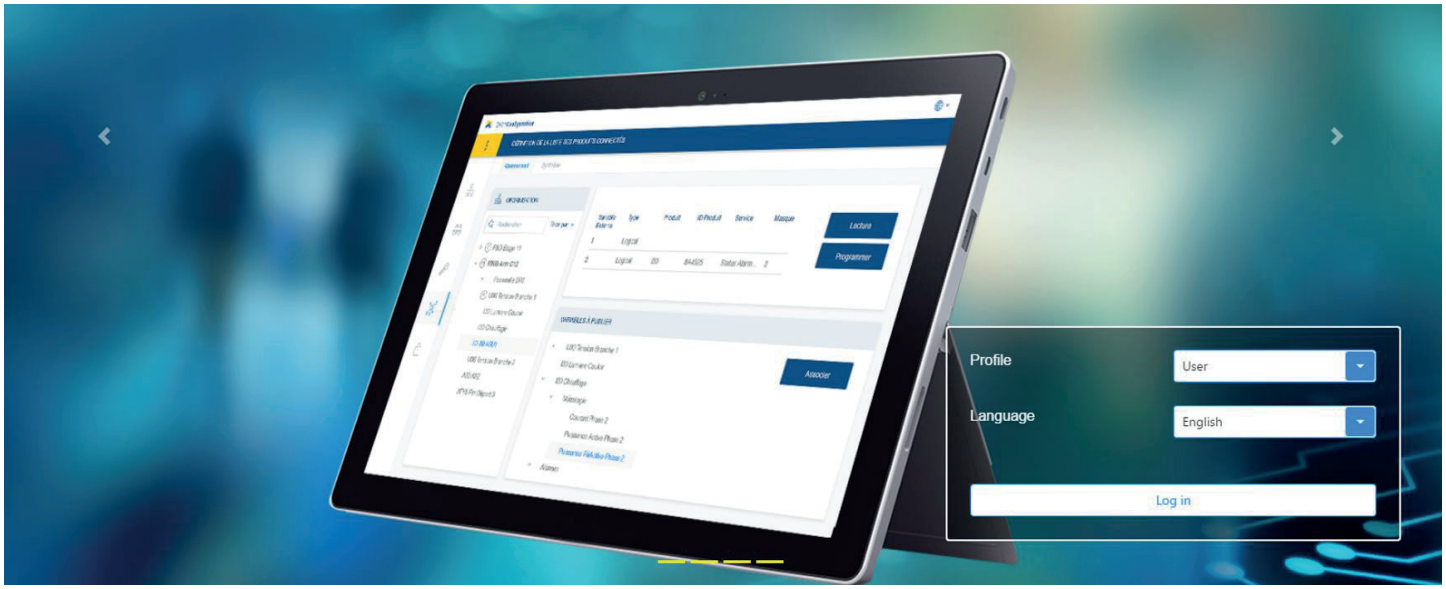
EASY CONFIG SYSTEM



socomec
Innovative Power Solutions

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1. DOWNLOAD AND INSTALLATION

1.1. Where to download ?

Go to: **https://www.socomec.com/easy-config-system_en.html**

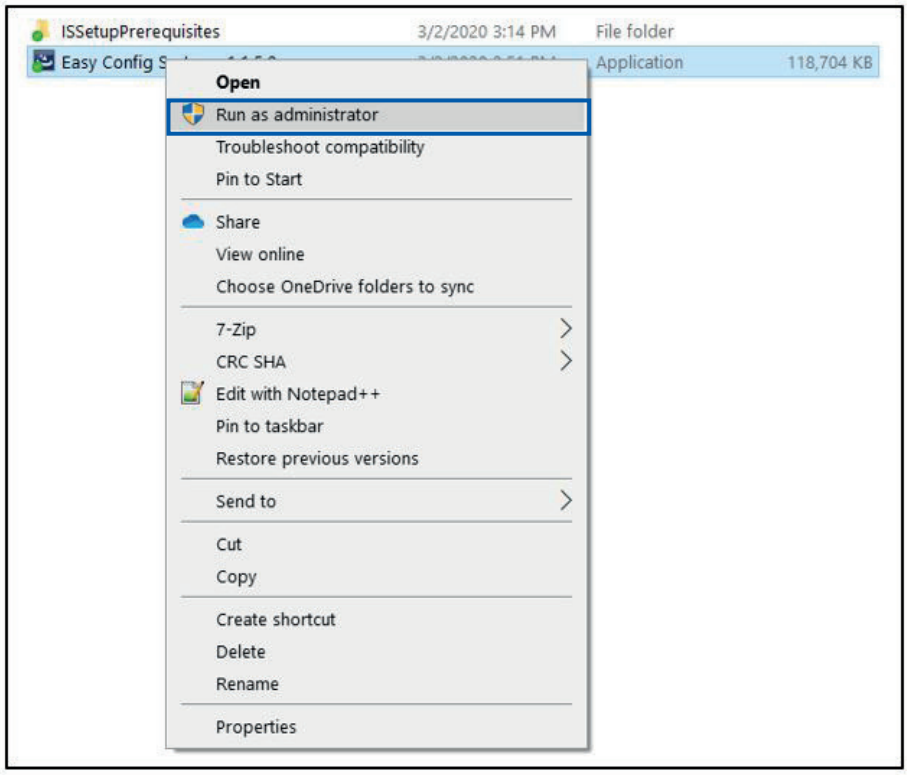
Minimum configuration required:

- Windows 7 and above
- Windows 64 bits only
- 2 Go of RAM
- 1 Go of hard disk
- Screen resolution: 1024 x 768

1.2. How to install ?

Step 1: Unzip the “Easy Config System X.X.zip” file.

Step 2: Right-click on the .exe file and **“Run as administrator”.**



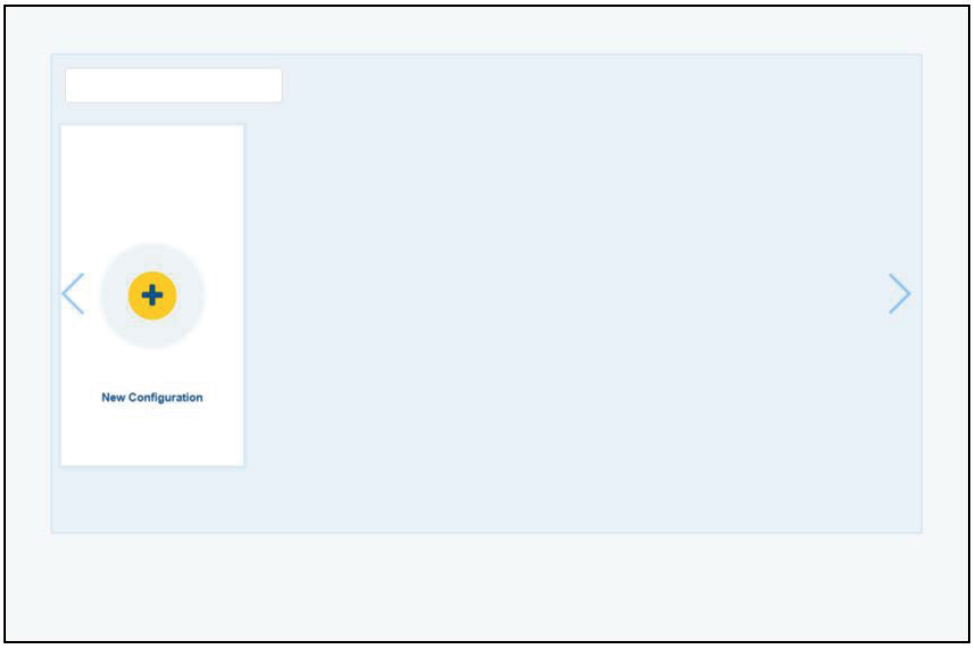
2. START-UP

2.1. Profiles

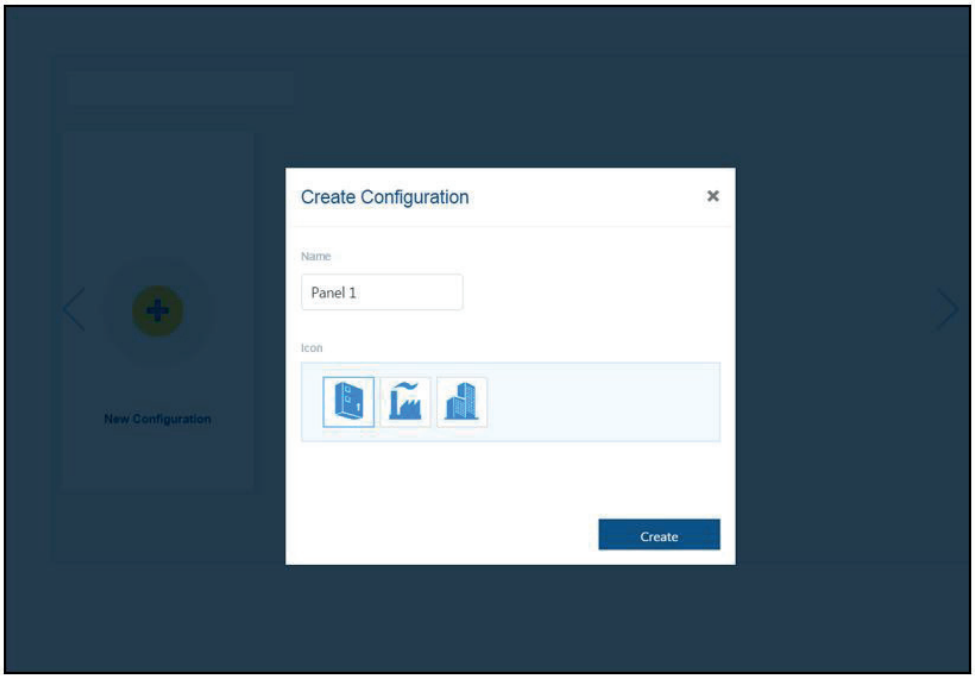
Profile	Default Password	Rights
User	None	• Visualisation • Limited configuration
Admin	Admin	• Visualisation • Full configuration • Save system • Open system • Save template • Upload template • Template management • Password modification

