TWN4

BLE Credential Apps User Guide

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Contents

1 Purpose of the document

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

In this document "TWN4 MultiTech" 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.

2 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).

3 Mobile Badge BLE NFC

3.1 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.

3.2 TWN4 Configuration - Mode BLE

AppBlaster 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"
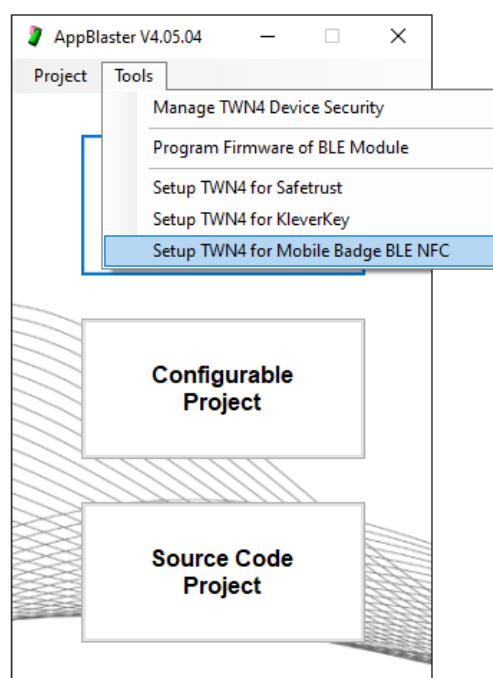
2. The current firmware running on the BLE Module will be checked in the process and the module will be reprogrammed only if the firmware doesn't match the selected setup. The