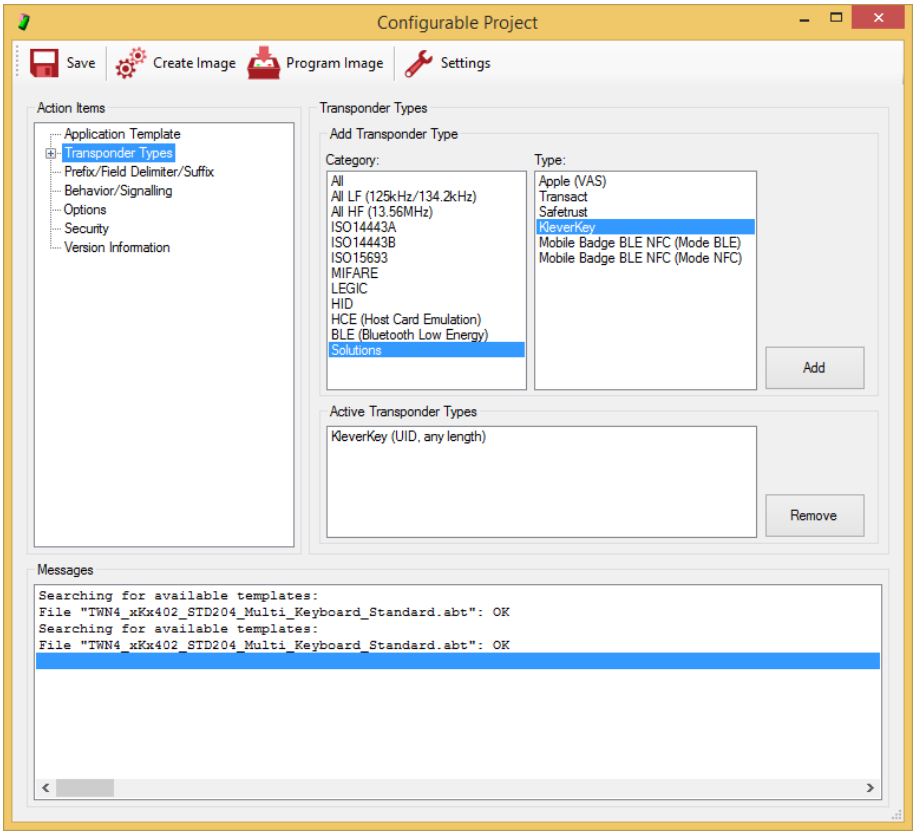
1. Open AppBlaster and under “Tools” select “Setup TWN4 for KleverKey”



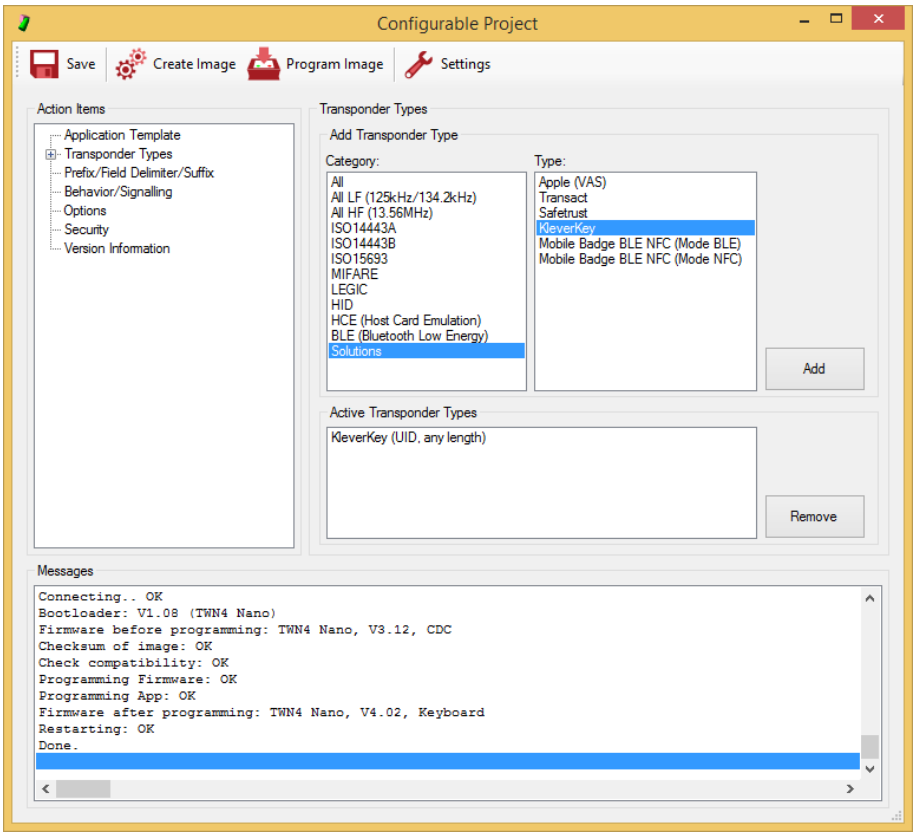
2. New dialog will display the “Start” button used for setting the BLE Module firmware for “KleverKey”. The current firmware running on the BLE Module will be checked in the process and the module will be reprogramed only if the firmware doesn’t match the selected setup. The AppBlaster messages window will display the current firmware for the verification. In the setup process the AppBlaster needs to communicate with KleverKey server for the reader registration. The internet connection is necessary for successful operation. Once setup process is finished, the LockID and LockPIN will be displayed in the AppBlaster and saved in KleverKeyLog.txt created in the same folder from which the AppBlaster is running. In case reprogramming is necessary the process may take up to 2 minutes.