2.2. Create a new configuration

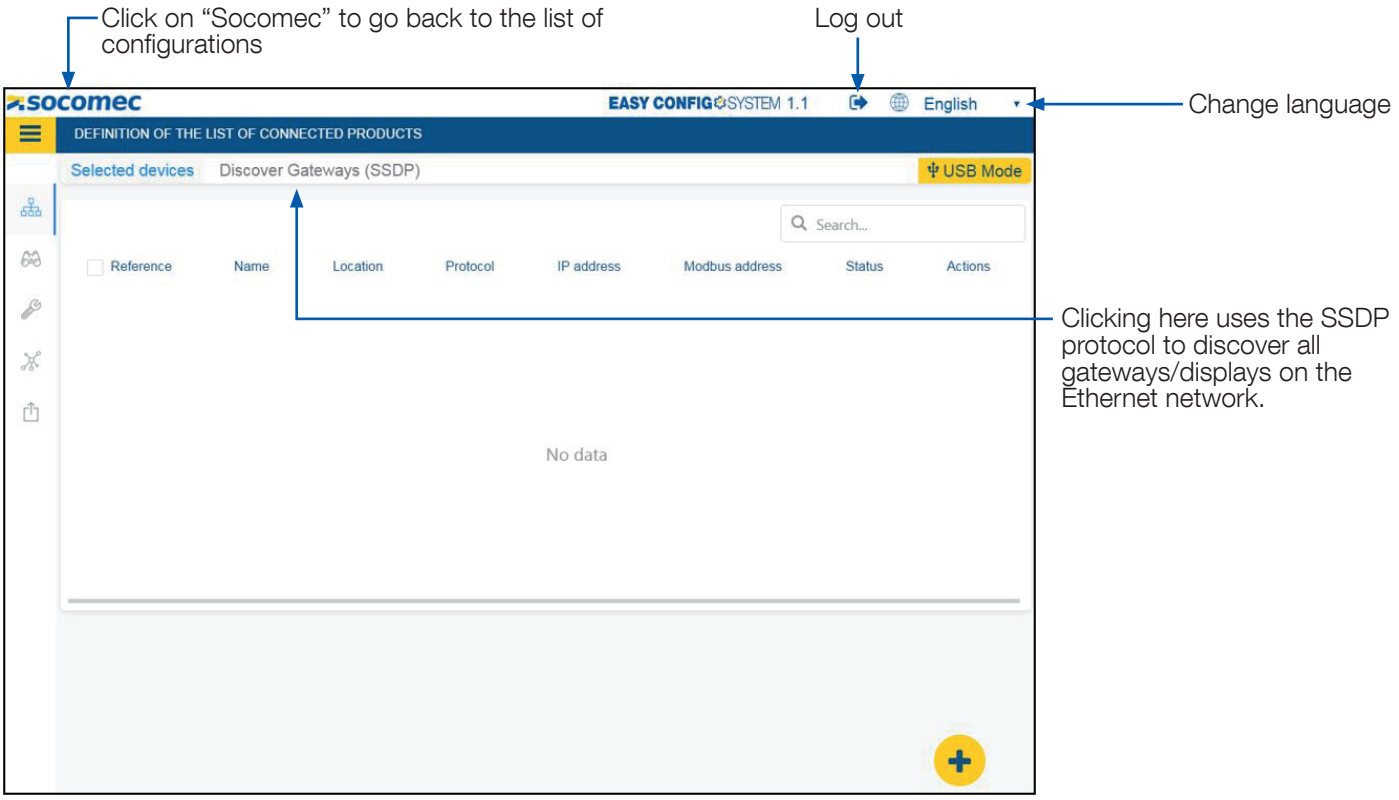
Step 1: Click on “New Configuration”.



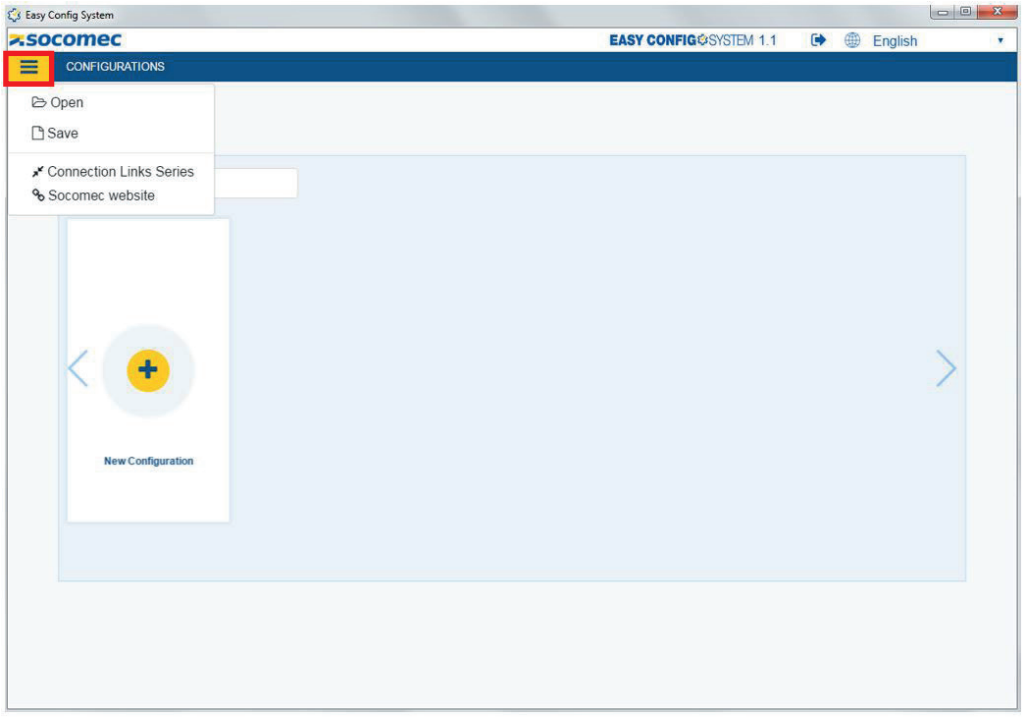
Step 2: Name the configuration and choose an icon.



2.3. Main screen

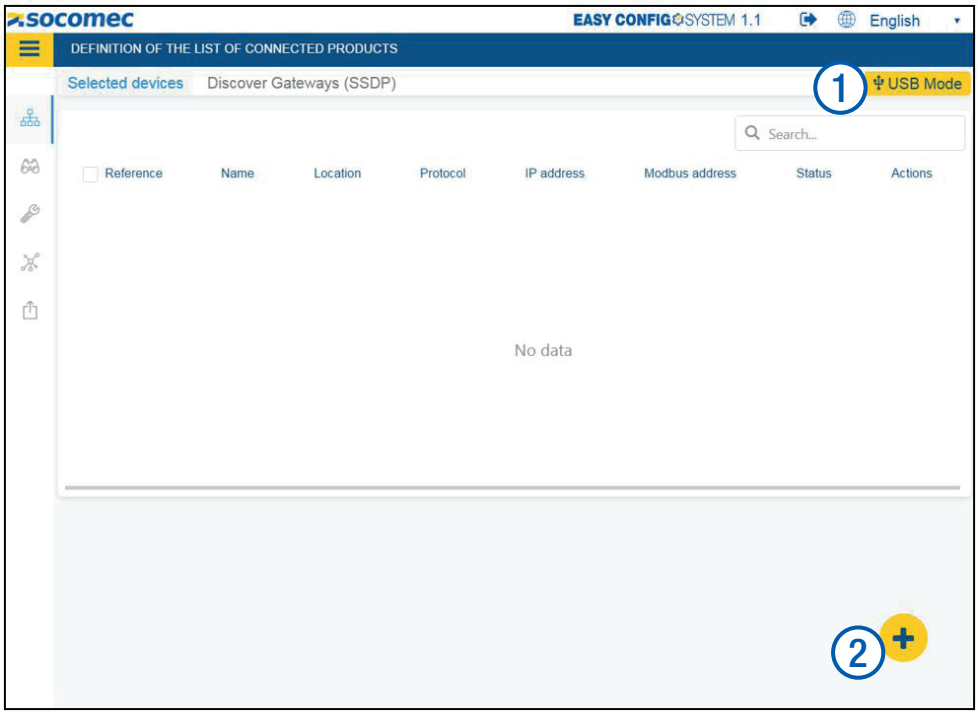


2.4. Saving or opening a configuration



- Your system configurations can be saved and used again for another project.
- Instead of saving the configurations of individual devices, this allows you to save the configuration of an entire system.
- This will be particularly helpful if you need to configure multiple identical panels.

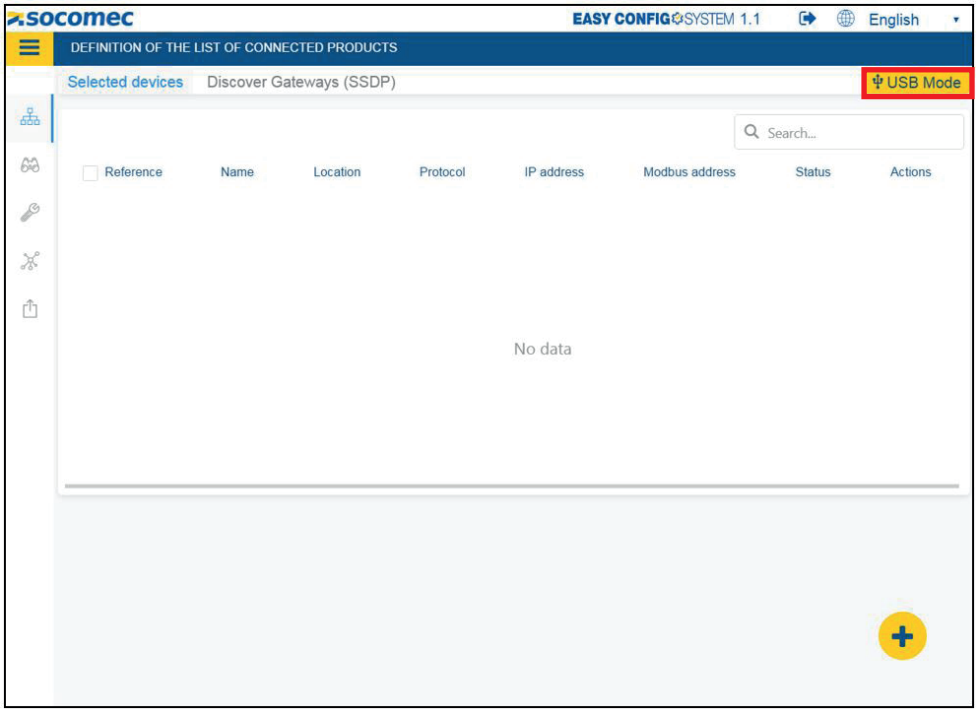
2.5. Connection modes



2 modes to connect to a device:

1. USB mode when your laptop is connected to a device via a USB cable.
2. "+" button to manually add a device connected over Ethernet or RS485.

