

XPPRESSENTRY

XPP Helper for NEDAP Mobile

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By



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Purpose

XPP Helper is an easy-to-use tool that helps customers create and manage custom firmware for their devices. It makes the process faster and safer by using strong encryption to protect sensitive files. This guide explains how to program a Telaeris XPID handheld reader to read NEDAP mobile credentials by entering basic details like wallet type, keys, and communication settings.

Pre-Requisites

The following are required:

- The XPPHelper tool is installed on the Windows PC.
- The encrypted source/bix .zip file provided by Telaeris for the NEDAP deployment.
- The credential details for the NEDAP project (keys and identifiers supplied with the encrypted file).
- Each XPID device connected to the PC, with KeyLink available.

Software Installation

The MSI installer will be provided by Telaeris. Download and run the installer. The app can now be found in the Start menu and is installed in the current user's app data directory. Full path example: C:\Users\<user>\AppData\Local\XPP Helper

Overview

1. XPPHelper → Build Bix tab → Load Source/Bix File (encrypted .zip from Telaeris).
2. Fill all fields → Build → ".bix" saved to Downloads.
3. KeyLink → Config → Local → select the ".bix" → XPID programmed for NEDAP mobile credentials.

Pages

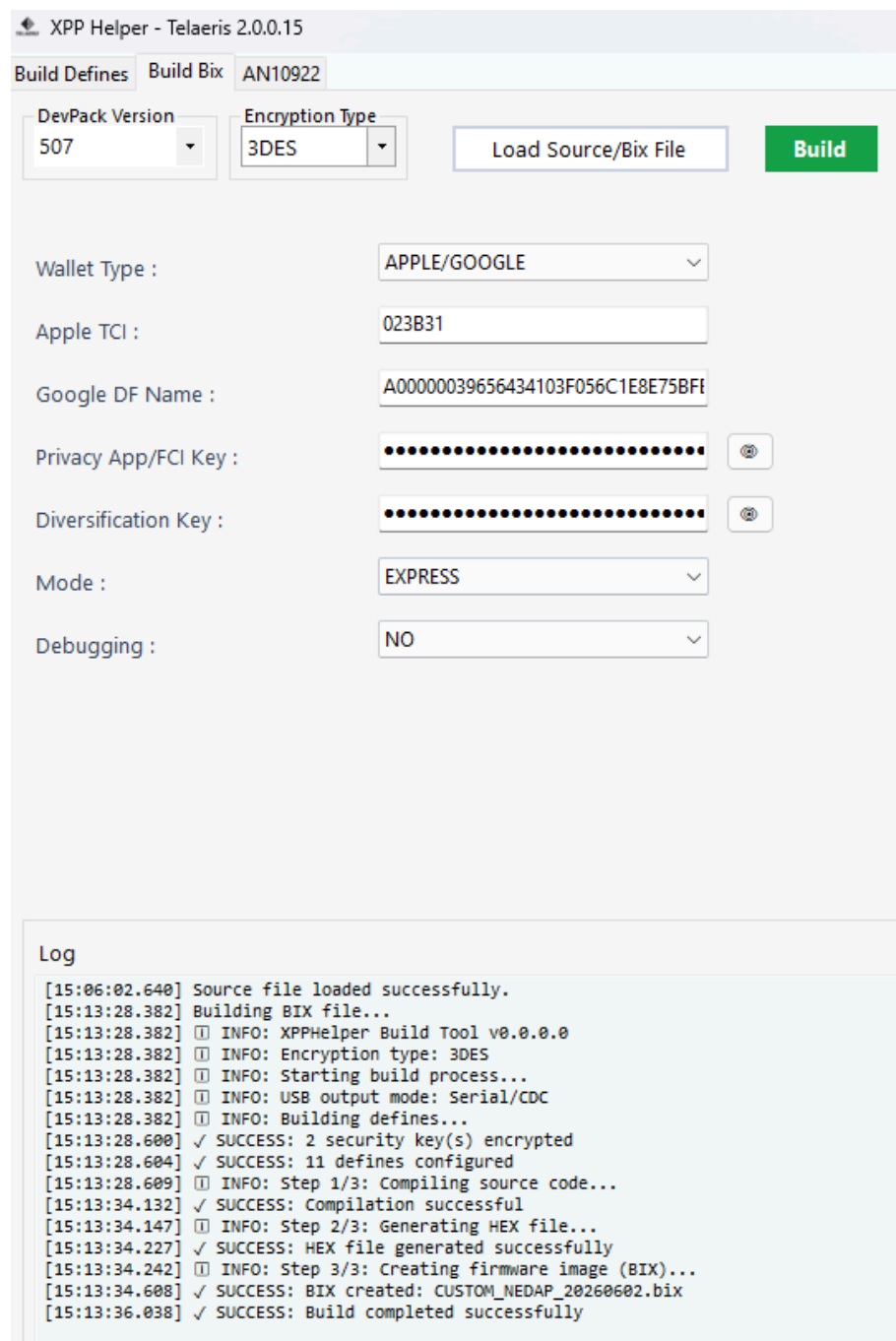
There are two pages available in XPP Helper: Build Defines and Build Bix. The Build Defines page will be used by Telaeris' team and the Build Bix page will be used by the customer.

