

CardExchange Solutions

UniC10Exchange

Version 3.3.0.0

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2014/05/02

Contents

Scope.....	2
UniC10Exchange functional description.....	3
Card configuration to use the plug-in.....	4
Plug-in usage flow.....	8
History release	11

Scope

Detailed instructions how to configure and use the UniC10Exchange plug-in. This plug-in does the interface between CardExchange and Mada Unic10 encoding solution.

UniC10Exchange functional description

This plug-in has six files, AMS.Profile.dll, matrix32.dll, UniC10_Plugin.dll, UniC10Exchange.dll, UniC10ExchangeP.dll and UniC10Exchange.ini, they need to be copied to CardExchange program folder, usually at C:\Program Files (x86)\ExchangeIt\CardExchange for 64 bits operating systems or C:\Program Files\ExchangeIt\CardExchange for 32 bits operating systems.

The matrix32.dll and UniC10_Plugin.dll are part of the Mada encoding solution sdk used to communicate with the licensing dongle, the reader and the card.

The AMS.Profile.dll, UniC10Exchange.dll, UniC10ExchangeP.dll and UniC10Exchange.ini are the files used to interface with CardExchange. The ini file has some settings described below:

- ReaderName: this setting defines the reader name used with the plugin, the default value is Legic Advant SM2570C;
- SerialPort: this setting defines the com port used by the reader, the default value is 1;
- Retries: Timeout value in seconds for the encoding process.

Card configuration to use the plug-in

In the card definition wizard enable the External plugins option and click Edit

Card Definition Wizard

Definitions Mappings

Card type: N/A
Card uid: 00000000

☐ Enable visible notes

Settings

Layout and magnetic encoding

☒ Do you want to define a card layout?

☒ Do you want to enable printing?

☐ Do you want to enable magnetic encoding?

Templates\Plugin\UniC10.cedx ... Create Edit

☒ Print front ☐ Rotate front

☐ Print back ☐ Rotate back

☐ Print back side first ☐ Send to printer as bitmap

Database connections

☐ Do you want to connect to a database?

Database Connections\MS Access 2007\Internal Databases ... Create Edit

Contactless encoding

☒ Do you want to enable contactless encoding?

☐ Do you want to read data from MIFARE Classic?

☐ Do you want to write data to MIFARE Classic?

☐ Do you want to read and/or write from MIFARE DESFire?

☐ Do you want to put the card on the smart-card reader manually?

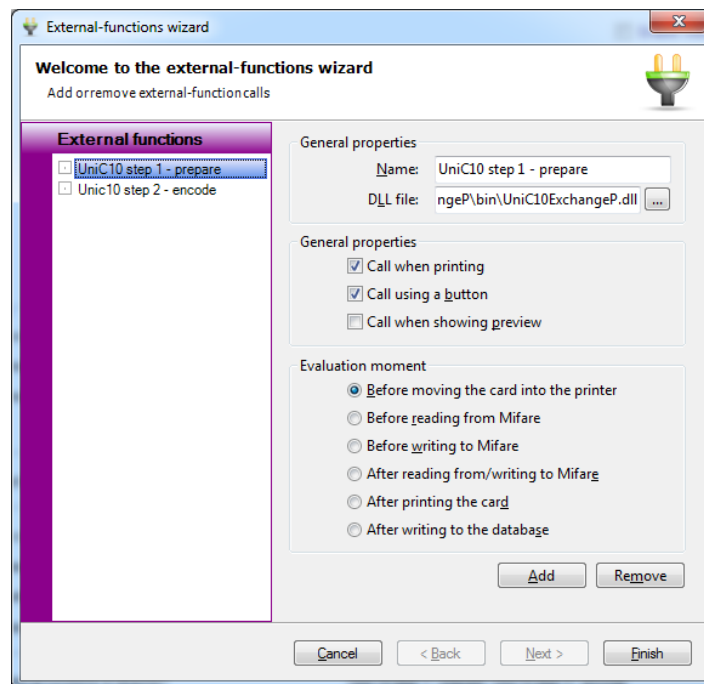
External plugins

☒ Do you want to use external functions or plug-ins?