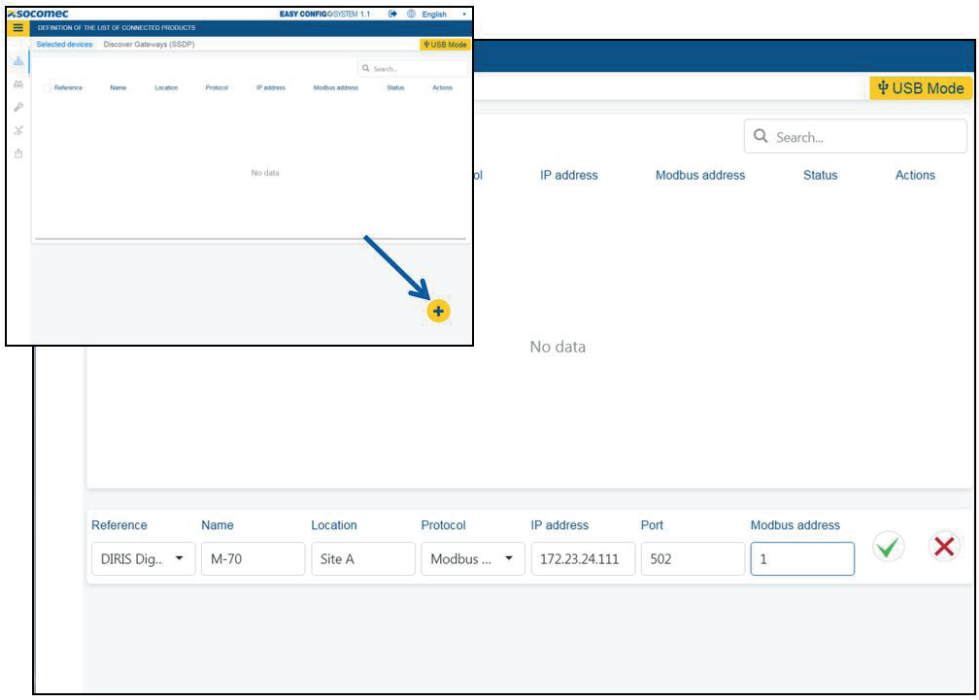
2.6. Connection modes – USB



- Connect a USB cable between your PC and a Socomec device.
- Click on USB mode.
- The device will be added.

Note: When adding a D-xx display or M-xx gateway, all slaves will also be added (providing the Auto-Discovery was done already).

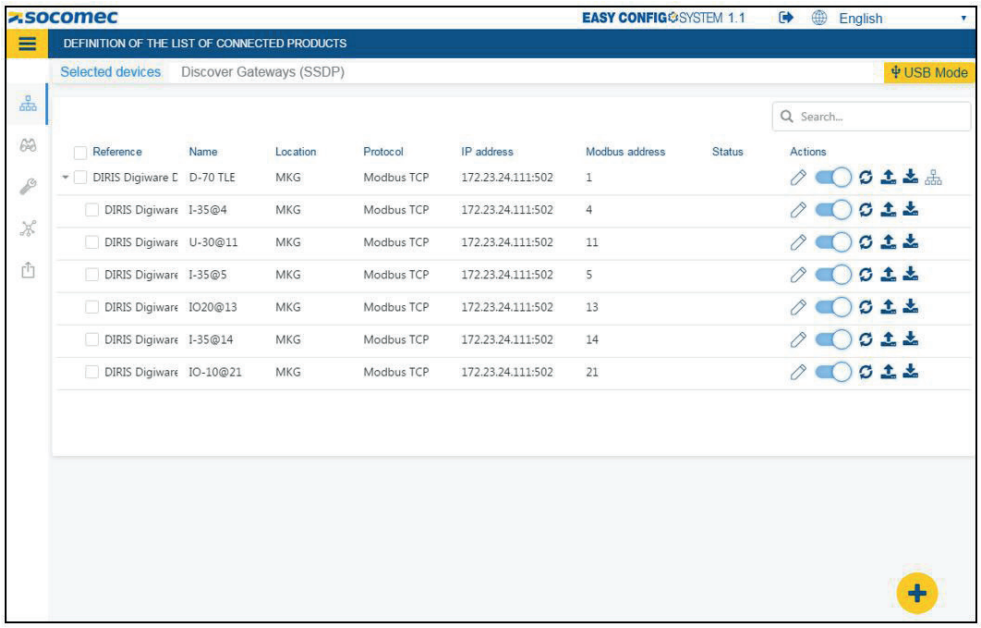
2.7. Adding a device manually



- Enter communication details for the device you wish to add:
  - Device type
  - Name
  - Location
  - Communication protocol
  - IP address
  - Communication port
  - Modbus Address

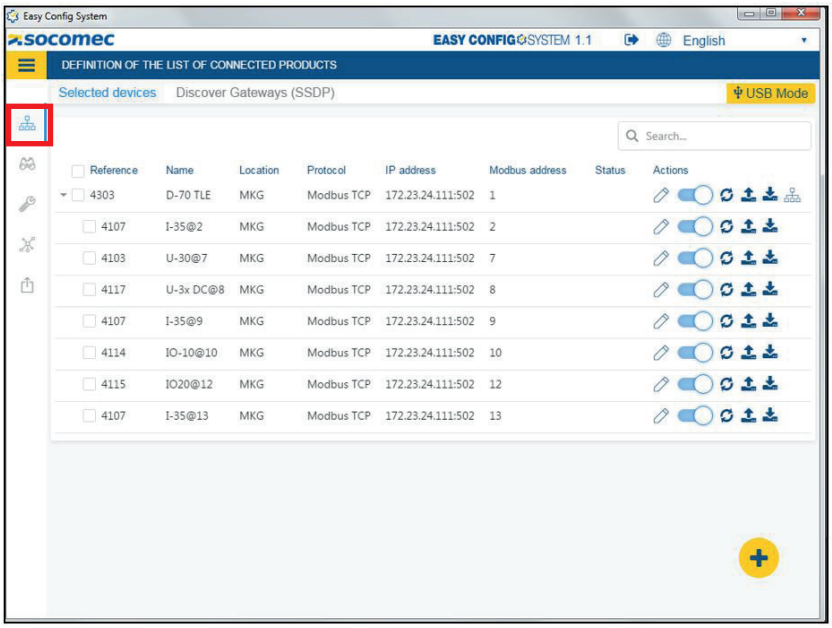
When adding a D-xx display or M-xx gateway, all slaves will also be added (providing the Auto-Discovery was done already) ➡ See chapter 2.8.

2.8. Manual addition of a gateway/display

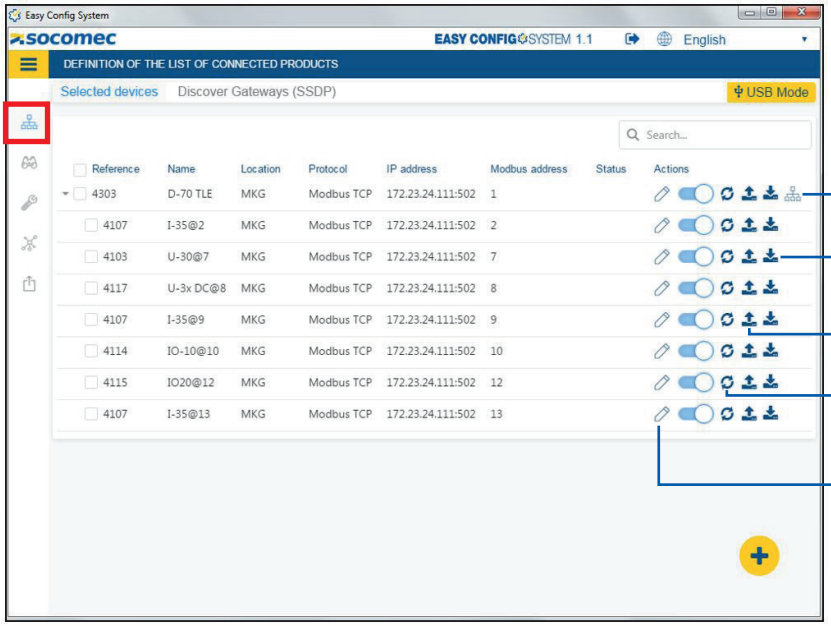


- If the Auto-Discovery process was launched before, all slave devices will be added as shown on the screen capture.

3. DEVICE LIST MENU

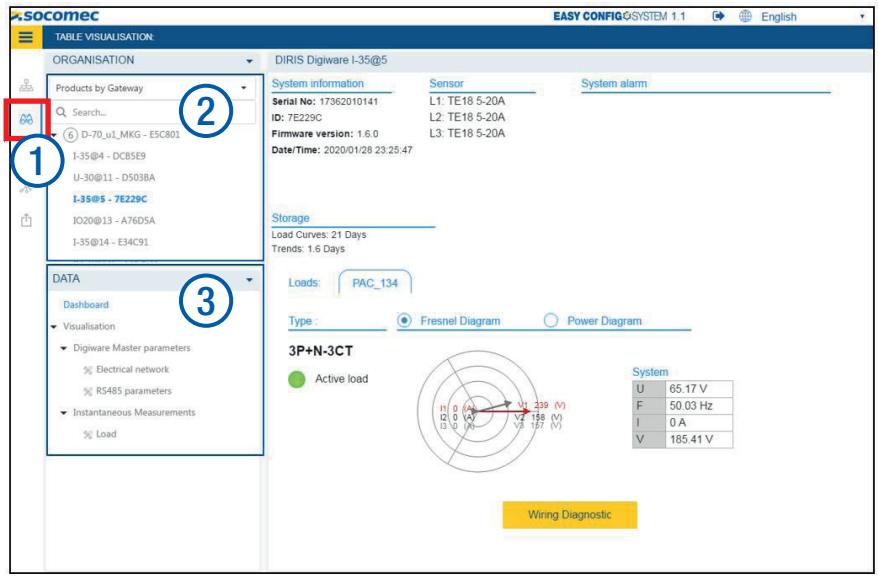


- From this menu, you can find the list of devices present within the configuration.
- One or several gateways/displays can be listed, each with their own slave devices.



- Refresh the gateway/display's topology
- Save the device's configuration
- Upload a saved configuration to the device
- Reset the device's default settings in Easy Config
- Modify the device's details (name, location etc.)

