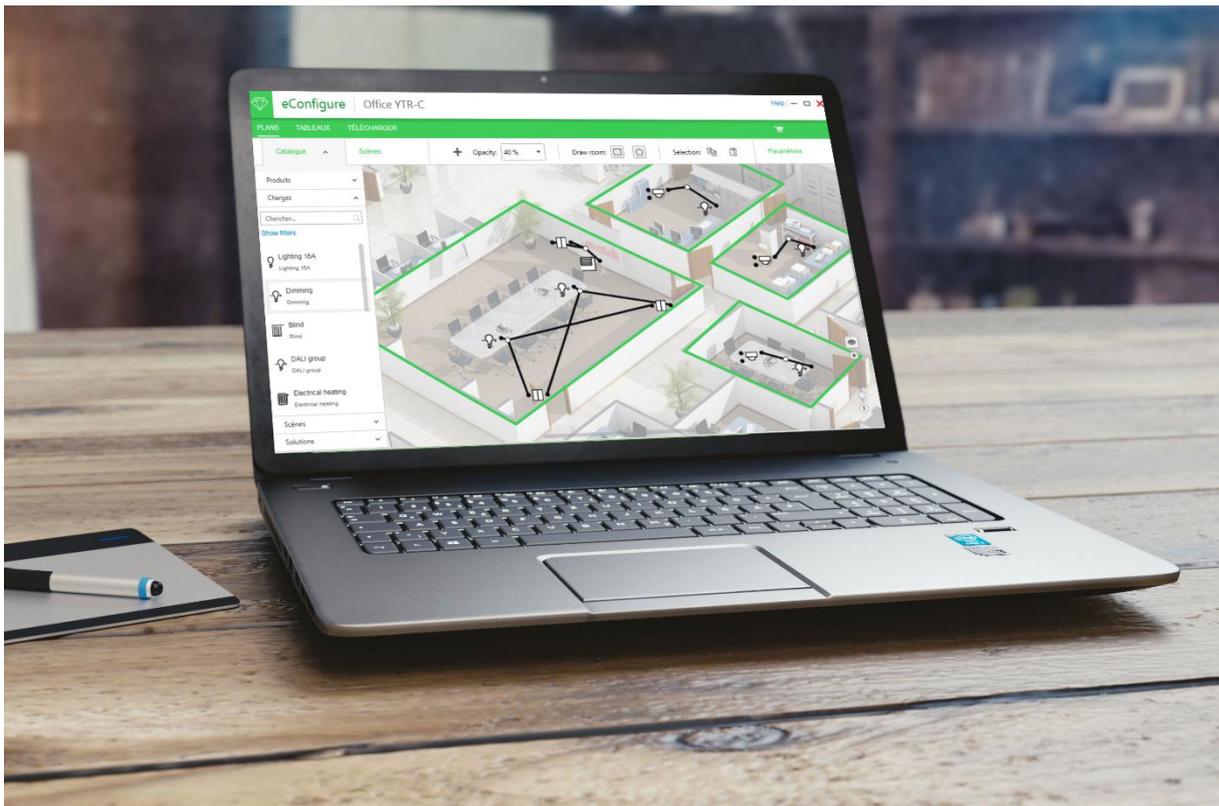




eConfigure KNX Lite

User Guide - English

Software v1.7.5





The information provided in this documentation contains general descriptions and technical characteristics of the performance of the devices contained in this document. This documentation is not intended to replace or not be used to determine the suitability or reliability of these devices for specific applications. Any user or integrator must perform the appropriate and complete risk analysis, assessment and testing of the devices concerning the relevant specific application or their use. Neither Schneider Electric nor any of its affiliates or subsidiaries are responsible for any misuse of the information contained in this document. If you have suggestions for improvements or changes or have found errors in this publication, please let us know.

No part of this document may be reproduced in any form, electronic or mechanical, including photocopying, without the express written permission of Schneider Electric.

All relevant local and regional safety regulations must be observed when installing and using this equipment. For safety reasons and to ensure compliance with documented system data, only the manufacturer should perform component repairs.

When devices are used for applications with technical safety requirements, the relevant instructions must be followed.

Failure to use Schneider Electric software or approved software with our hardware devices may result in injury, damage, or improper performance.

Failure to do so may result in personal injury or property damage.

© 2020 Schneider Electric. All rights reserved.

Contents

Introduction	5
Presentation of the software	5
Compatibility and installation of the software	5
Limits of the software	5
Contents of this document.....	6
Online help.....	6
Implementation advice	7
The steps of your project.....	7
Wiring.....	7
Fields knowledge	8
User parameters and project management	9
Projects.....	9
My User Settings.....	9
Tab «FLOOR»	11
Creation of floor.....	11
General view.....	11
Catalog	12
Scene.....	15
Workflow.....	16
Devices parameters details.....	17
Tab «PANELS»	19
General view.....	19
Subtab «Actuators»	19
Subtab «Controllers»	20
KNX Topology	23
Tab «UPLOAD»	24
General view.....	24
Installation status	24
Devices configuration.....	24
Bill of material (BOM) and Reports	30
Bill of materials (BOM)	30
Reports.....	30
Filters	32

Diagnosis	33
Introduction	33
Scan bus devices.....	34
Identify device	34
Scan bus messages	36

Introduction

Presentation of the software

The "eConfigure KNX Lite" software is a tool for designing, configuring and maintaining KNX home and building automation systems.

This software can be used at different stages of a project (Quotation, Commissioning, Maintenance). This allows you to be autonomous in the design and the commissioning of KNX home and building automation systems.

You must purchase a Dongle license to be able to log in and download the programs to devices. This Dongle is available as LSS900100.

NOTE: You can find an initial version of the software on the enclosed USB memory. After the software is installed, a tool for updating to the updated version is created on the desktop:



Compatibility and installation of the software

Details on the computer compatibility and installation of the software are available in the Quick Starter Guide available in the package LSS900100 and on the website « The Exchange Community ».

NOTE: eConfigure Lite requires minimum 3.5GB of free memory space on your disc.

The installation of the software also leads to the automatic installation of the last version of the software ETS5, from KNX association, as well as of an ETS App. If you already have ETS5 on your computer, it will be updated with a newer version, but your projects will be retained.

When using the software "eConfigure KNX Lite", the ETS5 software is opened, and runs in the background on your computer (the tab ETS5 can appear in the Windows taskbar in some cases), however the use and the ETS5 software training are not necessary for the use of the software "eConfigure KNX Lite".

NOTE: On update of eConfigure lite any existing ETS5 catalog will be removed and updated to the latest version coming with the latest eConfigure lite version. If you have an existing ETS5 catalog other than from eConfigure lite then please use the eConfigure Expert version.

Limits of the software

This software allows the fast and straightforward implementation of KNX devices with a limitation of the parameters from the ETS software. The user shall check in the software that features needed for his project are well attainable.

The list of compatible KNX devices can be found directly in the software and on the internet site « The Exchange Community ».

“eConfigure KNX Lite” is limited to projects with maximum 250 KNX devices.

NOTE: Not all KNX functionalities are possible with “eConfigure KNX Lite” (versus ETS5).

Contents of this document

This document gives an overview of the features of the software “eConfigure KNX Lite”. For more details, it is mandatory to install the software and to start working on a real project.

Online help

Tutorials

Several tutorials are available on the internet, on the Schneider Electric Exchange Community. We recommend you using these videos as help and support in your first projects.

A link to these tutorials is available in your software “Help” section.

Some tutorials (English only) are available without an internet connection.