AppBlaster messages window will display the current firmware for the verification. In case reprogramming is necessary the process may take up to 1 minute.
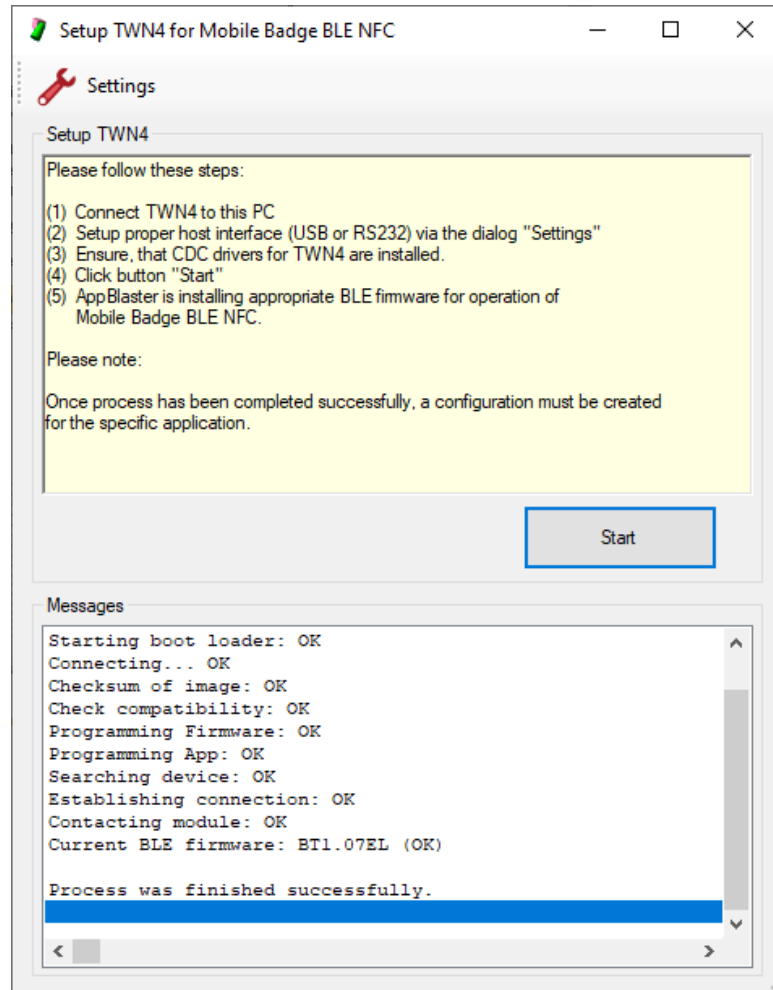
3. Return to the main AppBlaster window and start a new project with "Configurable Project" button. Under Transponder Types -> Solutions select "Mobile Badge BLE NFC (BLE Mode)"
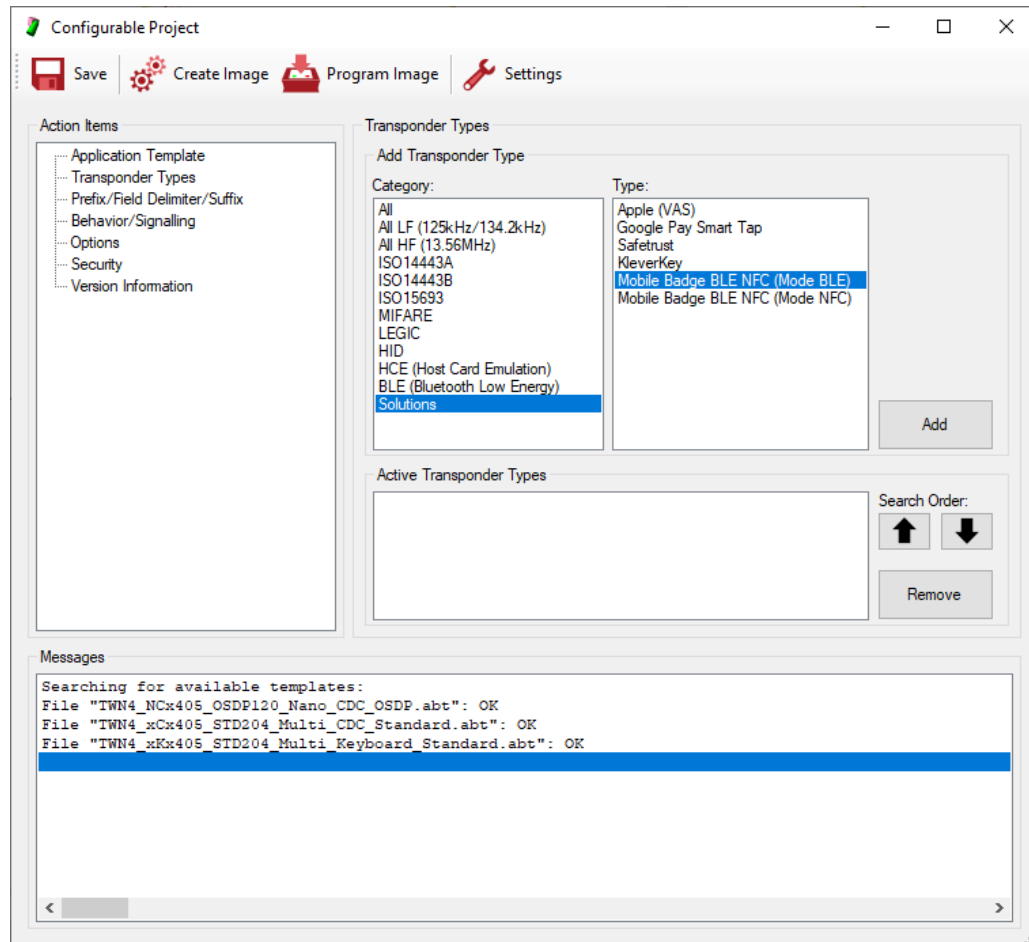
4. Using "Create Image" for compiling a new firmware image and "Program Image" button for loading it on the reader, the process of configuration is finished. The reader now supports the BLE Mode of "Mobile Badge BLE NFC" Android and iOS Apps.
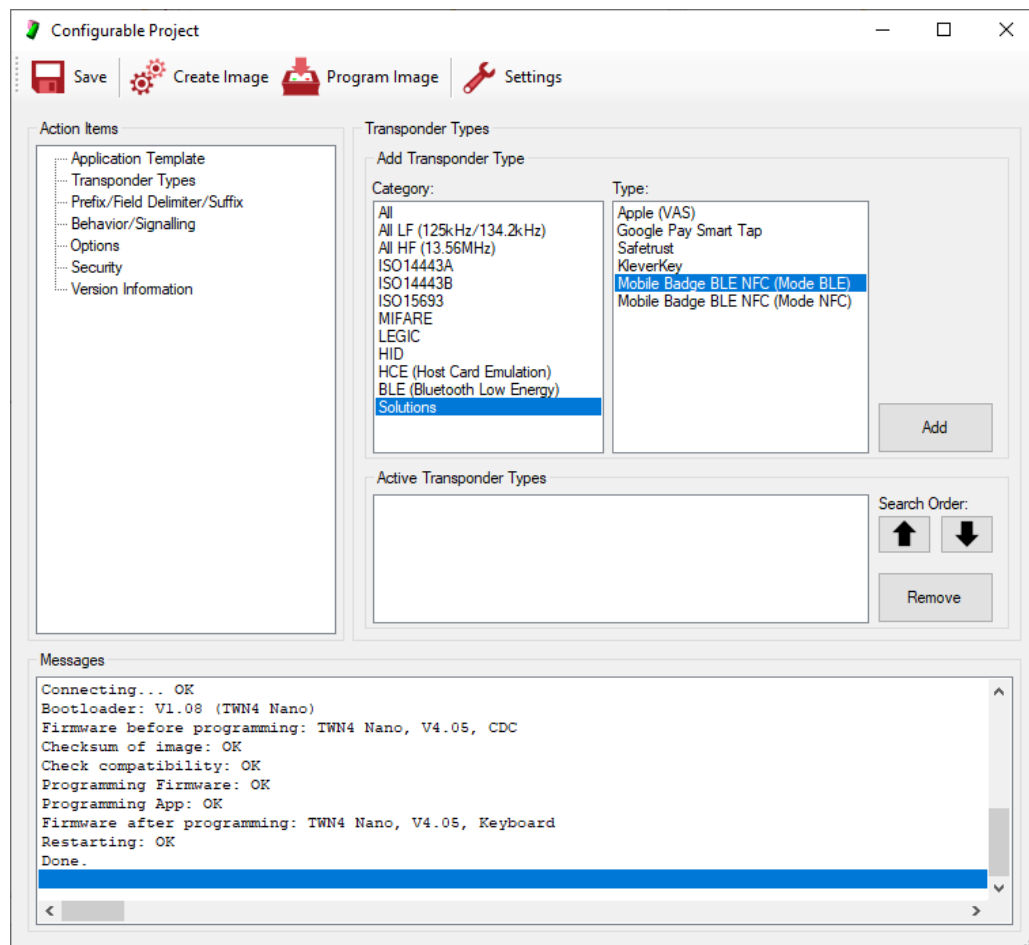
3.3 TWN4 Configuration - Mode NFC