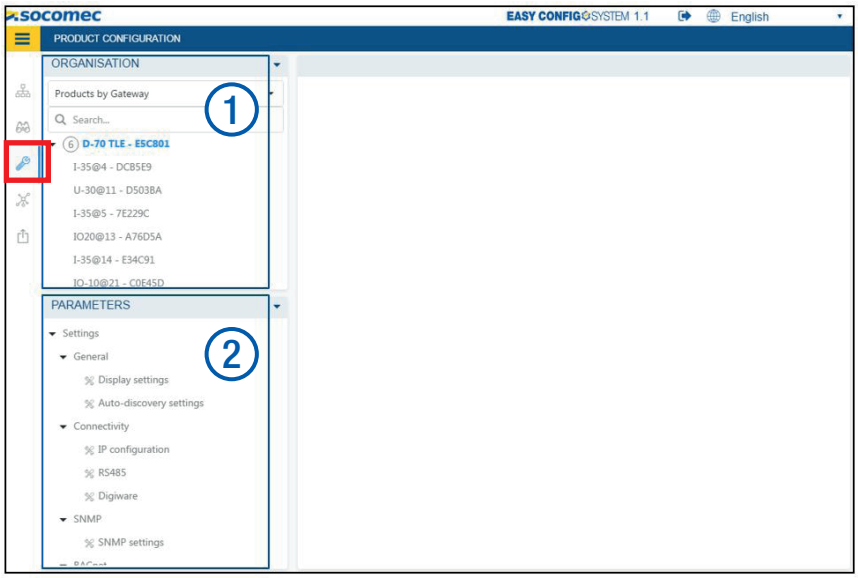
4. VISUALISATION MENU



- From this menu (1), the list of devices is shown in the “Organisation” part (2).
- In the “DATA” part (3), select data to visualise.
- Each device has a custom dashboard.

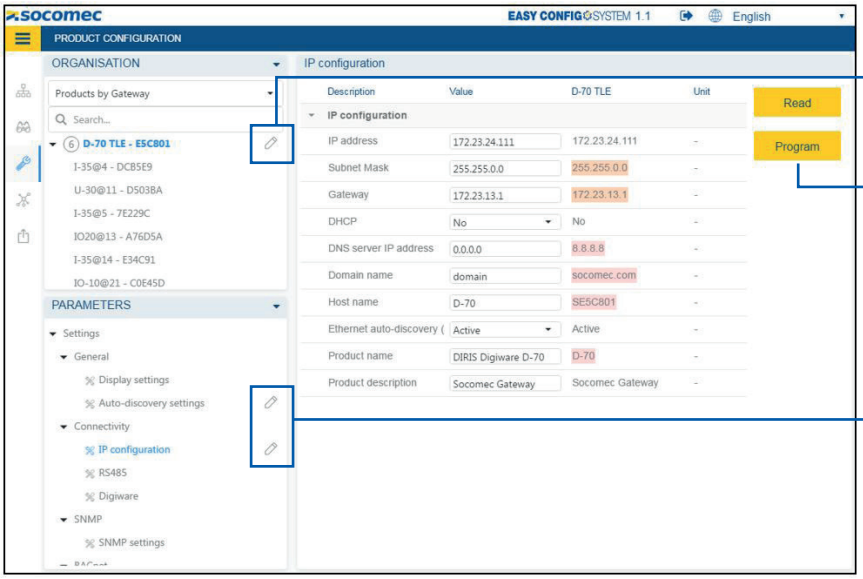
5. CONFIGURATION MENU

5.1. Device configuration



- From this menu (1), the list of devices is shown in the “Organisation” part (2).
- In the “DATA” part (3), select data to visualise. Each device has a custom dashboard.

When parameters are modified, an icon appears next to the modified menu and next to the modified device.



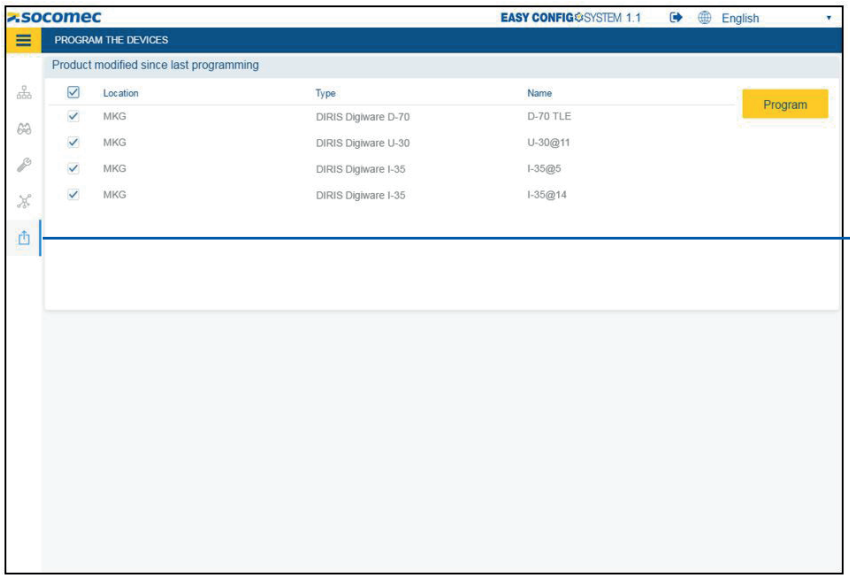
Parameters were modified for this device but configuration has not been sent to the device yet.

Click on program to send the configuration **(for this menu only)** to the device.
This does not send the configuration of other configuration menus.

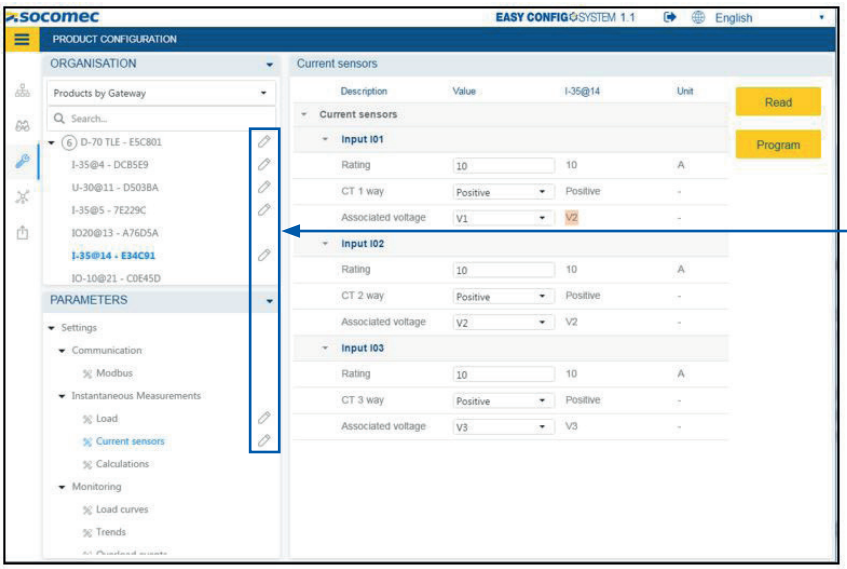
Some parameters have been modified within this menu, but changes were not sent to the device yet.

6. SYSTEM CONFIGURATION MENU

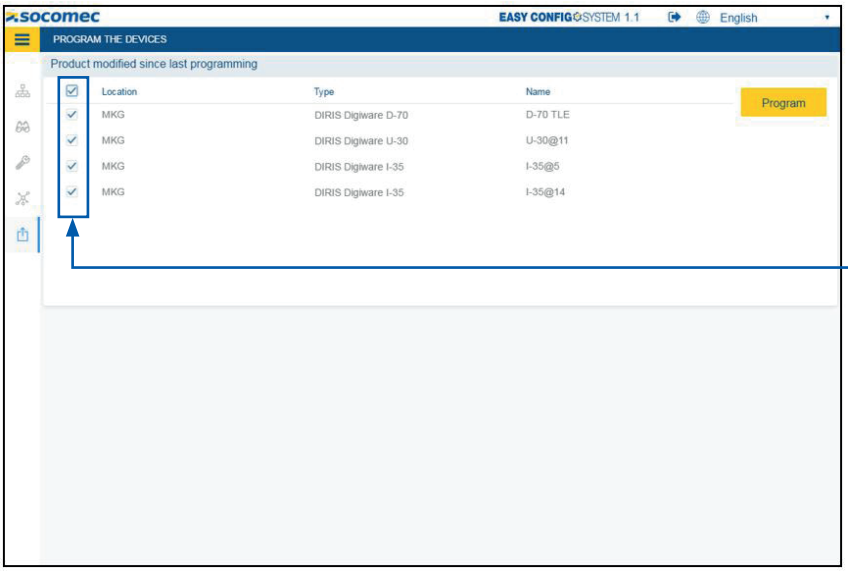
6.1. Multi-menu and Multi-device programming



- This menu is used to send the configuration to multiple devices at the same time.
- All devices that have been modified and not yet configured are listed in this menu.
- This menu is particularly handy and quick if you have modified the configuration within several tables, and for multiple devices.



1 Several configuration menus or devices have been modified (indicated by the pencil icon) and waiting to be configured.

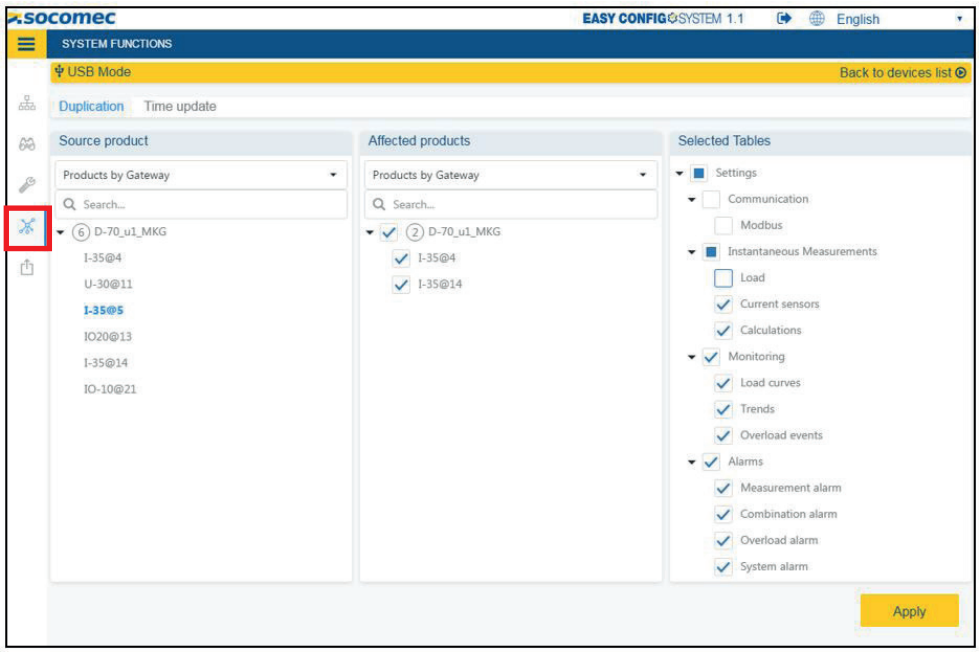


2 All devices which have been modified but not yet configured are listed.

Click on Program to send the configuration to all devices.

7. DUPLICATE A CONFIGURATION

7.1. Duplicate a configuration (device to device)



This menu is used to duplicate the configuration of a device into another device of the same type.