Exchange Community

Visit the Schneider Electric Exchange Community to find all tutorials and documentations.

You must create an account to access the forum.

Training

We recommend you following an official training in order to use the software in the best conditions.

Ask your local Schneider Electric contacts for more details.

Implementation advice

The steps of your project

“eConfigure KNX Lite” software allows you to perform a complete installation of home automation and building automation.

We recommend you following these steps:

QUOTE your installation with “eConfigure KNX Lite” allows you to give an accurate quote and a full report to your final customer or Engineering Office to give content to your commercial proposal.

UPLOAD a basic program (minimum features) in the devices before their installation, which allows you to have a functional facility from their installation. This helps reassure your customer and give him time to refine his need without pressure.

COMMISSION the installation with your client to validate the operation of the system.

INTERVENE on site 1 or 2 months after completion of the project to have the maximum return on the part of the customer and minimize travel.

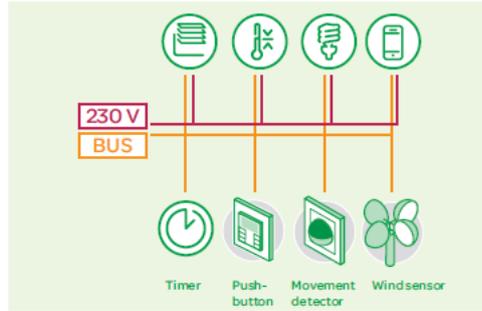
It is advised to prepare each step of your project before on-site service to optimize your time.

Wiring

The quality of the wiring of your installation is essential. If you have any doubts, do not hesitate to be trained on the KNX installation or to consult our experts.

Some important reminders about the wiring of a KNX installation:

- Use a KNX certified cable,
- Do not loop the KNX cable on itself,
- Do not forget to install repeaters for any facility with more than 64 devices or a consumption above 1280 mA,
- Do not forget the KNX power supply!



Fields knowledge

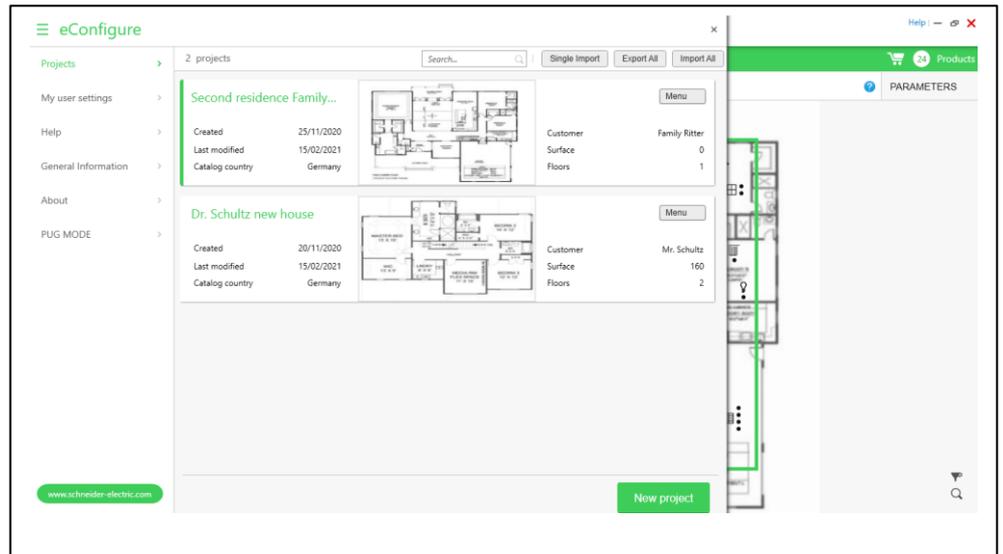
This software does not replace a good knowledge of the trades.

For example, it is recommended to have knowledge of basic heating applications to install heating management devices.

User parameters and project management

The user parameters and project management are accessible by clicking on the “Menu” button  located at the top left of the screen, on the icon located on the left of the name “eConfigure”:

Projects



A project can be created by clicking on the button “New project”. The minimum required to validate the creation of a project is to complete the project name, and the name and the country of the end-customer.

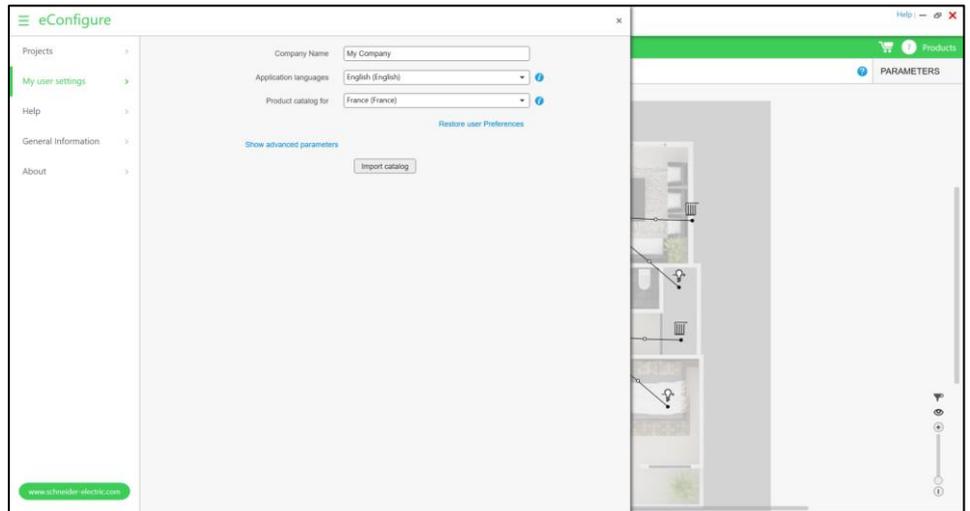
Using the “Menu” button available for each project on the right, it is possible to open, edit, duplicate, delete, and export projects. Only the current project can be duplicate.

From version 1.6.0, there’s a “Search” bar at the top to easily search by name through all the existing projects and identify the one we’re looking for.

The complete base of projects can also be exported using the button “Export all”. During an export, the projects are saved in the folder: My documents/Schneider Electric/ BackupFiles/.

Projects can be imported using the “Import all” or “Single Import”.

My User Settings

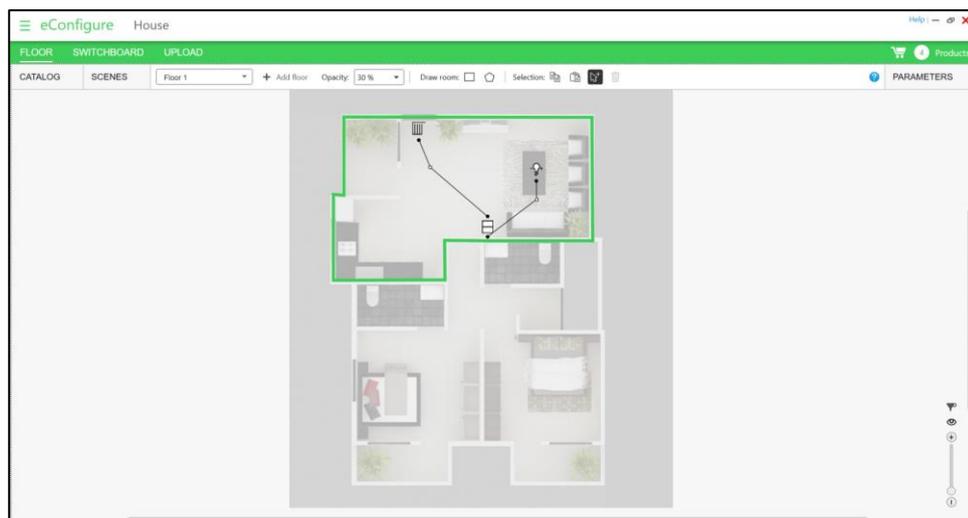


“My user settings” are the settings that are used by default in all created projects. It is possible to change these parameters to create a project.