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.
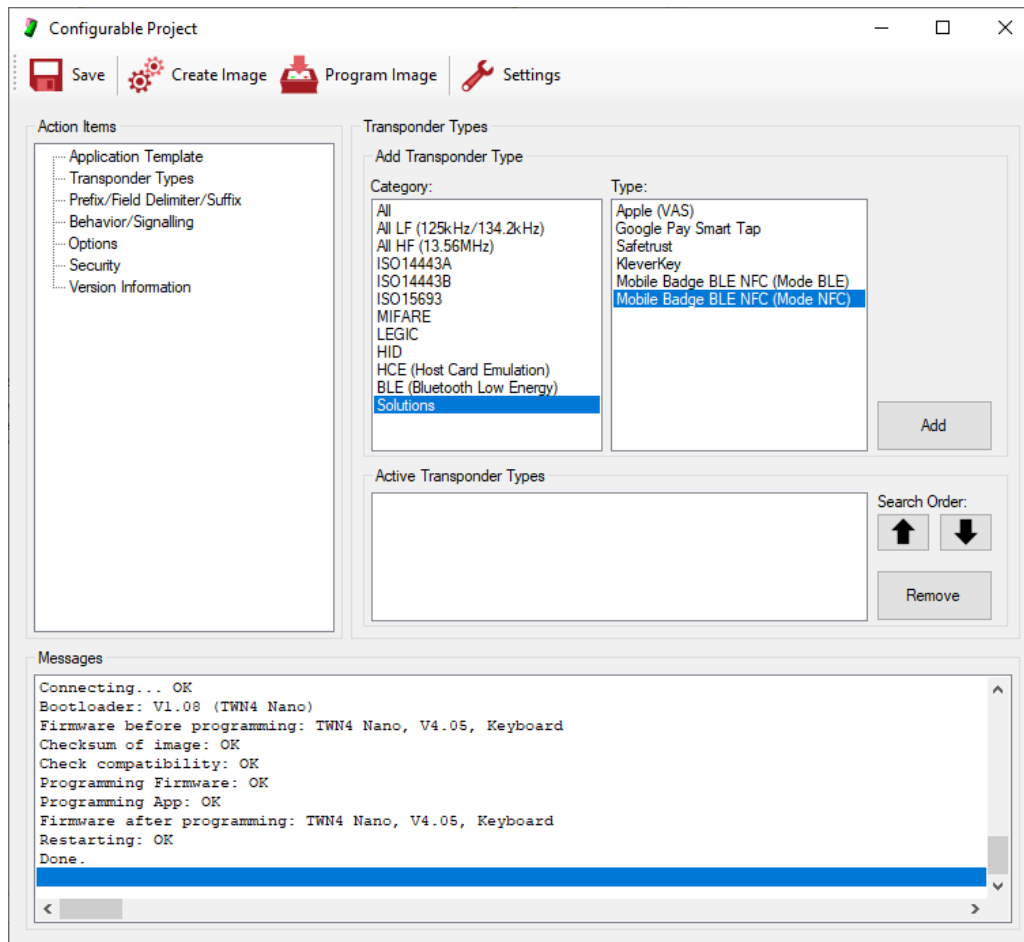
4 KleverKey