Ex:
Choose a source product (I-35).

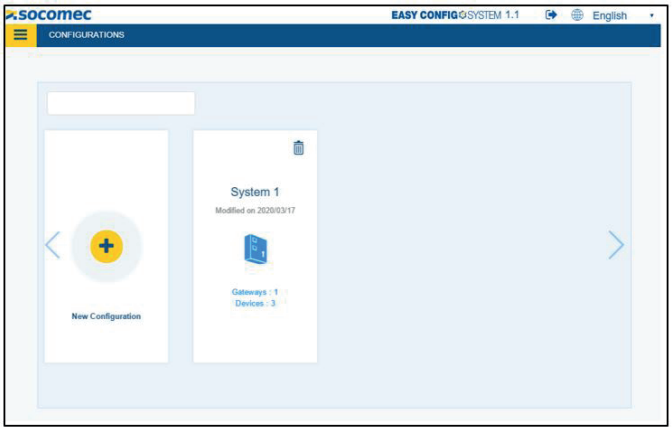
All other I-35 modules are then listed in the “Affected product” part.

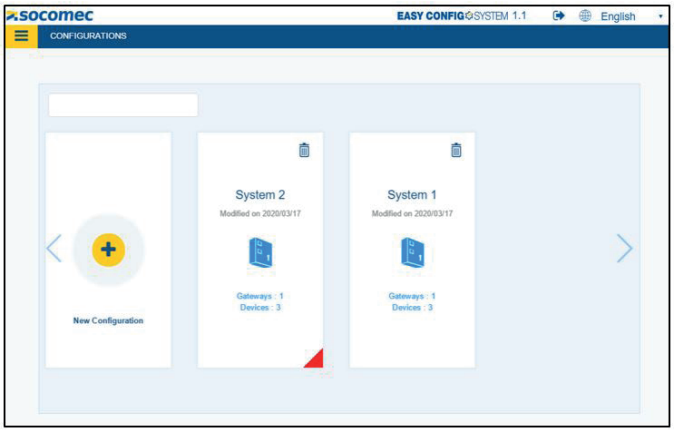
Choose the ones you want to apply the configuration of the source I-35 and then select the tables you want to apply.

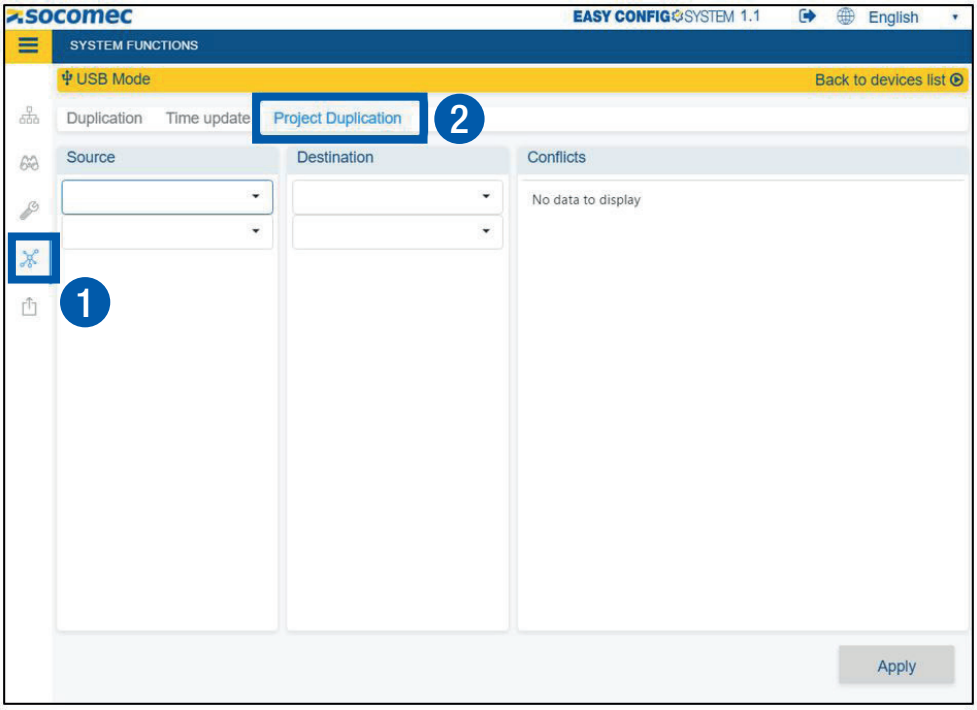
Don’t forget to uncheck the menus you don’t want to duplicate (Modbus, etc.).
After clicking on “Apply”, don’t forget to send the configuration to the devices.

7.2. Duplicate a configuration (system to system)

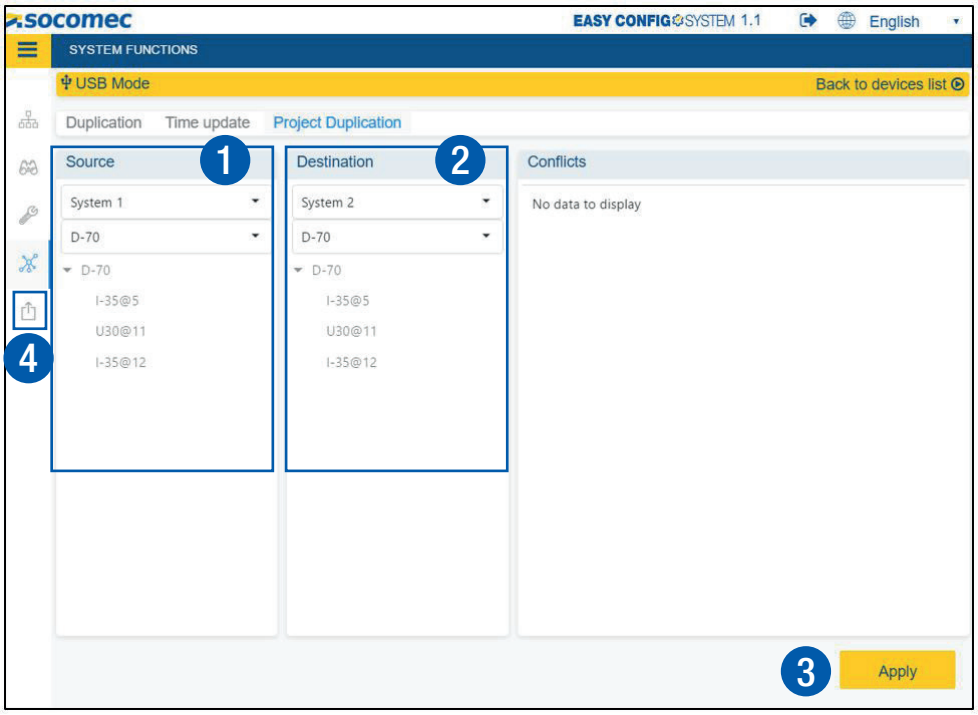
- **Step 1**: Connect to a system (named System 1), via USB or Ethernet.
- **Step 2**: Configure a System.
- **Step 3**: Save the system configuration.
- **Step 4**: Create a new configuration.
- **Step 5**: Connect to the new system (named System 2).
- **Step 6**: Do the auto-discovery and change Modbus addresses to have the same Modbus mapping as System 1.
- **Step 7**: Go to the Duplication menu (see next page).





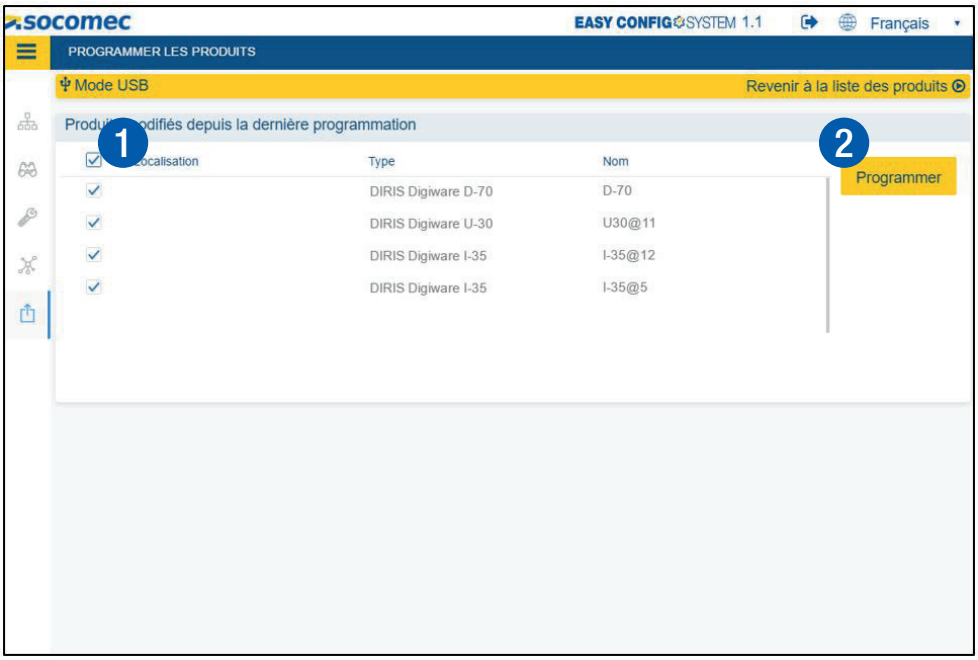


- This menu is used to duplicate a system configuration and apply it to a new system (for instance a DIRIS Digiware system).
- Go to the Duplication menu (1).
- Click on “Project Duplication” (2).



- Select the “Source” system (1).
- Select the “Destination” system (2).
- Click on “Apply” at the bottom right corner of the screen (3).
- Click on the “System configuration” menu (4).

The “Destination” system must have the same Modbus mapping as the “Source” system.
The Auto-discovery process and Modbus addressing of the “Destination” system must therefore be done prior to using the duplication function.



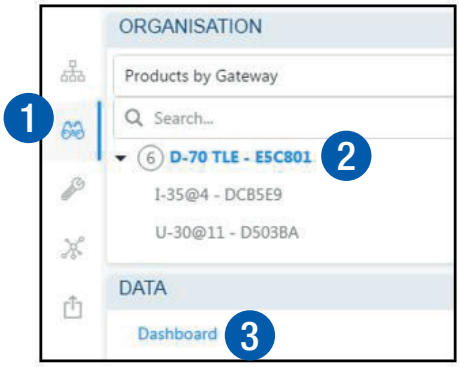
- Select all devices within system 2 (1).
- Click on “Program” to send the configuration to devices in system 2 (2).

8. AUTO-DISCOVERY PROCESS

Launched from the dashboard of D-xx displays or M-xx gateways.