These settings include:

- The name of your company (that will appear on the report).
- The language of the software.
- The location of the catalog, which allows you to display only the devices available in your country.
- Free space, which corresponds to the place you want to leave free on your actuators in the case of the automatic composition (see later in this document).

Tab «FLOOR»



Creation of floor

When creating a project, the first tab to use is the tab “FLOOR”.

When creating a project, it is automatically asked to create the first floor. You can create 10 floors maximum in an “eConfigure KNX Lite” project.

When creating a floor, it is possible to insert an image of background (in general, the floor plans), to allow a graphic work in the design of the project.

Acceptable formats are:

- JPEG,
- BMP,
- PNG.

The maximum size of image is 1920x1440 pixels.

General view

The different elements of the tab “FLOOR”.

The “FLOOR” tab is divided into 5 zones:

- The work area, in which we find the floor plan,
- The toolbar, in which we find the creation of floors, rooms and general tools (copy, paste, select, delete),
- The catalogue on the left of the screen, which contains devices, loads, virtual loads (like schedulers) and solutions,

- The scene module, right next to the catalogue, which allows the creation of a control scene,
- The parameters on the right side of the screen, which allows, when a device or a load is selected, change the parameters for this item.

Shortcuts

The shortcuts can be used in this tab are:

- CTRL C: copy.
- CTRL X: cut.
- CTRL V: paste. The paste of an item is not immediate; it is necessary to position the item on the plan and click to validate the paste.
- CTRL A: select all items on the floor or all text of a selected area.
- CTRL E: show/hide links.
- CTRL R: draw the contours of a rectangular room.
- CTRL P: draw the outline of a polygon room (max. 15 faces).
- CTRL S: multiple Selection modes.
- ESC: return to classic mode (from any mode).
- CTRL + mouse wheel: zoom in/out
-

Catalog

Devices

The term “Devices” here represents all the communicating (KNX) devices that can be installed in the rooms of a building.

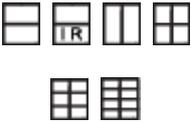
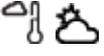
The devices are represented by icons. For more details on a device, you can leave your mouse a few moments on the icon in the view parameter. It is also possible to use filters to display a selection of devices. Filtering categories and ranges (for push buttons) is possible.

Devices can be integrated into your project by drag-and-drop directly on the floor plan.

The list of devices compatible with “eConfigure KNX Lite” is accessible in the document [eConfigureKNXlite_List_of_compatible_devices.pdf](#) available on “The Exchange Community”.

The list of features of the different types of devices is available in Chapter 4.6 of this document.

The icons used by devices are:

	Push buttons.	<p>Push buttons allow the control of the installation. They are available, according to the ranges in 2, 4, 6, and 8 keys.</p> <p>Some devices also have an IR function to allow the command via the remote control infrared of Schneider Electric.</p>
	Push button interfaces.	<p>Push button interfaces allow the control of the installation. They are installed in the installation box behind all kind of conventional push buttons. They are available in 2 or 4 inputs.</p>
	Push button Pro.	<p>Push button Pro allows control of the installation. Each device can be set in 1, 2, 3 or 4 keys, which allows an adaptation on site without change reference.</p>
	Thermostat.	<p>The thermostats allow heating area management and/or a cooling zone.</p> <p>Also, some thermostats contain buttons, whose functions are the same as the push buttons.</p>
	Multitouch.	<p>The multitouch allows control of the installation (lighting, shutters, ...) as well as heating and cooling. A built-in touchscreen allows a viewing clear and simple installation.</p>
	Presence / Movement detectors.	<p>Presence or movement detectors allow the management of presence or movement. There is a different type (ceiling, wall, 2,2 m, outside, ...), but they are all based on the same parameters.</p> <p>Some of them also allow the regulation of lighting.</p>
	Various sensors.	<p>The sensors include CO2 sensors, humidity, temperature, indoor or outdoor (weather station). It allows to back up the information in real time and to automate specific functions of the building.</p>
	Valve drive.	<p>The valve drive allows controlling the valve on water heating systems.</p>
	Actuators embedded	<p>Built-in actuators allow management closer to the loads. They are used in projects where the electric tables do not allow installation of KNX components.</p>

Loads

The term «Loads» here represents all the non-communicating elements that can be installed in the rooms of a building. Each load then will be connected to an actuator in the tab «SWITCHBOARD».

A load is not compatible with all actuators, so it is essential to choose the right loads in the tab «FLOOR». In the automatic composition of actuators, each load is linked to a specific family of actuators.

The loads are represented by icons. For more details on a load, you can leave your mouse a few moments on the icon in the view parameter.

The loads can be integrated into your project by drag-and-drop directly on the floor plan.

The icons used are the following:

	Lighting area 10A.	Compatible with: MTN6492xx (used in automatic composition <2 ch) MTN6705-0008 (used in automatic composition >2 ch)
	Switch area 16A.	Compatible with: MTN647x93 (used in automatic composition)
	Dimming area.	Compatible with: 350W: MTN6710-0102 (used in automatic composition), MTN649350, MTN649310 500W: MTN649350 (used in automatic composition), MTN649310 1000W: MTN649310 (used in automatic composition)
	Group of ballasts 1 - 10V.	Compatible with: MTN64xx91 (used in automatic composition)
	Group of ballasts RGB DALI	Compatible with: MTN6725-0101 SpaceLogic KNX Dali Gateway Pro (used in automatic composition)
	Group of ballasts DALI (FW 1.x.x)	Compatible with: MTN6725-0001 (used in automatic composition)
	Group of sockets.	Compatible with: MTN647x93 (used in automatic composition)
	Shutter / Blinds Parameter 230V	Compatible with: 350W: MTN6710-0102 230Vca: MTN6498xx (used in automatic composition) 24Vcc: MTN6497xx (used in automatic composition) 230Vca: MTN6705-0008 (used in automatic composition > 2 ch)
	Floor heating area	Compatible with: MTN6730-0002 (used in automatic composition)
	Fan coil controller	Compatible with: MTN645094 (used in automatic composition)
	Binary input	Compatible with: MTN644492 / MTN644592 (used in automatic composition) MTN644892 / MTN644792 (used in automatic composition) MTN644992 / MTN644692 (used in automatic composition)

Virtual devices

The virtual devices folder includes all virtual functions that can be drag-and-dropped on the plan but are not devices nor loads.

When using a **scheduler** or when using **central linking**, the software automatically adds a controller in your installation (Wiser for KNX or spaceLYnk logic controllers, see chapter 5.3).

All **schedulers** are created automatically in the controller user interface.

Central Linking creates a Widget for scenes in the controller (See chapter “Scenes”).

Solutions

The solutions are available in the solution tab. A solution is a set of devices and loads, with predefined parameters to perform specific functions. By default, the solutions folder is empty.

There are 2 types of solutions:

- Created by Schneider Electric, available on the forum of Schneider Electric (a direct link is available in the “Help” section of the software)
- Solutions created by the user.