4.1 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

4.2 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 config-

ure the reader to support KleverKey, one can follow the steps below.

1. Open AppBlaster and under "Tools" select "Setup TWN4 for KleverKey"
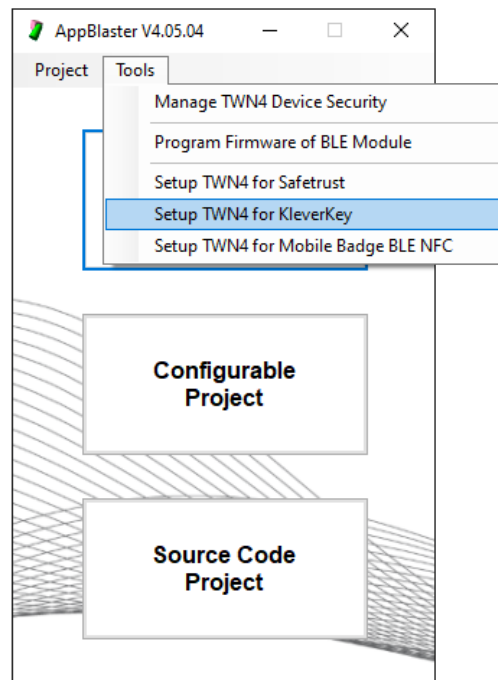
2. New dialog will display the "Start" button used for setting the BLE Module firmware for KleverKey. The current firmware running on the BLE Module will be checked in the process and the module will be reprogrammed