3. Return to the main AppBlaster window and start a new project with “Configurable Project” button. Under *Transponder Types -> Solutions* select “KleverKey”



4. Using “Create Image” for compiling a new firmware image and “Program Image” button for loading it on the reader, the process of configuration is finished. The reader now supports “KleverKey” Android and iOS Apps.



5. An administrator or user has to add permission for lock/reader to the user account, using LockID and LockPIN provided by AppBlaster after successful reader’s registration with the KleverKey server. The process of adding permissions to an account

can be done using KleverKey portal or KleverKey smartphone App. More information is available on the “Grant permission” video.

Safetrust

Function

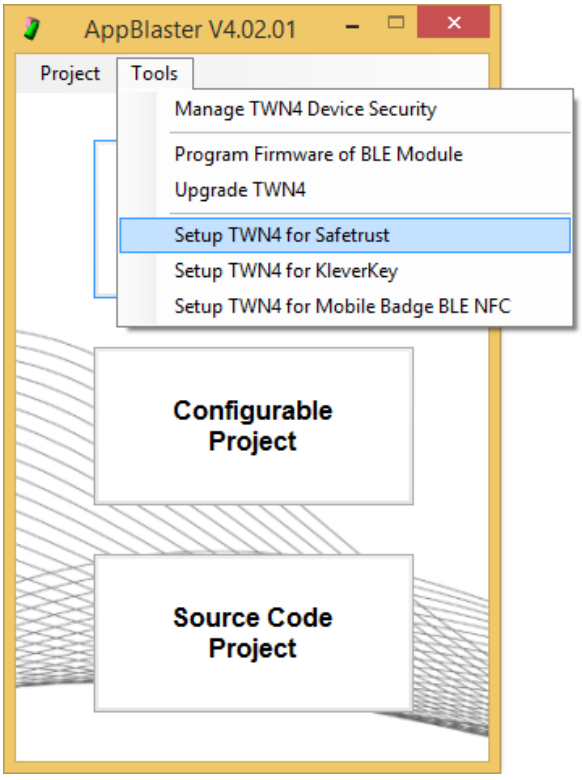
The Safetrust Wallet for iOS and Android holds your secure virtual identity, providing touchless access to your premises, resources and more. With end-to-end encryption and ultra-fast access, Safetrust provides a modern, secure way to give employees, tenants and visitors streamlined authentication for secure print, desktop logon, secure office access, parking garages, turnstiles and more.