The user can create his own solutions:

- Select a set of devices
- Open the window of solutions
- Click on «Create a solution».

The user can use a solution by drag-n-dropping it on the plan.

A created solution can be used in all projects the user.

Solutions can be edit, delete, and export. Exported solutions can be saved on your computer. Their format is “.sls”.

Scene

The scenes (or scenarios) are managed in the tab “Scene”. When the “Scene” tab is selected, the software goes into a special mode, which allows a quick and straightforward scenario creation. It is possible to create, edit, and delete scenes.

When creating a scene, only the channels connected and compatible with the scenes can be selected.

The “link type” can be selected:

- **KNX scene:** The KNX scenes are activated i.e. a sensor device (e.g. a push button) is sending a scene number. The actuator is then activating an output action stored at this scene number.
- **Central linking:** The sensor (e.g. a push button) is directly sending a value to one or many actuators (e.g. 95% for dimming).

When a channel is selected, then this channel passes in mode “Scene” and appears in the list of items in the scene on the right side of the screen. Then the user must select on the right side of the screen the value of each load in this scene.

Number of scenes per items:

- Lighting and Dimming loads can be linked to a maximum of 5 scenes.
- Switch and Socket loads can be linked to a maximum of 5 scenes.
- Thermostats (except Multitouch) can be linked to 8 scenes.
- Multitouch can be linked to 4 scenes.

NOTE: Some thermostats are not possible to be integrated into scenes (Altira, Unica, ...).

Workflow

Tips

Video tutorials are available on the internet to illustrate the steps for creating a project in a more visual channel.

The steps recommended for work in the «FLOOR» tab are:

1. Create floors and download the floor plan
2. Create different rooms on each floor, giving them a specific name (a name is given by default, but it is strongly recommended to re-name rooms)
3. Insert devices and loads on the plan in drag-and-drop, and change the parameters for each item (if necessary)
4. Linking the devices with loads (or other devices).

Hide / show / filter links and zoom

It is possible to hide the links of the project using the show  CTRL E or by clicking on the icon on the right side of the screen: . In this mode, it is possible to select either a device or a load and view links related only to this item. This allows greater clarity when checking of the installation.

It is also possible to filter some links by clicking on the icon on the right side of the screen:



, and then select the type of loads you want to display or not:

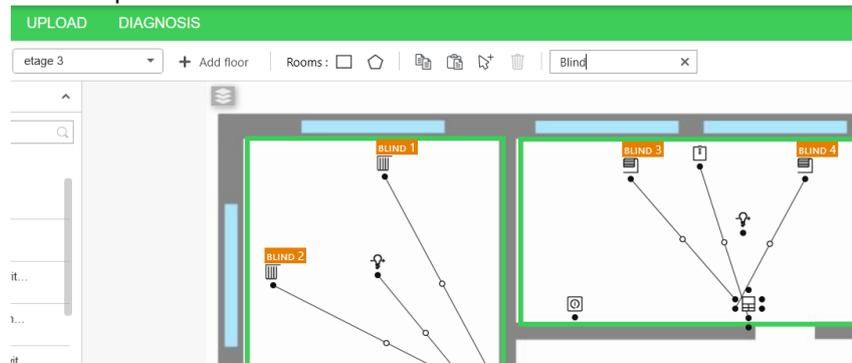


It is possible to zoom in on the map by using the shortcut CTRL + the mouse wheel or by using the zoom bar available on the right side of the screen:



There you also find filters to change the background image opacity and opacity of the links.

A textual filter is available in order to support the search for objects on the floor plan



Channels and links

A device, when it is present on the plan, has points called «Channel». Each channel can contain parameters that change the behavior of the device. The main parameters are described in this document, but it is essential to use the software for more details.

The channels of different devices or loads can then be connected between to ensure a functional link between these items. In some cases, the channels are not compatible, in this case, the binding is not possible.



To link different loads and devices on different floors, you need to use the multi-floors symbol:



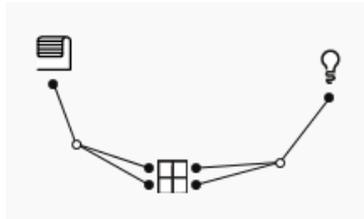
Devices parameters details

The settings of the loads and devices are visible in the windows «Parameters» on the right side of the screen. This window opens by clicking on the “Parameters” text at the top right of the screen, or by clicking on the icon of a device or a load.

NOTE: Not all parameters of KNX devices are available in “eConfigure KNX Lite”. Please be sure that functionalities that you want are integrated in the software.

Some typical examples are described below. Please follow the tutorials available on Exchange Community for more details.

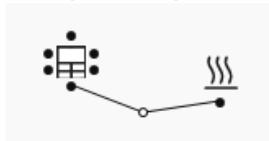
Example 1: Lighting and Shutter Control



In this example, the settings of the push-button shall be:

- Button 1: “Moving blind up”
- Button 2: “Switching On”
- Button 3: “Moving blind down”
- Button 4: “Switching Off”

Example 2: Heating control (valves)

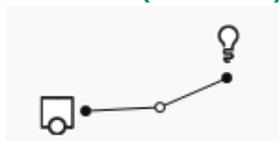


In this example, the settings of the thermostat shall be:

- Heating control type: “PI continuous control (valves)”

Several parameters can be changed, but the thermostat is ready to control heating without any additional changes.

Example 3: Movement detection (external)



In this example, the settings of the detector are directly set. The user can change the timer, sensitivity and range directly on the device.

Several parameters can be changed, but the detector is ready to control lighting without any additional changes.

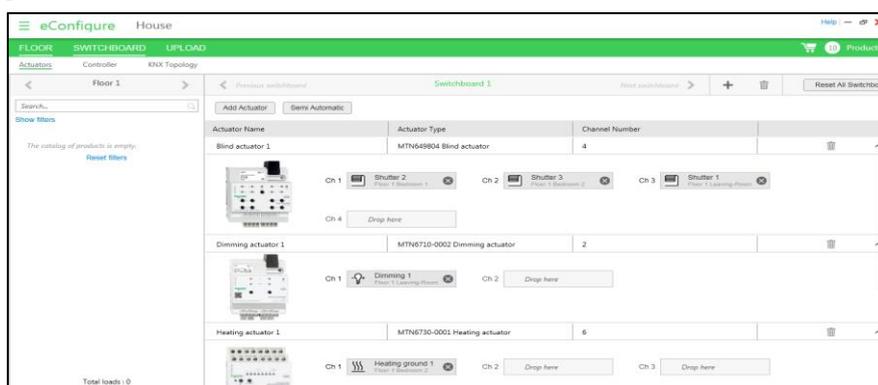
Tab «PANELS»

General view

The «PANELS» tab has 3 subtabs:

- Subtab “Actuators”.
- Subtab “Controller”.
- Subtab “Topology KNX”, used for projects with more than 64 devices or with higher consumption 1280 mA.

Subtab «Actuators»



The subtab «Actuators» is divided into 2 main rooms:

- The “Loads” part, on the left of the screen, with all loads of the project which are not yet connected to an actuator. These loads are classified by floors.
- The “Switchboard” part, on the middle and the right side of the screen, which contains the electric SWITCHBOARDS.

At the opening of the tab “SWITCHBOARD-Actuators”, actuators can be integrated with different way:

- a) It is possible to integrate them automatically. In this case, the actuators are created automatically to connect all the loads that are created in the “FLOOR” tab to its default actuator. You can make changes later.
- b) It is possible to integrate them manually. In this case, the actuators must be added manually (button “Add an actuator”) and the loads must be connected to the outputs of the actuators by drag-and-drop.
- c) It is also possible to use the semi-automatic function, which allows you to compose the actuators from loads selected on the left side of the screen.