only if the firmware doesn't match the selected setup. The AppBlaster messages window 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.
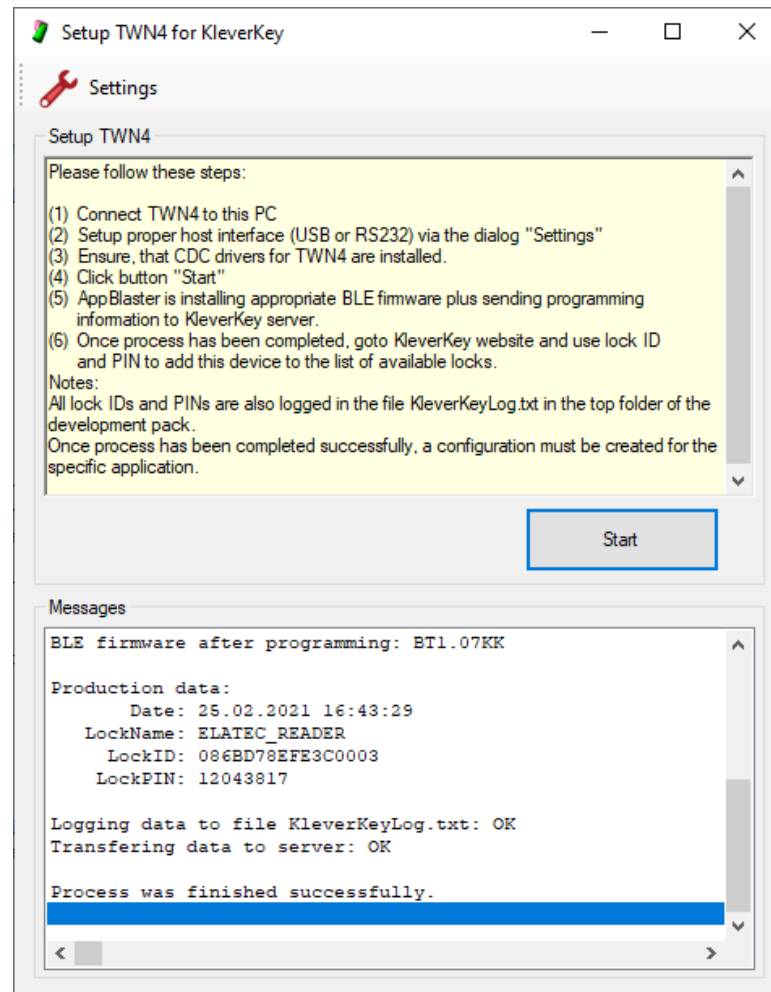
3. Return to the main AppBlaster window and start a new project with "Configurable Project" button. Under Transponder Types -> Solutions select "KleverKey"
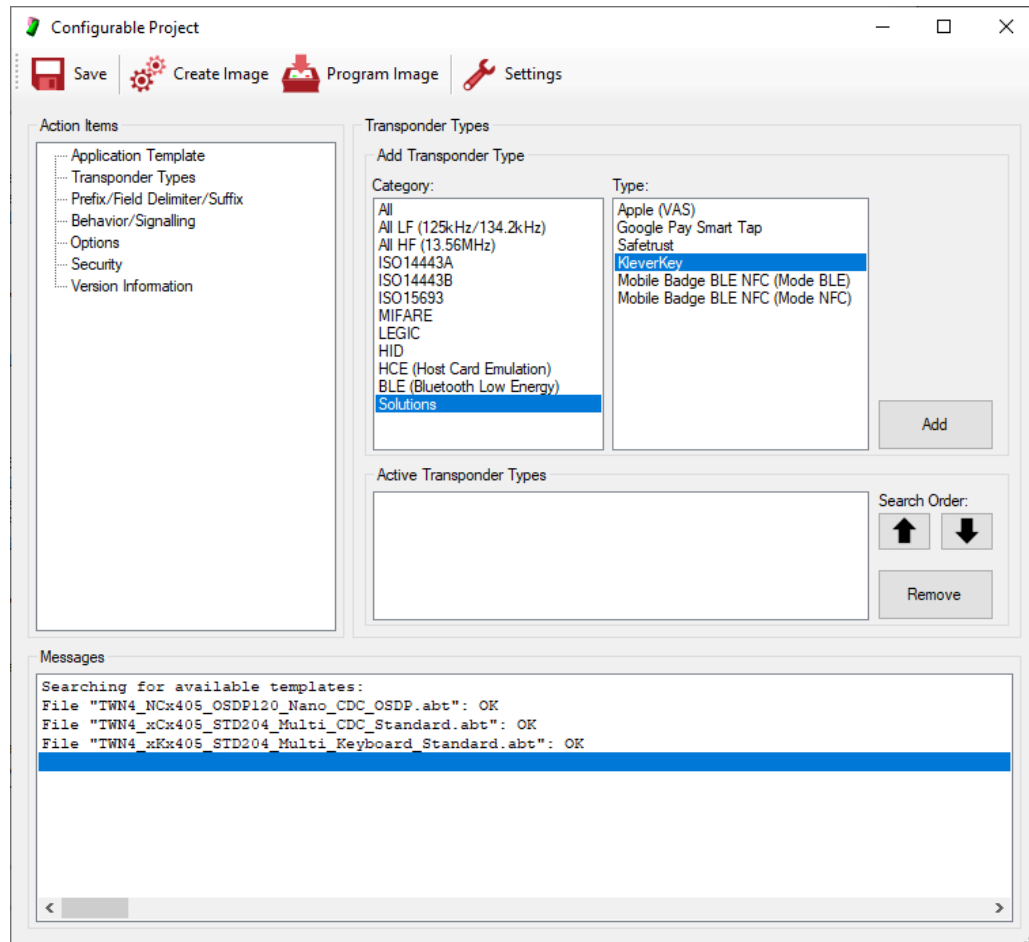
4. Using "Create Image" for compiling a new firmware image and "Program Image" button for loading it on the reader, the process of configuration is finished. The reader now supports KleverKey Android and iOS Apps.