Picture 1

- From the Visualisation menu, click on the dashboard of the D-xx display/M-xx gateway (picture 1).



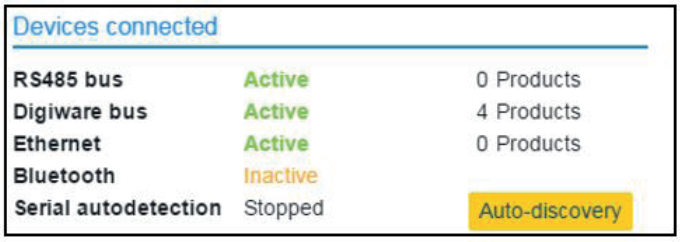
- Click on “Auto-discovery” (picture 2).

- The Auto-Discovery from Easy Config System **doesn’t generate any conflict**. The M-xx gateway/D-xx displays automatically assigns a Modbus address to each device.

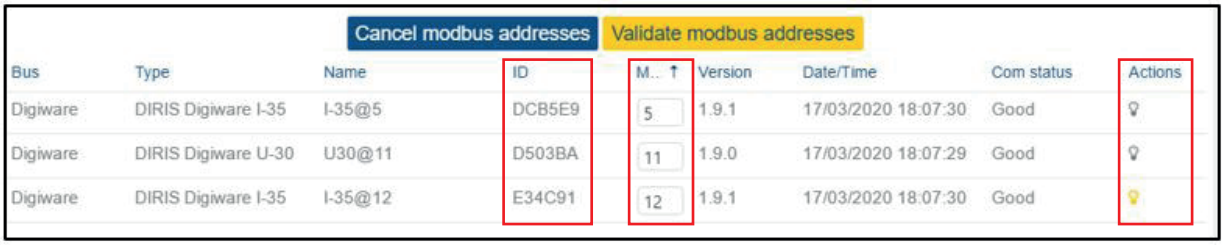
- Once the Auto-Discovery process is completed, the list of devices is displayed at the bottom, and you can change the Modbus address of all devices (picture 3).

- The unique ID and the “Blink” function which makes the slave’s ON LED blink for 10 seconds allow you to quickly identify the module inside electrical panels (picture 3).

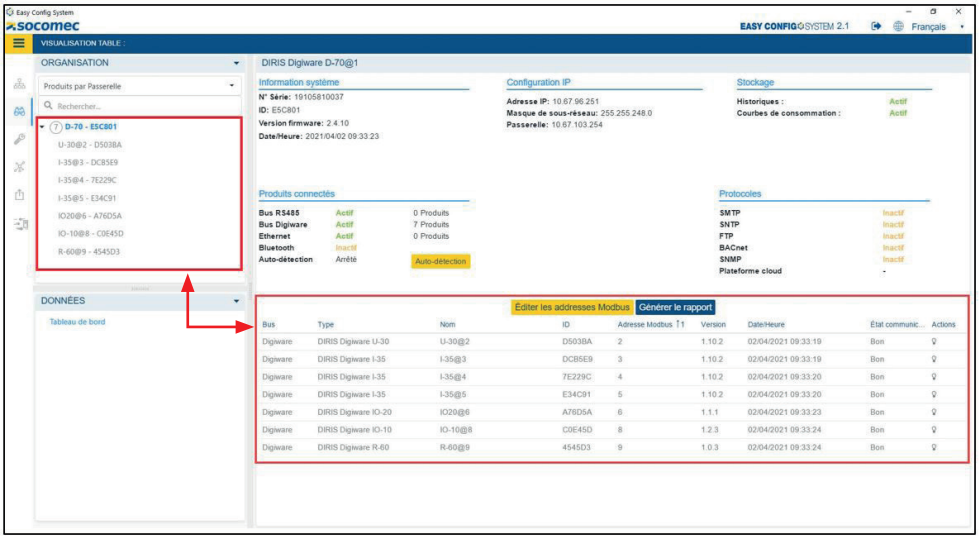
Picture 2



Picture 3



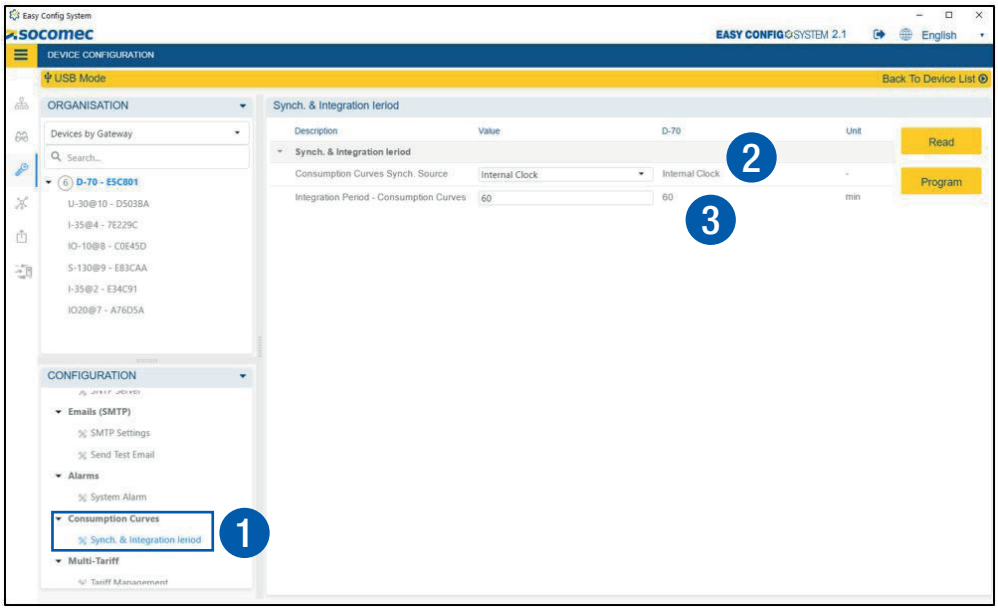
- Once the Auto-Discovery process is completed, the list of slave devices is also updated in the organisation part on the left sidebar.



9. CONFIGURING CONSUMPTION CURVES, LOAD CURVES AND TRENDS WITH DIRIS DIGIWARE

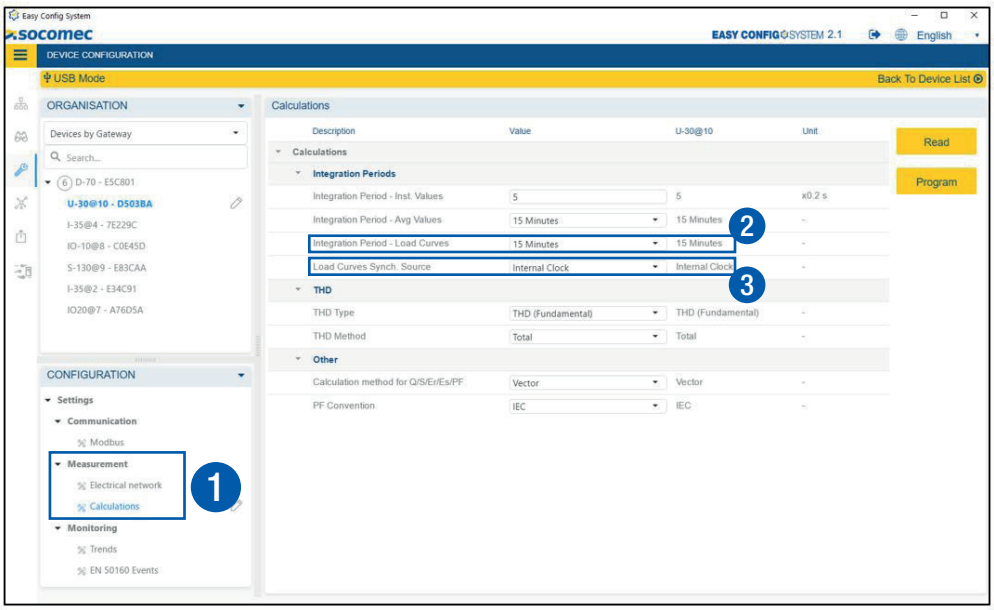
9.1. Configuration of Consumption Curves

- From the DIRIS Digiware D-70 display or DIRIS Digiware M-70 gateway:

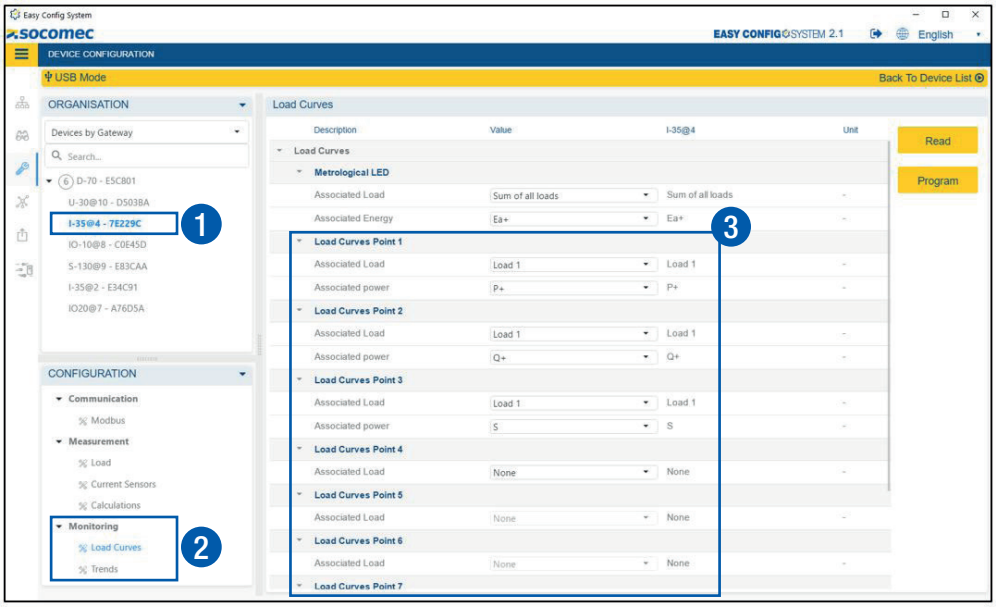


1. Go to the “Consumption curves” menu.
2. Choose the Synchronisation Source:
   - Internal clock
   - External comm signal
3. Choose the integration period for consumption curves.