The actuators added in the Switchboard have a direct link to their product information page in se.com for easy access to their product documentation (Internet connection needed).

From version 1.6.0 eConfigure introduces support for the new Master/Extension concept, available in the new SpaceLogic actuators from Schneider Electric.

The Master actuator can either operate independently or can also control one or up to two extensions, depending on the number of channels needed for each of its functions.

The available devices are:

- SpaceLogic Switch/Blind Master (MTN6705-0008)
- SpaceLogic Switch/Blind Extension (MTN6805-0008)
- SpaceLogic Universal Dimming Master (MTN6710-0102)
- SpaceLogic Universal Dimming Extension (MTN6810-0102)

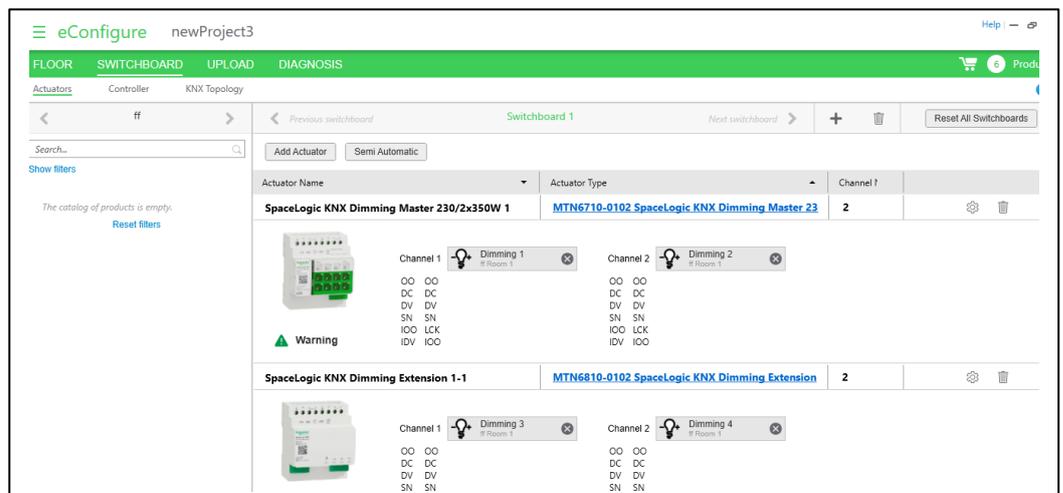
Compatibility:

- The SpaceLogic Switch/Blind Master can control ONLY Switch/Blind Extensions
- The SpaceLogic Universal Dimming Master can either control Switch/Blind Extensions or Dimming Extensions.

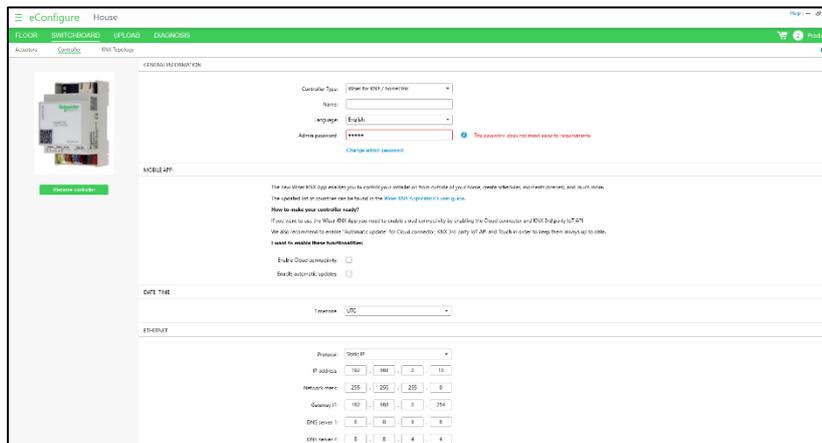
When automatically calculating the Switchboard, eConfigure will propose the best combination depending on the project needs. Those new SpaceLogic Master and Extension devices can also be added manually or semi-automatically.

When using Master and Extensions, eConfigure will arrange the Extensions to their corresponding Master and will be named accordingly: E.G

- SpaceLogic KNX Dimming Master 230/2x350W 1
- SpaceLogic KNX Dimming Extension 1-1
- SpaceLogic KNX Dimming Extension 1-2



Subtab «Controllers»



In the “Controller” subtab, it is possible to choose a logic controller.

This controller is used for the configuration of the KNX devices and to generate a graphical interface that the end-user can use to control its installation from a Smartphone or a tablet. If Wiser for KNX is used, the end-user can use the “Wiser for KNX Remote” App available on Google Play and Apple Store.

NOTE: The GUI configuration is automatic. You can subsequently make changes directly in the configuration of the controller interface, but any reprogramming with “eConfigure KNX lite” results in the loss of information. It’s recommended to save a copy of your complete project and from your visualization in the controller (Information on how to do it is available in the product guide of the Wiser for KNX and spaceLYnk).

The user needs to decide if the controller shall be in automatic or manual IP address:

- Automatic (DHCP) is used if your controller is connected to a router
- Manual is used if your controller is directly connected to your computer

NOTE: You need to follow an IP training or contact an integrator for more details about the Automatic and Manual connection.

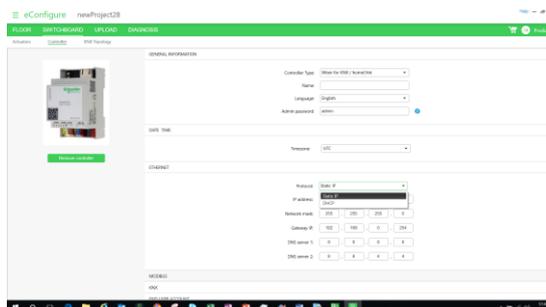
If you have an older version of the Wiser for KNX eConfigure will update the controller to version 2.8.0

IP settings

For the configuration of the controller the IP settings of the PC connected to the controller need to be adapted to the IP settings of the controller.

To do so, you have 2 options:

- **Static IP:** If you connect directly with an Ethernet cable to the controller then you should select as Protocol “Static IP”. In this case, during the configuration of the controller the IP settings of your PC adapts to the IP settings of the controller. After successful commissioning, the PC settings are reverted to the setting as before.
- **DHCP:** If your controller is connected via a Router then you should select the DHCP option.



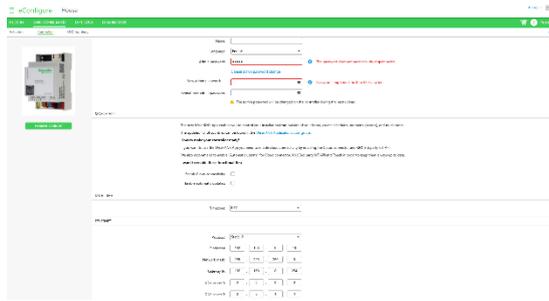
Password change

Due to security reasons it is required to change the password in the Wiser for KNX. If the password does not meeting the security requirements the password change is required.

App settings

eConfigure helps you to prepare your Wiser for KNX controller for the new mobile App. This feature is currently available for Germany, France, Italy, Sweden and Spain. You can select if you want your controller be prepared by:

- **Enable cloud connectivity** – this enable that the controller connects to the cloud
- **Enable automatic updates** – this enables automatic update of the Cloud connector, KNX 3rd party IoT API and Touch applications in the controller



Widgets details

The widgets are automatically created from some loads and devices. Find below the list of widgets with linked loads or devices.