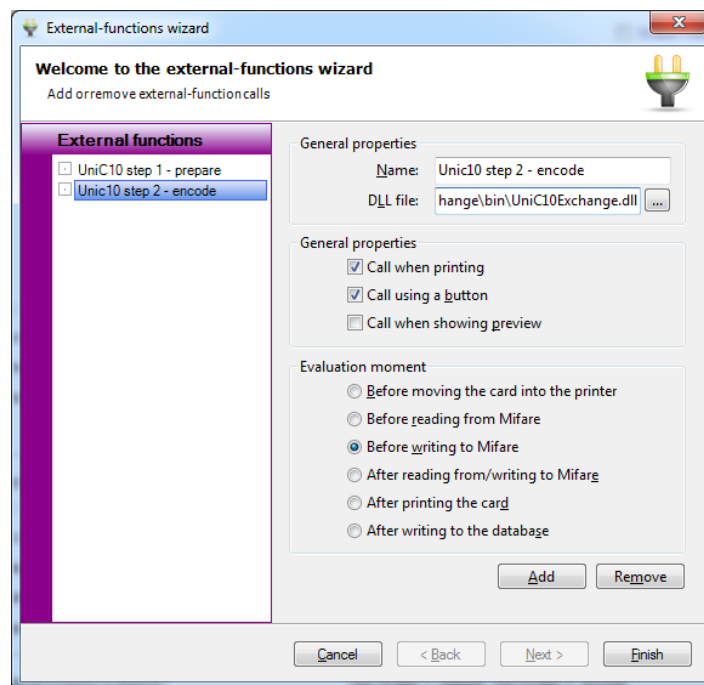
UniC10 step 1 - prepare, UniC10 step 2 - encode Edit

Cancel < Back Next > Finish

In case of Legic encoding, create a first plug-in to be executed before moving the card into the printer like the image below:

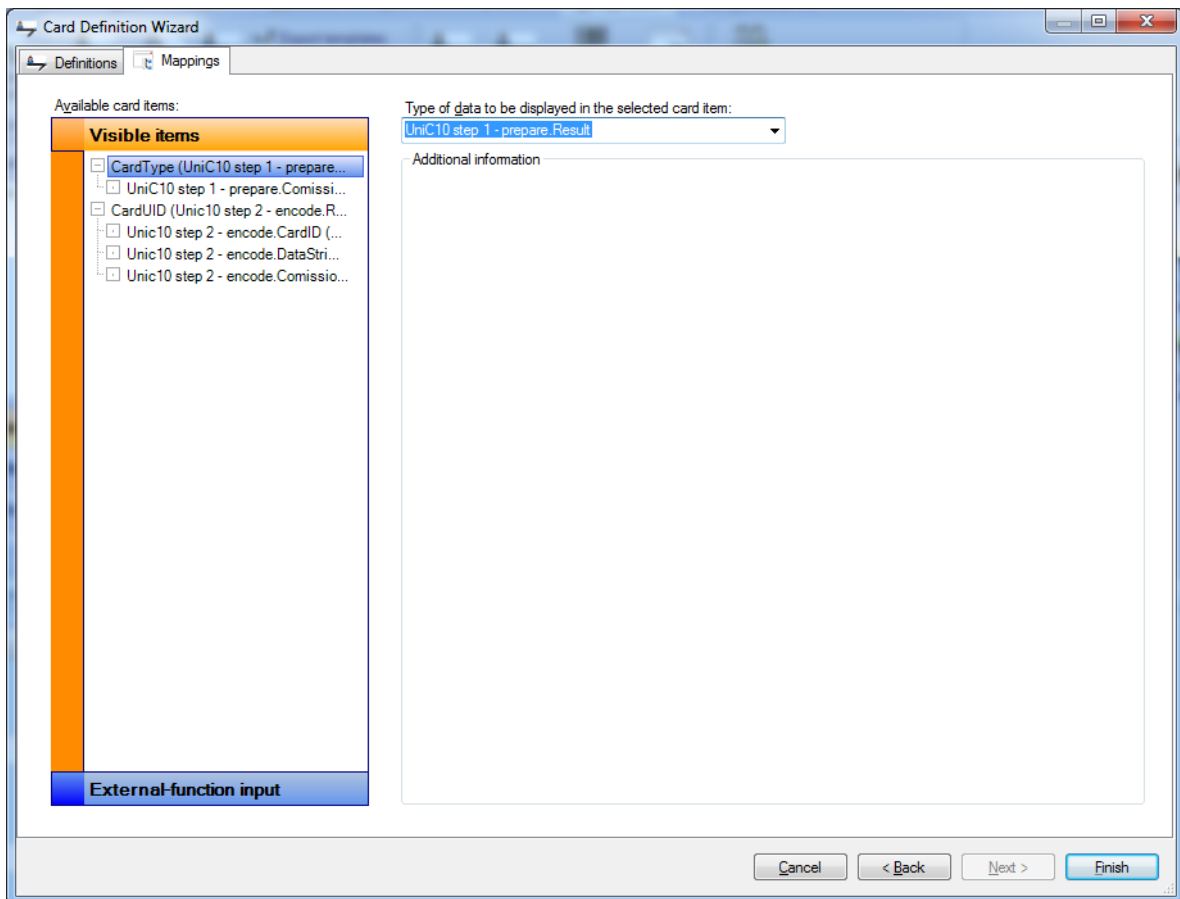


Create a second plug-in to do the encoding process like was done in the previous versions:



For other card types where the master card is not used only the second plug-in is needed.

On the mappings window map any available visible or storage items to the plug-ins result objects, in this case the results will be the encoded card uid in hexadecimal format for Unic10Exchange and a string with the card type for Unic10ExchangeP, these values can be stored on a database or just used for visible validation.



Then map the External-function input fields to the source of it, in this example the CardID will be available in a database column. Any other additional input fields will be managed in the same way.

Card Definition Wizard

Definitions Mappings

Available card items:

Visible items

- ☐ CardType (UniC10 step 1 - prepare...
- ☐ CardUID (UniC10 step 2 - encode.R...
- ☒ UniC10 step 2 - encode.CardID (...)
- ☐ UniC10 step 2 - encode.DataStri...
- ☐ UniC10 step 2 - encode.Comissio...

External-function input

Type of data to be displayed in the selected card item:
Enter manually

Additional information

Value:
12345

Manual-entry window

☒ Make this value editable in the manual-entry window

Description to be shown in the manual-entry window:
CardID:

Prompt for value

☐ Prompt for value before printing

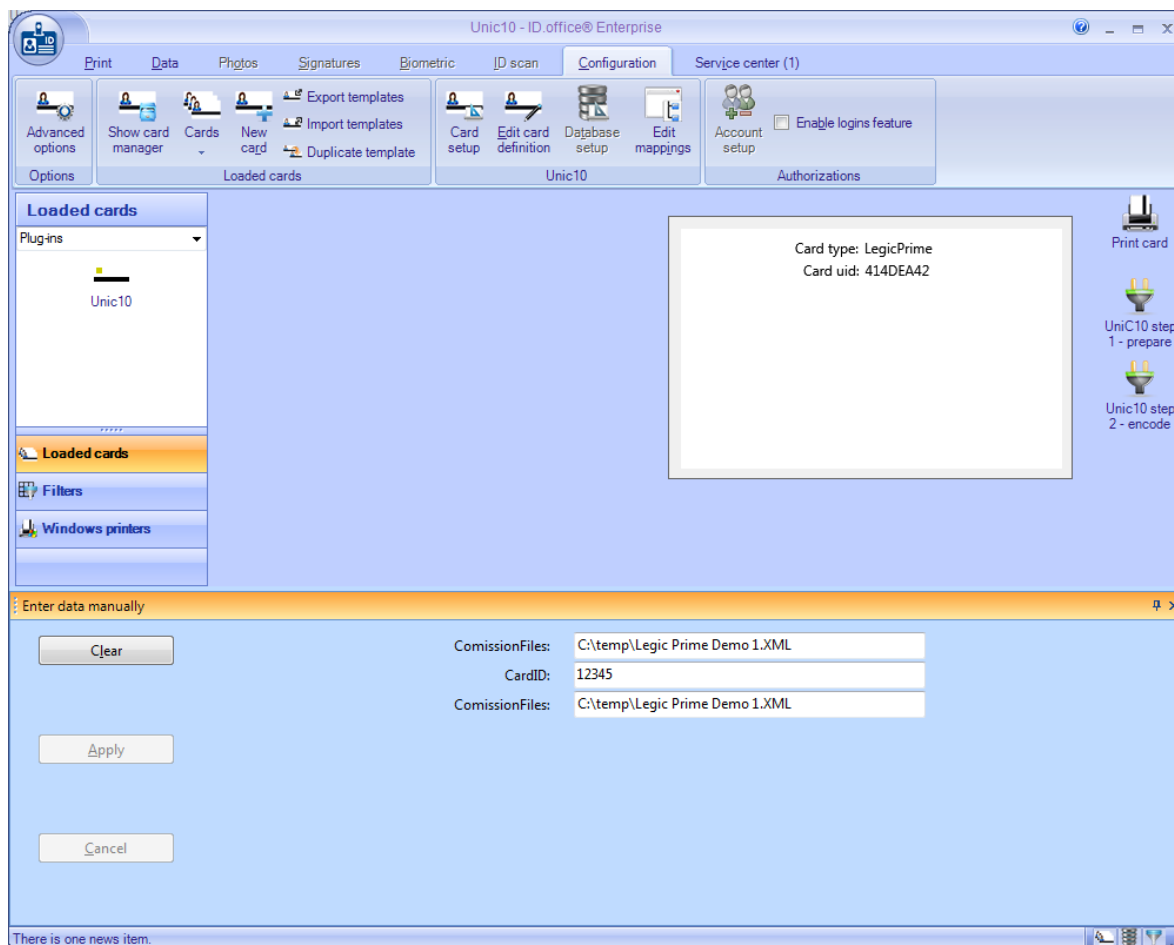
☐ Value cannot be null or empty

☐ Show previous value

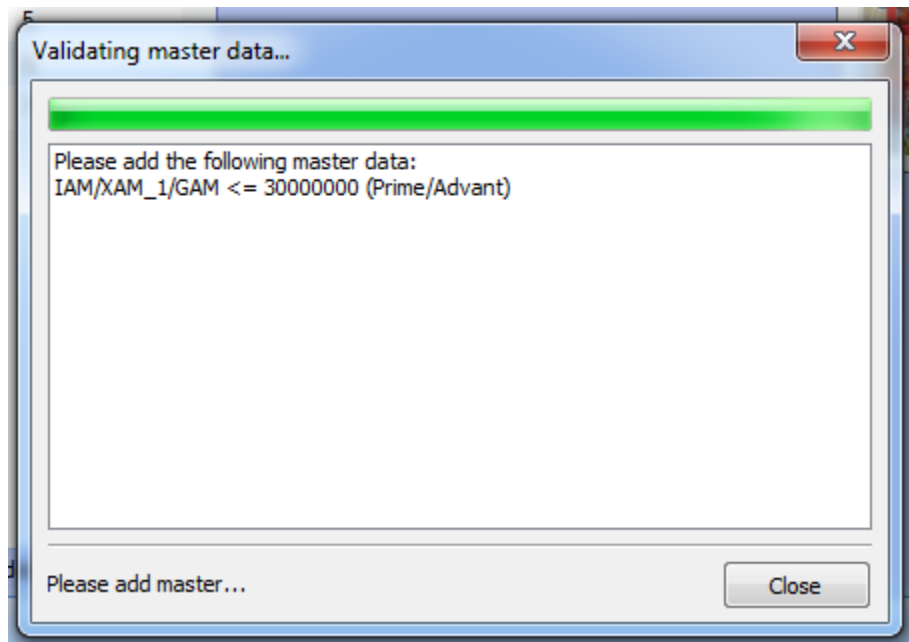
Cancel < Back Next > Finish

Plug-in usage flow

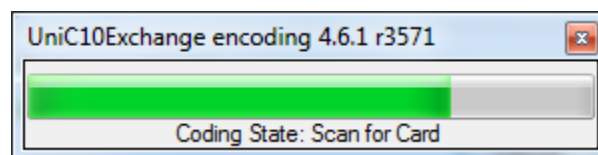
When the configuration is done is possible to see two buttons on the right side of CardExchange interface to call each plug-in individually for test purposes. When the print button is pressed the first plug-in will be executed before load the card into the printer and the second plug-in will load the card and encode it respecting the settings loaded from the commission file.