9.2. Configuration of Load Curves



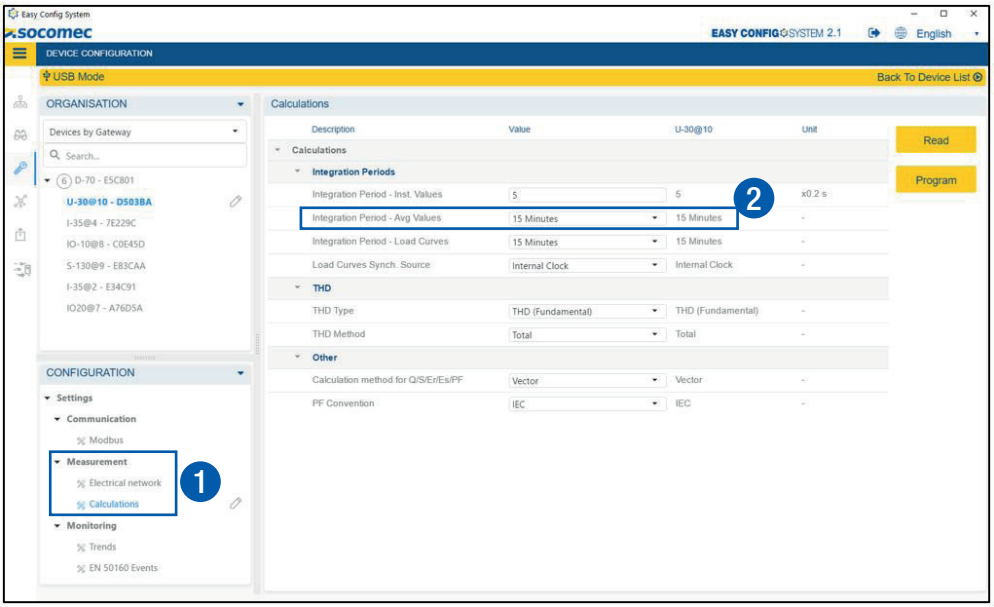
1. On the DIRIS Digiware U module, go to the “Calculation” menu.
2. Choose the integration period for Load curves.
3. Choose the Synchronisation Source:
   - Internal clock
   - External comm signal



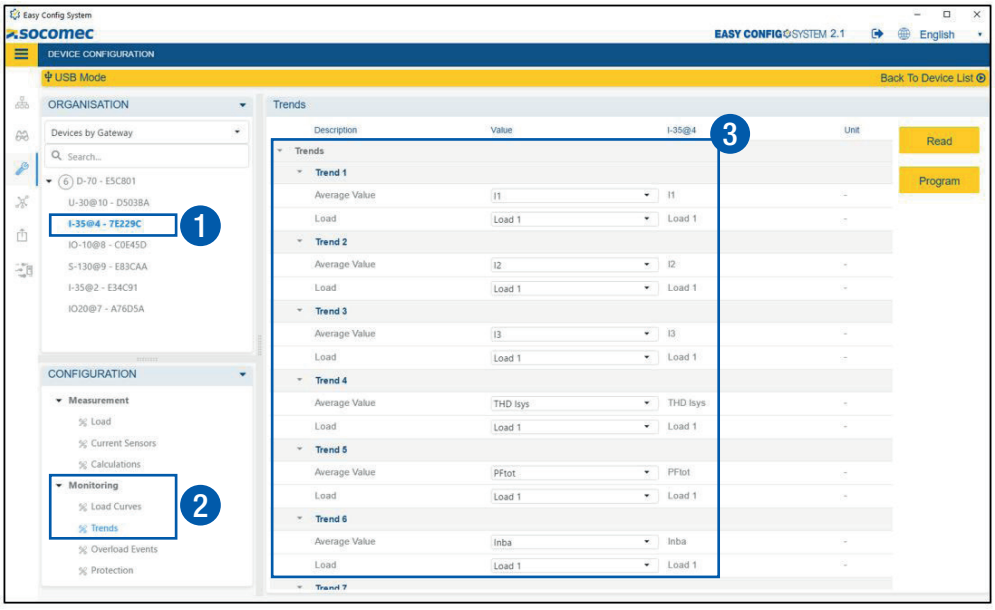
1. Select the DIRIS Digiware current module to configure.
2. Go to the “Load Curves” menu.
3. Select the powers to log and their associated load.

9.3. Configuration of Trends

- On the DIRIS Digiware U module, go to the “Calculation” menu (1) and select the integration period for Trends (Avg. values) (2).



- Then you must go on each DIRIS Digiware I/S current module to select the electrical parameters you want to log (refer to next page).



1. Select the DIRIS Digiware I/S current module to configure.
2. Go to the “Trends” menu.
3. Select the electrical parameters to log and their associated load.

10. FEATURES ASSOCIATED WITH THE TOKEN MODE

10.1. Introduction to the TOKEN mode

The TOKEN is a communication mode within the Digiware bus where there are **publishing** devices and **subscribing** devices

A **publishing device** can publish a service (alarm status for example) on the Digiware bus:

- DIRIS Digiware U-xx
- DIRIS Digiware I-xx
- Etc.

A **subscribing device** can subscribe to a published service (alarm status)

- IO-10
- Etc.

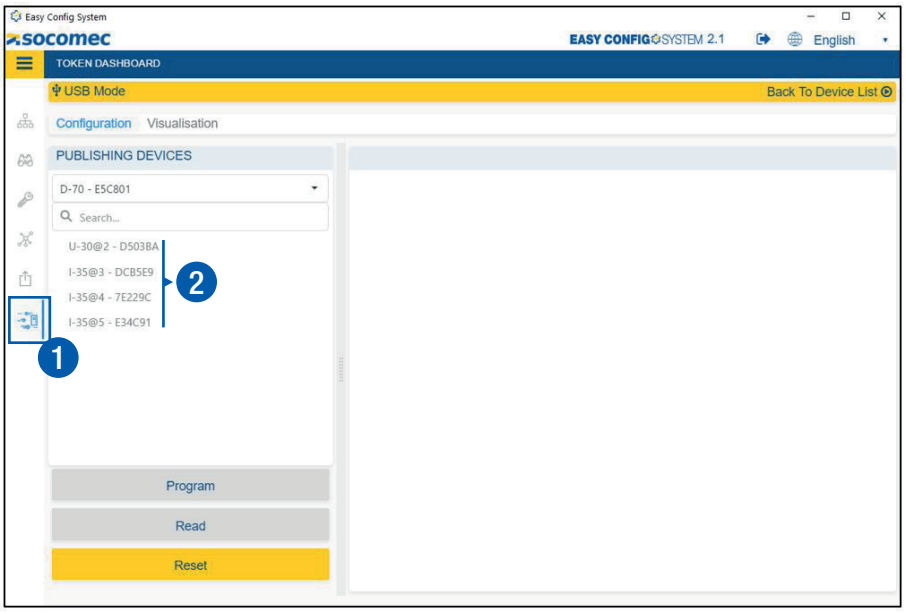
The TOKEN mode only works on Digiware systems that include an M-50/M-70 gateway or a D-50/D-70 display (v2.3 firmware and above).

10.2. Alarm report on digital outputs of IO-10 module

10.2.1. Configuration

1. Click on the « Token » configuration menu.

2. Choose a PUBLISHING DEVICE.



3. Select the first service to publish (here a measurement alarm status).

4. Choose the alarm number (here the first Measurement Alarm of the U-30 module).

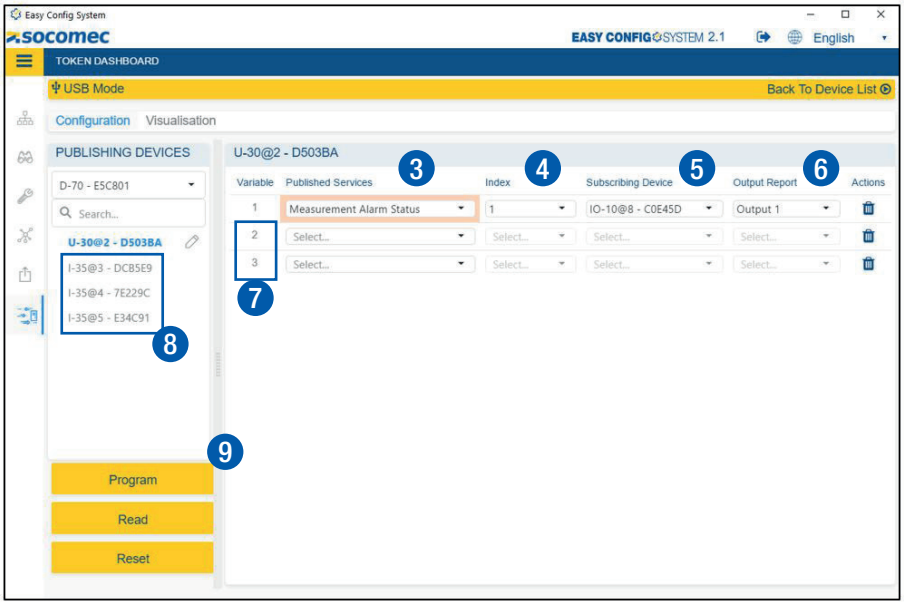
5. Choose the Subscribing Device (here the IO-10@8 module).

6. Choose the output to use for alarm report (here the output 1 of the IO-10@8 module).

7. Repeat the same operation for other services if needed.

8. Repeat the same operation for other DIRIS Digiware modules is needed.

9. Click on “Program”.



Once the Token is configured, the Digiware bus speed is automatically set to 500 kbps (both on U-xx module and D-xx display / M-xx gateway) and the COM LEDs of Digiware modules start blinking fast.

