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i4 Automation Ltd
Innovative Solutions for Industry

Licensing PLC

Licensing PLC with Univision Licensing Software

You may want to license some programs so that it can only be used in a certain PLC/s to prevent plagiarism or incompatibility between units. The following guide will outline how to do this using the UniVision Licensing Software which can be downloaded here-
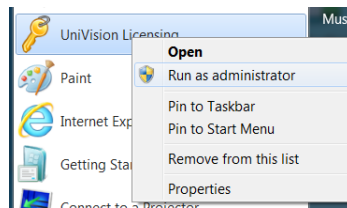https://unitronicsplc.com/Download/SoftwareUtilities/UniVision%20Licensing%201.0.10.zip

The 4 main values (Key and Data) need to be written into your program using VisiLogic. These values can then be used to unlock and restrict certain parts of your program depending on whether they match the values burnt into the PLC within the UniVision Licensing software. This is explained in the 'UniVision Licensing Demo.vlp' file found here-

http://www.i4automation.co.uk/i4appnotes/UniVision Licensing Demo.zip

To define which values need to be written into your program, first generate these values in the UniVision Licensing Software.

Open the 'Univision Licensing' Software and run as administrator.

Once the Univision Licensing software is open, set the Communication parameters by selecting the correct COM Port etc. as you would for connecting in VisiLogic.

Once Communication parameters are set check the connection to the PLC by clicking the 'Check Connection' button in the bottom right corner of the screen. If the Connection is established then the 'PLC Information' fields will become populated.

PLC Model	OS Version	Boot Version	BinLib Version	PLC Name
SM43-J-R20	4.2(24)	2.2 (41)	0-2.50 (01)	10801934

Check Connection

Enter the appropriate values into the Key and Data fields or click the generate button to create new numbers from scratch.
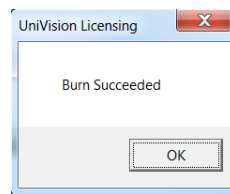
NOTE: *Enter your values in decimal according to these rules 1) Key and Data values cannot be identical. 2) The value must fill 4 bytes, and in hex cannot repeat values (i.e. CC CC) or use 00, FF, AA or 55.*

NOTE: *It is recommended to take note of these values so that you can easily call them within the program. Also using these values, you can license more PLCs without having to change the program at all.*

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Once the PLC is connected and the correct values are entered into the correct fields then you simply have to click the 'Burn License to PLC'

Key: Example: 2172381702	614444368 ✔	🔑 Generate Key
Data1: Example: 3562017692	1635320616 ✔	🔑 Generate Data1
Data2: Example: 3288499731	2312050612 ✔	🔑 Generate Data2
Data3: Example: 1739424505	3023917696 ✔	🔑 Generate Data3

⬇ Burn License to PLC

...unication — Select Communication Parameters

Burn License to PLC
⬇ Burn license to secure, hidden PLC sector

	PC Port	Baud Rate	Retries			
...t (Call)	COM16	57600	3	3 sec	0 (Direct)	8

Once the licence has been successfully burned onto the PLC this dialogue box will appear showing that the Licence has been successfully sent to the PLC and it is now licensed. No further action is required.
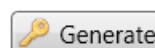
UniVision Licensing ❌

Burn Succeeded

OK

Licensing a specific PLC to be used with your program remotely.

If you wish to license or change the level of Licensing available to the customer on a PLC remotely you can get the customer to connect their PLC to the UniVision Licensing software in the same way as before but using the 'Customer: Get License' tab generate a unique Keygen for that PLC. Once this Keygen is then sent to you, it can be used to generate a license using the pre-defined Key and Data values you defined in the program ladder. This license can then be sent back to the customer so they can burn it into the PLC, licensing only that PLC to be used with your program.

To create the keygen get the customer to download and install the UniVision Licensing software, once open establish communication with the PLC as before and open the 'Customer: Get License' tab.

Programmer: Create & Burn License	Programmer: Generate for Customer	Customer: Get License

Click the Generate button-

🔑 Generate

This will create a long KeyGen code in the box to the left.

KeyGen:	w+6cLvxxauFnGMWqen1EfAQ9ZpWDHjnHsni/0Vxsh7KUvCSzK/eafXzGuNwPW03f ✔	🔑 Generate 📋 ❌

This code is unique to this PLC and should be copied and E-mailed to you.
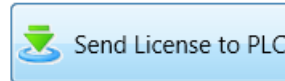
You can then use this code to generate a unique 'Customer License' for your PLC and send it back.

Telephone: 01480 395256
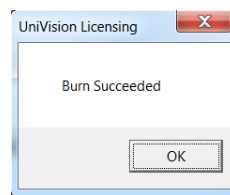www.i4automation.co.uk
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Customer License:	tatQPLXT1TQ8MkQz7QW8h2Z90r/XlqOhbyWLGuhNAeZiMDkS83w6QDNL6yFbY1MM

When the customer receives the unique 'Customer License' from you, ensure the correct 'KeyGen' field is populated correctly and paste new 'Customer License' code into the 'Customer License' field and click 'Send License to PLC.

Send License to PLC

Once the licence has been successfully burned onto the PLC this dialogue box will appear showing that the Licence has been successfully sent to the PLC and it is now licenced. Reset the PLC using VisiLogic, now you should be able to load and run your program on the PLC with no problems.

UniVision Licensing

Burn Succeeded

OK

Tom Johnson
January 2018