TWN4 Configuration

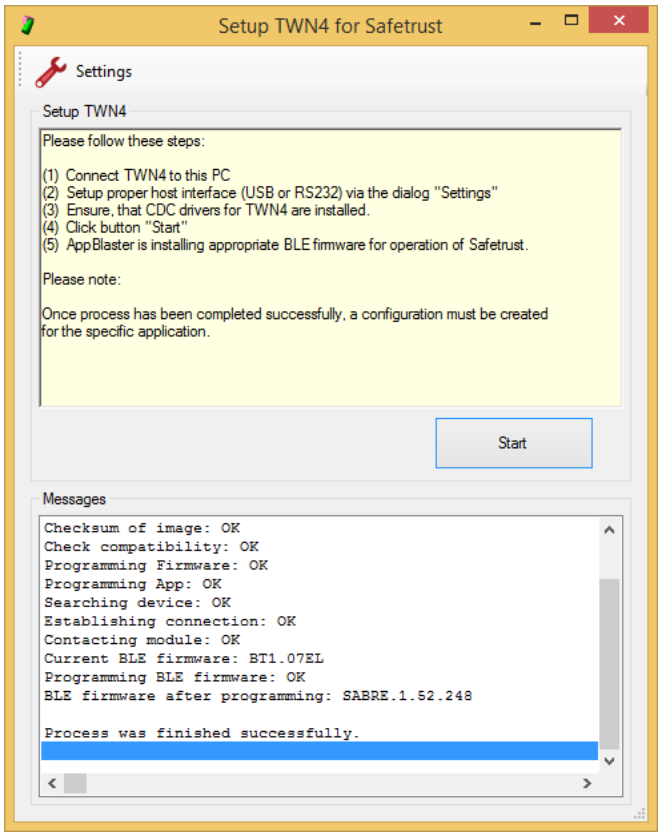
The first step in configuring “TWN4 MultiTech BLE” readers to support “Safetrust” credentials is to confirm the BLE Module on the reader is running the appropriate firmware. The latest version sabre-ble-bgm113-app-262.gbl (SABRE 1.52.262) is included in all Elatec DevPacks 4.02 or later.

To program the BLE Module firmware and configure the reader to support “Safetrust”, one can follow the steps below.

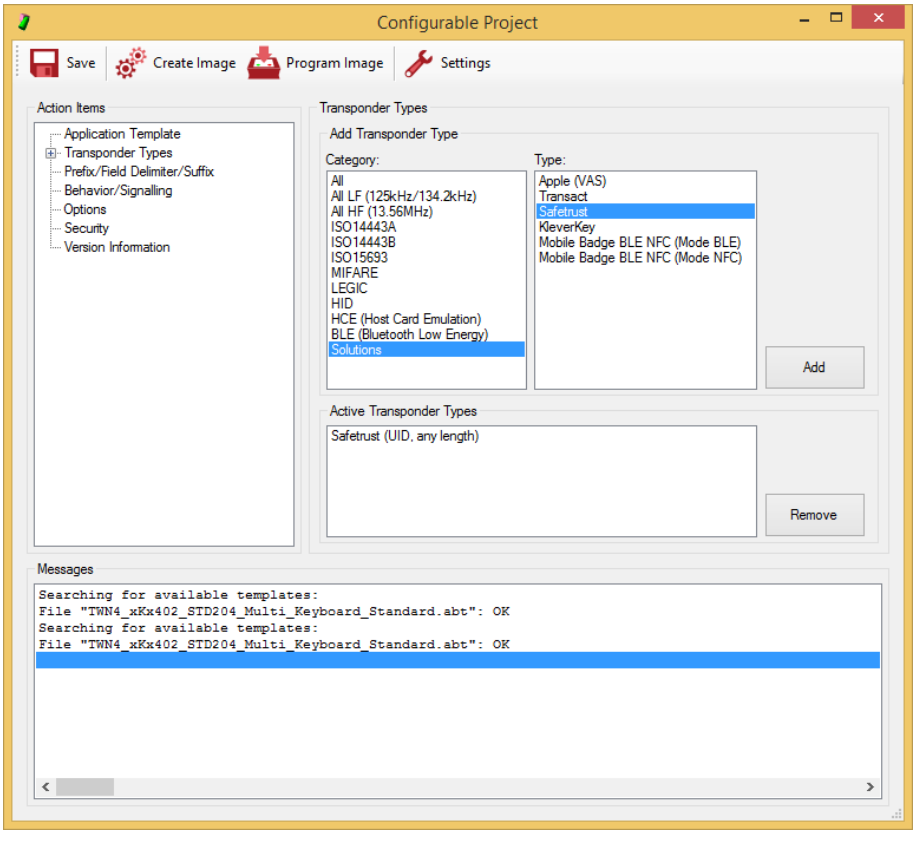
1. Open AppBlaster and under “Tools” select “Setup TWN4 for Safetrust”