Load / Device	Widget

Load / Device	Widget

Controller workflow

When you use the controller, your computer must be in the same IP network as the controller. Please check that your controller is installed with the right firmware.

All steps to configure and use Wiser for KNX and spaceLYnk are detailed in their user guide, in several videos in YouTube or in a tutorial available on the Exchange Community on the web.

To connect to the controller, you can use “Wiser for KNX Remote”, if you are in residential, and use Wiser for KNX logic controller, you must put your Wiser for KNX in DHCP in eConfigure.

To connect to the controller in Static IP, you need to use the URL of your Wiser for KNX or spaceLYnk directly using an internet navigator.

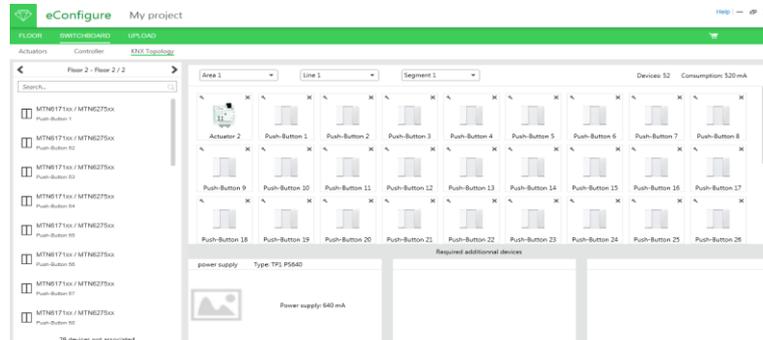
Step 1: Connect to your controller using the IP.

Step 2: Use the standard Admin and Password to connect to your device: admin / admin

Step 3: Click on Touch.



KNX Topology



The “Topology” tab is only available for projects with more than 64 devices or a consumption above 1280 mA.

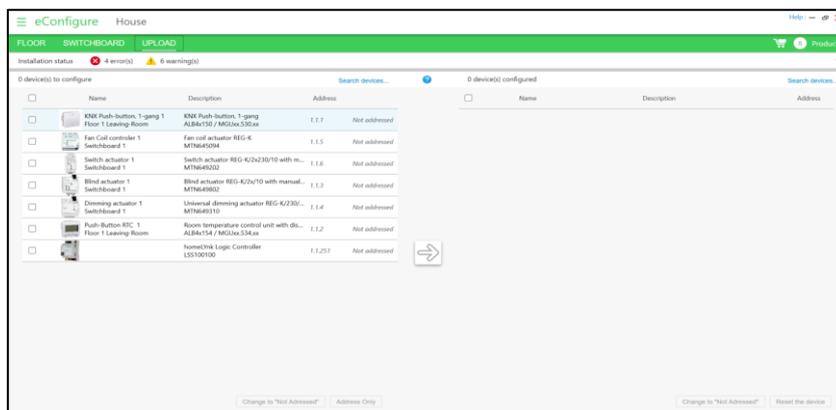
In this case, it is necessary to distribute devices to different segments of the KNX bus. Please follow a training to enter more in details in this kind of architecture.

When new segments are added, a SpaceLogic KNX Bus Coupler is added automatically as a repeater. From version 1.6.0, by clicking on the tool icon (🔧), it's possible to manually replace that device and select an older model.

From version 1.6.0, it has been added support for a 1280 mA Power Supply (additionally of the 320mA and 640mA). The Power Supply can also be manually changed by clicking in the tool icon (🔧).

Tab «UPLOAD»

General view



The “UPLOAD” tab is composed of 2 distinct parts:

- The “installation status” which allows you to view the problems of design of the tabs “FLOOR” and “SWITCHBOARD”. This tab can be opened or closed by clicking on the text “Installation status”.
- The list of devices that can be configured. This tab allows downloading programs in devices.

Installation status

In this part there are so-called problems “Errors” and any other so-called “Warnings”:

- Errors are problems that prevent the software from running.
- Warnings are problems that do not prevent the software from running but may be forgotten on your part.

Devices configuration

Advices

We strongly recommend configuring devices one by one before the installation on site, and not all at the same time.

Connecting to the devices

Before uploading the programs into KNX devices, you need first to connect your computer to a USB interface. The reference of the USB interface is MTN631829 or MTN6502-0101. You can connect to the complete installation (on site), or connect to each device (in your office, for example).

To configure a controller, the PC must be connected to the controller via an RJ45 cable. The downloading steps are then detailed in the Wizard.

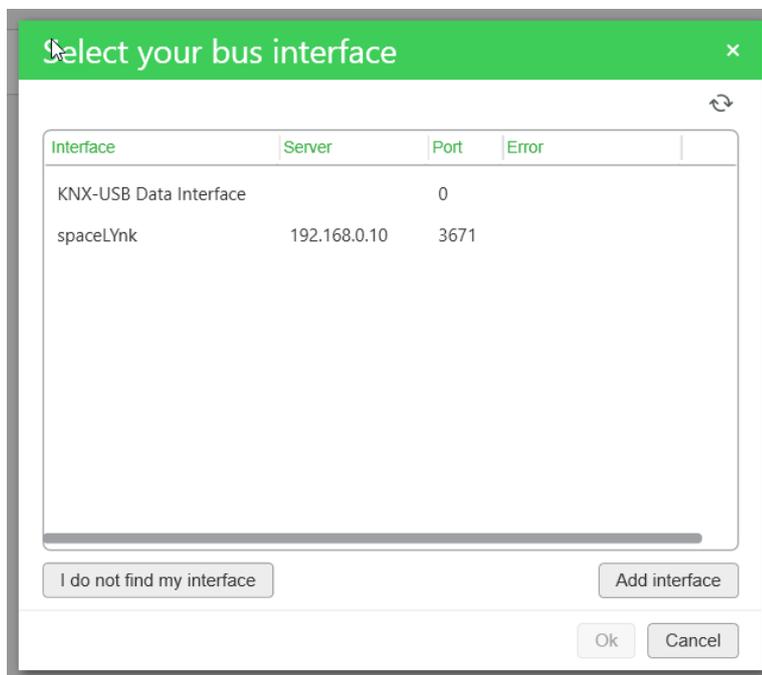
Before uploading the programs into KNX devices, first you need to connect your computer to a KNX USB-interface (MTN631829 or MTN6502-0101) or to the same network as a KNX IP-interface, like Wiser for KNX or spaceLYnk. You can connect to the complete installation (on site) or connect to each specific device (in your office, for example).

To select an interface, click on



in the lower left corner of the “UPLOAD” tab.

eConfigure will search for available KNX USB interfaces and IP interfaces.



Select the interface you want to use and click on



Controller access “unlock”

eConfigure configures the controller via an API (Application Programming Interface) via IP. Normally the API is locked to avoid misuse, until the controller is set into temporary IP mode (192.168.0.10) by pressing the reset button > 10 s.

It is possible to unlock the API permanently, so that the reset button doesn't have to be pressed between uploads. However, with FW 2.4.0 (or above) of the controller this function must be installed in the controller.

In order to unlock the controller:

- Configure the controller as usual under SWITCHBOARD → Controller
- Connect the controller directly to the laptop with a RJ45 cable (if laptop is in DHCP address mode no change of IP is required, IP address is temporarily set to 192.168.0.11 automatically, then set back)
- Go to UPLOAD and click "Select controller access"
- Select "Unlock access"
- Click "Get update" and save the file "unlock_update.lmup" to the PC. This file must be installed in the controller.

