Integration of KNX devices: Data conversion

Concepts

The 'Write' column corresponds to 'W' objects: Device control.

The 'Read' column corresponds to 'T' objects: state feedback for the controlled device (indicator).

Installing the device

Example: management of a module that returns a bit (0/1) to the bus and check of another module that will receive a byte (0/255).

We will apply a trigger system to scenarios.

The triggers will respond to the state of the property of the module based on the bit.

The scenarios will write in the module property based on a byte.

2 options are possible:

- **Using 2 devices in Tydom 3.**0:

  The first has a read property whose DPT is on a bit: a detector, a switch or a light for example.

  The second has a write property whose DPT is on a byte.

  With this solution, the default display of widgets in Design Studio will not necessarily be consistent and will depend on the device selected.

- Use one generic KNX device by adding a property and indicating the associated DPTs.

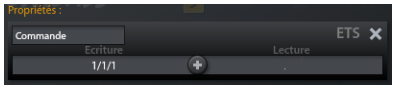
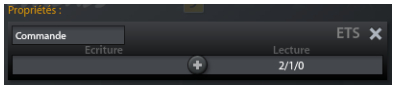
  This solution is retained as the device will appear as a generic device in Design Studio.

ETS programming:

Create 2 group addresses (the example uses arbitrary addresses):

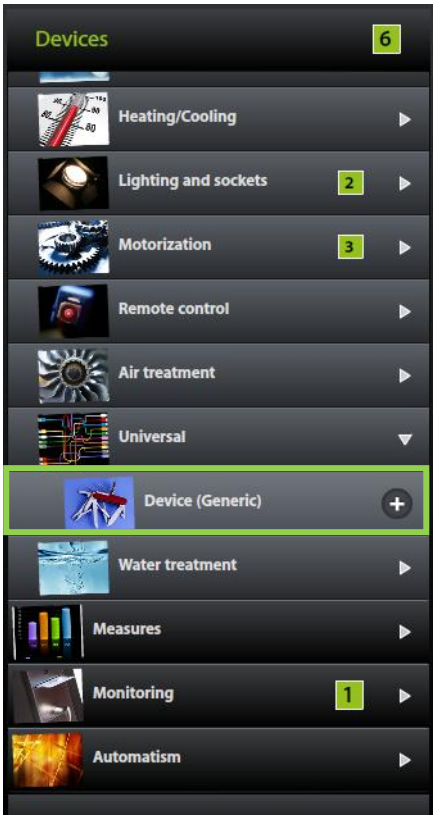
- 1/1/1: related to the 'W' object writing the data on 1 bit.
- 2/1/0: related to the 'T' object feeding a state back to 1 bit.

Interfacing group addresses and properties in Tydom 3.0 :

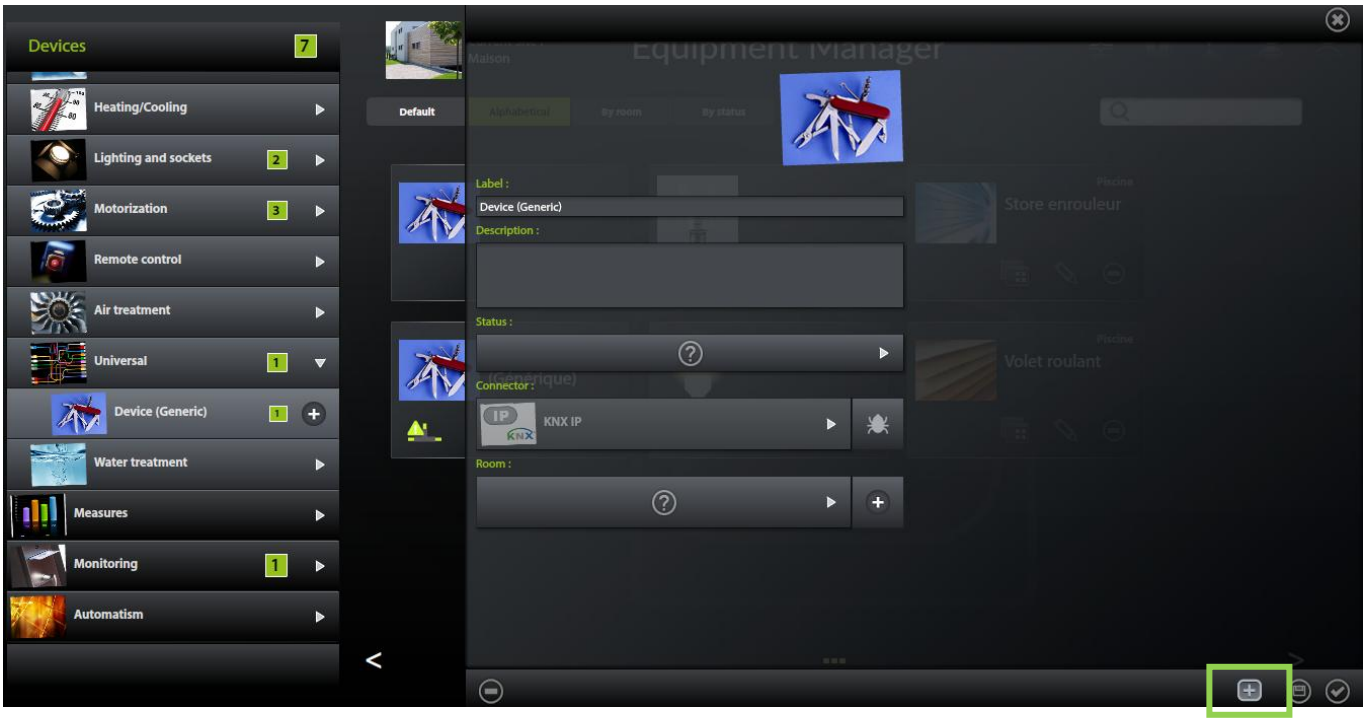
Function		*Object*	*Property*
Write value 2 or 3	'W' type object on 1 byte DPT 5.010 for example		
Read value 0 or 1	'T' type object on 1 byte DPT 1.002 for example		