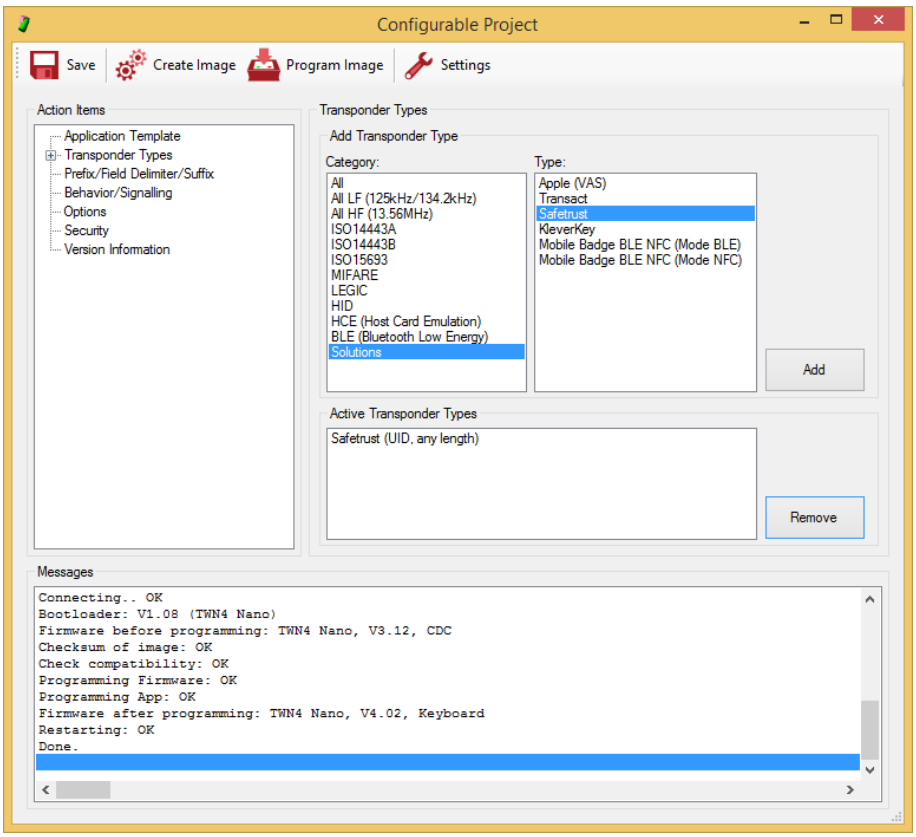
2. The current firmware running on the BLE Module will be checked in the process and the module will be reprogramed only if the firmware doesn't match the selected setup. The AppBlaster messages window will display the current firmware for the verification. In case reprogramming is necessary, the process may take up to 1 minute.



3. Return to the main AppBlaster window and start a new project with "Configurable Project" button. Under *Transponder Types -> Solutions* select "Safetrust"



4. Using "Create Image" for compiling a new firmware image and "Program Image" button for loading it on the reader, the process of configuration is finished. The reader now supports "Safetrust" Android and iOS Apps.


Configurable Project
Save
Create Image
Program Image
Settings
Action Items
Application Template
Transponder Types
Prefix/Field Delimiter/Suffix
Behavior/Signalling
Options
Security
Version Information
Transponder Types
Add Transponder Type
Category:
All
All LF (125kHz/134.2kHz)
All HF (13.56MHz)
ISO14443A
ISO14443B
ISO15693
MIFARE
LEGIC
HID
HCE (Host Card Emulation)
BLE (Bluetooth Low Energy)
Solutions
Type:
Apple (VAS)
Transact
Safetrust
KleverKey
Mobile Badge BLE NFC (Mode BLE)
Mobile Badge BLE NFC (Mode NFC)
Add
Active Transponder Types
Safetrust (UID, any length)
Remove
Messages
Connecting.. OK
Bootloader: V1.08 (TWN4 Nano)
Firmware before programming: TWN4 Nano, V3.12, CDC
Checksum of image: OK
Check compatibility: OK
Programming Firmware: OK
Programming App: OK
Firmware after programming: TWN4 Nano, V4.02, Keyboard
Restarting: OK
Done.