Unlock access

This will leave the controller API available after the configuration. You will be able to configure it using a user-defined IP address and port, without pressing the device's button.

Please ensure the admin password is strong enough.

To enable this functionality you must install an update in the controller first.

Get update

Close

In order to install the unlock API function in the controller

- Login to the controller (the laptop and controller must be connected to the same network)
- Go to Configurator
- Go to Install updates
- Select the file unlock_update.lmup
- Click save
- Now the API is unlocked.

NOTE: Before you hand over the project to your client you should revert to the default state and secure the controller access by unticking the "Unlock access" checkbox and upload to the controller.

Controller access "user defined"

Remote controller access is possible via a router. Please enter the IP address of the router and the port which is assigned to the controller.

If the lock access is selected, then the controller access will be reset to default and access on possible when pressing the button > 10 secs.

Controller access

Controller directly connected to PC via Ethernet

Default

Access type: Controller connected via a router

User-defined

IP address via router

IP address: 192 . 168 . 0 . 10

HTTPS port, please verify it in controller settings

Port: 443

Unlock access

Close

Remote connection using VPN-connection (secure)

If you want to connect remotely to a KNX IP-interface via the Internet, we recommend using a VPN connection, as this creates a secure connection. In order to connect a KNX IP-interface via VPN, you first have to connect your computer to a VPN before continuing. Then go to the "UPLOAD" tab within eConfigure.

eConfigure/ETS cannot search for KNX IP interface through the VPN connection, so you must add the interface manually, by clicking

Add interface

and filling in the fields below.

Edit interface

Name : VillaSchniederVPN

Individual Address :

IP Address : 192.168.0.10

Port : 3671

Using NAT : 

Success

Test

Ok Cancel

Remote connection using direct connection and port-forwarding (unsecured/insecure)

It also is possible to connect to the KNX IP-interface directly via the onsite internet router by using port-forwarding. Note that port-forwarding is an unsecured/insecure connection method, as anyone can connect to your network as username and password are not required.

For this method, a port-forwarding rule must be created on the router, that directs messages coming in on port 3671 to the IP address of your KNX IP-interface.

Example:

Port Forwarding List (Max Limit : 32)						
Service Name	Source Target	Port Range	Local IP	Local Port	Protocol	Add / Delete
					TCP	+
s1 - https		443	192.168.0.10	443	TCP	-
s1 - http		80	192.168.0.10	80	TCP	-
s1 - knx		3671	192.168.0.10	3671	UDP	-

To make the connection from eConfigure, you must add an interface manually and enter the Internet IP address of the internet router. If the internet IP address is not fixed, a dynamic DNS (DDNS) service can be used if the router supports it. You then enter the host name instead of the IP address. You must also enable the NAT mode (Network Address Translation).

Edit interface ×

Name : VillaSchnieder_PF

Individual Address :

IP Address : house.hopto.org

Port : 3671

Using NAT : ⚠

Success Test

Ok Cancel

Steps

First, you must select the device(s) you want to upload. Then you click on the button in the center of the screen:



The first time you want to configure a device, you need to click on the “programming” button of the device to give an individual number (called “individual address”) to this device.

In option, you can also decide to configure only the individual address, in this case, click on “Address only” on the bottom of the screen.

NOTE: If you have several devices with the same individual address, it means you made an error. In this case you need to use the function “Reset physical device” in order to solve the issue.

In case you have remaining problems, the best is to configure each device separately.

Bill of material (BOM) and Reports

Bill of materials (BOM)

You can generate a .csv file containing the full list of KNX devices of the building. This function is available by clicking on the icon located in the top bar of your software:



You need to verify that the actuators and the controllers have been set up. Otherwise, they do not appear in the list of hardware. The USB interface is not included in the BOM. You can use the same USB interface for all your project.

In the case of several line segments, please check the tab “Topology KNX” has been set up.

Note: The list of materials contains only the KNX devices. Don't forget to order additional accessories:

For push-button don't forget to add frames, installation boxes, and additional accessories.

For controllers don't forget to add power supplies (24Vcc)

Reports

This function is available by clicking on the icon located in the top bar of your software:



It allows you to edit 2 types of reports that are exported in a .zip file:

- the installation report file
- the customer report file
- the floor plans

Installation report

This installation report contains information to allow the electrician to:

Check the list of KNX devices,

Check the list of loads,

- Wire the actuators on right loads,
- Install the devices at the right place in the installation,
- Check the proper functioning of the installation.

Customer report

This customer report contains the essential information for the end customer to test its installation and validate that the installation corresponds to his needs.

You can include this report in your quotation to provide more details to your customer.

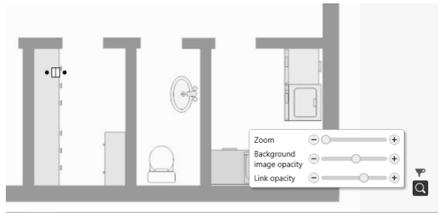
Floor plan

The floor plans are generated in .pdf format, with the unique address of each device. It enables you to use this plan on site to install the devices in the right place.

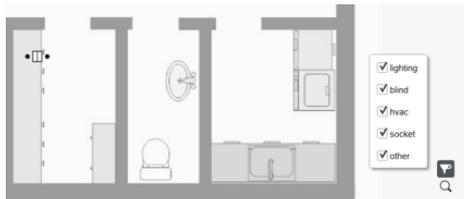
Filters

As shown in the following image by clicking on the  icon a menu appears with the filter options

- Zoom: Zoom of floor view
- Background image opacity: adapting the transparency of the background image, for example, the floorplan
- Link opacity: adapting the transparency of the connection lines between devices



By clicking on the  icon a filter of business categories appears. When unchecking a business category, the corresponding links are not shown anymore.



Diagnosis

Introduction

The diagnosis functions give you support for troubleshooting of your configured project. The diagnosis tool provides functions to identify the devices on the network and tells you if a device which is in your project is not found on the network so that you can understand why a particular device is not correctly working, or not correctly uploaded.

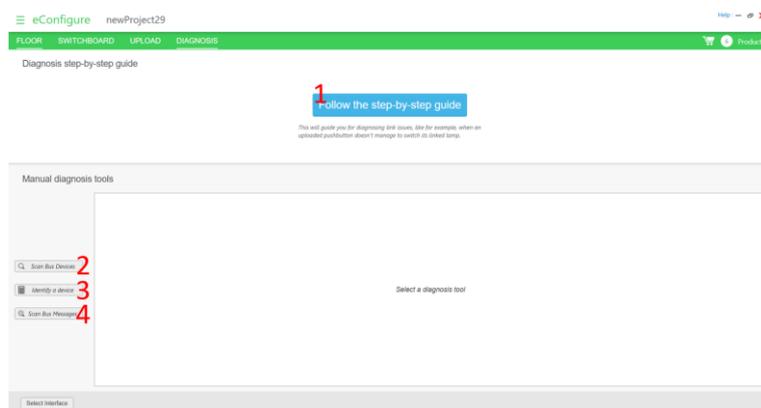
The following cases are typical:

- You want to upload a device, but the individual address is already used. You want to see which device is using this address so that you can upload the application to the right device
- You note that clicking on a button doesn't turn on a lamp. You want to find this button in the eConfigure project (as there are several buttons in the same room).
- You suspect that a button is not connected to the right actuator. You want to identify the right actuator, to connect the button to this actuator.