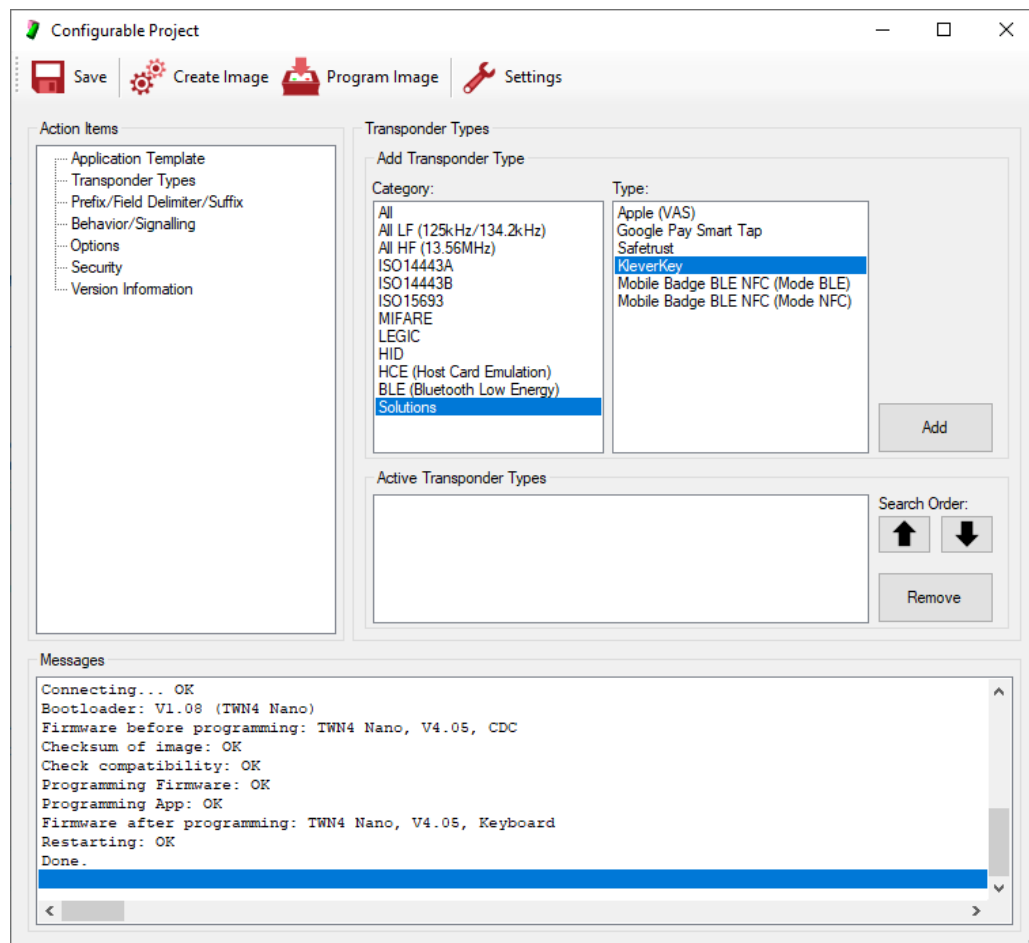
5. An administrator or user has to add permission for lock (in this case the TWN4 reader in question) to the user account, using LockID and LockPIN provided by AppBlaster after successful reader's registration with the KleverKey server. The process of adding permissions to an account can be done using KleverKey portal or KleverKey smartphone App. More information is available on the "Grant permission" video.