Build Bix

1. Open the XPPHelper tool on the PC.
2. Select the Build Bix tab at the top of the window.

3. Select DevPack 507.
4. Set Encryption Type to AES/3DES (ask Telaeris about this).
5. Click Load Source/Bix File and select the encrypted .zip file provided by Telaeris.
The form fields will populate with the settings for the NEDAP credential.
6. Confirm the DevPack Version and Encryption Type match the values Telaeris supplied (for example DevPack 507, 3DES).
7. Review and fill in every field on the form (see the field reference table below).
Confirm that the Wallet Type and all key values match the details provided for the NEDAP project.
8. Click Build. The .bix file is generated and saved to the Downloads folder.

Example of the Build Bix screen:



XPP Helper - Telaeris 2.0.0.15

Build Defines Build Bix AN10922

DevPack Version: 507 Encryption Type: 3DES Load Source/Bix File Build

Wallet Type : APPLE/GOOGLE

Apple TCI : 023B31

Google DF Name : A00000039656434103F056C1E8E75BFE

Privacy App/FCI Key : [Redacted]

Diversification Key : [Redacted]

Mode : EXPRESS

Debugging : NO

Log

```
[15:06:02.640] Source file loaded successfully.
[15:13:28.382] Building BIX file...
[15:13:28.382] [i] INFO: XPPHelper Build Tool v0.0.0.0
[15:13:28.382] [i] INFO: Encryption type: 3DES
[15:13:28.382] [i] INFO: Starting build process...
[15:13:28.382] [i] INFO: USB output mode: Serial/CDC
[15:13:28.382] [i] INFO: Building defines...
[15:13:28.600] [x] SUCCESS: 2 security key(s) encrypted
[15:13:28.604] [x] SUCCESS: 11 defines configured
[15:13:28.609] [i] INFO: Step 1/3: Compiling source code...
[15:13:34.132] [x] SUCCESS: Compilation successful
[15:13:34.147] [i] INFO: Step 2/3: Generating HEX file...
[15:13:34.227] [x] SUCCESS: HEX file generated successfully
[15:13:34.242] [i] INFO: Step 3/3: Creating firmware image (BIX)...
[15:13:34.608] [x] SUCCESS: BIX created: CUSTOM_NEDAP_20260602.bix
[15:13:36.038] [x] SUCCESS: Build completed successfully
```

Build Bix Field Reference

The exact fields shown depend on the encrypted source file loaded. A NEDAP mobile credential build typically includes the following:

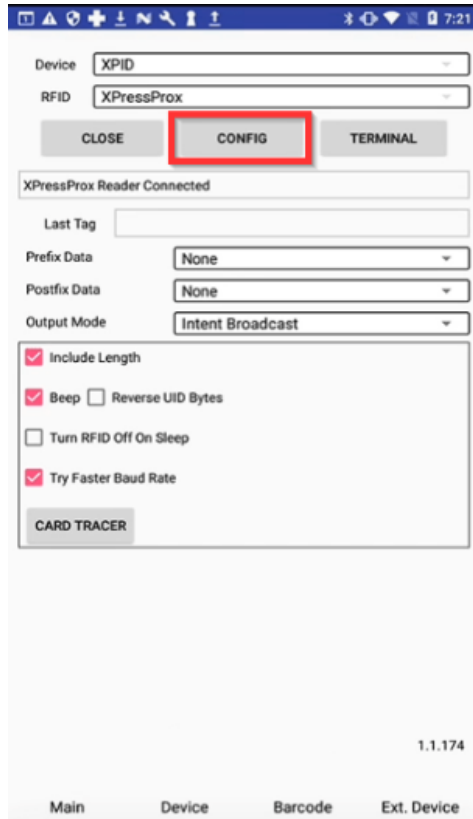
Field	Input
DevPack Version	Firmware development pack version. Use the value specified by Telaeris.
Encryption Type	Encryption scheme for the build (e.g., 3DES). Match the supplied value.
Wallet Type	The mobile wallet / credential type. Select the option for the NEDAP deployment.
Apple TCI	Apple wallet identifier supplied with the encrypted file.
Google DF Name	Google wallet application / DF name supplied with the encrypted file.
Privacy App / FCI Key	Secret key value (hidden). Confirm it is loaded correctly — use the eye icon to reveal if needed.
Diversification Key	Secret diversification key (hidden). Confirm it is loaded correctly.
Mode	Operating mode for the credential read (e.g., EXPRESS).
Debugging	Leave set to NO for production builds.

The key fields are masked for security. When the encrypted source file is loaded, these are filled in automatically. Do not retype them unless Telaeris instructs otherwise. Use the eye icon only to verify a value.

Program Via KeyLink

Repeat these steps for each XPID device to be programmed.

1. Connect the XPID device to the PC.
2. Open KeyLink.
3. Click Config.
4. Choose Local.



5. Select the .bix file built in Stage 1 (from the Downloads folder).
6. KeyLink programs the device. Once complete, the XPID is configured to read NEDAP mobile credentials.

After programming, present a NEDAP mobile credential to the XPID to confirm it reads correctly before deploying the device.

Summary

Programming an XPID for NEDAP mobile credentials is a two-stage process. In Stage 1, XPPHelper combines the encrypted source file from Telaeris with the project's credential settings to build a ".bix" configuration file. In Stage 2, KeyLink loads that .bix file onto each XPID device.

Once a device has been programmed, test it with a live NEDAP mobile credential before deploying it in the field. Repeat the KeyLink loading step for every additional XPID that needs the same configuration—the .bix file built in Stage 1 can be reused across devices. If a device fails to read a credential after programming, confirm that the DevPack Version, Encryption Type, and Wallet Type used in the build match the values Telaeris supplied, then rebuild the .bix file and reload it. If the issue persists, contact Telaeris support.