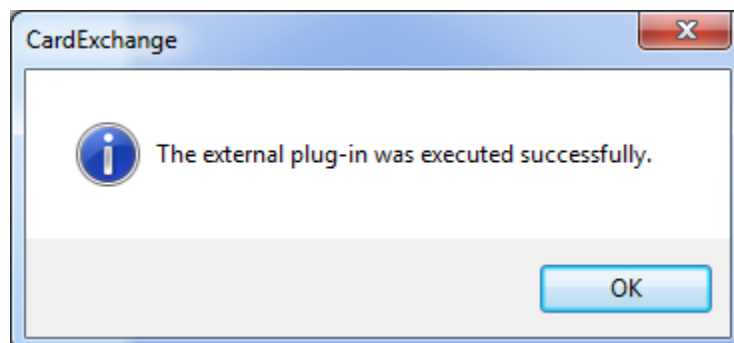
In the first plug-in the commission file will be loaded and a master card will be asked if needed, as shown in the image below



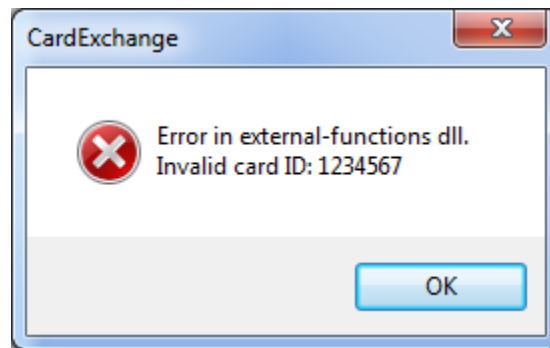
In the second plug-in the commission file is loaded again and the encoding process will be executed and possible to be monitored by the user using the progress dialog below:



If the plug-in is executed correctly the dialog below will be shown and the result will be used according with the previous mappings definitions.



If some error happens an error dialog will appear, like the one below:



History release

3.3.0.0	2014/05/02	<ul style="list-style-type: none"> Improvement: Added a card scan timeout of 20 seconds by default, this value can be changed in the ini file.
3.2.0.0	2014/04/01	<ul style="list-style-type: none"> Improvement: Revised the encoding flow to optimize the Unic10 code error handling
3.1.1.0	2014/03/26	<ul style="list-style-type: none"> Improvement: If the master card is missing the encoding process will not be executed
3.1.0.0	2014/03/18	<ul style="list-style-type: none"> Added support to Legic Advant into Unic10EchangeP.dll Added cancel encoding process feature into Unic10Echange.dll
3.0.1.0	2014/03/17	<ul style="list-style-type: none"> Changed Unic10ExchangeP.dll to location code free license
3.0.0.0	2014/03/14	<ul style="list-style-type: none"> Created an additional plug-in named Unic10ExchangeP.dll to do the preparation process for Legic cards and read the master card outside the encode and print process which is still done with the regular Unic10Exchange dll.
2.1.0.0	2014/03/03	<ul style="list-style-type: none"> Fixed the "Wait for remove" bug
2.0.0.0	2014/02/19	<ul style="list-style-type: none"> Removed the commission file load setting from the ini file and added it has an input parameter of the plug-in. Added an additional input parameter to the plug-in in order to encode the variable data defined in the loaded commission file.
1.3.0.0	2014/01/13	<ul style="list-style-type: none"> Changed the plug-in output to return the hexadecimal card UID
1.2.0.0	2013/12/20	<ul style="list-style-type: none"> Added a default 20 seconds timeout to the encoding process
1.1.0.0	2013/10/18	<ul style="list-style-type: none"> Fixed a bug where the exceptions where closing the main application (ID.Office)
1.0.0.0	2013/10/08	<ul style="list-style-type: none"> Initial implementation