5 Safetrust

5.1 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.

5.2 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"
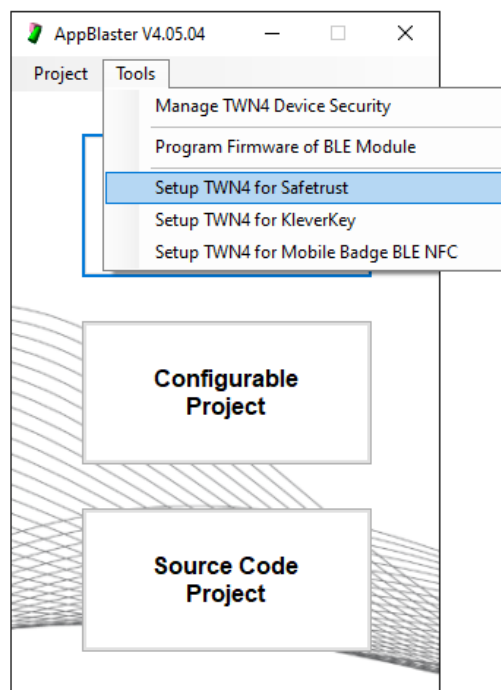
2. The current firmware running on the BLE Module will be checked in the process and the module will be reprogramed only if the firmware doesn't match the selected setup. The AppBlaster messages window will display the current firmware for the verification. In case reprogramming is necessary, the process may take up to 1 minute.