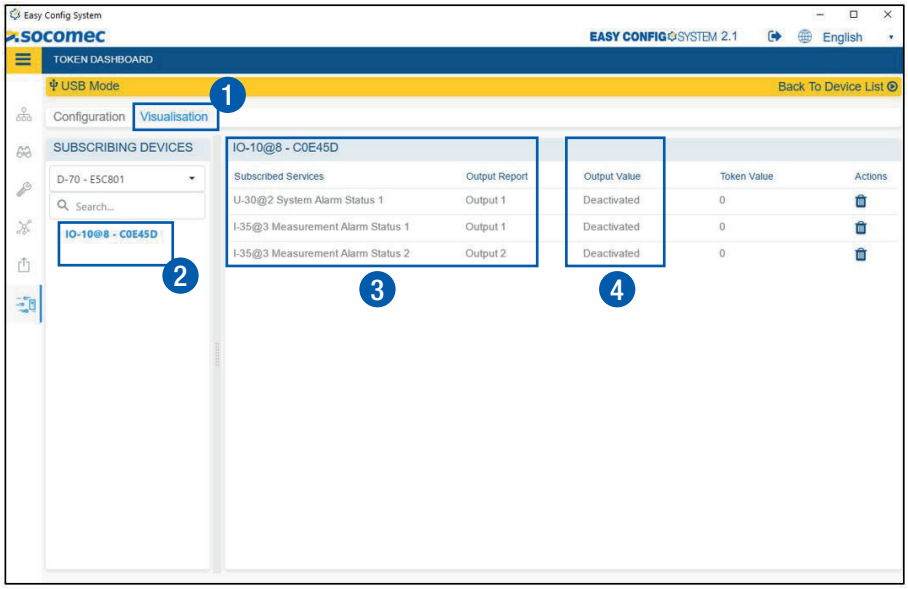
10.2.2. Visualisation

1. Click on “Visualisation” to view a summary of the Token configuration.

2. Choose a Subscribing Device from the list (here IO-10@8).

3. The list of services for which the IO-10 @8 module is subscribed to is displayed, along with the associated output.

4. The real time Output State is displayed.
It changes upon the activation of the associated alarm.

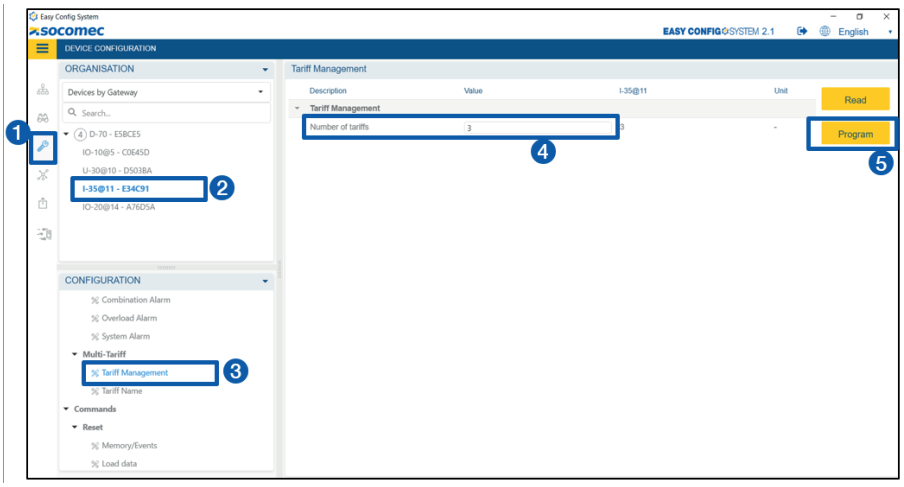


10.3. Tariff change via IO-10 module

The TOKEN mode also allows to use the digital inputs of a DIRIS Digiware IO-10 module to change the tariff for one or several DIRIS Digiware I / S current modules.

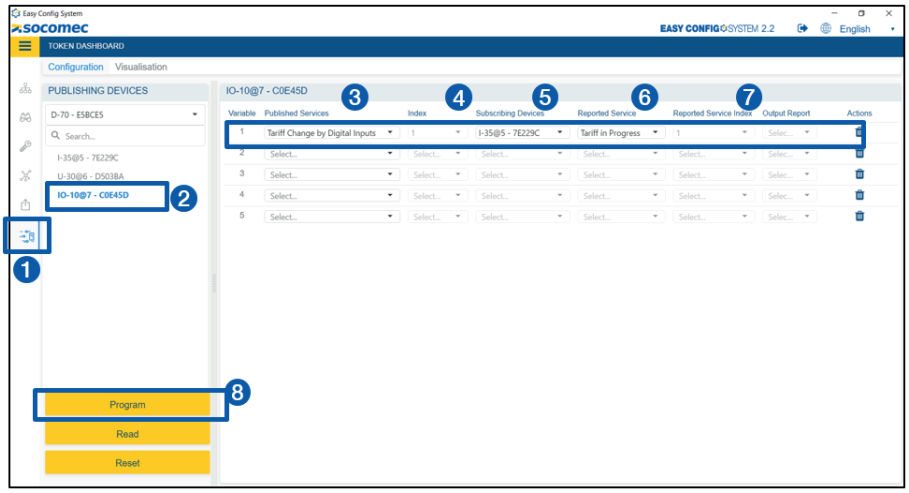
Tariff configuration of DIRIS Digiware I/S modules

1. Go to the “Settings” menu.
2. Click on the DIRIS Digiware I-xx or S-xx module which will be affected by the tariff management.
3. Go to “Tariff Management”.
4. Enter the number of tariffs.
5. Click on “Program”.



TOKEN mode configuration on IO-10 for multi-tariff management

1. Go the “TOKEN” configuration menu.
2. Select the DIRIS Digiware IO-10 which will control the tariff change.
3. Select “Tariff Change by digital inputs”.
4. Index always set to “1”.
5. Select the I-xx/S-xx module on which the IO-10 must change the tariff.
6. Reported Service set to “Tariff in Progress”.
7. Reported Service Index always set to “1”.
8. Click on “Program”.



10.3.1. Rules on the digital input states of the IO-10 module

To control the tariff change (1 - 8) of the DIRIS Digiware I-xx / S-xx modules, only inputs 1 - 3 of the DIRIS Digiware IO-10 module are used.

The following table gives the current tariff number according to the digital input states of the IO-10 module:

		IO-10 Inputs		
		1	2	3
Tariff	T1	Off	Off	Off
	T2	On	Off	Off
	T3	Off	On	Off
	T4	On	On	Off
	T5	Off	Off	On
	T6	On	Off	On
	T7	Off	On	On
	T8	On	On	On

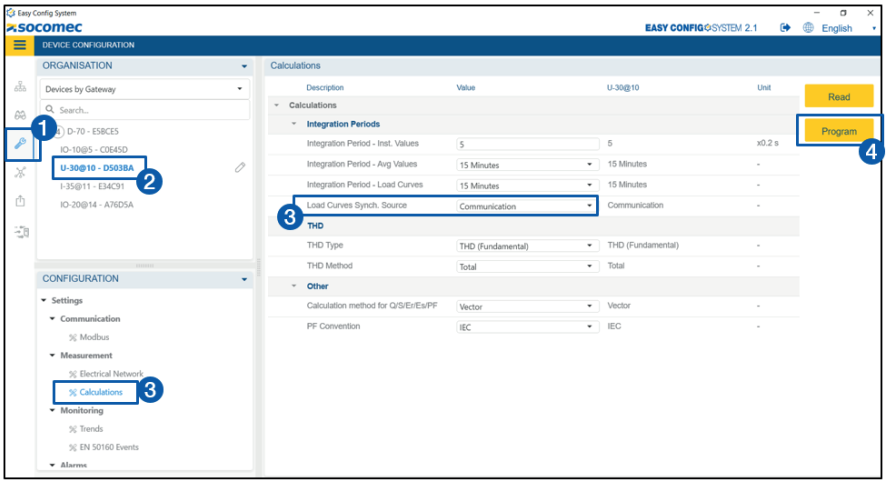
- Digital input states of IO-10 module

10.4. Synchronisation of load curves via IO-10 module

The TOKEN mode also allows to use the digital input of a DIRIS Digiware IO-10 module to synchronise the timestamp of the load curves of all the DIRIS Digiware I-xx / S-xx current modules within the same Digiware bus with an external signal (for example the sync. signal from the energy supplier).

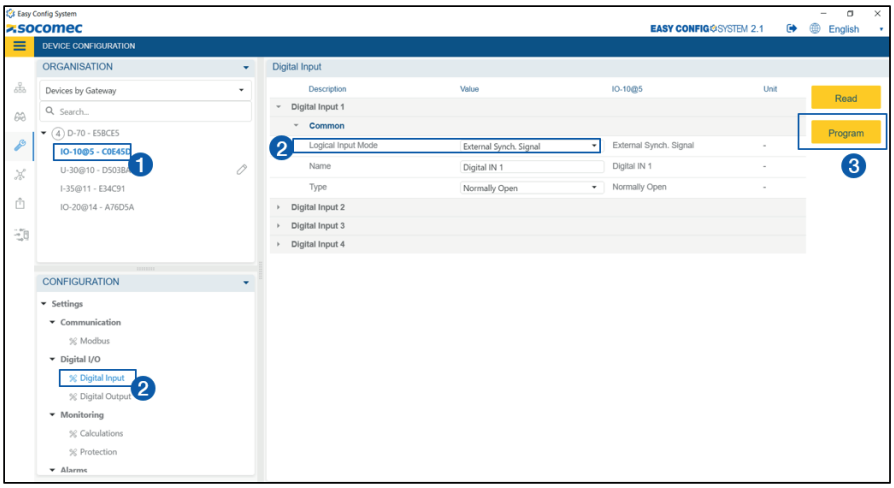
Configuration of the synch. source on the DIRIS Digiware U-xx module

1. Go to the “Settings” menu.
2. Click on the DIRIS Digiware U-xx module.
3. In the “Calculation” menu, set the Load Curves Synch. Source to “Communication”.
4. Click on “Program”.



Configuration of the DIRIS Digiware IO-10’s digital input

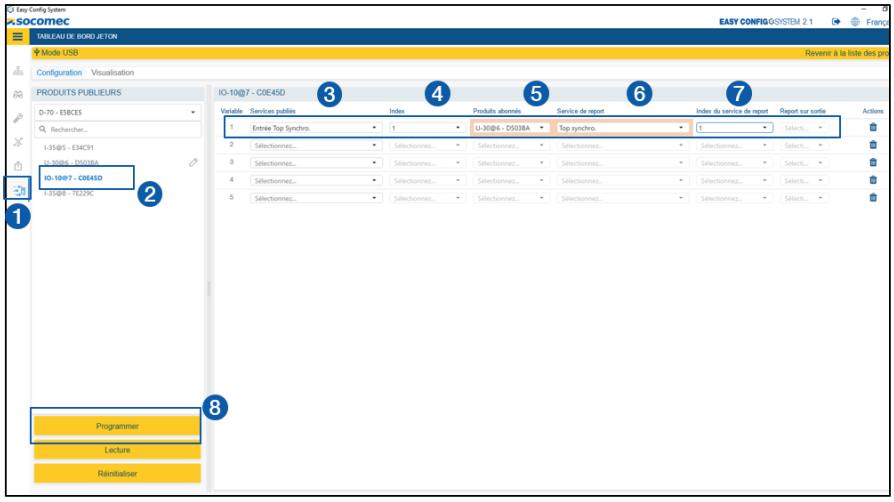
1. Click on the DIRIS Digiware IO-10 module.
2. In the “Digital Input” menu, set the input 1 of the IO-10 module to “External Synch. Signal”.
3. Click on “Program”.



The Synch. Signal function can only be used on input no 1 of the DIRIS Digiware IO-10 module.

TOKEN mode configuration on IO-10 for the synchronisation of load curves

1. Go to the “TOKEN” configuration menu.
2. Select the DIRIS Digiware IO-10 module which will drive the load curves synchronization.
3. Select “Synch. Signal Input”.
4. Index always set to “1”.
5. Select the DIRIS Digiware U-xx module as the subscribing device.
6. Reported Service set to “Synch. Signal”.
7. Reported Service Index always set to “1”.
8. Click on “Program”.



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