Programming a device:

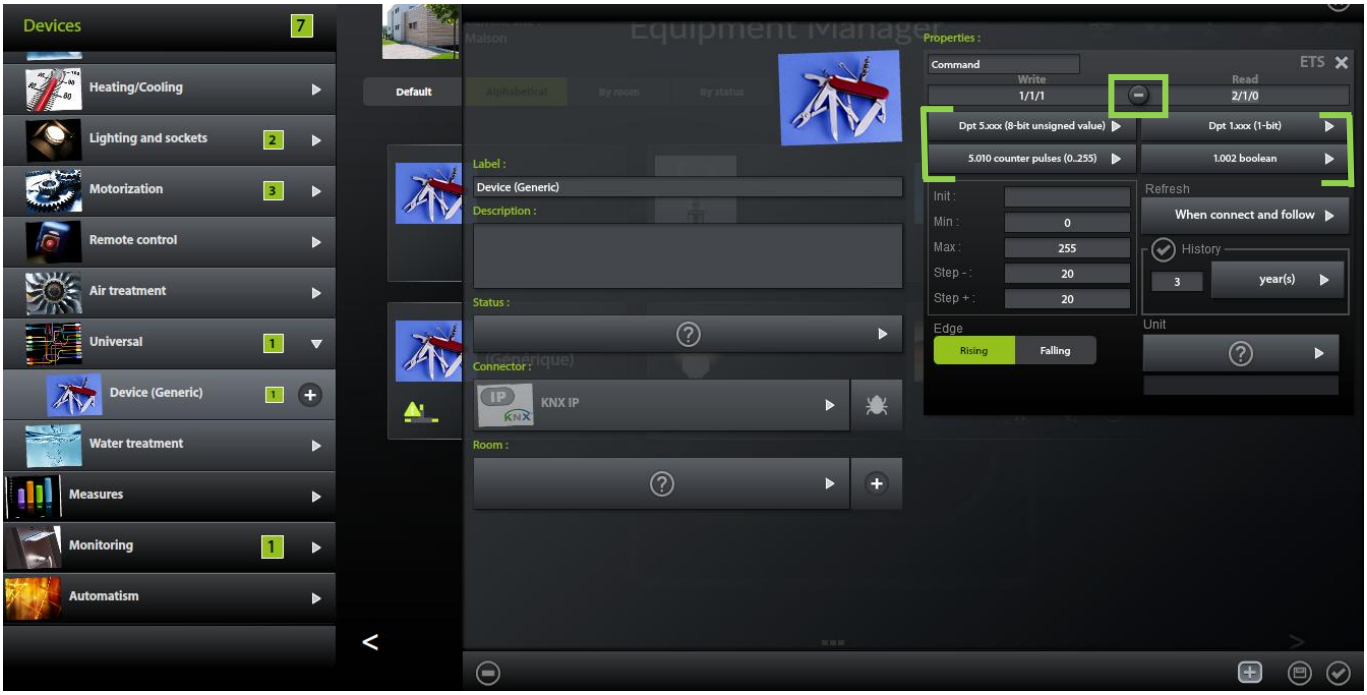
Create a generic device:



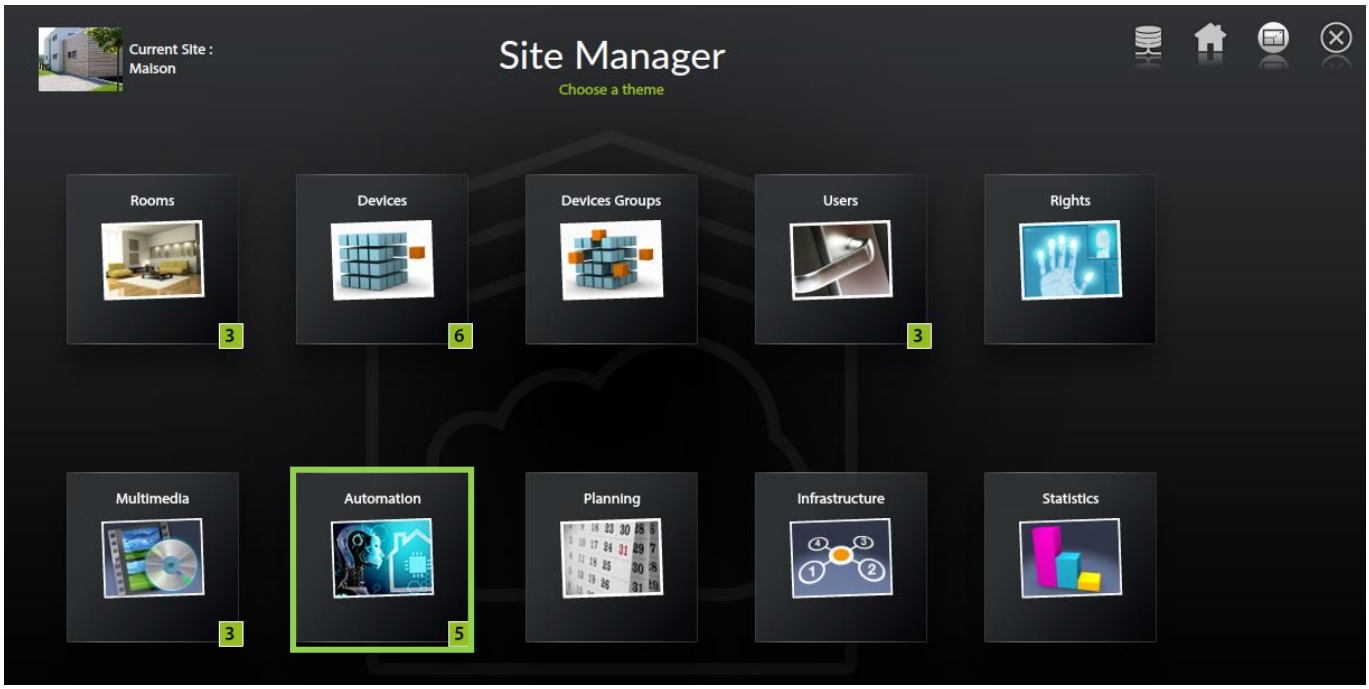
- Add a property:

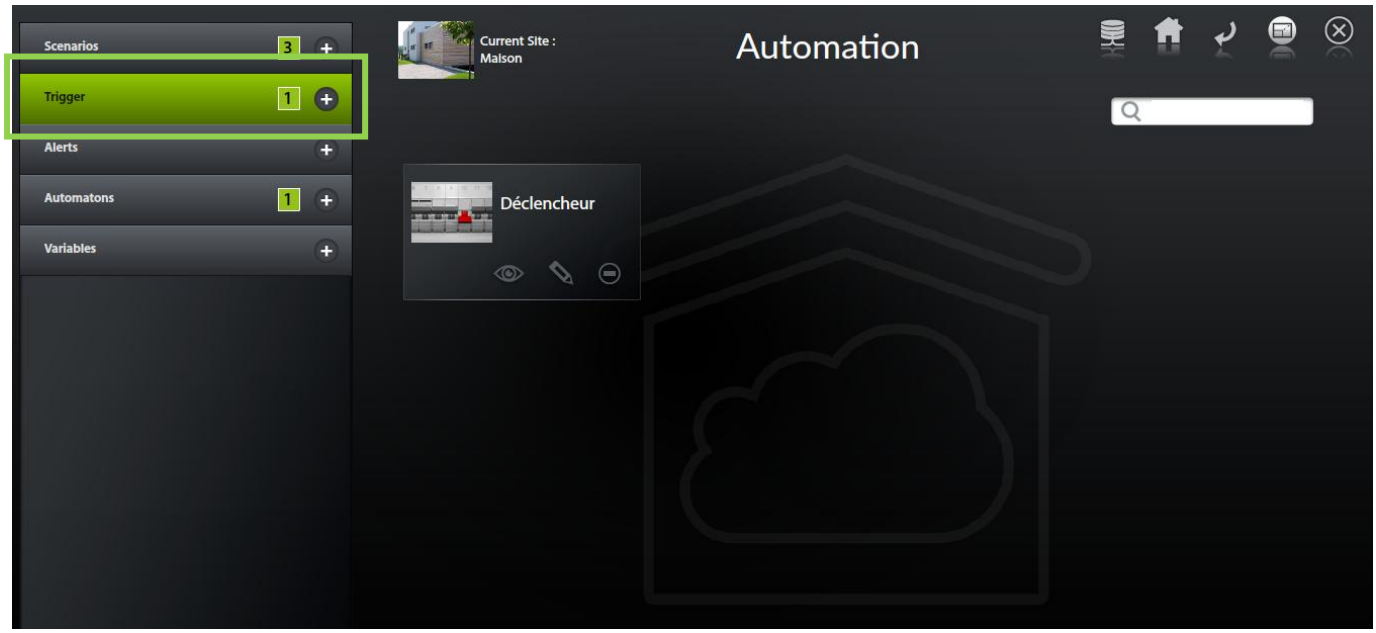


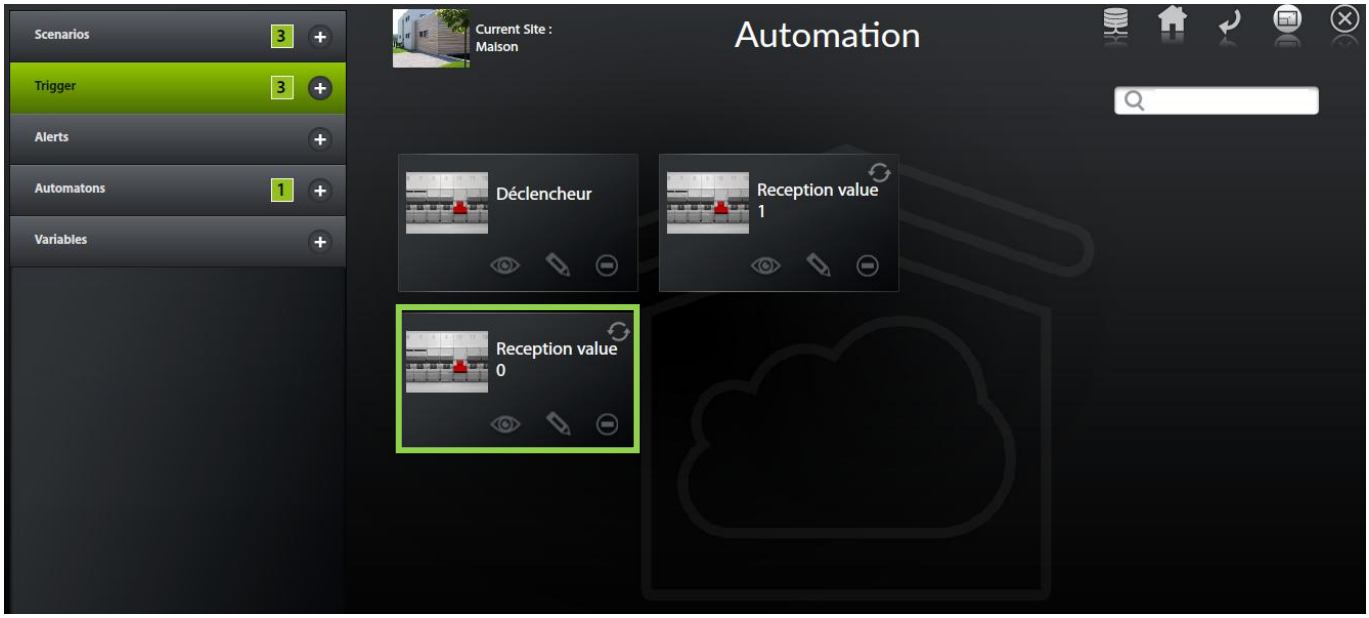
- Change the DPTs to match the KNX objects:



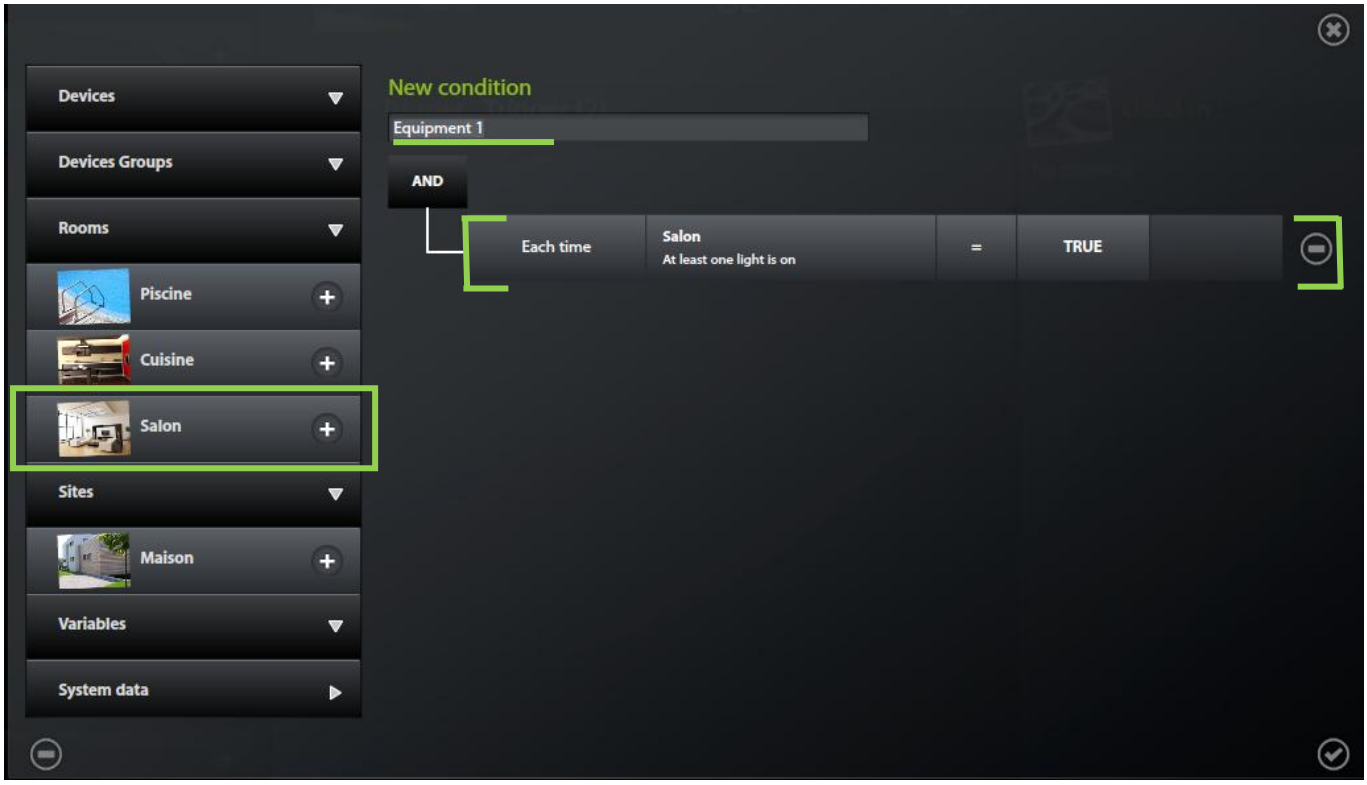
- Create triggers:





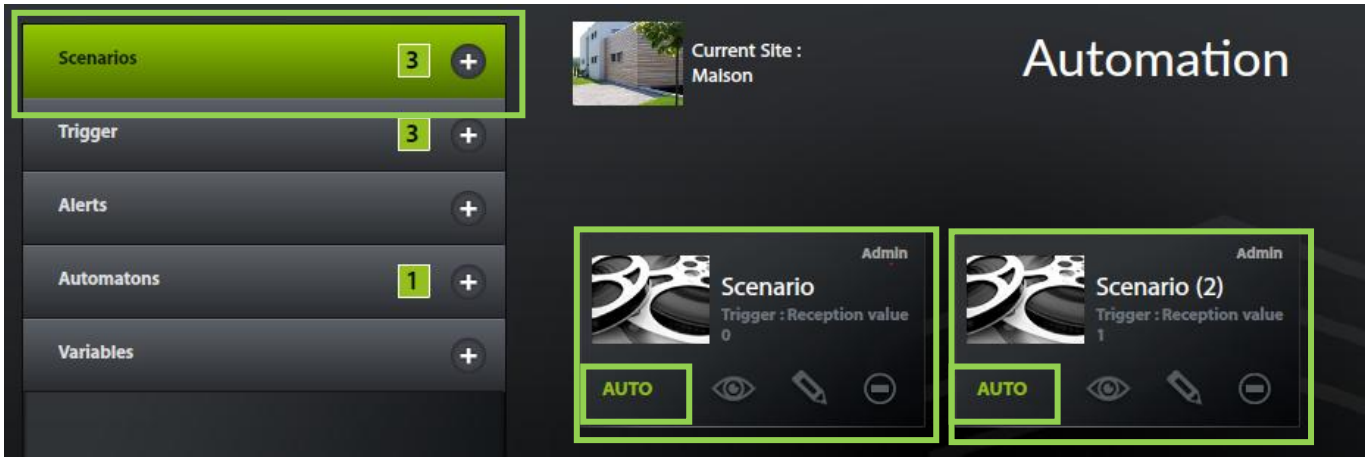


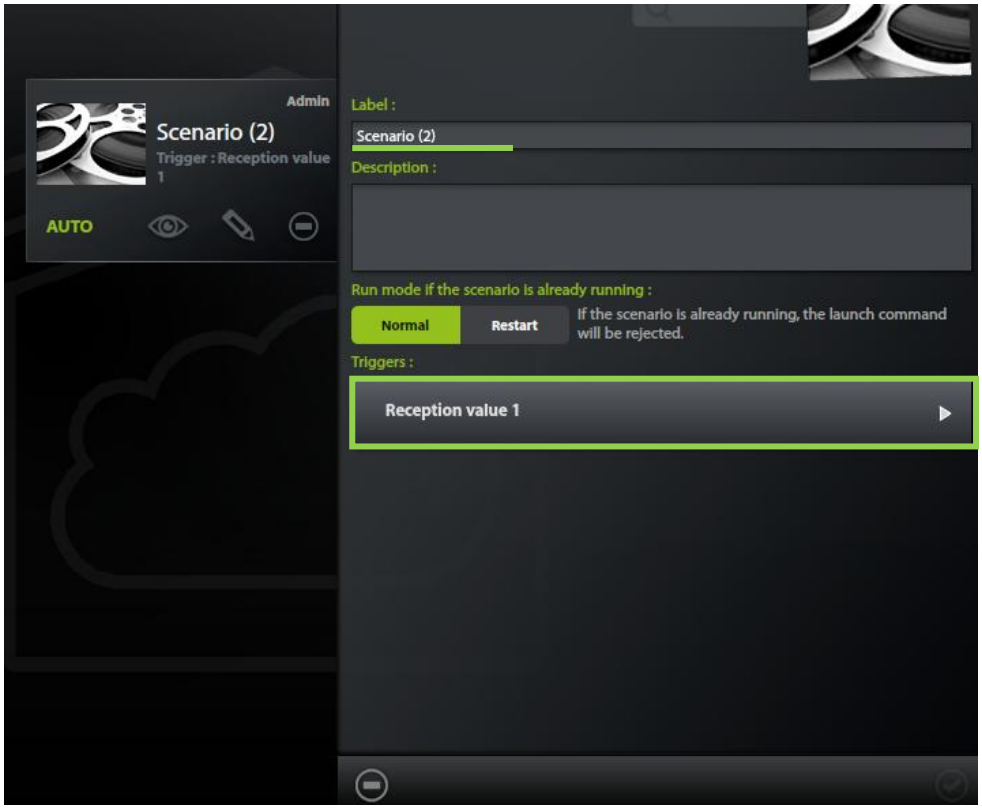
⇨ Add conditions:

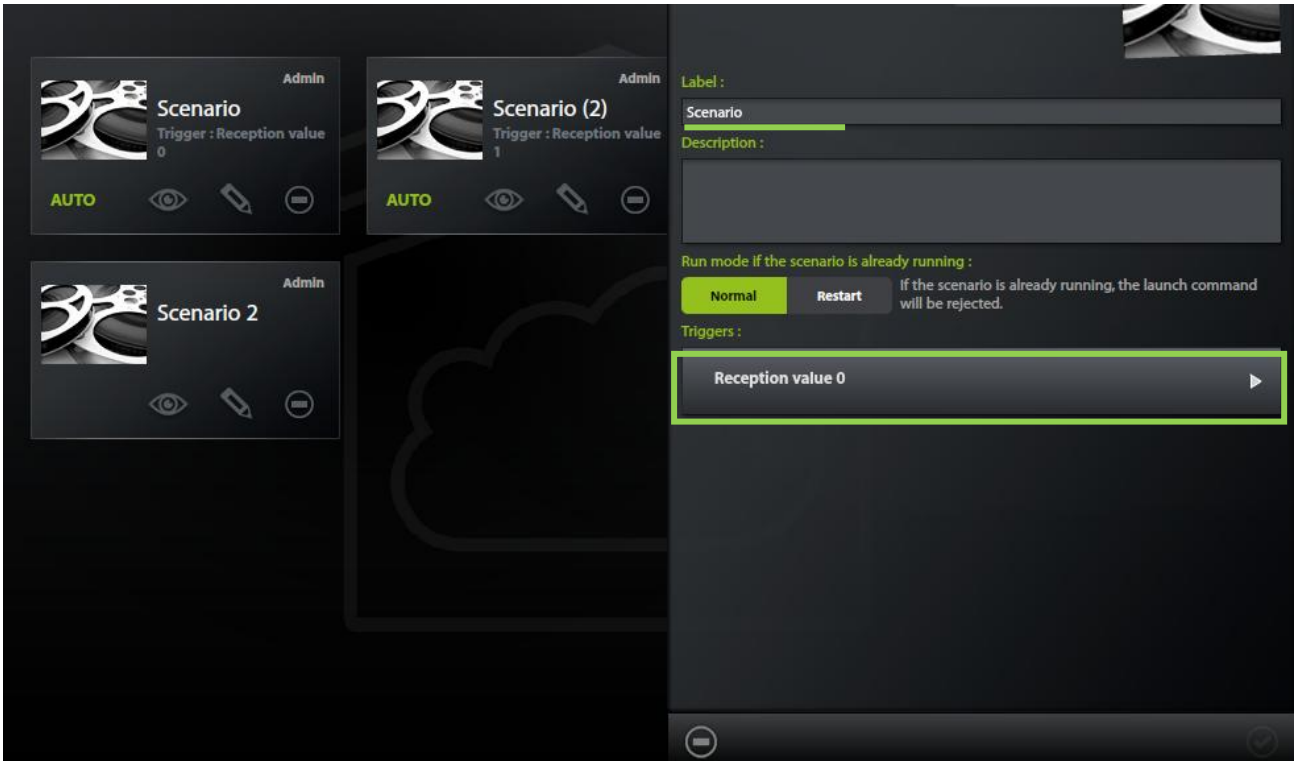


⇨ Select conditions in the triggers:

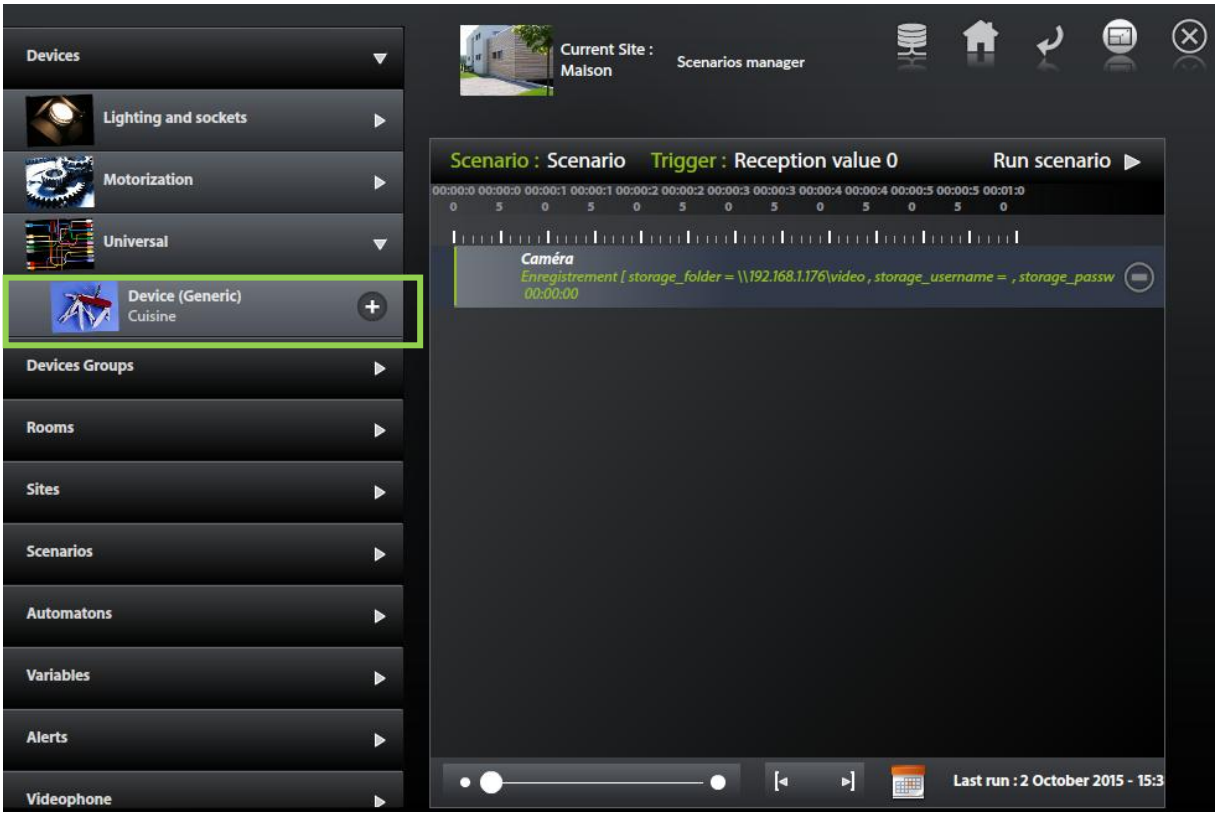
- Create scenarios:

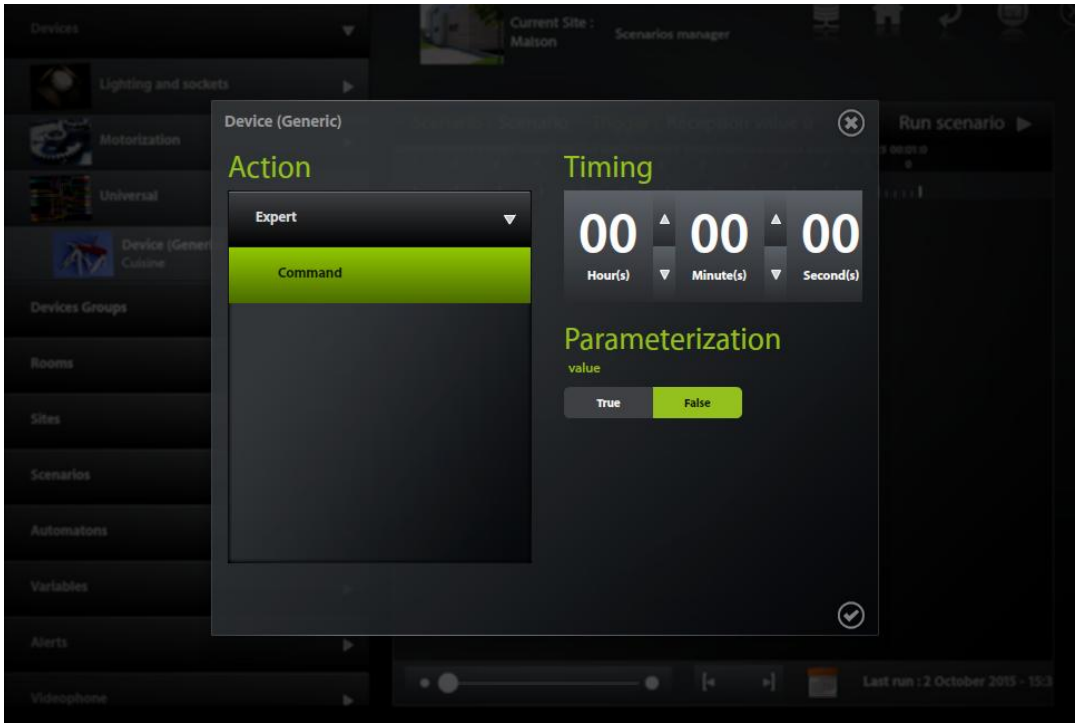

Scenarios
3
Trigger
3
Alerts
Automatons
1
Variables
Current Site :
Maison
Automation
Admin
Scenario
Trigger : Reception value
0
AUTO
Admin
Scenario (2)
Trigger : Reception value
1
AUTO

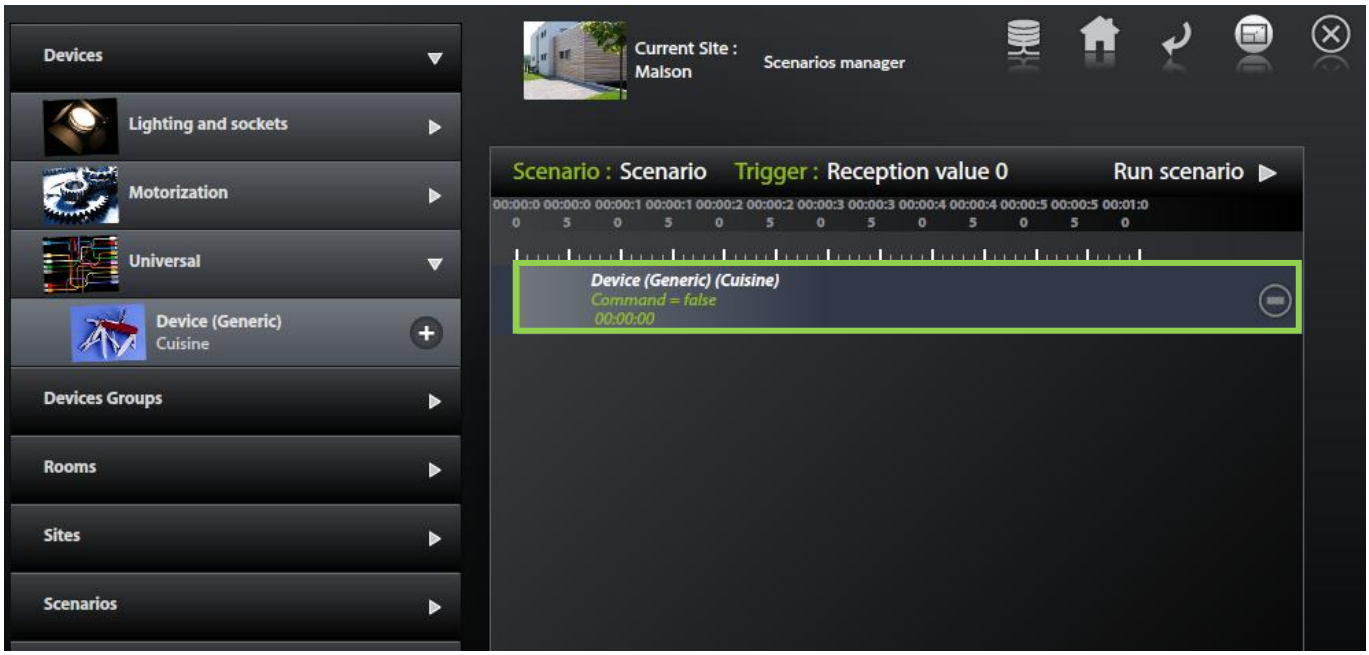

Admin
Scenario (2)
Trigger : Reception value
1
AUTO
Label :
Scenario (2)
Description :
Run mode if the scenario is already running :
Normal
Restart
If the scenario is already running, the launch command will be rejected.
Triggers :
Reception value 1



⇨ Edit scenarios:







⇨ The word 'AUTO' on the scenario's thumbnail must be illuminated for the trigger to run the scenario whenever the value is received.