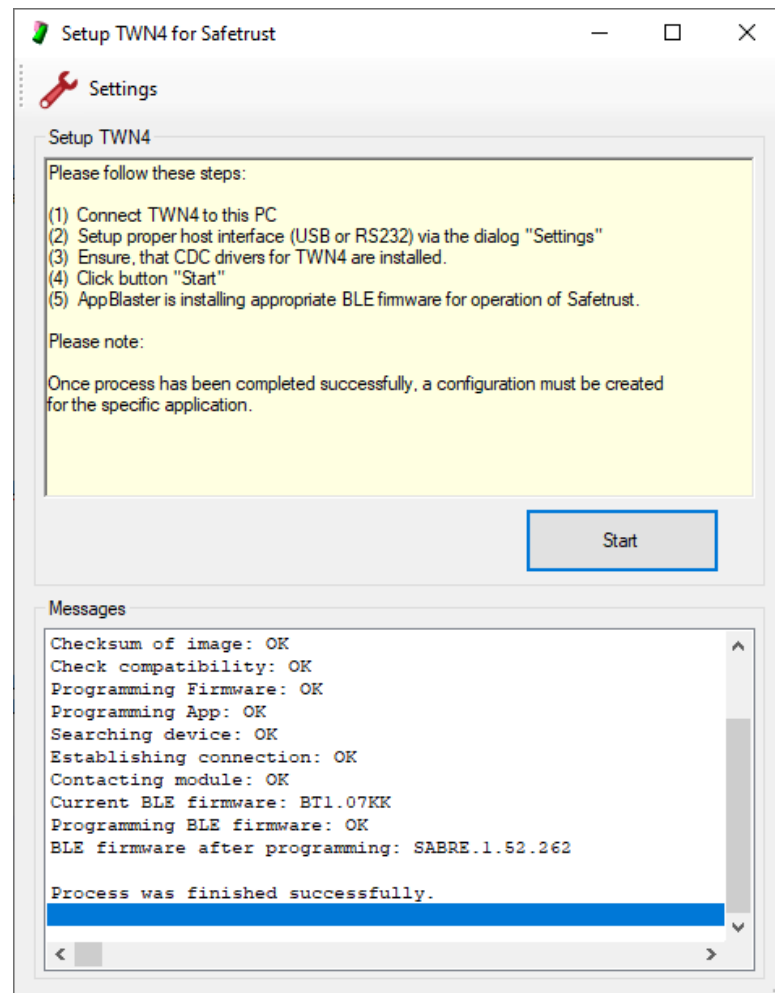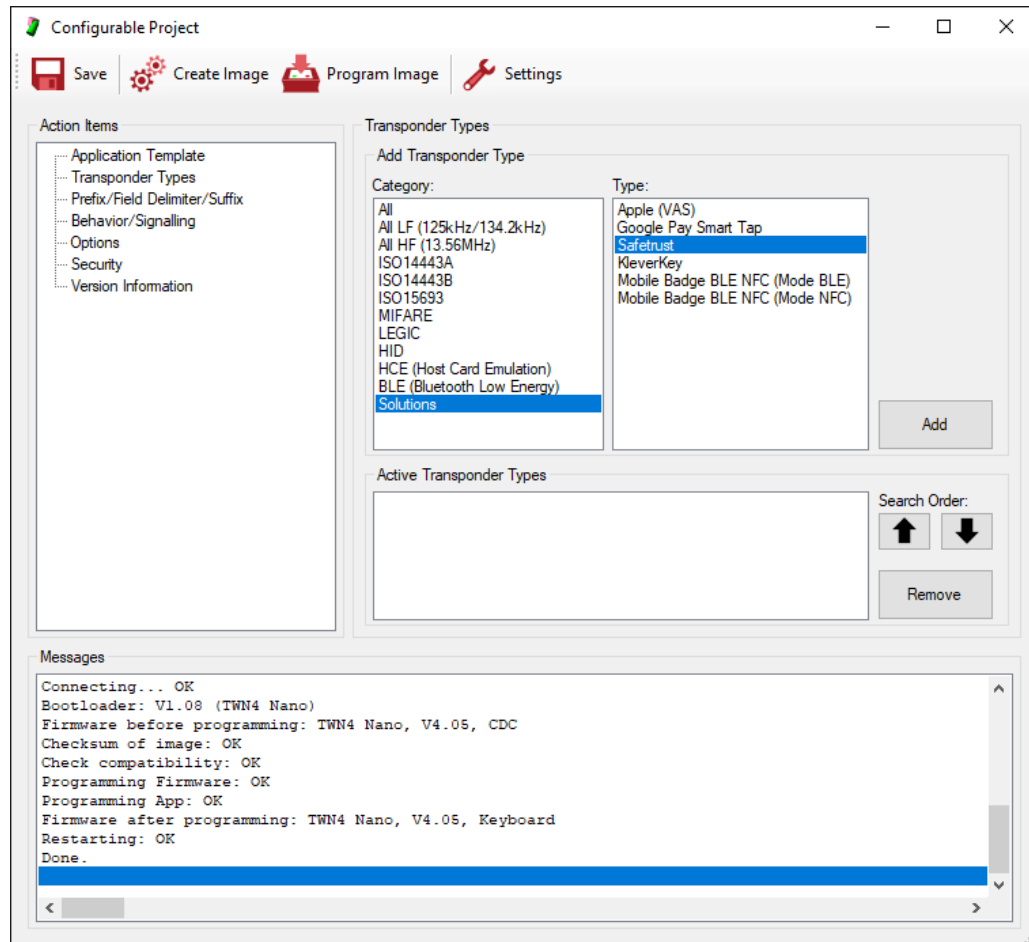
3. Return to the main AppBlaster window and start a new project with "Configurable Project" button. Under Transponder Types -> Solutions select "Safetrust"
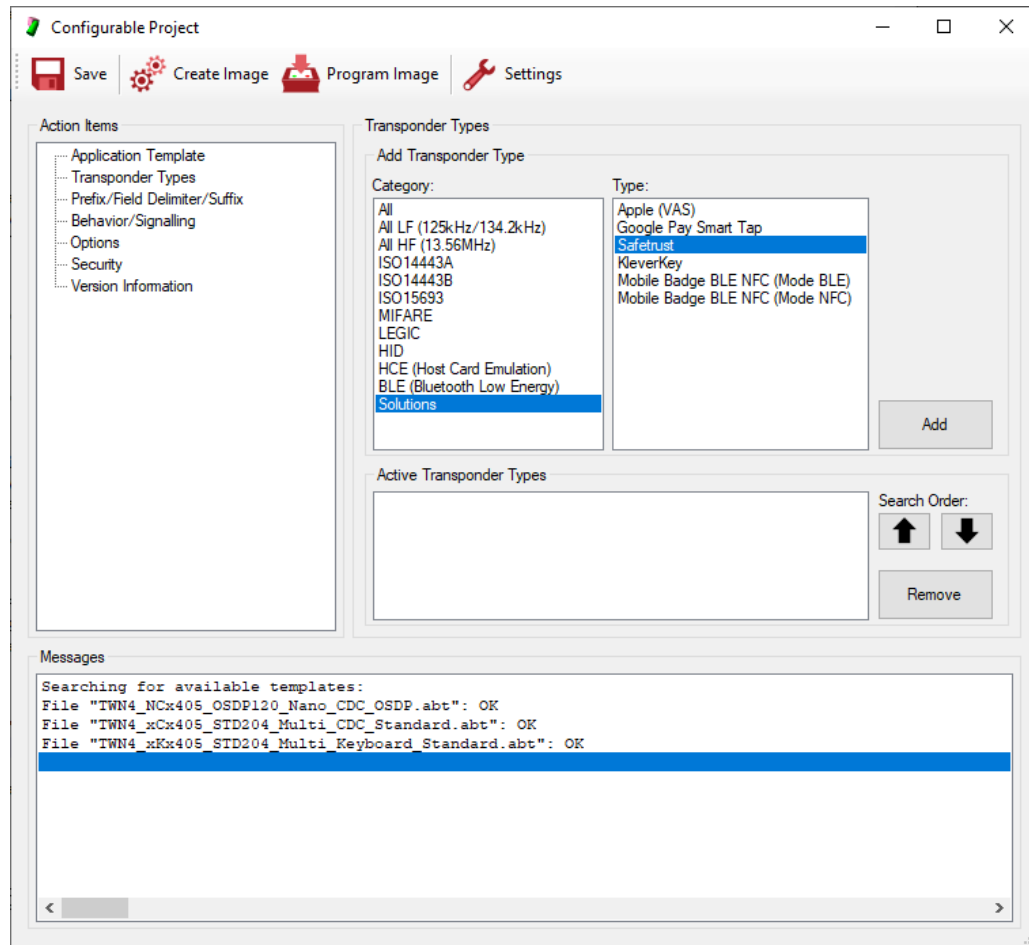
4. Using "Create Image" for compiling a new firmware image and "Program Image" button for loading it on the reader, the process of configuration is finished. The reader now supports Safetrust Android and iOS Apps.

6 Disclaimer

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