The diagnosis tool provides three functions to identify a device:

- check an individual address
- identify all devices in programming mode
- identify a device through bus monitoring

In the upper part of the window shown in the picture below you find button 1 for being guided through the analysis process. This step-by-step guide leads you through the different functions which you also can use individually in the bottom part of the window, i.e. buttons 2,3 and 4.



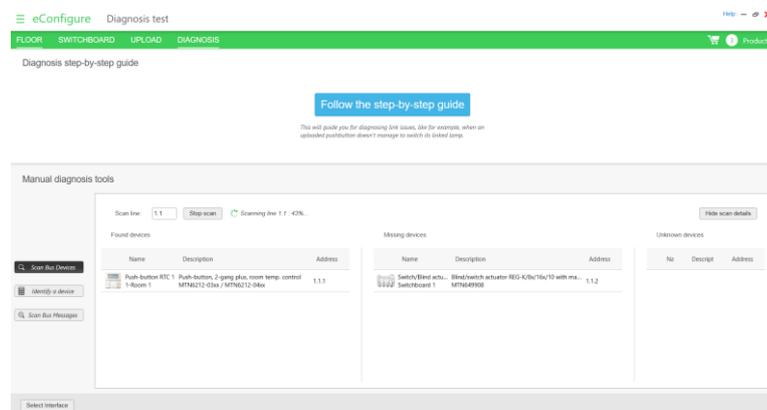
Scan bus devices

This function scans a line in your project for devices which are physically configured on this line.

After clicking on the “Scan Bus Devices” button, you will find a window as below where you can select the line you want to be scanned. The lines correspond to the lines defined in Switchboard > Topology.

When you start the scan, devices which were found appear on the left side as shown below. Devices which are in your project but not found on the scanned line are shown in the middle column. Unknown devices appear on the right side.

If a device does not appear, then you may check in Switchboard > Topology if the device is configured on the correct line according to your electrical wiring.



Identify device

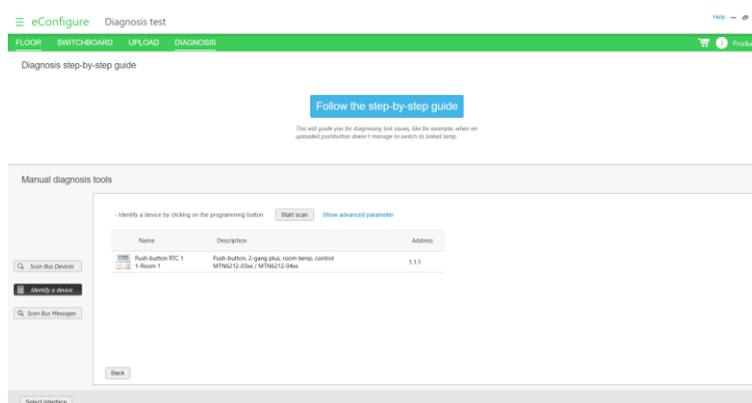
With this function, you can identify a device on your network.

Via the name of the device (the name contains the location of the device), you can verify if the device is physically in the place you expected.

You can identify the device in 3 different ways:

- By clicking on the programming button
- By using the device to be identified
- By typing its address (advanced identification feature)

Identification by clicking on the programming button



Most devices have a programming button, which turns on (or off) a programming LED. To identify a device this way, click first on the programming button of your device, then start the scan.

By default, this detects devices on line 1.1: if you want to detect a device on another line, you need to change the line to scan (advanced feature).

If several devices have their programming LED on, they are all displayed on this screen. The Programming LED should be on. Click the programming button of the devices you don't want to identify to turn off their programming LED.

Identification by using the device

For a device where the programming button may be difficult to be accessed. In this case you may use a button action on the device to identify it.

For example, for a pushbutton, you may want to click on a button to identify it, or for a presence detector, to move in front of the detector to activate it.

For this feature,

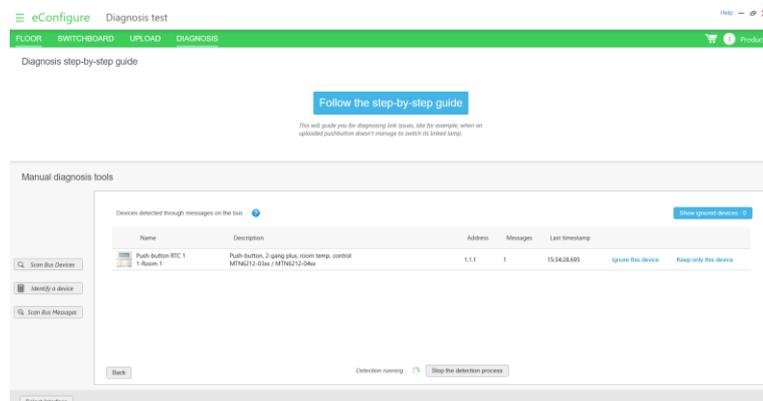
- The detection process must be running (visible on the bottom of the screen)
- You need to trigger the device you want to identify (click on the button, activate the detector, etc.)
- When your device is detected, you should stop the detection process

This feature can detect unexpected devices (other presence sensors for instance). In that case, you can click on the "Ignore this device" button to hide them.

If you want to detect again a device you have ignored, click on the button "Ignored devices: X" (with X the number of ignored devices), and click on "Detect this device again" button.

If you want to ignore all devices except the one you wanted to identify, click on “Keep only this device”.

Finally, note that your device may be undetected because it didn't send any message on your network: You should then use another identification way (e.g. by programming button or by individual address)



Identification by its individual address (advanced identification feature)

If you know the individual address of your device (which is visible in the KNX topology, and the upload tab), you may want to identify your device by typing its address.

Once you have typed the individual address, if a device is found, you can turn on/off the programming LED of your device, so that you can check where your device is.

If there is no device at this individual address, we suggest you run the feature “Scan bus devices”, which may help you to find your device.

Some devices may be detected but not recognized.

They are labelled “Unknown device”.

These devices have probably been uploaded from another project in eConfigure, or you have made significant changes in your project since you've uploaded this device for the last time.

We recommend you resetting this device and re-upload it so that this device is up-to-date.

Scan bus messages

To see the traffic of your network you can run the monitor. While scanning all messages are monitored.

Each message is identified by a timestamp and provides information about

- Source address: which device has sent the message
- Source name: What is the device name which has sent the message
- Destination address: is the name of the group address to which this device belongs.

- Info: Value of the message, i.e. ON, OFF, UP DOWN, 55% etc.

eConfigure Diagnosis test

FLOOR SWITCHBOARD UPLOAD DIAGNOSIS

Diagnosis step-by-step guide

[Follow the step-by-step guide](#)

This will guide you for diagnosing link issues. Use for example, when an expected push-button doesn't message to switch in linked time.

Manual diagnosis tools

Hour	Service	Source Address	SourceName	Destination Address	Info
5/18/2018 15:20:56:454	From bus	1.1.1	Push-button RCT1	1.0/2	0 OK
5/18/2018 15:20:56:773	From bus	1.1.1	Push-button RCT1	1.0/2	0 OK
5/18/2018 15:20:57:056	From bus	1.1.1	Push-button RCT1	1.0/2	0 OK
5/18/2018 15:20:57:282	From bus	1.1.1	Push-button RCT1	1.0/2	0 OK
5/18/2018 15:21:03:499	Stop				Listening stopped
5/18/2018 15:21:04:251	Close				

Select interface